

# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

## Form 10-K

- ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934  
 TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2017

Commission File Number 001-34481

### Mistras Group, Inc.

(Exact name of registrant as specified in its charter)

**Delaware**

(State or other jurisdiction of incorporation or organization)

22-3341267

(I.R.S. Employer Identification Number)

195 Clarksville Road  
Princeton Junction, New Jersey 08550  
(609) 716-4000

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Name of each exchange on which registered
Common Stock, par value \$.01 par value	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: **None**

Indicate by check mark whether the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act of 1933. Yes  No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 (the "Exchange Act"). Yes  No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Exchange Act during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes  No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes  No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of Registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes  No

The aggregate market value of the voting and non-voting common stock held by non-affiliates of the Registrant as of June 30, 2017, based upon the closing price of the common stock as reported by New York Stock Exchange on such date was approximately \$377.7 million.

As of March 5, 2018, the Registrant had 28,301,598 shares of common stock outstanding

## DOCUMENTS INCORPORATED BY REFERENCE

Information required by Part III (Items 10, 11, 12, 13 and 14) is incorporated by reference to portions of the registrant's definitive Proxy Statement for its 2018 Annual Meeting of Shareholders (the "Proxy Statement"), which is expected to be filed not later than 120 days after the registrant's fiscal year ended December 31, 2017. Except as expressly incorporated by reference, the Proxy Statement shall not be deemed to be a part of this report on Form 10-K.

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**MISTRAS GROUP, INC.**  
**ANNUAL REPORT ON FORM 10-K**  
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## ITEM 1. BUSINESS

### FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains forward-looking statements regarding us and our business, financial condition, results of operations and prospects within the meaning of Section 27A of the Securities Act of 1933 (Securities Act), and Section 21E of the Securities Exchange Act of 1934 (Exchange Act). Such forward-looking statements include those that express plans, anticipation, intent, contingency, goals, targets or future development and/or otherwise are not statements of historical fact. These forward-looking statements are based on our current expectations and projections about future events and they are subject to risks and uncertainties known and unknown that could cause actual results and developments to differ materially from those expressed or implied in such statements.

In some cases, you can identify forward-looking statements by terminology, such as “goals,” “expects,” “anticipates,” “intends,” “plans,” “believes,” “seeks,” “estimates,” “may,” “could,” “should,” “would,” “predicts,” “appears,” “projects,” or the negative of such terms or other similar expressions. Factors that could cause or contribute to differences in results and outcomes from those in our forward-looking statements include, without limitation, those discussed elsewhere in this Report in Part I, Item 1A. “Risk Factors,” Part 2, Item 7, “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and in this Item 1, as well as those discussed in our other Securities and Exchange Commission (SEC) filings. We undertake no obligation to (and expressly disclaim any obligation to) revise or update any forward-looking statements made herein whether as a result of new information, future events or otherwise. However, you should consult any further disclosures we may make on these or related topics in our reports on Form 8-K or Form 10-Q filed with the SEC.

The following discussions should be read in conjunction with the sections of this Report entitled “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and “Risk Factors.”

### Transition Period

On January 3, 2017, the Company’s Board of Directors approved a change in the Company’s fiscal year end from May 31 to December 31, effective December 31, 2016. In connection with this change, we previously filed a Transition Report on Form 10-K to report the results of the seven-month transition period from June 1, 2016 to December 31, 2016. In this Annual Report, the periods presented are the year ended December 31, 2017, the seven-month transition period from June 1, 2016 to December 31, 2016 (which we sometimes refer to as the “transition period ended December 31, 2016”) and the years ended May 31, 2016 and 2015 (which we sometimes refer to as “fiscal 2016 and fiscal 2015”, respectively). For comparison purposes, we have also included unaudited data for the year ended December 31, 2016 and for the seven months ended December 31, 2015.

### Our Business

We offer our customers “one source for asset protection solutions®” and are a leading global provider of technology-enabled asset protection solutions used to evaluate the structural integrity and reliability of critical energy, industrial and public infrastructure.

We deliver value through a comprehensive “OneSource” portfolio of customized solutions, utilizing a proven systematic method that creates a closed-loop lifecycle for addressing continuous asset protection and improvement. These mission critical solutions enhance our customers’ ability to comply with governmental safety and environmental regulations, extend the useful life of their assets, increase productivity, minimize repair costs, manage risk and avoid catastrophic disasters.

Given the role our solutions play in ensuring the safe and efficient operation of infrastructure, we have historically provided a majority of our solutions to our customers on a regular, recurring basis. We perform these services largely at our customers’ facilities, while primarily servicing our aerospace customers at our growing network of state-of-the-art, in-house laboratories. These solutions typically include Non-Destructive Testing (NDT) and inspection services, and can also include a wide range of mechanical services, including engineering assessments, heat tracing, pre-inspection insulation stripping, inspections, coating applications, re-insulation, and long-term condition-monitoring. Under this business model, many customers outsource their inspection to us on a “run and maintain” basis. We have established long-term relationships as a critical solutions provider to many of the leading companies with asset-intensive infrastructure in our target markets. These markets include oil and gas (downstream, midstream, upstream and petrochemical), commercial aerospace and defense, power generation (natural gas, fossil, nuclear, alternative, renewable, and transmission and distribution), public infrastructure, chemicals, transportation, primary metals and metalworking and research and engineering institutions.

As a global asset protection leader, we provide a comprehensive range of solutions that includes:

- *Traditional NDT Field Inspections:* The foundation of our business, NDT is the examination of assets without impacting current and future usefulness or impairing the integrity of these assets. The ability to inspect infrastructure assets and not interfere with their operating performance makes NDT a highly-attractive alternative to many traditional intrusive inspection techniques, which may require dismantling equipment or shutting down a plant, mill or site. These services include, for example, mechanical integrity (MI) assessments, aboveground storage tank inspection, pipeline inspection, American Petroleum Institute (API) visual inspections and predictive maintenance (PdM) programs.
- *Advanced NDT Field Inspections:* In most cases, these involve proprietary acoustic emission (AE), digital radiography, infrared, wireless and/or automated ultrasonic inspections and sensors, which are operated by our highly-trained technicians.
- *Mechanical and Maintenance Services:* We perform mechanical services to prepare assets for inspection and to return them to working condition. These services include insulation, electrical, coating and heat tracing services; corrosion assessment and mitigation services, including water blasting, sand blasting, and ultra-high pressure water (UHP) blasting, used for both offshore oil and gas platforms and land-based refinery and chemical fixed equipment; and wind turbine repairs and maintenance. NDT inspection services are offered while in post-cleaning mode. Mechanical services are still a small part of our business, and we are careful to try and avoid providing any such services that conflict with our inspection services.
- *Destructive Testing (DT):* A definitive discipline in material testing, which takes specimens through to mechanical failure while examining a host of factors. Hardness, stiffness and strength are a few key indicators drawn from destructive tests per customer specifications. DT is performed by our German and select U.S. labs, which specializes in an array of destructive testing applications utilized throughout the materials selection and approval process in the aerospace, automotive, chemical, oil and gas and power generation industries.
- *In-House Lab Testing Services:* Our in-house inspection services provide cost-effective, efficient solutions that improve the integrity and lifespan of critical assets featuring a dynamic suite of testing and inspection services. With a network of in-house laboratories, we provide a one-stop shop for traditional (NDT), advanced non-destructive testing (ANDT), and destructive testing (DT) of materials and fabricated structures by offering a complete inspection package - from preparation and production all the way to post-processing. These capabilities are available through our state-of-the-art testing equipment and expertise in our grid of in-house testing laboratories across the U.S., Canada and Europe.
- *Proprietary Products & Systems:* A proprietary and customized portfolio of software products for testing and analyzing data captured in real-time by our technicians and sensors, including advanced features such as pattern recognition and neural networks.
- *Data Management & Analysis Software:* Our world-class enterprise inspection database management and analysis software (IDMS), Plant Condition Management Software (PCMS®), stores and analyzes inspection data. It compares data to prior operations and testing of similar assets, industrial standards and specific risk conditions, such as use with highly-flammable or corrosive materials. It also develops asset integrity management plans based on Risk-Based Inspections (RBI) that specify an optimal schedule for the testing, maintenance and retirement of assets.
- *On-Line Monitoring and Trending Systems:* Condition-monitoring systems provide secure, web-based, remote or on-site asset inspection, real-time reports and analysis of plant or enterprise structural integrity data, comparison of integrity data to our library of historical inspection data and analysis to better assess structural integrity. They also provide alerts for and prioritize future inspections and maintenance.
- *Engineering Consulting Services:* These services include plant operations support covering both process and equipment technologies; project planning, management and execution; expert testimony; and technical training. Our Mechanical Integrity (MI) services help improve plant safety, asset reliability and regulatory compliance through a

systematic, engineering-based approach to ensure the on-going integrity and safety of equipment and industrial facilities. MI services can include conducting an inventory of infrastructure assets; developing, implementing, and training personnel in executing inspection and maintenance procedures; and managing inspections, testing, and assessments of customer assets. We enable customers to identify gaps between existing and desired practices, identify deficiencies and degradations, and establish quality assurance standards for fabrication, engineering and installation of infrastructure assets. Our MI solutions incorporate comprehensive (RBI) data analysis from our proprietary IDMS, providing detailed, integrated, cost-effective solutions that rate the risks of alternative maintenance approaches, recommend actions in accordance with consensus industry standards, and help establish and support key performance indicators (KPIs) to ensure continued safe and economic operations.

- *Access Solutions:* Much of our work is conducted in hard-to-access or confined locations. We perform NDT and mechanical services both on the ground and at height, using specialized technicians who work safely while suspended on ropes rather than using scaffolding. We employ trained and certified divers for subsea inspection and maintenance, and we utilize unmanned aerial, land-based and subsea systems for a wide range of inspection applications.

Most of our revenues are generated by deploying technicians at our customers' locations, where NDT and mechanical services are performed on-site. However, the majority of our aerospace revenues are generated at our various in-house laboratories that have Nadcap and numerous other customer accreditations. We have special machinery and equipment and specialized technicians at these labs to perform various forms of NDT inspection and mechanical services, which can include chemical cleaning, coating application, painting, and pressure testing techniques. Our labs hold a wide variety of certifications that allow them to perform inspections to meet or exceed stringent regulatory requirements, such as: Nadcap, AS9100/ISO-9001, FAA Repair Station and ITAR/EAR. With these certifications comes a comprehensive range of approvals from prime contractors of major projects, the military, and internationally-renowned products and systems manufacturers from aerospace to nuclear energy, transportation to petrochemical industries.

We offer our customers a customized package of services, products and systems, or our enterprise software and other niche high-value products on a stand-alone basis. For example, customers can purchase most of our sensors and accompanying software to integrate with their own systems, or they can purchase a complete turn-key solution, including installation, monitoring and assessment services. Importantly, we do not sell certain advanced and proprietary software and other products as stand-alone offerings; instead, we embed them in our comprehensive service offerings to protect our investment in intellectual property while providing our customers an added value which generates a substantial source of recurring revenues.

As of December 31, 2017, we had approximately 6,000 employees, in approximately 120 offices across 14 countries. We generated revenues of \$701.0 million and \$404.2 million, respectively, and net loss of \$2.2 million and net income of \$9.6 million, respectively, for the year ended December 31, 2017 and the transition period ended December 31, 2016. We generated revenues of \$719.2 million and \$711.3 million and net income of \$24.7 million and \$16.1 million for fiscal 2016 and 2015, respectively. For the year ended December 31, 2017, the transition period ended December 31, 2016, and fiscal 2016 and 2015, we generated approximately 78%, 73%, 77% and 76% respectively, of our revenues from our Services segment. Our revenues are diversified, with our top ten customers accounting for approximately 38%, 37%, 36% and 33% of our revenues during the year ended December 31, 2017, the transition period ended December 31, 2016 and fiscal 2016 and 2015, respectively.

### **Asset Protection Industry Overview**

The asset protection industry consists of NDT inspection, DT, PdM and MI services and inspection data management and analysis. NDT plays a crucial role in assuring the operational and structural integrity and reliability of critical infrastructure without compromising the usefulness of the tested materials or equipment. The evolution of NDT services, in combination with broader industry trends, including increased asset utilization and aging of infrastructure, includes the desire by owners to extend the useful life of their existing infrastructure, new construction projects, enhanced government regulation and the shortage of certified NDT professionals, have made NDT an integral and increasingly outsourced part of many asset-intensive industries. The industry has progressed such that end users are actively seeking firms that can provide asset protection solutions to both in and out of service issues.

Historically, NDT solutions used qualitative testing methods aimed primarily at detecting defects in the tested materials, also referred to as traditional NDT. The traditional NDT market had been highly fragmented, with a significant number of small vendors providing inspection services to divisions of companies or local governments situated in close proximity to the vendor's field inspection engineers and technicians. The trend has progressed over the past several years, however, for customers to engage a select few vendors capable of providing a wider spectrum of asset protection solutions for global infrastructure. This shift in underlying demand, which began in the early 1990s and has accelerated more recently, has contributed to a transition from traditional NDT solutions to more advanced solutions that employ automated digital sensor

technologies and accompanying enterprise software, allowing for the effective capture, storage, analysis and reporting of inspection and engineering results electronically and in digital formats. These advanced techniques, taken together with advances in wired and wireless communication and information technologies, have further enabled the development of remote monitoring systems, asset-management and predictive maintenance capabilities and other data analytics and management. We believe that as advanced asset protection solutions continue to gain acceptance and the technology becomes more and more reliable, those vendors offering broad, complete and integrated solutions, scalable operations and a global footprint will have a distinct competitive advantage. Moreover, we believe that vendors that are able to effectively deliver both advanced solutions and data analytics, by virtue of their access to customers' data, create a significant barrier to entry for competitors, leading to the opportunity to further create significant recurring revenues.

We believe the following represent key dynamics of the asset protection industry:

- *Extending the Useful Life of Aging Infrastructure.* The prohibitive cost and challenge of building new infrastructure has resulted in the significant aging of existing infrastructure and caused companies to seek ways to extend the useful life of existing assets. For example, due to the significant cost associated with constructing new refineries, stringent environmental regulations which have increased the costs of managing them and difficulty in finding suitable locations on which to build them, only one new refinery has been constructed in the United States since 1976. Another example is in the area of power transmission and distribution. The Smart Grid initiative in the United States is causing increased loading on aging transformers that are more than 40 years old in many cases. The need to test and monitor these units to ensure their reliability until replacement is instrumental in support of a reliable Smart Grid network. Because aging infrastructure requires relatively higher levels of maintenance and repair in comparison to new infrastructure, as well as more frequent, extensive and ongoing testing, companies and public authorities continue to spend on asset protection solutions to ensure the operational and structural integrity of existing infrastructure.
- *Outsourcing of Non-Core Activities and Technical Resource Constraints.* The increasing sophistication and automation of NDT programs, together with a decreasing supply of skilled professionals and stricter and increasing governmental regulations, has caused many companies and public authorities to outsource NDT and other services rather than recruit and train such capabilities internally. Owners and operators of infrastructure are increasingly contracting with third party providers that have the necessary technical product portfolio, engineering expertise, technical workforce and proven track record of results-oriented performance to effectively meet their increasing requirements.
- *Increasing Asset and Capacity Utilization.* Due to the high repair and replacement costs and the limited construction of new infrastructure, existing infrastructure in some of our target markets has experienced high usage, causing increased stress and fatigue that accelerates deterioration. These dynamic costs also motivate our customers to complete repairs, maintenance, replacements and upgrades more quickly. For example, increasing demand for refined petroleum products, combined with high plant utilization rates, is driving refineries to upgrade facilities to make them more efficient and expand capacity. In order to sustain high capacity utilization rates, customers are increasingly using asset protection solutions to efficiently ensure the integrity and safety of their assets. Implementation of asset protection solutions can also lead to increased productivity as a result of reduced maintenance-related downtime.
- *Increasing Corrosion from Low-Quality Inputs.* The increased availability and low cost of crude oil from areas such as shale plays and oil sands resources have led to the use of lower grade raw materials and feedstock used in refinery and power generation processes. These lower grade raw materials and feedstock, especially in the case of the refining process involving petroleum with higher sulfur content, can rapidly corrode the infrastructure with which they come into contact, which in turn increases the need for asset protection solutions to identify such corrosion and enable infrastructure owners to proactively combat the problems caused by such corrosion.
- *Increasing Use of Advanced Materials.* Customers in our target markets are increasingly utilizing advanced materials, such as composites, and other unique technologies in the manufacturing and construction of new infrastructure and aerospace applications. As a result, they require advanced testing, assessment and maintenance technologies to inspect and to protect these assets, since many of these advanced materials cannot be tested using traditional NDT techniques. We believe that demand for NDT solutions will increase as companies and public authorities continue to use these advanced materials, not only during the operating phase of the lifecycle of their assets, but also during the design, manufacturing and quality control phases and are more frequently integrating and embedding sensors directly into the end product in support of total life cycle asset management.
- *Meeting Safety Regulations.* Owners and operators of infrastructure assets increasingly face strict government regulations and safety requirements. Failure to meet these standards can result in significant financial liabilities, increased scrutiny by Occupational Safety and Health Administration (OSHA), U.S. DOT Pipeline and Hazardous

Materials Safety Administration (PHMSA) and other regulators, higher insurance premiums and tarnished corporate brand value. There have been several industrial accidents, including explosions and fires, in recent years. These accidents created significant damage to the reputation of refineries and Pipeline Operators, and coupled with concern by owners, led OSHA/PHMSA to strengthen process safety enforcement standards with the continued implementation of the National Emphasis Program (NEP) that also extends to chemical plants for compliance with applicable regulations. As a result, these owners and operators are seeking highly reliable asset protection suppliers with a proven track record of providing asset protection services, products and systems to assist them in meeting these increasingly stringent regulations.

- *Expanding Addressable End-Markets.* Advances in NDT sensor technology and asset protection software based systems, and the continued emergence of new technologies, are creating increased demand for asset protection solutions in applications where existing techniques were previously ineffective.
- *Expanding Addressable Geographies.* We believe that incremental demand will continue to come from international markets, including Western and Eastern Canada, Europe, Asia and parts of Latin America. Specifically, as companies and governments in these markets build and maintain infrastructure and applications that require the use of asset protection solutions, we believe demand for our solutions will increase.
- *Expanding Aerospace Industry.* We believe that increased demand will continue to come from the aerospace industry due to the approximately decade-long backlog for next generation commercial aircraft to be built, driving the need for enhanced levels of inspections.
- *Offering Complementary Mechanical Services.* We believe that owners of capital assets will increasingly look for a single vendor who can provide mechanical services that are complementary to inspection services, such as removing insulation in order to inspect piping, then reinstalling insulation.

We believe that the market available to us will continue to grow as these macro-market trends continue to develop.

## **Our Target Markets**

### *Overview*

Mistras operates in a highly competitive, but fragmented market. Domestically, the market is serviced by several national competitors, and many regional and/or local companies. Internationally, our primary competitors are divisions of large companies, with additional competition from small independent local companies which may be limited to a specific product, service or technology and focused on a niche market or geographic region. We focus our strategic sales, marketing and product development efforts on a range of infrastructure-intensive based industries and governmental authorities. We view energy-related infrastructure and commercial aerospace as the Company's largest market opportunities. We perform inspection and mechanical services for customers in both industries.

In the energy market there are various economic indicators that drive our business, especially in the U.S. domestic markets. These factors are excerpted below from various Energy Information Administration (EIA) outlook reports;

Natural gas prices are expected to remain less expensive than electric prices for commercial, industrial and residential customers. The use of natural gas as an energy source is projected to grow the most on an absolute basis. Natural gas production will grow at a faster rate through 2020, and thereafter grow at a slower pace. Natural gas used for power generation will generally increase over the time period due to the scheduled expiration of renewable tax credits. The industrial sector accounts for the most growth in natural gas consumption, with expanding use in the chemical industries; for industrial heat and power; and for liquefied natural gas production. Natural gas consumption also increases significantly in the power sector as a result of the scheduled expiration of renewables tax credits in the mid-2020s. In its monthly short-term energy outlook dated December 12, 2017, the agency forecast that U.S. crude oil output will rise by 780,000 barrels per day (bpd) to 10.02 million bpd in 2018, which would be the highest level for any year on record in the United States.

There are a number of economic factors which drive the aerospace market, including:

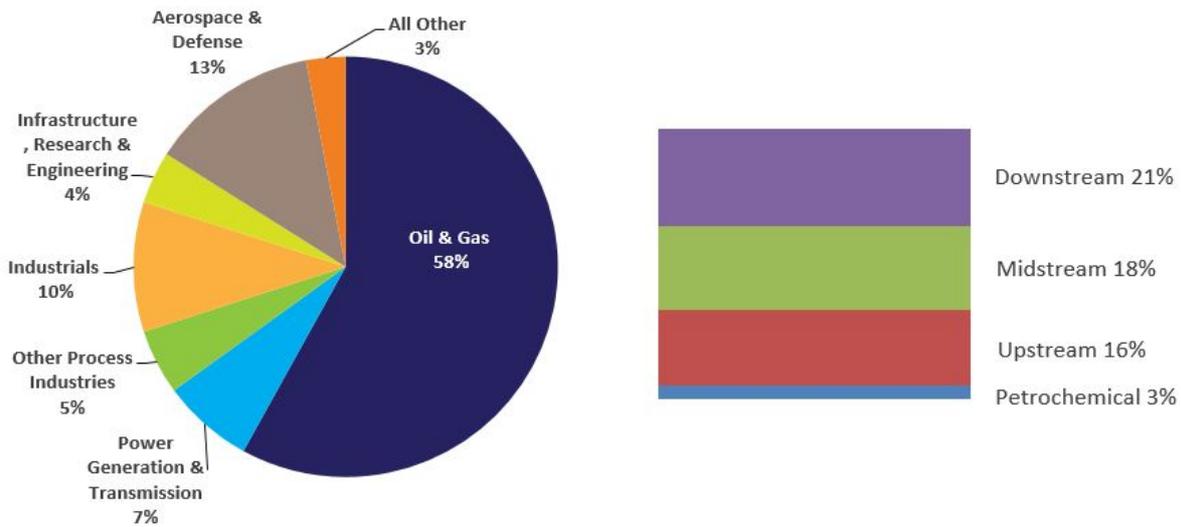
- The approximately decade-long backlog for next generation commercial aircraft to be built, including several large and mid-sized aircraft built by Boeing, Airbus, Bombardier and Embraer, among other manufacturers;

- The backlog of next generation aircraft engines which operate with greater fuel efficiency, including the LEAP engine and the geared-turbo fan engine;
- The continuing regulatory scrutiny to ensure public safety associated with these new technologically advanced aircraft, which serves to ensure continued need for inspection and mechanical services to be performed, as well as to limit the number of participants who can meet the demanding requirements associated with performing these services.

*Revenue by Target Market*

The following chart represents the percentage of consolidated revenues we generated from our various markets for the year ended December 31, 2017:

**Mistras Revenues by Target Market  
(Year ended December 31, 2017)**



*Oil and Gas*

Recently crude oil prices have begun to rebound which should lead to increase spending on maintenance shutdowns in 2018 and 2019. This increased demand will be balanced against the continued focus on process efficiencies and cost savings initiatives. On-line monitoring and permanently mounted sensors, as well as the use of drones and other alternative delivery devices, are all being considered as the Oil and Gas owners look to “smart” technologies that reduce human intervention while delivering highly accurate data to aid in their operational decisions. This helps to drive demand for our integrated approach to asset protection. While we expect off-stream inspection of vessels and piping during a plant shut-down or turnaround to remain a routine practice by companies in these industries, we anticipate this practice will decrease as owners utilize non-invasive, or on-stream inspections, of critical assets. Non-invasive inspections enables companies to minimize the costs associated with shutdowns during testing while enabling the economic and safety advantages of advanced planning and/or predictive maintenance.

*Aerospace and Defense*

The aerospace industry is enjoying unprecedented growth with many original equipment manufacturers (OEMs) reporting record backlogs of up to ten years. We serve this rapidly growing target market by providing our state of the art fully integrated inspection systems to OEMs. For the OEM that prefers to outsource this inspection, we provide a full range of in-house services through our various regional facilities. These facilities have obtained and maintain numerous accreditations and certifications required to meet the stringent inspection criteria that the aerospace industry demands.

The operational safety, reliability, structural integrity and maintenance of aircraft and associated products is critical to the aerospace and defense industries. Many of the OEM's are positioning themselves to use sensor technology to deliver data that may aid in driving decisions regarding structural and operational integrity of the aircraft as opposed to performing maintenance on time based intervals. Industry participants use asset protection solutions for the inspection of advanced composites found in new classes of aircraft, x-ray of critical engine components, ultrasonic fatigue testing of complete aircraft structures, corrosion detection and on-board monitoring of landing gear and other critical components. We expect increased demand for our solutions to result from wider use of advanced composites and distributed on-line sensor networks and other embedded analytical applications built into the structure of assets that enable real-time performance monitoring and condition-based maintenance.

#### *Power Generation and Transmission*

The growing availability of cheap natural gas, along with environmental concerns with coal has stimulated the construction of new natural gas fired power plants across North America. Our Asset Integrity Management approach offers many tools that aid in the establishment of integrity programs during plant construction using software model. In addition, actual construction drives traditional and Advanced NDT services. We anticipate sharp growth in the plants as natural gas pricing remains low, and the environmental impacts of coal remain unattractive to the public. Asset protection in the power industry has traditionally been associated with the inspection of high-energy, critical steam piping, boilers, rotating equipment, and various other plant components (balance of plant), utility aerial man-lift devices, large transformer testing and various other applications for nuclear and fossil-fuel based power plants. We believe that in recent years the acceptance of asset protection solutions has grown in this industry due to the aging of critical power generation and transmission infrastructure.

#### *Process Industries*

The process industries, or industries in which raw materials are treated or prepared in a series of stages, include chemicals, pharmaceuticals, food processing, paper and pulp and metals and mining, have a need for our products and services. As with oil and gas processing facilities, chemical processing facilities require significant spending on maintenance and monitoring. Given their aging infrastructure and high utilization requirements, growing capacity constraints and increasing capital costs, we believe asset protection solutions will continue to grow in importance in maintenance planning, quality and cost control and prevention of catastrophic failure in the chemicals industry.

#### *Public Infrastructure, Research and Engineering*

We believe that high profile infrastructure catastrophes, such as the collapse of the I-35W Mississippi River Bridge in Minneapolis and others since, have caused public authorities to more actively seek ways to prevent similar events from occurring. Public authorities tasked with new construction and maintenance of existing, public infrastructure increasingly use asset protection solutions to inspect these assets, including the use of embedded sensors to enable on-line monitoring throughout the life of the asset. This is a target market for our application technology and experience. Over the last twenty years, we have provided testing and health monitoring on many bridges and structures worldwide, among which include some of the largest and well-known bridges in the United States and United Kingdom. In fiscal 2015, for example, we installed several wire break systems complete with multiple sensors types (known as sensor fusion). These bridges are being monitored continuously and automatically, alerting the bridge owner when a crack is detected. Other services are offered, including internet and cloud data transfer, secure web sites and monitoring contracts that provide for "around the clock monitoring" and regular reports, which provide information on the status of the bridge and early detection of suspect areas that can be identified and repaired before an alarm is generated. We continue to provide these monitoring services worldwide.

#### *Industrial*

The quality control requirements driven by the need for zero to low defect component tolerance within automated robotic intensive industries such as automotive, consumer electronics and medical industries, serve as key drivers for the recent growth of NDT technologies, such as ultrasonics and radiography. We expect that increasingly stringent quality control requirements and competitive forces will drive the demand for more costly finishing and polishing which, in turn, may promote greater use of NDT throughout the production lifecycle.

### **Our Competitive Strengths**

We believe the following competitive strengths contribute to our being a leading provider of asset protection solutions and will allow us to further capitalize on growth opportunities in our industry:

- *One Source Provider for Asset Protection Solutions® Worldwide.* We believe we have the most comprehensive portfolio of proprietary and integrated asset protection solutions, including inspection, mechanical and engineering services, products and systems worldwide, which positions us to be the leading single source provider for a customer's asset protection requirements. Through our network of approximately 120 offices, supplemented by independent representatives in 14 countries around the world, we offer an extensive portfolio of solutions that enables our customers to consolidate their inspection and maintenance requirements and the associated data storage and analytics on a single system that spans the customers' entire enterprise.
- *Long-Standing Trusted Provider to a Diversified and Growing Customer Base.* By providing critical and reliable NDT services, products and systems for more than 30 years and expanding our asset protection solutions, we have become a trusted partner to a large and growing customer base across numerous infrastructure-intensive industries globally. Our customers include some of the largest and most well-recognized firms in the oil and gas, chemicals, fossil and nuclear power, and aerospace and defense industries as well as some of the largest public authorities.
- *Repository of Customer-Specific Inspection Data.* Our enterprise data management and analysis software, PCMS, enables us to capture, warehouse, manage and analyze our customers' testing and inspection data in a centralized relational database. As a result, we have accumulated large amounts of proprietary process data and information that allows us to provide our customers with value-added services, such as benchmarking, risk-based inspection and reliability centered maintenance solutions including predictive maintenance, inspection scheduling, data analytics and regulatory compliance.
- *Proprietary Products, Software and Technology Packages.* We have developed systems that have become the cornerstone of several high value-added unique NDT applications, such as those used for the testing of above-ground storage tanks (the TANKPAC® technology package). These proprietary products allow us to efficiently and effectively provide highly valued solutions to our customers' complex applications, resulting in a significant competitive advantage. In addition to the proprietary products and systems that we sell to customers on a stand-alone basis, we also develop a range of proprietary sensors, instruments, systems and software used exclusively by our Services segment.
- *Deep Domain Knowledge and Extensive Industry Experience.* In the field of asset protection, we have long and extensive experience and have accumulated vast amount of data and knowledge. We have gained this through our industry leadership in developing advanced asset protection solutions, including acoustic emission testing for non-intrusive on-line monitoring of storage tanks and pressure vessels, bridges and transformers, portable corrosion mapping, ultrasonic testing (UT) systems, on-line plant asset integrity management with sensor fusion, enterprise software solutions for plant-wide and fleet-wide inspection data archiving and management, advanced and thick composites inspection and ultrasonic phased array inspection of thick wall boilers.
- *Collaborating with Our Customers.* Our asset protection solutions have historically been designed in response to our customers' unique performance specifications and are supported by our proprietary technologies. Important technology packages, such as TANKPAC for tank floor corrosion detection and Acoustic Turbine Monitoring System (ACTMS), were developed in close cooperation and partnership with key Mistras customers. Our sales and engineering teams work closely with our customers' research and design staff during the design phase in order to incorporate our products into specified infrastructure projects, as well as with facilities maintenance personnel to ensure that we are able to provide the asset protection solutions necessary to meet these customers' changing demands.
- *Experienced Management Team.* Our management team has a track record of leadership in NDT, DT, PdM and engineering services, averaging over 20 years of experience in the industry. These individuals also have extensive experience in growing businesses organically and in acquiring and integrating companies, which we believe is important to facilitate future growth in the fragmented asset protection industry. In addition, our senior managers are supported by highly experienced managers who are responsible for delivering our solutions to customers.

## **Our Growth Strategy**

Our growth strategy emphasizes the following key elements:

- *Continue to Develop Technology-Enabled Asset Protection Services, Products, Software and Systems.* We intend to maintain and enhance our technological leadership by continuing to invest in the internal development of new services, products, software and systems. Our highly trained team of Ph.D.'s, engineers, application software

developers and certified technicians has been instrumental in developing numerous significant asset protection standards. We believe their knowledge base will continue to enable us to innovate a wide range of new asset protection solutions.

- *Expand our Service Offerings to Existing Customers.* By branching into adjacent mechanical services, we believe we are providing customers with greater value, which increases our value proposition and our ability to capture additional business. Many of our customers are multinational corporations with asset protection requirements from multiple divisions at multiple locations across the globe. Currently, we believe we capture a relatively small portion of their overall expenditures. We believe our expanded services offerings, coupled with our products and systems, and combined with the trend of outsourcing asset protection solutions to a small number of trusted service providers, positions us to significantly expand both the number of divisions and locations that we serve as well as the types of solutions we provide. We strive to be the preferred global partner for our customers and aim to become the single source provider for their asset protection solution requirements.
- *Expand our Focus in the Aerospace Industry.* We believe that the recent introduction of next generation airframes and aircraft engines has created an inherent demand for inspection and mechanical services required for the production of parts that support their build for years to come. Mistras Group has been an active participant in this market for several years. The Company consummated two acquisitions of aerospace inspection companies in 2017 and won a key European contract in 2016. These recent actions are driven by our increased focus in this growing area.
- *Continue to Expand Our Customer Base into New End Markets.* We believe we have significant opportunities to expand our customer base in relatively new end markets, including nuclear, wind turbine and other alternative energy and natural gas transportation industries. The expansion of our addressable markets is being driven by the increased recognition and adoption of asset protection services, products and systems, and new NDT technologies enabling further applications in industries such as compressed and liquefied natural gas transportation, and the aging of infrastructure, such as construction and loading cranes and ports, to the point where visual inspection has proven inadequate and new asset protection solutions are required. We expect to continue to expand our global sales organization, grow our inspection data management and data mining services and find new high-value applications. As companies in these emerging end markets realize the benefits of our asset protection solutions, we expect to expand our leadership position by addressing customer needs and winning new business.
- *Continue to Capitalize on Acquisitions.* We intend to continue employing a disciplined acquisition strategy to broaden, complement and enhance our service offerings, add new customers, expand our sales channels, supplement our internal development efforts and accelerate our expected growth. We believe the market for asset protection solutions is highly fragmented with a large number of potential acquisition opportunities. We have a proven ability to integrate complementary businesses, as demonstrated by the success of our past acquisitions, which have often contributed new or supplemented existing services that have added to our revenues and profitability.

## **Our Segments**

The Company has three operating segments:

- *Services.* This segment provides asset protection solutions predominantly in North America, with the largest concentration in the United States, consisting primarily of non-destructive testing, inspection, mechanical and engineering services that are used to evaluate the structural integrity and reliability of critical energy, industrial and public infrastructure.
- *International.* This segment offers services, products and systems similar to those of our Services and Products and Systems segments to select markets within Europe, the Middle East, Africa, Asia and South America, but not to customers in China and South Korea, which are served by our Products and Systems segment.
- *Products and Systems.* This segment designs, manufactures, sells, installs and services our asset protection products and systems, including equipment and instrumentation, predominantly in the United States.

For discussion of segment revenues, operating results and other financial information, including geographic areas in which we generated revenues, see “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in Item 7, as well as Note 19 - *Segment Disclosure* in the notes to consolidated financial statements in Item 8 of this Annual Report.

## **Our Solutions**

We offer our customers “one source for asset protection solutions”® and are a leading global provider of technology-enabled asset protection solutions used to evaluate the structural integrity and reliability of critical energy, industrial and public infrastructure. We combine industry-leading products and technologies, expertise in MI, NDT, DT, mechanical and PdM services, process and fixed asset engineering and consulting services, and our world class enterprise inspection database management and analysis software PCMS, to deliver a comprehensive portfolio of customized solutions, ranging from routine inspections to complex, plant-wide asset integrity management and assessments. We deliver our solutions through a combination of services and products and systems.

## **Our Services**

Our Services segment provides a range of testing, inspection and mechanical services to a diversified customer base across energy-related, aerospace, industrial and public infrastructure industries. We either deploy our services directly at the customer’s location or through our own extensive network of field testing facilities. Our footprint allows us to provide asset protection solutions through local offices in close proximity to our customers, permitting us to keep response time, and travel, living and per diem costs to a minimum, while maximizing our ability to develop meaningful, collaborative customer relationships. Examples of our comprehensive portfolio of services include: testing components of new construction as they are built or assembled; providing corrosion monitoring data to help customers determine whether to repair or retire infrastructure; providing material analysis to ensure the integrity of infrastructure components; and supplying non-invasive on-stream techniques that enable our customers to pinpoint potential problem areas prior to failure. In addition, we also provide services to assist in the planning and scheduling of resources for repairs and maintenance activities. Our experienced inspection professionals perform these services, supported by our advanced proprietary software and hardware products. We are also looking to expand our capabilities to offer mechanical services that are complementary to our inspection services. Examples of our services are discussed below.

### *Traditional NDT Services*

Our certified personnel provide a range of traditional inspection services. For example, our visual inspections provide comprehensive assessments of the condition of our customers’ plant equipment during capital construction projects and maintenance shutdowns. Of the broad set of traditional NDT techniques that we provide, several lend themselves to integration with our other offerings and often serve as the initial entry point to more advanced customer engagements. For example, we provide a comprehensive program for the inspection of above-ground storage tanks designed to meet stringent industry standards for the inspection, repair, alteration and reconstruction of oil and petrochemical storage tanks. This program includes magnetic flux exclusion for the rapid detection of floor plate corrosion, advanced ultrasonic systems and leak detection of floor defects, remote ultrasonic crawlers for shell and roof inspections and trained, certified inspectors for visual inspection and documentation.

### *Advanced NDT Services*

In addition to traditional NDT services, we provide a broad range of proprietary advanced NDT services that we offer on a stand-alone basis or in combination with software solutions such as our proprietary enterprise inspection data management and plant condition monitoring software and systems (PCMS). We also provide on-line monitoring capabilities and other solutions that enable the delivery of accurate and real-time information to our customers. Our advanced NDT services require more complex equipment and more highly skilled inspection professionals to operate this equipment and interpret test results. Some of the technologies and techniques we use include automated ultrasonic testing, guided ultrasonic long wave testing, phased array ultrasonic testing, risk-based inspection (RBI) and computed and digital radiography.

### *Mechanical Integrity Services*

We provide a broad range of MI services that enable our customers to meet stringent regulatory requirements. These services increase plant safety, minimize unscheduled downtime and allow our customers to plan for, repair and replace critical components and systems before failure occurs. Our services are designed to complement a comprehensive predictive and preventative inspection and maintenance program that we can provide for our customers in addition to the MI services. Customers of our MI services, in many instances, also have licensed our PCMS software, which allows for the storage and analysis of data captured by our testing and inspection products and services, and implemented this solution to complement our inspection services.

As a result of the information captured by PCMS and its risk-based inspection software module, we are able to provide a professional service known as “Mechanical Integrity Gap Analysis” for process facilities. Our Mechanical Integrity Gap

Analysis service offers insight into the level of plant readiness, how best to manage and monitor the integrity of process facility assets, and how to extend the useful lives of such assets. Our Mechanical Integrity Gap Analysis service also assists customers in benchmarking and managing their infrastructure through key performance indicators and other metrics.

### *Destructive Testing Services*

We provide a wide range of destructive testing (DT) services in select locations. Hardness, stiffness and strength are a few key indicators drawn from destructive tests per customer specifications. DT is performed for an array of destructive testing applications utilized throughout the materials selection and approval process in the aerospace, automotive, chemical, oil and gas and power generation industries. Example testing includes:

- Mechanical tests — Materials, specimens and even composites are subjected to increasing levels of tension, compression, shear and peeling until failure. There are a number of variations of mechanical testing in which adding temperature, strain, unidirectional load or shear can provide useful results.
- Physical/Chemical — Used to examine specific material and thermal characteristics as well as chemical compositions, including differential scanning calorimetry (DSC), high performance liquid chromatography, fiber volume content and fourier transformation infrared spectroscopy (FTIR).
- Materialography — Gives an insight into the geometries of structural composites, which presents an inside track with regards to determining failure mechanisms and asset lifespan expectations.

### **Our Products and Systems**

We provide a range of acoustic emission (AE) products and are a leader in the design and manufacture of AE sensors, instruments and turn-key systems used for monitoring and testing materials, pressure components, processes and structures. Though we principally sell our products as a system, which includes a combination of sensors, an amplifier, signal processing electronics, knowledge-based software and decision and feedback electronics, we can also sell these as individual components to certain customers that have the in-house expertise to perform their own services. Our sensors “listen” to structures and materials to detect real-time AE activity and to determine the presence of active corrosion, crack propagation and other structural flaws in the inspected materials. Such structures include pressure vessels, storage tanks, heat exchangers, piping, turbine blades and reactors.

In addition, we provide leak monitoring and detection systems used in diverse applications, including the detection and location of both gaseous and liquid leaks in valves, vessels, pipelines, boilers and tanks. AE leak monitoring and detection, when applied in a systematic preventive maintenance program, has proven to substantially reduce costs by eliminating the need for visual valve inspection and unscheduled down-time.

We design, manufacture and market a complete line of ultrasonic equipment. While AE technology detects flaws and pinpoints their location, our UT technology has the ability to size defects in three-dimensional geometric representations. Our line of UT systems include various Automated UT scanners, our unique portable UT handheld and tablet systems with motion control to run our many inspection scanners, and our immersion systems ranging from small bench top units to large UT systems over 55 feet long and large production unit gantry systems.

We provide a wide array of digital radiographic systems to solve specific industrial problems, including Computed Radiography (CR), Real-Time Radiography (RTR), Direct Radiography (DR), and Computed Tomography (CT). Digital Radiography is one of the newer forms of radiographic imaging. Thickness profiles of piping systems, both insulated and un-insulated, are performed using computed radiography, while large production runs of smaller parts are inspected using direct radiography. Real time radiography is utilized for large “real time” inspections of insulated piping systems to identify areas of pipe degradation.

## Technology Solutions

In order to address some of the more common problems faced by our customers, we have developed a number of robust technology solutions. These packages generally allow more rapid and effective testing of infrastructure because they minimize the need for service professionals to customize and integrate asset protection solutions with the infrastructure and interpret test results. These packaged solutions use proprietary and specialized testing procedures and hardware, advanced pattern recognition, neural network software and databases to compare test results against our prior testing data or national and international structural integrity standards. One such package is our ACTMS (Acoustic Combustion Turbine Monitoring System), an on-line system to detect stator blade cracks in gas turbines. Others include TANKPAC for tank inspections, POWERPAC for monitoring discharges in critical power grid transformers, and the AMS boiler tube leak detection and location monitoring system.

## Software Solutions

Our software solutions are designed to meet the demands of our customers inspection data management, risk management, data analysis and asset integrity management requirements. We address these requirements using best in class database management systems and applying enterprise based inspection and data management applications. We apply our comprehensive portfolio of customized Acoustic Emission and Ultrasonic application-specific software products to cover a broad range of materials testing and analysis methods, for neural networks, pattern recognition, wavelet analysis and moment tensor analysis. Some of the key software solutions we offer include:

- PCMS enterprise software: A leading inspection data management system for supporting asset protection and reliability.
- ISOTRAC: A multiphase methodology to illustrate in 3-D each element of a plant to help develop an overall asset integrity management program that meets or exceeds compliance with current MI standards and regulations.

Our PCMS application is an enterprise software system that allows for the collection, storage and analysis of data as captured by our testing and inspection products and services and convert it to valuable information for our plant personnel and plant management. PCMS allows our customers to design and develop asset integrity management monitoring plans that include:

- optimal systematic testing schedules for their infrastructure based on real-time data captured by our sensors;
- alerts that notify customers when to perform special testing services on suspect areas, enabling them to identify and resolve flaws on a timely basis by using our PCMS risk-based inspection (RBI) software module; and
- schedules for the maintenance and retirement of assets.

PCMS also offers advantages by allowing the information it develops and stores to be organized, linked and synchronized with enterprise software systems such as SAP and IBM's Maximo. We believe PCMS is one of the more widely used plant condition management software systems in the world and we estimate it is currently used by more than 40% of U.S. refineries, by capacity. This provides us not only with recurring maintenance and support fees, but also marketing opportunities for additional software, asset integrity management and other asset protection solutions. PCMS has also been chosen and installed by leading midstream pipeline energy companies and major energy companies in Canada and Europe.

We also offer other software solutions, such as our Advanced Data Analysis Pattern Recognition and Neural Networks Software (NOESIS), which enables our AE experts to develop automated remote monitoring systems for our customers, and our Loose Parts Monitoring Software (LPMS), which is a software program for monitoring, detecting and evaluating metallic loose parts in nuclear reactor coolant systems in accordance with strict industry standards.

## Engineering and Consulting Services

In addition to software and advanced technologies, Mistras also provides professional engineering and consulting services that is organized under our Asset Integrity Management Services (AIMS) group. Asset integrity management refers to the management system that enables plant owners to maintain the integrity of their assets in a fit for service condition for the desired life of the assets, as well as optimize the assets that are part of a process unit. Our engineering and consulting support capabilities include plant operations support, turn-around planning, project planning, management and execution, facilities planning studies, engineering design, safety reviews, plant operations improvement and optimization evaluations, and technical training.

## On-line Monitoring

Our on-line monitoring offerings combine all of our asset protection services, products and systems. We provide temporary, periodic and continuous monitoring of static infrastructures such as bridges, pipes, and transformers, as well as dynamic or rotating assets such as pumps, motors, gearboxes, steam and gas turbines. Temporary monitoring is typically used when there is a known defect or problem and the condition needs to be monitored until repaired or new equipment can be placed in service. Periodic monitoring, or “walk around” monitoring, is used as a preventative maintenance tool to take machine and device readings, on a periodic basis, to observe any change in the assets’ condition, such as increased vibration or unusual heat buildup and dissipation. Continuous monitoring is applied “24/7” on critical assets to observe the earliest onset of a defect and to track its progression to avoid catastrophic failure.

### **Centers of Excellence**

Another differentiator in our business model are our Centers of Excellence (COEs), which focus on specific aspects of inspection technology. The COEs are focused around target applications in our key market segments. They are supported by subject matter experts that will engage in strategic sales opportunities offering customers value-added solutions using advanced technologies and methods providing oversight, management and consultation. The COEs have a blueprint for their areas that can be replicated throughout the world by delivering procedures, equipment, reports, certifications, etc. ensuring a standardized approach to implementation yielding higher margin business.

### **Customers**

We provide our asset protection solutions to a global customer base of diverse companies primarily in our target markets. One customer, BP plc., accounted for approximately 11%, 12% and 10% of our total revenues for the year ended December 31, 2017, the transition period ended December 31, 2016 and fiscal 2016, respectively. No customer accounted for more than 10% of our revenues in fiscal 2015.

### **Geographic Areas**

We conduct our business in 14 different countries. Our revenues are primarily derived from our U.S., Canadian and European operations. See Note 19 — *Segment Disclosure* to the consolidated financial statements in this Annual Report for further disclosure of our revenues, long-lived assets and other financial information regarding our international operations.

### **Seasonality**

Our business is seasonal. This seasonality relates primarily to our Services segment. U.S. refineries’ non-peak periods are generally in the fall, when they are retooling to produce more heating oil for winter, and in the spring, when they are retooling to produce more gasoline for summer. The peak periods for these customers are the summer and winter months, when they run at peak capacity and are not retooling or performing turnarounds or shut downs. As a result, our revenues in the summer and winter months are typically lower than our revenues in the fall and spring because demand for our asset protection solutions from the oil and gas as well as the fossil and nuclear power industries increases during their non-peak production periods. Because we are increasing our work in the fall and spring, our cash flows are lower in those quarters than in the summer and winter, as collections of receivables lag behind revenues. We expect that this seasonality will continue.

### **Competition**

We operate in a highly competitive, but fragmented, market. Our primary competitors are divisions of large companies, and many of our other competitors are small companies, limited to a specific product or technology and focused on a niche market or geographic region. We believe that none of our competitors currently provides the full range of asset protection and NDT products, enterprise software (PCMS) and the traditional and advanced services solutions that we offer. Our competition with respect to NDT services include the Acuren division of Rockwood Service Corporation, SGS Group, the Team Qualspec division of Team, Inc. and APPLUS RTD. Our competition with respect to our PCMS software includes UltraPIPE, Lloyd’s Register Capstone, Inc. and Meridium Systems. In the traditional NDT market, we believe the principal competitive factors include project management, availability of qualified personnel, execution, price, reputation and quality. In the advanced NDT market, reputation, quality and size are more significant competitive factors than price. We believe that the NDT market has significant barriers to entry which would make it difficult for new competitors to enter the market. These barriers include: (1) having to acquire or develop advanced NDT services, products and systems technologies, which in our case occurred over many years of customer engagements and at significant internal research and development expense, (2) complex regulations and safety codes that require significant industry experience, (3) license requirements and evolved quality and safety programs,

(4) costly and time-consuming certification processes, (5) capital requirements and (6) emphasis by large customers on size and critical mass, length of relationship and past service record.

## **Sales and Marketing**

We sell our asset protection solutions through our experienced and highly trained direct sales and marketing teams within all of our offices worldwide. In addition, our project and laboratory managers as well as our management are trained on our solutions and often are the source of sales leads and customer contacts. Our direct sales and marketing teams work closely with our customers' research and design personnel, reliability engineers and facilities maintenance engineers to demonstrate the benefits and capabilities of our asset protection solutions, refine our asset protection solutions based on changing market and customer needs and identify potential sales opportunities. We divide our sales and marketing efforts into services sales, products and systems sales and marketing and utilize CRM systems to collect, manage and collaborate customer information with our teams globally. Our CRM's also provide critical data to provide accurate forecasting and reporting.

## **Manufacturing**

Most of our hardware products are manufactured in our Princeton Junction, New Jersey facility. Our Princeton Junction facility includes the capabilities and personnel to fully produce all of our AE products, NDT Automation Ultrasonic equipment and Vibra-Metrics vibration sensing products and systems. Certain other hardware is manufactured by a third party and then loaded by us with our proprietary software. We also design and manufacture automated ultrasonic systems and scanners in France.

## **Intellectual Property**

Our success depends, in part, on our ability to maintain and protect our proprietary technology and to conduct our business without infringing on the proprietary rights of others. We utilize a combination of intellectual property safeguards, including patents, copyrights, trademarks and trade secrets, as well as employee and third-party confidentiality agreements, to protect our intellectual property.

As of December 31, 2017, we held 4 patents (by direct ownership or exclusive licensing), all in the United States, which will expire at various times between 2021 and 2026, and license certain other patents. However, we do not principally rely on these patents or licenses to provide our proprietary asset protection solutions. Our trademarks and service marks provide us and our products and services with a certain amount of brand recognition in our markets. We do not consider any single patent, trademark or service mark material to our financial condition or results of operations.

As of December 31, 2017, the primary trademarks and service marks that we held in the United States included Mistras<sup>®</sup> and our stylized globe design. Other trademarks or service marks that we utilize in localized markets or product advertising include PCMS<sup>®</sup>, Physical Acoustics Corporation and the PAC logo, Ropeworks<sup>®</sup>, NOESIS, Pocket AE<sup>®</sup>, Pocket UT<sup>®</sup>, AEwin<sup>®</sup>, AEwinPost, UTwin<sup>®</sup>, UTIA, LST, Vibra-Metrics<sup>®</sup>, Field CAL<sup>®</sup>, MONPAC, PERFPAC, TANKPAC<sup>®</sup>, Valve-Squeak<sup>®</sup>, VPAC, POWERPAC, Sensor Highway, QSL, NDT Automation, and One Source for Asset Projection Solutions<sup>®</sup>.

Many elements of our asset protection solutions involve proprietary know-how, technology or data that are not covered by patents or patent applications because they are not patentable, or patents covering them would be difficult to enforce, including technical processes, equipment designs, algorithms and procedures. We believe that this proprietary know-how, technology and data is the most important component of our intellectual property assets used in our asset protection solutions, and is a primary differentiator of our asset protection solutions from those of our competitors. We rely on various trade secret protection techniques and agreements with our customers, service providers and vendors to protect these assets. All of our employees are subject to confidentiality requirements through our employee handbook. In addition, employees in our Products and Systems segment and our other employees involved in the development of our intellectual property have entered into confidentiality and proprietary information agreements with us. Our employee handbook and these agreements require our employees not to use or disclose our confidential information, to assign to us all of the inventions, designs and technologies they develop during the course of employment with us, and otherwise address intellectual property protection issues. We also seek confidentiality agreements from our customers and business partners before we disclose any sensitive aspects of our asset protection solutions technology or business strategies. We are not currently involved in any material intellectual property claims.

## **Research and Development**

Our research and development is principally conducted by engineers and scientists at our Princeton Junction, New Jersey headquarters, and supplemented by other employees in the United States and throughout the world, including France, Greece, and the United Kingdom, who have other primary responsibilities. Our total professional staff includes employees who hold

Ph.D.'s and engineers and employees who hold Level III certification, the highest level of certification from the American Society of Non-Destructive Testing.

We work with customers to develop new products or applications for our technology. Research and development expenses are reflected on our consolidated statements of income as research and engineering expenses. Our company-sponsored research and engineering expenses were approximately \$2.3 million, \$1.6 million, \$2.5 million and \$2.5 million for the year ended December 31, 2017, the transition period ended December 31, 2016 and fiscal 2016 and 2015, respectively. While we have historically funded most of our research and development expenditures, from time to time we also receive customer-sponsored research and development funding. We also have paid research contracts in Greece, Brazil, France, the United Kingdom, and the Netherlands, for various industries and applications, including testing of new composites, detecting crack propagation and wireless and communications technologies, as well as the development of permanently embedded inspection systems using acoustic emission and acousto-ultrasonics to provide continuous on-line in-service full coverage monitoring of critical structural components. Most of the projects are in our target markets; however, a few of the projects could lead to other future market opportunities.

## **Employees**

Providing our asset protection solutions requires a highly-skilled and technically proficient employee base. As of December 31, 2017, we had approximately 6,000 employees worldwide, of which approximately 63% were based in the United States. Less than 10% of our employees in the United States are unionized. We believe that we have good relations with our employees.

## **Environmental Matters**

We are subject to numerous environmental, legal and regulatory requirements related to our operations worldwide. In the United States, these laws and regulations include, among others: the Comprehensive Environmental Response, Compensation, and Liability Act, the Resources Conservation and Recovery Act, the Clean Air Act, the Federal Water Pollution Control Act, the Toxic Substances Control Act, the Atomic Energy Act, the Energy Reorganization Act of 1974, and applicable regulations. In addition to the federal laws and regulations, states and other countries where we do business often have numerous environmental, legal and regulatory requirements by which we must abide. We evaluate and address the environmental impact of our operations by assessing properties in order to avoid future liabilities and comply with environmental, legal and regulatory requirements.

We received a notice in May 2015 that the U.S. Environmental Protection Agency ("EPA") performed a preliminary assessment of a leased facility we operate in Cudahy, California. Based upon the preliminary assessment, the EPA conducted an investigation of the site. The purpose of the investigation is to determine whether any hazardous materials were released from the facility. We have been informed that certain hazardous materials and pollutants have been found in the ground water in the general vicinity of the site and the EPA is attempting to ascertain the origination or source of these materials and pollutants. Given the historic industrial use of the site, the EPA determined that the site of our Cudahy facility should be examined along with numerous other sites in the vicinity. At this time, we are not able to determine whether we have any liability in connection with this matter and if so, the amount or range of any such liability.

## **Our Website and Available Information**

Our website address is [www.mistrasgroup.com](http://www.mistrasgroup.com). We file reports with the SEC, including Quarterly Reports on Form 10-Q, Annual Reports on Form 10-K, Current Reports on Form 8-K and Proxy Statements. All of the materials we file with or furnish to the SEC are available free of charge on our website at <http://investors.mistrasgroup.com/sec.cfm>, as soon as reasonably practicable after having been electronically submitted to the SEC. Information contained on or connected to our website is not incorporated by reference into this Annual Report on Form 10-K and should not be considered part of this report or any other filing with the SEC. All of our SEC filings are also available at the SEC's website at [www.sec.gov](http://www.sec.gov). In addition, materials we file with the SEC may be read and copied at the SEC's Public Reference Room at 100 F Street, NE, Washington, DC 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330.

## **Executive Officers**

The following are our executive officers and other key employees as of December 31, 2017 and their background and experience:

Name	Age	Position
Dr. Sotirios J. Vahaviolos	71	Executive Chairman and Director
Dennis Bertolotti	58	President, Chief Executive Officer and Director
Michael C. Keefe	60	Executive Vice President, General Counsel and Secretary
Michael J. Lange	57	Vice Chairman, Senior Executive Vice President of Global Business Development, Marketing & Strategic Planning, and Director
Jonathan H. Wolk	56	Senior Executive Vice President, Chief Financial Officer and Chief Operating Officer

*Dr. Sotirios J. Vahaviolos* was named Executive Chairman on August 10, 2017. Prior to being named Executive Chairman, Dr. Vahaviolos had been our Chairman and Chief Executive Officer since he founded Mistras in 1978 under the name Physical Acoustics Corporation and was also our President until June 1, 2016. Prior to joining Mistras, Dr. Vahaviolos worked at AT&T Bell Laboratories. Dr. Vahaviolos received a B.S. in Electrical Engineering and graduated first in his engineering class from Fairleigh Dickinson University and received Masters Degrees in Electrical Engineering and Philosophy and a Ph.D. (EE) from the Columbia University School of Engineering. During Dr. Vahaviolos' career in non-destructive testing, he has been elected Fellow of The Institute of Electrical and Electronics Engineers, a member of The American Society for Nondestructive Testing (ASNT) where he served as its President from 1992-1993 and its Chairman from 1993-1994, a member of Acoustic Emission Working Group (AEWG) and an honorary life member of the International Committee for Nondestructive Testing. Additionally, he was the recipient of ASNT's Gold Medal in 2001 and AEWG's Gold Medal in 2005. He was also one of the six founders of NDT Academia International in 2008 headquartered in Brescia, Italy.

*Dennis Bertolotti* joined Mistras when Conam Inspection Services was acquired in 2003, where Mr. Bertolotti was a Vice President at the time of the acquisition. Since then, Mr. Bertolotti has had increasing levels of responsibility with Mistras, and became our President and Chief Executive Officer and Director, effective August 10, 2017. From June 1, 2016 to August 9, 2017, Mr. Bertolotti was our President and Chief Operating Officer. Mr. Bertolotti has been in the NDT business for over 30 years, and previously held ASNT Level III certifications and various American Petroleum Institute, or API, certifications, and received his Associate of Science degree in NDT from Moraine Valley Community College in 1983. Mr. Bertolotti has also received a Bachelor of Science and MBA from Otterbein College.

*Michael C. Keefe* joined Mistras in December 2009. Prior to joining Mistras, Mr. Keefe worked at International Fight League, a publicly-traded sports promotion company, from 2007 until 2009, in various executive positions. From 1990 until 2006, Mr. Keefe served in various legal roles with Lucent Technologies and AT&T, the last four years as Vice President, Corporate and Securities Law and Assistant Secretary. Mr. Keefe received a BS in Business Administration (Accounting) from Seton Hall University and a J.D. from Seton Hall University School of Law.

*Michael J. Lange* joined Mistras when we acquired Quality Services Laboratories in November 2000, and was elected a Director in 2003. Mr. Lange has held various executive level positions with Mistras, becoming Vice Chairman in July 2015 and Senior Executive Vice President, effective June 1, 2016. Mr. Lange is a well-recognized authority in Radiography and has held an ASNT Level III Certificate for almost 20 years. Mr. Lange received an Associate of Science degree in NDT from the Spartan School of Aeronautics.

*Jonathan H. Wolk* joined Mistras in November 2013 as Executive Vice President, Chief Financial Officer and Treasurer until August 10, 2017, when Mr. Wolk became Senior Executive Vice President and Chief Operating Officer. Mr. Wolk was also acting Chief Financial Officer from August 10, 2017 until the appointment of Mr. Prajzner on January 5, 2018. Prior to joining Mistras, Mr. Wolk served as Senior Vice President, Chief Financial Officer and Secretary of American Woodmark Corporation from 2004 until August 2013. Prior to American Woodmark, he served as the Chief Financial Officer and Treasurer of Tradecard, Inc., from 2000 to 2004, and was the global controller of GE Capital Real Estate from 1998 to 2000. Mr. Wolk started his career in public accounting at KPMG, received his B.S. in accounting from State University of New York-Albany and is a certified public accountant.

On January 5, 2018, Edward J. Prajzner, joined Mistras as Senior Vice President, Chief Financial Officer and Treasurer. Prior to joining Mistras, Mr. Prajzner worked at CECO Environmental Corp., a global service provider to environmental, energy and filtration industries, and served as Chief Financial Officer and Secretary from 2014 to 2017, Vice President of Finance and Chief Accounting Officer from 2013 until his appointment as CFO in 2014, and Corporate Controller and Chief Accounting Officer from 2012 to 2013. Mr. Prajzner also served in senior finance roles at CDI Corporation (now AE Industrial Partners), and American Infrastructure (now Allan Myers). Mr. Prajzner began his career in public accounting at Ernst & Young, received

his B.S. in accountancy from Villanova University, his MBA in finance from Temple University and is a certified public accountant.

Our executive officers are elected by, and serve at the discretion of, our board of directors. There are no family relationships among any of our directors or executive officers.

## ITEM 1A. RISK FACTORS

This section describes the major risks to us, our business and our common stock. You should carefully read and consider the risks described below, together with the other information contained in this Annual Report, including our financial statements and the notes thereto and “Management’s Discussion and Analysis of Financial Condition and Results of Operations”(MD&A) before making an investment decision. The statements contained in this section constitute cautionary statements under the Private Securities Litigation Reform Act of 1995. If any of these risks occur, our business, financial condition, results of operations and future growth prospects may be adversely affected. As a result, the trading price of our common stock would likely decline, and you may lose all or part of your investment. You should understand that it is not possible to predict or identify all risk factors that could impact us. Accordingly, you should not consider the following to be a complete discussion of all risks and uncertainties pertaining to us and our common stock.

### Risks Related to Our Business

***Our growth strategy includes acquisitions. We may not be able to identify suitable acquisition candidates or integrate acquired businesses successfully, which may adversely impact our results. Furthermore, acquisitions that we do complete could expose us to a number of unanticipated operational and financial risks.***

A significant factor in our growth has been and will continue to be based upon our ability to make acquisitions and successfully integrate these acquired businesses. We intend to continue to seek additional acquisition opportunities, both to expand into new markets and to enhance our position in existing markets. This strategy has provided us with many benefits and has helped fuel our growth, but also carries with it many risks. Some of the risks associated with our acquisition strategy include:

- whether we successfully identify suitable acquisition candidates, negotiate appropriate acquisition terms, and complete proposed acquisitions;
- whether we can successfully integrate acquired businesses into our current operations, including our accounting, internal control and information technology systems, marketing and other key infrastructure;
- whether we can adequately capture opportunities that an acquired business may offer, including the expansion into new markets in which we do not have significant experience or presence;
- whether we value an acquired business properly when determining the purchase price, terms and whether we are able to achieve the returns on the investment we expect;
- whether an acquired business can achieve levels of revenues, profitability, productivity or cost savings we expect;
- whether an acquired business is compatible with our culture and philosophy of doing business;
- the unexpected loss of key personnel and customers of an acquired business;
- the assumption of liabilities and risks (including environmental-related costs) of an acquired business, some of which may not be anticipated;
- the potential disruption of our ongoing business and distraction of management and other personnel of us and the acquired business resulting from the efforts to acquire, then integrate, an acquired business; and
- the use of significant funds, including those borrowed under our bank credit agreement, and the opportunity cost associated with the funds spent on the acquisition and integration of other businesses (some of which acquisition funding may be substantial), as well as the impact of the acquisition and borrowing on our continued compliance with our bank covenants.

Our ability to undertake acquisitions is limited by our financial resources, including available cash and borrowing capacity. Future acquisitions could result in potentially dilutive issuances of equity securities, the incurrence of substantial additional indebtedness and other expenses, any of which could adversely impact our financial condition and results of operations. Although management intends to: (i) evaluate the risks inherent in any particular transaction, (ii) assume only risks management believes to be acceptable, and (iii) develop plans to mitigate such risks, there are no assurances that we will properly ascertain or accurately assess the extent of all such risks. Difficulties encountered with acquisitions may adversely impact our business, financial condition and results of operations.

In addition, we have a significant amount of goodwill and other intangible assets on our balance sheet from our acquisitions. This will increase as we complete more acquisitions. If our acquisitions do not perform as planned and we do not realize the benefits and profitability we expect, we could incur significant write-downs and impairment charges to our earnings due to the impairment of the goodwill and other intangible assets we have acquired or acquire in the future.

***Our international operations are subject to risks relating to non-U.S. operations.***

For the year ended December 31, 2017, the transition period ended December 31, 2016 and fiscal 2016 and 2015, we generated approximately 33%, 36%, 28% and 31% of our revenues outside the United States, respectively. In addition, our international operations as a percentage of our business may increase over time. Our primary operations outside the United States are in Canada, Germany, France, the United Kingdom and Brazil. We also have operations in the Netherlands, Belgium and India. There are numerous risks inherent in doing business in international markets, including:

- fluctuations in currency exchange rates and interest rates;
- varying regional and geopolitical business and economic conditions and demands;
- compliance with applicable foreign regulations and licensing requirements, and U.S. laws and regulation with respect to our business in other countries, including export controls and anti-bribery laws;
- the cost and uncertainty of obtaining data and creating solutions that are relevant to particular geographic markets;
- the need to provide sufficient levels of technical support in different locations;
- the complexity of maintaining effective policies and procedures in locations around the world;
- political instability and civil unrest;
- restrictions or limitations on outsourcing contracts or services abroad;
- the impact of the United Kingdom exiting the European Union;
- restrictions or limitations on the repatriation of funds, or tax consequences on the non-repatriation of overseas operationally generated funds; and
- other potentially adverse tax consequences.

***Due to our dependency on customers in the oil and gas industry, we are susceptible to prolonged negative trends relating to this industry that could adversely affect our operating results.***

Our customers in the oil and gas industry (including the petrochemical market) have accounted for a substantial portion of our historical revenues. Specifically, they accounted for approximately 58%, 55%, 56% and 52% of our revenues for the year ended December 31, 2017, the transition period ended December 31, 2016 and fiscal 2016 and 2015, respectively. Although we have expanded our customer base into industries other than the oil and gas industry, we still receive approximately half of our revenues from this industry. Our services are vital to the operators of plants and refineries and we have expanded our services offerings, such as expanding our mechanical services capabilities. However, economic slowdowns or low oil prices have, and could continue to, result in cutbacks in contracts for our services. In addition, low oil prices could depress the level of new exploration and construction, which would adversely affect our market opportunities. If the oil and gas industry were to continue to operate in a market with low oil prices, our revenues, profits and cash flows may be reduced. While we continue to expand our market presence in the power generation and transmission, and the chemical processing industries, among others, these markets are also cyclical in nature and as such, are subject to economic downturns.

***We expect to continue expanding and our success depends on how effectively we manage our growth.***

We expect to continue experiencing growth, including through acquisitions, in the number of employees and the scope of our operations over the long-term. To effectively manage our anticipated future growth, we must continue to implement and improve our managerial, operational, compliance, financial and reporting systems and capabilities, expand our facilities and continue to recruit and train additional qualified personnel. We expect that all these measures will require significant expenditures and will demand the attention of management. Failure to manage our growth effectively could lead us to over or under-invest in technology and operations, result in weaknesses in our infrastructure, systems, compliance programs or controls, give rise to operational mistakes, the loss of business opportunities, the loss of employees and reduced productivity among remaining employees. Our expected growth could require significant capital expenditures and may divert financial resources from other projects, such as the development of new solutions. If our management is unable to effectively manage our expected growth, our expenses may increase more than expected, our profit margins may suffer, our revenues could decline or may grow more slowly than expected and we may be unable to implement our business strategy as anticipated.

***Our operating results could be adversely affected by a reduction in business with our significant customers.***

We derive a significant amount of revenues from a few customers. For instance, various divisions or business units of our largest customer were responsible for approximately 11% of our revenues for 2017. Taken as a group, our top ten customers were responsible for approximately 38%, 37%, 36% and 33% of our revenues for the year ended December 31, 2017, the transition period ended December 31, 2016 and fiscal 2016 and 2015, respectively. This concentration pertains almost exclusively to our Services segment, which accounted for more than 70% of our revenues for the year ended December 31, 2017, the transition period ended December 31, 2016 and fiscal 2016 and 2015. These customers are primarily in the oil and gas sector. Generally, our customers do not have an obligation to make purchases from us and may stop ordering our products and services or may terminate existing orders or contracts at any time with little or no financial penalty. The loss of any of our significant customers, any substantial decline in sales to these customers or any significant change in the timing or volume of purchases by our customers could result in lower revenues and could harm our business, financial condition or results of operations. During 2017, we have noted a challenged region within our Services segment ("the Challenged Region") which includes a large customer contract. During the first quarter of 2018, the large contract in the Challenged Region was awarded to another contractor. Accordingly, our 2018 results will be impacted by the loss of this contract.

***An accident or incident involving our asset protection solutions could expose us to claims, harm our reputation and adversely affect our ability to compete for business and, as a result, harm our operating performance.***

We could be exposed to liabilities arising out of the solutions we provide. For instance, we furnish the results of our testing and inspections for use by our customers in their assessment of their assets, facilities, plants and other structures. If such results were to be incorrect or incomplete, as a result of, for instance, poorly designed inspections, malfunctioning testing equipment or our employees' failure to adequately test or properly record data, we could be subject to claims. Further, if an accident or incident involving a structure we tested occurs and causes personal injuries or property damage, such as the collapse of a bridge or an explosion in a facility, and particularly if these injuries or damages could have been prevented by our customers had we provided them with correct or complete results, we may face significant claims relating to personal injury, property damage or other losses. Even if our results are correct and complete, we may face claims for such injuries or damage simply because we tested the structure or facility in question. While we do have insurance, our insurance coverage may not be adequate to cover the damages from any such claims, forcing us to bear these uninsured damages directly, which could harm our operating results and may result in additional expenses and possible loss of revenues. An accident or incident for which we are found partially or fully responsible, even if fully insured, or even an incident at a customer for which we provide services although we were found not to be responsible, may also result in negative publicity, which would harm our reputation among our customers and the public, cause us to lose existing and future contracts or make it more difficult for us to compete effectively, thereby significantly harming our operating performance. In addition, the occurrence of an accident or incident might also make it more expensive or extremely difficult for us to insure against similar events in the future.

***Many of the sites at which we work are inherently dangerous workplaces. If we fail to maintain a safe work environment, we may incur losses and lose business.***

Many of our customers, particularly in the oil and gas and chemical industries, require their inspectors and other contractors working at their facilities to have good safety records because of the inherent danger at these sites. If our employees are injured at the work place, we will incur costs for the injuries and lost productivity. In addition, safety records are impacted by the number and amount of workplace incidents involving a contractor's employees. If our safety record is not within the levels required by our customers, or compares unfavorably to our competitors, we could lose business, be prevented from working at

certain facilities or suffer other adverse consequences, all of which could negatively impact our business, revenues, reputation and profitability.

***Most of our computer and communications hardware is located at a single facility, the failure of which would harm our business and results of operations.***

Most of our computer and communications hardware is located at a single facility. We have a back-up data-center and storage in a different geographic area. Should a natural disaster or some other event occur that damages our primary data center or significantly disrupts its operation, such as human error, fire, flood, power loss, telecommunications failure, break-ins, terrorist attacks, acts of war and similar events, we could suffer temporary interruption of key functions and capabilities before the back-up facility is fully operational.

***If we are unable to attract and retain a sufficient number of trained certified technicians, engineers and scientists at competitive wages, our operational performance may be harmed and our costs may increase.***

We believe that our success depends, in part, upon our ability to attract, develop and retain a sufficient number of trained certified technicians, engineers and scientists at competitive wages. The demand for such employees fluctuates as the demand for NDT and inspection services fluctuate. There is currently a reduced demand for technicians because of a slowdown of spending in the oil and gas industry. However, if the demand for qualified technicians increases, we will likely experience increased labor costs. The markets for our products and services require us to use personnel trained and certified in accordance with standards set by domestic or international standard-setting bodies, such as the American Society of Non-Destructive Testing or the American Petroleum Institute. Because of the limited supply of these certified technicians, we expend substantial resources maintaining in-house training and certification programs. If we fail to attract sufficient new personnel or fail to motivate and retain our current personnel, our ability to perform under existing contracts and orders or to pursue new business may be harmed, preventing us from growing our business or causing us to lose customers and revenues, and the costs of performing such contracts and orders may increase, which would likely reduce our margins.

***We operate in competitive markets and if we are unable to compete successfully, we could lose market share and revenues and our margins could decline.***

We face strong competition from NDT and a variety of niche asset protection providers, both larger and smaller than we are. Some of our competitors have greater financial resources than we do and could focus their substantial financial resources to develop a competing business model or develop products or services that are more attractive to potential customers than what we offer. Some of our competitors are business units of companies substantially larger than us and could attempt to combine asset protection solutions into an integrated offering to customers who already purchase other types of products or services from them. Our competitors may offer asset protection solutions at lower prices than ours in order to attempt to gain market share. Smaller niche competitors with small customer bases could be aggressive in their pricing in order to retain customers. These competitive factors could reduce our market share, revenues and profits.

***Certain of our operations are unionized, and as a result, we or our subsidiaries are required to contribute to multi-employer pension plans. A significant reduction in our union work force could result in withdrawal liability to these multi-employer pension plans, which could be significant.***

Some of our workforce is unionized and the terms of employment for these workers are governed by collective bargaining agreements, or CBAs. Under these CBAs, we are required to contribute to the national pension funds for the unions representing these employees, which are multi-employer pension plans. If we experience a significant reduction in the employees covered by the CBAs, including as a result of lost business in the Challenged Region, a complete or partial withdrawal liability to these multi-employer pension plans could result under ERISA. Depending on the circumstances, this liability could be significant and adversely impact our earnings and cash flow.

***Events such as natural disasters, industrial accidents, epidemics, war and acts of terrorism, and adverse weather conditions could disrupt our business or the business of our customers, which could significantly harm our operations, financial results and cash flow.***

Our operations and those of our customers are susceptible to the occurrence of catastrophic events outside our control, ranging from severe weather conditions to acts of war and terrorism. Any such events could cause a serious business disruption that reduces our customers' need or interest in purchasing our asset protection solutions. In the past, such events have resulted in order cancellations and delays because customer equipment, facilities or operations have been damaged, or are not then operational or available. A large portion of our customer base has operations in the Gulf of Mexico, which is subject to

hurricanes. Hurricane-related disruptions to our customers' operations have adversely affected our revenues in the past. Such events in the future may result in substantial delays in the provision of solutions to our customers and the loss of valuable equipment. In addition, our results can be adversely impacted by severe winter weather conditions, which can result in lost work days and temporary closures of customer facilities or outdoor projects. Any cancellations, delays or losses due to such events may significantly reduce our revenues and harm our operating performance.

***If we lose key members of our senior management team upon whom we are dependent, we may be less effective in managing our operations and may have more difficulty achieving our strategic objectives.***

Our future success depends to a considerable degree upon the availability, contributions, vision, skills, experience and effort of our senior management team. We have in place various compensation programs, such as an annual cash incentive program, equity incentive program and a severance policy, each designed to incentivize and retain our key senior managers. We have also made changes to our senior management structure so that executive officers other than our founder, Dr. Sotirios Vahaviolos, provide executive leadership for operational, business development and strategy matters. At this time, we do not have any reason to believe that we may lose the services of any of these key persons in the foreseeable future and we believe our compensation programs will help us retain these individuals. We believe we have sufficient depth in our executive management to continue our success if we were to lose the services of an executive. However, an unplanned loss or interruption of the service of numerous key members of our senior management team could harm our business, financial condition and results of operations and could significantly reduce our ability to manage our operations and implement our strategy.

***Deteriorations in economic conditions in certain markets or other factors may cause us to recognize impairment charges for our goodwill.***

As of December 31, 2017, the carrying amount of our goodwill was approximately \$203 million, of which approximately \$38 million relates to our International segment. A significant portion of our international operations are concentrated in Europe and Brazil. Significant deterioration in industry or economic conditions in which we operate, disruptions to our business, not effectively integrating acquired businesses, or other factors, may cause impairment charges to goodwill in future periods. During 2017, the Products and Systems segment had contract bids which management assessed as having a reasonable chance of success and were not awarded to the Company. As a result of this missed opportunity, the annual forecasting process was accelerated, resulting in a goodwill impairment test for the Products and Systems reporting unit and a \$13.2 million impairment charge during the third quarter of 2017.

***The success of our businesses depends, in part, on our ability to develop new asset protection solutions, increase the functionality of our current offerings and meet the needs and demands of our customers.***

The market for asset protection solutions is impacted by technological change, uncertain product lifecycles, shifts in customer demands and evolving industry standards and regulations. We may not be able to successfully develop and market new asset protection solutions that comply with present or emerging industry regulations and technology standards. Also, new regulations or technology standards could increase our cost of doing business.

From time to time, our customers have requested greater value and functionality in our solutions. As part of our strategy to enhance our asset protection solutions and grow our business, we continue to make investments in the research and development of new technologies, inspection tools and methodologies. We believe our future success will depend, in part, on our ability to continue to design new, competitive and broader asset protection solutions, enhance our current solutions and provide new, value-added services. Many traditional NDT and inspection services are subject to price competition by our customers. Accordingly, the need to demonstrate our value-added services is becoming more important. Developing new solutions will require continued investment, and we may experience unforeseen technological or operational challenges. In addition, our asset protection software is complex and can be expensive to develop, and new software and software enhancements can require long development and testing periods. If we are unable to develop new asset protection solutions or enhancements that meet market demands on a timely basis, we may experience a loss of customers or otherwise be likely to lose opportunities to earn revenues and to gain customers or access to markets, and our business and results of operations will be adversely affected.

Even if we develop new solutions, if our customers, or potential customers, do not see the value our solutions have over competing products and services, our operating results could be adversely impacted. In addition, because the asset protection solutions industry is rapidly evolving, we could lose insight into trends that may be emerging, which would further harm our competitive position by making it difficult to predict and respond to customer needs. If the market for our asset protection solutions does not continue to develop, our ability to grow our business would be limited and we might not be able to maintain

profitability. If we cannot convince our customers of the advantages and value of our advanced NDT services, we could lose large contracts or suffer lower profit margin.

***If our software or system produces inaccurate information or are incompatible with the systems used by our customers and make us unable to successfully provide our solutions, it could lead to a loss of revenues and customers.***

Our software and systems are complex and, accordingly, may contain undetected errors or failures. Software or system defects or inaccurate data may cause incorrect recording, reporting or display of information related to our asset protection solutions. Any such failures, defects and inaccurate data may prevent us from successfully providing our asset protection solutions, which could result in lost revenues. Software or system defects or inaccurate data may lead to customer dissatisfaction and could cause our customers to seek to hold us liable for any damages incurred. As a result, we could lose customers, our reputation may be harmed and our financial condition and results of operations could be materially adversely affected.

We currently serve a commercial, industrial and governmental customer base that uses a wide variety of constantly changing hardware, software solutions and operating systems. Our asset protection solutions need to interface with these non-standard systems in order to gather and assess data. Our business depends on the following factors, among others:

- our ability to integrate our technology with new and existing hardware and software systems;
- our ability to anticipate and support new standards, especially internet-based standards; and
- our ability to integrate additional software modules under development with our existing technology and operational processes.

If we are unable to adequately address any of these factors, our results of operations and prospects for growth and profitability would be adversely impacted.

***The seasonal nature of our business reduces our revenues and profitability in the winter and summer.***

Our business, primarily in our Services segment, is seasonal. The fall and spring revenues for our Services segment are typically higher than our revenues in the winter and summer because demand for our asset protection solutions from the oil and gas as well as the fossil and nuclear power industries increases during their non-peak production periods. For instance, U.S. refineries' non-peak periods are generally in the fall, when they are retooling to produce more heating oil for winter, and in the spring, when they are retooling to produce more gasoline for summer. As a result of these trends, we generally have reduced cash flows in the fall and spring, as collections of receivables lag behind revenues, possibly requiring us to borrow under our credit agreement. In addition, most of our operating expenses, such as employee compensation and property rental expense, are relatively fixed over the short term. Moreover, our spending levels are based in part on our expectations regarding future revenues. As a result, if revenues for a particular quarter are below expectations, we may not be able to proportionately reduce operating expenses for that quarter. We expect that the impact of seasonality will continue.

***Our business, and the industries we currently serve, are currently subject to governmental regulation, and may become subject to modified or new government regulation that may negatively impact our ability to market our asset protection solutions.***

We incur substantial costs in complying with various government regulations and licensing requirements. For example, the transportation and overnight storage of radioactive materials used in providing certain of our asset protection solutions such as radiography are subject to regulation under federal and state laws and licensing requirements. Our Services segment is currently licensed to handle radioactive materials by the U.S. Nuclear Regulatory Commission (NRC), over 20 state regulatory agencies and the Canadian Nuclear Safety Commission. If we allegedly fail to comply with these regulations, we may be investigated and incur significant legal expenses associated with such investigations, and if we are found to have violated these regulations, we may be fined or lose one or more of our licenses or permits, which would prevent or restrict our ability to provide radiography services. In addition, while we are investigated, we may be required to suspend work on the projects associated with our alleged noncompliance, resulting in loss of profits or customers, and damage to our reputation. Many of our customers have strict requirements concerning safety or loss time occurrences and if we are unable to meet these requirements it could result in lost revenues. In the future, governmental agencies may seek to change current regulations or impose additional regulations on our business. Any modified or new government regulation applicable to our current or future asset protection solutions may negatively impact the marketing and provision of those solutions and increase our costs of providing these solutions and have a corresponding adverse effect on our margins.

Additionally, greenhouse gases that result from human activities, including burning of fossil fuels, have been the focus of increased scientific and political scrutiny and are being subjected to various legal requirements. International agreements, national laws, state laws and various regulatory schemes limit or otherwise regulate emissions of greenhouse gases, and additional restrictions are under consideration by different governmental entities. We derive a significant amount of revenues and profits from such industries, including oil and gas, power generation and transmission, and chemicals processing. Such regulations could negatively impact our customers, which could negatively impact the market for the services and products we provide. This could materially adversely affect our business, financial condition, results of operations and cash flows.

We rely on certification of our NDT solutions by industry standards-setting bodies. We and/or our subsidiaries currently have International Organization for Standardization (ISO) 9001:2008 certification, ISO 14001:2004 certification and OHSAS 18001:2007 certification. In addition, we currently have NADCAP (formerly National Aerospace and Defense Contractors Accreditation Program) and similar certifications for certain of our locations. We continually review our NDT solutions for compliance with the requirements of industry specification standards and the NADCAP special processes quality requirements. However, if we fail to maintain our ISO, Nadcap or other certifications, our business may be harmed because our customers generally require that we have these certifications before they purchase our NDT solutions.

***Intellectual property may impact our business and results of operations.***

Our ability to compete effectively depends in part upon the maintenance and protection of the intellectual property related to our asset protection solutions. Patent protection is unavailable for certain aspects of the technology and operational processes important to our business and any patent or patent applications, trademarks or copyrights held by us or to be issued to us, may not adequately protect us. Some of our trademarks that are not in use may become available to others. To date, we have relied principally on copyright, trademark and trade secrecy laws, as well as confidentiality agreements and licensing arrangements, to establish and protect our intellectual property. However, we have not obtained confidentiality agreements from all of our customers and vendors. Although we obligate our employees to confidentiality, we cannot be certain that these obligations will be honored or enforceable.

***We may require additional capital to support business growth, which might not be available.***

We intend to continue making investments to support our business growth and may require additional funds to respond to business challenges or opportunities, including the need to develop new, or enhance our current, asset protection solutions, enhance our operating infrastructure or acquire businesses and technologies. Accordingly, we may need to engage in equity or debt financings to secure additional funds. If we raise additional funds through further issuances of equity or convertible debt securities, our current stockholders could suffer significant dilution, and any new equity securities we issue could have rights, preferences and privileges superior to those of holders of our common stock. While our current bank financing is meeting our current need, any debt financing secured by us in the future could involve restrictive covenants relating to our capital-raising activities and other financial and operational matters, which may make it more difficult for us to obtain additional capital and to pursue business opportunities, including potential acquisitions. In addition, no assurance can be given that adequate or acceptable financing will be available to us, in which case we may not be able to grow our business, including through acquisitions, or respond to business challenges.

***Our credit agreement contains financial and operating restrictions that may limit our access to credit. If we fail to comply with financial or other covenants in our credit agreement, we may be required to repay indebtedness to our existing lenders, which may harm our liquidity.***

Our credit agreement contains financial covenants that require us to maintain compliance with specified financial ratios. If we fail to comply with these covenants, the lenders could prevent us from borrowing under our credit agreement, require us to pay all amounts outstanding, require that we cash collateralize letters of credit issued under the credit agreement and restrict us from making acquisitions. If the maturity of our indebtedness is accelerated, we then may not have sufficient funds available for repayment or the ability to borrow or obtain sufficient funds to replace the accelerated indebtedness on terms acceptable to us, or at all.

Our current credit agreement also imposes restrictions on our ability to engage in certain activities, such as creating liens, making certain investments, incurring more debt, disposing of certain property, paying dividends and making distributions and entering into a new line of business. While these restrictions have not impeded our business operations to date, if our plans change, these restrictions could be burdensome or require that we pay fees to have the restrictions waived.

***Any real or perceived internal or external electronic security breaches in connection with the use of our asset protection solutions could harm our reputation, inhibit market acceptance of our solutions and cause us to lose customers.***

We and our customers use our asset protection solutions to compile and analyze sensitive or confidential customer-related information. In addition, some of our asset protection solutions allow us to remotely control and store data from equipment at commercial, institutional and industrial locations. Our asset protection solutions rely on the secure electronic transmission of proprietary data over the internet or other networks. The occurrence or perception of security breaches in connection with our asset protection solutions or our customers' concerns about internet security or the security of our solutions, whether warranted or not, would likely harm our reputation or business, inhibit market acceptance of our asset protection solutions and cause us to lose customers, any of which would harm our financial condition and results of operations.

We may come into contact with sensitive information or data when we perform installation, maintenance or testing functions for our customers. Even the perception that we have improperly handled sensitive, confidential information would have a negative effect on our business. If, in handling this information, we fail to comply with privacy or security laws, we could incur civil liability to government agencies, customers and individuals whose privacy is compromised. In addition, third parties may attempt to breach our security or inappropriately harm our asset protection solutions through computer viruses, electronic break-ins and other disruptions. If a breach is successful, confidential information may be improperly obtained, for which we may be subject to lawsuits and other liabilities.

## **Risks Related to Our Common Stock**

### ***Our stock price could fluctuate for numerous reasons, including variations in our results.***

Our quarterly operating results have fluctuated in the past and may do so in the future. Accordingly, we believe that period-to-period comparisons of our results of operations may be the best indicators of our business. You should not rely upon the results of one quarter as an indication of future performance. Our revenues and operating results may fall below the expectations of securities analysts or investors in any future period. Our failure to meet these expectations may cause the market price of our common stock to decline, perhaps substantially. Our quarterly revenues and operating results may vary depending on a number of factors, including those listed previously under "Risks Related to Our Business." In addition, the price of our common stock is subject to general economic, market, industry, and competitive conditions, the risk factors discussed below and numerous other conditions outside of our control.

### ***A significant stockholder controls the direction of our business. The concentrated ownership of our common stock may prevent other stockholders from influencing significant corporate decisions.***

Dr. Sotirios J. Vahaviolos, our Executive Chairman, owns approximately 37% of our outstanding common stock. As a result, Dr. Vahaviolos exhibits significant control over our Company and has the ability to exert substantial influence over all matters requiring approval by our shareholders, including the election and removal of directors, amendments to our certificate of incorporation, and any proposed merger, consolidation or sale of all or substantially all of our assets and other corporate transactions. This concentration of ownership could be disadvantageous to other shareholders with differing interests from Dr. Vahaviolos.

### ***We currently have no plans to pay dividends on our common stock.***

We have not declared or paid any cash dividends on our common stock to date, and we do not anticipate declaring or paying any dividends on our common stock in the foreseeable future. To the extent we do not pay dividends on our common stock, investors must look solely to stock appreciation for a return on their investment.

### ***Shares eligible for future sale may cause the market price for our common stock to decline even if our business is doing well.***

Future sales by us or by our existing shareholders of substantial amounts of our common stock in the public market, or the perception that these sales may occur, could cause the market price of our common stock to decline. This could also impair our ability to raise additional capital in the future through the sale of our equity securities. Under our certificate of incorporation, we are authorized to issue up to 200,000,000 shares of common stock, of which approximately 28,302,000 shares of common stock were outstanding as of March 5, 2018. In addition, we have approximately 3,093,000 shares of common stock reserved for issuance related to stock options and restricted stock units that were outstanding as of March 5, 2018. We cannot predict the size of future issuances of our common stock or the effect, if any, that future sales and issuances of shares of our common stock, or the perception of such sales or issuances, would have on the market price of our common stock.

***Provisions of our charter, bylaws and of Delaware law could discourage, delay or prevent a change of control of our company, which may adversely affect the market price of our common stock.***

Certain provisions of our certificate of incorporation and bylaws could discourage, delay or prevent a merger, acquisition, or other change of control that stockholders may consider favorable, including transactions in which our stockholders might otherwise receive a premium for their shares. These provisions also could limit the price that investors might be willing to pay in the future for shares of our common stock, thereby depressing the market price of our common stock. Stockholders who wish to participate in these transactions may not have the opportunity to do so. Furthermore, these provisions could prevent or frustrate attempts by our stockholders to replace or remove our management. These provisions:

- allow the authorized number of directors to be changed only by resolution of our board of directors;
- require that vacancies on the board of directors, including newly created directorships, be filled only by a majority vote of directors then in office;
- authorize our board of directors to issue, without stockholder approval, preferred stock that, if issued, could operate as a “poison pill” to dilute the stock ownership of a potential hostile acquirer to prevent an acquisition that is not approved by our board of directors;
- require that stockholder actions must be effected at a duly called stockholder meeting by prohibiting stockholder action by written consent;
- prohibit cumulative voting in the election of directors, which may otherwise allow holders of less than a majority of stock to elect some directors; and
- establish advance notice requirements for stockholder nominations to our board of directors or for stockholder proposals that can be acted on at stockholder meetings and limit the right to call special meetings of stockholders to the Chairman of the Board, the Chief Executive Officer, the board of directors acting pursuant to a resolution adopted by a majority of directors or the Secretary upon the written request of stockholders entitled to cast not less than 35% of all the votes entitled to be cast at such meeting.

In addition, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which may, unless certain criteria are met, prohibit large stockholders, in particular those owning 15% or more of our outstanding voting stock, from merging or combining with us for a prescribed period of time.

**ITEM 1B. UNRESOLVED STAFF COMMENTS**

None.

**ITEM 2. PROPERTIES**

As of December 31, 2017, we operated approximately 120 offices in 14 countries, with our corporate headquarters located in Princeton Junction, New Jersey. Our headquarters in Princeton Junction is our primary location, where most of our manufacturing and research and development is conducted. While we lease most of our facilities, as of December 31, 2017, we owned properties located in Monroe, North Carolina; Trainer, Pennsylvania; LaPorte, Texas; Burlington, Washington; Gillette, Wyoming, Ellabell, Georgia; and Jonquiere, Quebec. Our Services segment utilizes approximately 80 offices throughout North America (including Canada). Our Products and Systems segment’s primary location is in our Princeton Junction, NJ facility. Our International segment has approximately 40 offices including locations in Belgium, Brazil, France, Germany, Greece, India, the Netherlands, and the United Kingdom. We believe that all of our facilities are well maintained and are suitable and adequate for our current needs.

**ITEM 3. LEGAL PROCEEDINGS**

We are subject to periodic legal proceedings, investigations and claims that arise in the ordinary course of business. See “Litigation” in Note 18 — *Commitments and Contingencies* to our audited consolidated financial statements contained in Item 8 of this Annual Report for a description of legal proceedings involving us and our business, which is incorporated herein by reference.

**ITEM 4. MINE SAFETY DISCLOSURES**

None.

**ITEM 5. MARKET FOR REGISTRANT’S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASE OF EQUITY SECURITIES****Market for Common Stock**

Our common stock currently trades on the New York Stock Exchange (NYSE) under the ticker symbol “MG.” The following table sets forth for the periods indicated the range of high and low sales prices, based on closing stock price, of our common stock.

	Year ended December 31, 2017	
	High	Low
Quarter ended March 31, 2017	\$ 26.33	\$ 20.00
Quarter ended June 30, 2017	\$ 22.78	\$ 20.54
Quarter ended September 30, 2017	\$ 22.51	\$ 17.12
Quarter ended December 31, 2017	\$ 23.47	\$ 20.38

Transition period:	Transition period ended December 31, 2016	
	High	Low
Quarter ended June 30, 2016 <sup>(1)</sup>	\$ 25.32	\$ 23.01
Quarter ended September 30, 2016	\$ 25.86	\$ 22.81
Quarter ended December 31, 2016	\$ 26.07	\$ 20.04

(1) The first quarter of the transition period ended December 31, 2016 (7-months) included only one month (June 1 - June 30, 2016) as a result of the change in our fiscal year-end.

	Year ended May 31, 2016		Year ended May 31, 2015	
	High	Low	High	Low
Quarter ended August 31,	\$ 20.14	\$ 13.88	\$ 25.04	\$ 20.70
Quarter ended November 30,	\$ 21.53	\$ 12.79	\$ 21.55	\$ 15.98
Quarter ended February 28,	\$ 22.59	\$ 18.42	\$ 21.50	\$ 15.87
Quarter ended May 31,	\$ 26.00	\$ 22.02	\$ 19.34	\$ 17.50

**Holders of Record**

As of March 5, 2018, there were 8 holders of record of our Common Stock. The number of record holders was determined from the records of our transfer agent and does not include beneficial owners of common stock whose shares are held in the names of various security brokers, dealers, and registered clearing agencies. The transfer agent of our common stock is American Stock Transfer & Trust Company, 6201 15th Avenue, Brooklyn, New York 11219.

**Dividends**

No cash dividends have been paid on our Common Stock to date. We currently intend to retain our future earnings, if any, to finance the expansion of our business and do not expect to pay any cash dividends in the foreseeable future.

**Purchases of Equity Securities**

The following sets forth the shares of our common stock we acquired during the fourth quarter of 2017 pursuant to the surrender of shares by employees to satisfy minimum tax withholding obligations in connection with the vesting of restricted stock units.

<b>Month Ending</b>	<b>Total Number of Shares (or Units) Purchased</b>	<b>Average Price Paid per Share (or Unit)</b>	<b>Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs <sup>(1)</sup></b>	<b>Approximate dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs <sup>(2)</sup></b>
October 31, 2017	1,233	\$ 20.69	—	\$ 25,081,657
November 30, 2017	2,741	\$ 21.33	—	\$ 25,081,657
December 31, 2017	2,918	\$ 23.47	—	\$ 25,081,657

(1) On August 17, 2016, the Company entered into an agreement with its founder, Chairman and then Chief Executive Officer, Dr. Sotirios Vahaviolos, which provided for the Company to repurchase up to 1 million shares of its common stock from Dr. Vahaviolos. The plan with Dr. Vahaviolos is included in the \$50.0 million of purchases authorized by our Board of Directors described in footnote 2 below. The repurchasing of Dr. Vahaviolos shares were completed during the third quarter of 2017. (See Note 20 in the notes to consolidated financial statements in Item 8 of this Annual Report for further details).

(2) - On October 7, 2015, the Company announced that its Board of Directors approved a share repurchase plan, which authorizes the expenditure of up to \$50.0 million for the purchase of the Company's common stock.

**ITEM 6. SELECTED FINANCIAL DATA**

The following table presents selected financial data for the year ended December 31, 2017, the transition period ended December 31, 2016 as well as each of the last four fiscal years. This selected financial data should be read in conjunction with “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in Item 7 and the audited consolidated financial statements and the notes thereto in Item 8 in this Annual Report.

	For the year ended December 31, 2017 (1)	For the Transition period ended December 31, 2016 (2)	For the year ended May 31,			
			2016 (3)	2015 (3)	2014 (3)	2013 (4)
(\$ in thousands, except per share data)						
<b>Statement of Income Data:</b>						
Revenues	\$ 700,970	\$ 404,161	\$ 719,181	\$ 711,252	\$ 623,447	\$ 529,282
Gross profit	187,712	117,004	203,008	184,733	172,943	148,371
Income from operations	4,160	17,533	43,177	30,353	38,295	27,554
Net (loss) income attributable to Mistras Group, Inc.	\$ (2,175)	\$ 9,568	\$ 24,654	\$ 16,081	\$ 22,518	\$ 11,646
<b>Per Share Information:</b>						
Weighted average common shares outstanding:						
Basic	28,422	28,989	28,856	28,613	28,365	28,141
Diluted	28,422	30,125	29,891	29,590	29,324	29,106
(Loss) earnings per common share:						
Basic	\$ (0.08)	\$ 0.33	\$ 0.85	\$ 0.56	\$ 0.79	\$ 0.41
Diluted	\$ (0.08)	\$ 0.32	\$ 0.82	\$ 0.54	\$ 0.77	\$ 0.40
<b>Balance Sheet Data:</b>						
Cash and cash equivalents	\$ 27,541	\$ 19,154	\$ 21,188	\$ 10,555	\$ 10,020	\$ 7,802
Total assets	554,441	469,427	482,675	471,727	443,972	377,997
Total long-term debt and obligations under capital leases, including current portion	181,491	103,466	104,776	132,822	97,563	77,956
Total Mistras Group, Inc. stockholders’ equity	\$ 270,619	\$ 270,582	\$ 276,163	\$ 244,819	\$ 242,104	\$ 210,053
<b>Cash Flow Data:</b>						
Net cash provided by operating activities	\$ 55,239	\$ 30,259	\$ 68,124	\$ 49,840	\$ 36,873	\$ 43,503
Net cash used in investing activities	(102,797)	(17,374)	(16,752)	(49,651)	(38,005)	(45,479)
Net cash (used in) provided by financing activities	53,605	(12,869)	(40,378)	2,066	3,262	1,144

1- Includes pre-tax charges of \$21.0 million relating to special items. See the Income from Operations table in Item 7 for a description of these items. The impact of these items, net of taxes, on net income and diluted earnings per share was \$14.9 million and \$0.51, respectively, including a \$2.0 million tax charge related to the Tax Act.

2- Includes pre-tax charges of \$2.2 million relating to special items. The impact of these items, net of taxes, on net income and diluted earnings per share was (\$1.6) million and (\$0.05), respectively.

3 - Includes pre-tax charges (benefits) of \$6.0 million in fiscal 2016, \$0.1 million in fiscal 2015 and \$(2.4) million in fiscal 2014 relating to special items. Net income was (decreased) increased by these items, net of taxes, by (\$3.2) million in fiscal 2016, \$1.0 million in fiscal 2015 and \$2.4 million in fiscal 2014, respectively. The (decrease) increase of these items on diluted earnings per share were (\$0.11) in fiscal 2016, \$0.03 in fiscal 2015 and \$0.08 in fiscal 2014, respectively.

4 - Includes pre-tax charges of \$7.8 million relating to: goodwill impairment charge of \$9.9 million and acquisition related benefit of (\$2.1 million). The impact of these items, net of taxes, on net income and diluted earnings per share was (\$8.3) million and (\$0.29), respectively.

## ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATION

The following Management's Discussion and Analysis ("MD&A") provides a narrative of our results of operations for the year ended December 31, 2017 and the comparable period ended December 31, 2016, the transition period ended December 31, 2016 and the comparable period ended December 31, 2015 (which is referred to as "transition period 2015") and the fiscal years ended May 31, 2016 and 2015, respectively, and our financial position as of December 31, 2017 and December 31, 2016, respectively. The MD&A should be read together with our consolidated financial statements and related notes included in Item 8 in this Annual Report on Form 10-K. Unless otherwise specified or the context otherwise requires, "Mistras," "the Company," "we," "us" and "our" refer to Mistras Group, Inc. and its consolidated subsidiaries. The MD&A includes the following sections:

- Forward-Looking Statements
- Overview
- Consolidated Results of Operations
- Liquidity and Capital Resources
- Critical Accounting Estimates
- Recent Accounting Pronouncements

### Forward-Looking Statements

This annual report on Form 10-K contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 (Securities Act), and Section 21E of the Securities Exchange Act of 1934 (Exchange Act). Such forward-looking statements include those that express plans, anticipation, intent, contingency, goals, targets or future development and/or otherwise are not statements of historical fact. See "Forward-Looking Statements" at the beginning of Item 1 of this Annual Report.

### Overview

We offer our customers "one source for asset protection solutions"® and are a leading global provider of technology-enabled asset protection solutions used to evaluate the structural integrity and reliability of critical energy, industrial and public infrastructure. We combine industry-leading products and technologies, expertise in mechanical integrity (MI), Non-Destructive Testing (NDT), Destructive Testing (DT), mechanical and predictive maintenance (PdM) services, process and fixed asset engineering and consulting services, proprietary data analysis and our world class enterprise inspection database management and analysis software, PCMS, to deliver a comprehensive portfolio of customized solutions, ranging from routine inspections to complex, plant-wide asset integrity management and assessments. These mission critical solutions enhance our customers' ability to comply with governmental safety and environmental regulations, extend the useful life of their assets, increase productivity, minimize repair costs, manage risk and avoid catastrophic disasters. Our operations consist of three reportable segments: Services, International and Products and Systems.

- *Services* provides asset protection solutions predominantly in North America, with the largest concentration in the United States, followed by Canada, consisting primarily of NDT, inspection, mechanical and engineering services that are used to evaluate the structural integrity and reliability of critical energy, industrial and public infrastructure.
- *International* offers services, products and systems similar to those of the other segments to select markets within Europe, the Middle East, Africa, Asia and South America, but not to customers in China and South Korea, which are served by the Products and Systems segment.
- *Products and Systems* designs, manufactures, sells, installs and services the Company's asset protection products and systems, including equipment and instrumentation, predominantly in the United States.

Given the role our solutions play in ensuring the safe and efficient operation of infrastructure, we have historically provided a majority of our services to our customers on a regular, recurring basis. We serve a global customer base of companies with asset-intensive infrastructure, including companies in the oil and gas (downstream, midstream, upstream and petrochemical), commercial aerospace and defense, power generation (natural gas, fossil, nuclear, alternative, renewable, and transmission and distribution), public infrastructure, chemicals, transportation, primary metals and metalworking, pharmaceutical/biotechnology and food processing industries and research and engineering institutions. As of December 31, 2017, we had approximately

6,000 employees in approximately 120 offices across 14 countries. We have established long-term relationships as a critical solutions provider to many of the leading companies in our target markets.

For the last several years, we have focused on introducing our advanced asset protection solutions to our customers using proprietary, technology-enabled software and testing instruments, including those developed by our Products and Systems segment. During this period, the demand for outsourced asset protection solutions, in general, has increased, creating demand from which our entire industry has benefited. We believe continued growth can be realized in all of our target markets. Concurrent with this growth, we are working on building our infrastructure to profitably absorb additional growth and have made a number of acquisitions in an effort to leverage our fixed costs, grow our base of experienced, certified personnel, expand our product and technical capabilities and increase our geographical reach.

We have increased our capabilities and the size of our customer base through the development of applied technologies and managed support services, organic growth and the integration of acquired companies. These acquisitions have provided us with additional products, technologies, resources and customers that we believe will enhance our advantages over our competition.

### **Note about Non-GAAP Measures**

In this MD&A under the heading "Income from Operations", the non-GAAP financial performance measure "Income before special items" is used for each of our three segments, the Corporate segment and the Total Company, with tables reconciling the measure to a financial measure under GAAP. This non-GAAP measure excludes from the GAAP measure "Income from Operations" (a) transaction expenses related to acquisitions, such as professional fees and due diligence costs, (b) the net changes in the fair value of acquisition-related contingent consideration liabilities, (c) impairment charges and (d) other special items. These special items have been excluded from the GAAP measure because these expenses and credits are not related to the Company's or Segment's core business operations. The acquisition related costs and special items can be a net expense or credit in any given period.

We believe investors and other users of our financial statements benefit from the presentation of "Income before special items" for each of our three segments, the Corporate segment and the Total Company in evaluating our performance. Income before special items excludes the identified special items, which provides additional tools to compare our core business operating performance on a consistent basis and measure underlying trends and results in our business. Income before special items is not used to determine incentive compensation for executives or employees, nor is it a replacement for GAAP and/or comparable to other companies non-GAAP financial measures.

### **Consolidated Results of Operations**

On January 3, 2017, the Company's Board of Directors approved a change in the Company's fiscal year end from May 31 to December 31, effective December 31, 2016. In connection with this change, we previously filed a Transition Report on Form 10-K to report the results of the seven-month transition period from June 1, 2016 to December 31, 2016. In this report, the periods presented are the year ended December 31, 2017, the seven-month transition period from June 1, 2016 to December 31, 2016 and the years ended May 31, 2016 and 2015. For comparison purposes, we have also included unaudited data for the year ended December 31, 2016 and for the seven months ended December 31, 2015.

#### **Year ended December 31, 2017 vs. Year ended December 31, 2016**

The following table summarizes our consolidated statements of operations for the years ended December 31, 2017 and 2016:

	For the year ended December 31,	
	2017	2016 (unaudited)
	(\$ in thousands)	
<b>Revenues</b>	\$ 700,970	\$ 684,762
<b>Gross profit</b>	187,712	194,134
<i>Gross profit as a % of Revenue</i>	27%	28%
Total operating expenses	183,552	168,588
<i>Operating expenses as a % of Revenue</i>	26%	25%
<b>Income from operations</b>	4,160	25,546
<i>Income from operations as a % of Revenue</i>	1%	4%
Interest expense	4,386	3,075
(Loss) income before provision for income taxes	(226)	22,471
Provision for income taxes	1,942	8,008
<b>Net (loss) income</b>	(2,168)	14,463
Less: net income attributable to noncontrolling interests, net of taxes	7	54
<b>Net (loss) income attributable to Mistras Group, Inc.</b>	\$ (2,175)	\$ 14,409

## Revenues

Revenues by segment for the years ended December 31, 2017 and 2016 were as follows:

	For the year ended December 31,	
	2017	2016 (unaudited)
	(\$ in thousands)	
<b>Revenues</b>		
Services	\$ 543,565	\$ 519,378
International	144,265	148,761
Products and Systems	23,297	26,049
Corporate and eliminations	(10,157)	(9,426)
	\$ 700,970	\$ 684,762

Revenue was \$701.0 million for the year ended December 31, 2017, an increase of \$16.2 million, or 2%, compared with the year ended December 31, 2016. The increase was driven by the Services segment, which increased by \$24.2 million, or 5%, partially offset by a decrease of \$4.5 million, or 3% from the International segment and the Products and Systems segment, which decreased \$2.8 million, or 11%. The Services segment increase was driven by mid-single digit acquisition growth. The International segment decrease was driven by a mid-single digit organic decline, offset by low single digit favorable impact of foreign exchange rates. The Products and Systems segment decrease was driven by lower sales volume.

Revenues from oil and gas customers comprised 58% for the year ended December 31, 2017, compared to 57% for the year ended December 31, 2016. Revenues from aerospace customers comprised 13% for the years ended December 31, 2017 and 2016.

## Gross Profit

Gross profit by segment for the years ended December 31, 2017 and December 31, 2016 was as follows:

	For the year ended December 31,	
	2017	2016 (unaudited)
	(\$ in thousands)	
<b>Gross profit</b>		
Services	\$ 139,160	\$ 133,532
<i>% of segment revenue</i>	25.6%	25.7%
International	38,974	48,372
<i>% of segment revenue</i>	27.0%	32.5%
Products and Systems	9,798	11,956
<i>% of segment revenue</i>	42.1%	45.9%
Corporate and eliminations	(220)	274
	<u>\$ 187,712</u>	<u>\$ 194,134</u>
<i>% of total revenue</i>	26.8%	28.4%

Gross profit decreased \$6.4 million, or 3%, for the year ended December 31, 2017 compared to the year ended December 31, 2016, despite a sales increase of 2%. Gross profit margin was 26.8% and 28.4% for the years ended December 31, 2017 and 2016, respectively. International segment gross margins had a year-on-year decline of 550 basis points to 27.0% for the year ended December 31, 2017. This decline was primarily driven by lower revenues in the Company's German subsidiary, as well as poor margins on a large contract and lower utilization of technical labor in the United Kingdom. Products and Systems segment gross margins declined by 380 basis points for the year ended December 31, 2017 to 42.1%, driven by lower sales volumes and a less favorable sales mix. Services segment gross profit margins were consistent with the prior year.

**Income from Operations.** The following table shows a reconciliation of segment income (loss) from operations to income (loss) before special items for the years ended December 31, 2017 and 2016:

	For the year ended December 31,	
	2017	2016 (unaudited)
	(\$ in thousands)	
<b>Services:</b>		
Income from operations (GAAP)	\$ 46,677	\$ 37,788
Litigation charges	—	6,320
Bad debt provision for a customer bankruptcy	1,200	—
Severance costs	561	77
Asset write-offs and lease terminations	123	—
Acquisition-related (benefit) expense, net	392	(232)
Income before special items (non-GAAP)	<u>48,953</u>	<u>43,953</u>
<b>International:</b>		
Income from operations (GAAP)	3,537	12,908
Severance costs	1,055	1,184
Asset write-offs and lease terminations	—	1,042
Acquisition-related (benefit) expense, net	(501)	(42)
Income before special items (non-GAAP)	<u>4,091</u>	<u>15,092</u>
<b>Products and Systems:</b>		
Loss from operations (GAAP)	(16,991)	(180)
Impairment charges	15,810	—
Severance costs	18	31
Loss before special items (non-GAAP)	<u>(1,163)</u>	<u>(149)</u>
<b>Corporate and Eliminations:</b>		
Loss from operations (GAAP)	(29,063)	(24,970)
Litigation charges	1,600	—
Severance costs	184	133
Acquisition-related expense (benefit), net	591	269
Loss before special items (non-GAAP)	<u>(26,688)</u>	<u>(24,568)</u>
<b>Total Company:</b>		
Income from operations (GAAP)	\$ 4,160	\$ 25,546
Litigation charges	\$ 1,600	\$ 6,320
Impairment charges	\$ 15,810	\$ —
Bad debt provision for a customer bankruptcy	\$ 1,200	\$ —
Severance costs	\$ 1,818	\$ 1,425
Asset write-offs and lease terminations	\$ 123	\$ 1,042
Acquisition-related (benefit) expense, net	\$ 482	\$ (5)
Income before special items (non-GAAP)	<u>\$ 25,193</u>	<u>\$ 34,328</u>

Total Company income from operations (GAAP) decreased by \$21.4 million, or 84% compared to the year ended December 31, 2016. Total Company income before special items (non-GAAP) decreased by \$9.1 million or 27% compared with the year

ended December 31, 2016. Income before special items declined by 140 basis points to 3.6% for the year ended December 31, 2017 from 5.0% for the year ended December 31, 2016.

Total operating expenses increased by \$15.0 million, or 9% for the year ended December 31, 2017, driven primarily by the \$15.8 million impairment charges for the Products and Systems segment (See Notes 8 and 9 in the notes to consolidated financial statements in Item 8 of this Annual Report).

### **Interest Expense**

Interest expense was \$4.4 million and \$3.1 million for the years ended December 31, 2017 and December 31, 2016. The increase was primarily related to increased borrowings on the Company's revolving line of credit.

### **Income Taxes**

Our effective income tax rate was approximately (858)% for the year ended December 31, 2017, compared to 36% for the year ended December 31, 2016. The change in effective tax rate was driven by tax reform in the United States.

On December 22, 2017, the United States enacted fundamental changes to federal tax law following the passage of the Tax Cuts and Jobs Act (the "Tax Act"). The Tax Act is complex and significantly changes the U.S. corporate tax system. Our financial statements for the year ended December 31, 2017 reflect certain effects of the Tax Act which includes a reduction in the corporate tax rate from 35% to 21%, imposition of a tax on unrepatriated foreign earnings ("the transition tax"), and a reduction to deferred tax assets attributable to changes made to executive compensation rules. As a result of the changes to tax laws and tax rates under the Tax Act, we incurred an increase in income tax expense of \$1.9 million during the year ended December 31, 2017, which consisted primarily of a \$2.3 million decrease in our net deferred tax liabilities due to the reduction in the federal corporate tax rate from 35% to 21%, an increase of \$3.9 million in tax expense attributable to the transition tax, and a decrease in the realizability of deferred tax assets of \$0.3 million due to changes made to executive compensation rules pursuant to the Tax Act.

Income tax expense varies as a function of pre-tax income and the level of non-deductible expenses, such as certain amounts of meals and entertainment expense, valuation allowances, and other permanent differences. It is also affected by discrete items that may occur in any given year, but are not consistent from year to year. Our effective income tax rate may fluctuate over the next few years due to many variables including the amount and future geographic distribution of our pre-tax income, changes resulting from our acquisition strategy, increases or decreases in our permanent differences, and the effects of the Tax Act.

### **Transition period ended December 31, 2016 vs. Transition period ended December 31, 2015**

The following table summarizes our consolidated statements of operations for the transition periods ended December 31, 2016 and 2015:

	For the Transition period ended December 31,	
	2016	2015 (unaudited)
	(\$ in thousands)	
<b>Revenues</b>	\$ 404,161	\$ 427,913
<b>Gross profit</b>	117,004	123,190
<i>Gross profit as a % of Revenue</i>	29%	29%
Total operating expenses	99,471	88,092
<i>Operating expenses as a % of Revenue</i>	25%	21%
<b>Income from operations</b>	17,533	35,098
<i>Income from operations as a % of Revenue</i>	4%	8%
Interest expense	2,052	3,672
Income before provision for income taxes	15,481	31,426
Provision for income taxes	5,870	11,627
<b>Net income</b>	9,611	19,799
Less: net income (loss) attributable to noncontrolling interests, net of taxes	43	(15)
<b>Net income attributable to Mistras Group, Inc.</b>	<u>\$ 9,568</u>	<u>\$ 19,814</u>

Revenues by segment for the transition periods ended December 31, 2016 and 2015 were as follows:

	For the Transition period ended December 31,	
	2016	2015 (unaudited)
	(\$ in thousands)	
<b>Revenues</b>		
Services	\$ 293,218	\$ 327,118
International	104,013	87,411
Products and Systems	14,541	18,786
Corporate and eliminations	(7,611)	(5,402)
	<u>\$ 404,161</u>	<u>\$ 427,913</u>

Revenue was \$404.2 million for the transition period ended December 31, 2016, a decrease of \$23.8 million, or 6% compared with the transition period ended December 31, 2015. The decrease was driven by the Services segment, which decreased by \$33.9 million, or 10% and the Products and Systems segment, which decreased by \$4.2 million, or 23%, partially offset by an increase of \$16.6 million, or 19% from the International segment. The Services segment decrease was driven by low double digit organic decline, offset by a small amount of acquisition growth. The Products and Systems segment decrease was driven by lower sales volume. The International segment increase was driven by organic growth, offset partially by an unfavorable impact of foreign exchange rates.

Revenues from oil and gas customers comprised 55% for the transition period ended December 31, 2016.

Gross profit by segment for the transition periods ended December 31, 2016 and December 31, 2015 was as follows:

	For the Transition period ended December 31,	
	2016	2015 (unaudited)
	(\$ in thousands)	
<b>Gross profit</b>		
Services	\$ 75,784	\$ 87,514
<i>% of segment revenue</i>	25.8%	26.8%
International	34,210	26,762
<i>% of segment revenue</i>	32.9%	30.6%
Products and Systems	6,920	8,986
<i>% of segment revenue</i>	47.6%	47.8%
Corporate and eliminations	90	(72)
	<u>\$ 117,004</u>	<u>123,190</u>
<i>% of total revenue</i>	28.9%	28.8%

Gross profit decreased \$6.2 million, or 5% for the transition period ended December 31, 2016 compared to the transition period ended December 31, 2015. As a percentage of revenues, gross profit improved by 10 basis points compared with the prior year to 28.9%.

The decrease in gross profit was primarily attributable to revenue declines in the Services segment of \$11.7 million or 13% and in the Products and Systems segment of \$2.1 million or 23%, offset in part by the International segment's improvement of \$7.4 million or 28%. International gross profit margins improved to 32.9% of revenues in the transition period ended December 31, 2016 compared with 30.6% of revenues in the transition period ended December 31, 2015. The 230 basis point increase was due to improvement across the Company's largest country locations, driven by organic growth, improvements in technical labor utilization, sales mix and overhead utilization. Services segment gross profit margins decreased to 25.8% of revenues in the transition period ended December 31, 2016 compared with 26.8% of revenues in the transition period ended December 31, 2015. The 100 basis point decrease was primarily driven by lower sales volume and a less favorable sales mix. Products and Systems segment gross margins decreased by 20 basis points to 47.6% of revenues.

**Income from Operations.** The following table shows a reconciliation of the segment income from operations to income before for the transition periods ended December 31, 2016 and 2015:

	For the transition period ended December 31,	
	2016	2015 (unaudited)
	(\$ in thousands)	
<b>Services:</b>		
Income from operations (GAAP)	\$ 22,411	\$ 37,175
Severance costs	77	188
Acquisition-related expense (benefit), net	236	(593)
Income before special items (non-GAAP)	22,724	36,770
<b>International:</b>		
Income from operations (GAAP)	10,597	6,888
Severance costs	474	175
Asset write-offs and lease terminations	1,042	—
Acquisition-related expense (benefit), net	29	(457)
Income before special items (non-GAAP)	12,142	6,606
<b>Products and Systems:</b>		
(Loss) income from operations (GAAP)	(254)	2,613
Severance costs	14	17
(Loss) income before special items (non-GAAP)	(240)	2,630
<b>Corporate and Eliminations:</b>		
Loss from operations (GAAP)	(15,221)	(11,578)
Severance costs	133	—
Acquisition-related expense (benefit), net	231	91
Loss before special items (non-GAAP)	(14,857)	(11,487)
<b>Total Company:</b>		
Income from operations (GAAP)	\$ 17,533	\$ 35,098
Severance costs	\$ 698	\$ 380
Asset write-offs and lease terminations	\$ 1,042	\$ —
Acquisition-related expense (benefit), net	\$ 496	\$ (959)
Income before special items (non-GAAP)	\$ 19,769	\$ 34,519

Total Company income from operations (GAAP) decreased by \$17.6 million, or 50% compared to the transition period ended December 31, 2015. Total Company income before special items (non-GAAP) decreased by \$14.8 million or 43% compared with the transition period ended December 31, 2015. Income before special items declined by 320 basis points to 4.9% of revenues for the transition period ended December 31, 2016.

Total operating expenses increased by \$11.4 million, or 13% in the transition period ended December 31, 2016 compared to the transition period ended December 31, 2015. The increase included approximately \$5 million of expenses that were primarily associated with the acceleration of certain costs to align with our new fiscal year, and other charges which included severance and the write-off of an intangible asset.

### Interest Expense

Interest expense was \$2.1 million and \$3.7 million for the transition periods ended December 31, 2016 and December 31, 2015, respectively. The decrease was primarily related to the repayment of seller notes related to acquisitions.

## Income Taxes

Our effective income tax rate was 38% for the transition period ended December 31, 2016 compared to 37% for the transition period ended December 31, 2015. The higher effective tax rate was driven by the impact of permanent items.

## Fiscal 2016 vs. 2015

The following table summarizes our consolidated statements of operations for fiscal 2016 and 2015:

	For the year ended May 31,	
	2016	2015
	(\$ in thousands)	
<b>Revenues</b>	\$ 719,181	\$ 711,252
<b>Gross profit</b>	203,008	184,733
<i>Gross profit as a % of Revenue</i>	28%	26%
Total operating expenses	159,831	154,380
<i>Operating expenses as a % of Revenue</i>	22%	22%
<b>Income from operations</b>	43,177	30,353
<i>Income from operations as a % of Revenue</i>	6%	4%
Interest expense	4,762	4,622
Income before provision for income taxes	38,415	25,731
Provision for income taxes	13,765	9,740
<b>Net income</b>	24,650	15,991
Less: net (loss) income attributable to noncontrolling interests, net of taxes	(4)	(90)
<b>Net income attributable to Mistras Group, Inc.</b>	<u>\$ 24,654</u>	<u>\$ 16,081</u>

Revenues by segment for fiscal 2016 and 2015 were as follows:

	For the year ended May 31,	
	2016	2015
	(\$ in thousands)	
<b>Revenues</b>		
Services	\$ 553,279	\$ 540,224
International	143,025	146,953
Products and Systems	30,293	31,255
Corporate and eliminations	(7,416)	(7,180)
	<u>\$ 719,181</u>	<u>\$ 711,252</u>

Revenue was \$719.2 million in fiscal 2016, an increase of \$7.9 million or 1% compared with fiscal 2015, driven by Services segment growth of \$13.1 million or 2%, offset by declines in International revenues of \$3.9 million or 3%, and the Products & Systems segment of \$1.0 million or 3%. The Services segment increase was driven by low single digit organic growth, plus a lesser amount of acquisition-driven growth, offset in part by low single digit unfavorable impact of foreign exchange rates. The decline in International Segment revenues was driven by a combination of high single digit organic growth, which had positive contributions from each of the segment's four largest subsidiaries, that was more than offset by the low double digit unfavorable impact of foreign exchange rates. Products and Systems segment revenues declined due to lower sales volume.

Management believes that revenues generally declined in the inspection industry during fiscal 2016, as evidenced by several of the Company's competitors who reported revenue declines that have been driven by customers spending less on inspection due to pressures stemming from low commodities prices. Despite these difficult market conditions, the Company had modest growth in fiscal 2016, as noted above, driven by market share gains in both the Services and International segments. Revenues

from oil and gas customers comprised 56% and 52% of revenues in fiscal 2016 and 2015, respectively. The International segment's largest revenue concentration in fiscal 2016 was aerospace and defense, which comprised 39% of segment revenues. One customer accounted for 10% of fiscal 2016 revenues.

Gross profit by segment for fiscal 2016 and 2015 was as follows:

	For the year ended May 31,	
	2016	2015
	(\$ in thousands)	
<b>Gross profit</b>		
Services	\$ 145,262	\$ 135,201
<i>% of segment revenue</i>	26.3%	25.0%
International	43,613	34,572
<i>% of segment revenue</i>	30.5%	23.5%
Products and Systems	14,022	14,314
<i>% of segment revenue</i>	46.3%	45.8%
Corporate and eliminations	111	646
	<u>\$ 203,008</u>	<u>\$ 184,733</u>
<i>% of total revenue</i>	28.2%	26.0%

Gross profit increased \$18.3 million, or 10% in fiscal 2016 compared to fiscal 2015. As a percentage of revenues, gross profit margin improved by 220 basis points compared with the prior year to 28.2% in fiscal 2016.

The 2016 improvement in gross profit margin was primarily attributable to the International and Services segments. International segment gross margins improved to 30.5% of revenues in fiscal 2016 compared with 23.5% of revenues in the prior year. The 700 basis point increase was driven by improvement in the Company's four largest countries, driven by organic revenue growth, prior year management changes and staffing actions that improved technical labor utilization and improved sales mix. Services segment gross profit margin was 26.3% and 25.0% in fiscal 2016 and fiscal 2015, respectively. The 130 basis point improvement was driven by improvements in contract profitability and technician labor utilization. Products and Systems segment gross profit margin improved to 46.3% compared to 45.8% in the prior year driven by a more favorable sales mix which included fewer customized solutions.

**Income from Operations.** The following table shows a reconciliation of the segment income from operations to income before special items for fiscal 2016 and 2015:

	For the year ended May 31,	
	2016	2015
(\$ in thousands)		
<b>Services:</b>		
Income from operations (GAAP)	\$ 52,552	\$ 49,142
Legal settlement	6,320	—
Severance costs	188	—
Acquisition-related expense (benefit), net	(1,061)	(639)
Income before special items (non-GAAP)	<u>57,999</u>	<u>48,503</u>
<b>International:</b>		
Income (loss) from operations (GAAP)	\$ 9,293	\$ (575)
Severance costs	885	1,082
Asset write-offs and lease terminations	—	872
Acquisition-related expense (benefit), net	(520)	(2,926)
Income (loss) before special items (non-GAAP)	<u>9,658</u>	<u>(1,547)</u>
<b>Products and Systems:</b>		
Income from operations (GAAP)	\$ 2,688	\$ 2,461
Severance costs	34	99
Asset write-offs and lease terminations	—	157
Acquisition-related expense (benefit), net	—	—
Income before special items (non-GAAP)	<u>2,722</u>	<u>2,717</u>
<b>Corporate and Eliminations:</b>		
Loss from operations (GAAP)	\$ (21,356)	\$ (20,675)
Severance costs	—	542
Charges related to sale of foreign operations	—	2,516
Acquisition-related expense (benefit), net	128	(1,602)
Loss before special items (non-GAAP)	<u>(21,228)</u>	<u>(19,219)</u>
<b>Total Company:</b>		
Income from operations (GAAP)	\$ 43,177	\$ 30,353
Legal settlement	\$ 6,320	\$ —
Severance costs	\$ 1,107	\$ 1,723
Asset write-offs and lease terminations	\$ —	\$ 1,029
Charges related to sale of foreign operations	\$ —	\$ 2,516
Acquisition-related expense (benefit), net	\$ (1,453)	\$ (5,167)
Income before special items (non-GAAP)	<u>\$ 49,151</u>	<u>\$ 30,454</u>

Total Company income from operations (GAAP) improved by \$12.8 million, or 42% compared to fiscal 2015. Total Company income before special items (non-GAAP) improved by \$18.7 million or 61% compared with fiscal 2015. Income before special items improved by 250 basis points to 6.8% of revenues in fiscal 2016. This improvement was driven by the Services and International segments. Services segment income from operations (GAAP) improved in fiscal 2016 by \$3.4 million, or 7%, while income before special items (non-GAAP) improved by \$9.5 million, or 20%. Services operating profit margin before

special items improved by 150 basis points to 10.5% in fiscal 2016, driven by the 130 basis point improvement in gross profit margin for the segment. International segment income before special charges improved by approximately 800 basis points to 7% in fiscal 2016, driven by the 700 basis point improvement in segment gross profit margin. Products and Systems fiscal 2016 operating margins before special charges of 9.0% improved by 30 basis points over 2015.

Total operating expenses increased by \$5 million, or 4% in fiscal 2016 compared to fiscal 2015, driven by a \$6.3 million legal settlement accrual, offset by a \$1.3 million, or 1% decline in recurring expenses.

### Interest Expense

Interest expense was \$4.8 million and \$4.6 million in fiscal 2016 and fiscal 2015, respectively.

### Income Taxes

Our effective income tax rate was 36% for fiscal 2016 compared to 38% for fiscal 2015. The lower effective tax rate was driven by discrete items, including favorability from reserves pertaining to uncertain tax positions and the absence of increases in the valuation allowance for deferred tax assets in 2016.

## Liquidity and Capital Resources

### Overview

The Company has funded its operations from cash provided from operations, bank borrowings and capital lease financings. Management believes that the Company's existing cash and cash equivalents, anticipated cash flows from operating activities, and available borrowings under our credit agreement will be more than sufficient to meet anticipated cash needs over the next 12 months. The Company generated operating cash flow of \$55.2 million for the year ended December 31, 2017, \$63.2 million for the year ended December 31, 2016 and \$30.3 million for the transition period ended December 31, 2016. The Company generated operating cash flow of \$68.1 million in fiscal 2016 and \$49.8 million in fiscal 2015. Capital expenditures for the purchase of property, plant and equipment and of intangible assets was \$20.6 million \$15.9 million, \$9.8 million, \$16.2 million and \$16.0 million for the years ended December 31, 2017 and 2016, the transition period ended December 31, 2016 and for fiscal 2016 and 2015, respectively.

### Cash Flows Table

The following table summarizes our cash flows for the years ended December 31, 2017 and 2016, the transition period ended December 31, 2016 and fiscal 2016 and 2015:

	For the year ended December 31,		For the Transition period ended December 31,	For the year ended May 31,	
	2017	2016 (unaudited)	2016	2016	2015
(\$ in thousands)					
Net cash provided by (used in):					
Operating activities	\$ 55,239	\$ 63,211	\$ 30,259	\$ 68,124	\$ 49,840
Investing activities	(102,797)	(22,408)	(17,374)	(16,752)	(49,651)
Financing activities	53,605	(30,031)	(12,869)	(40,378)	2,066
Effect of exchange rate changes on cash	2,340	(1,217)	(2,050)	(361)	(1,720)
Net change in cash and cash equivalents	\$ 8,387	\$ 9,555	\$ (2,034)	\$ 10,633	\$ 535

### Cash Flows from Operating Activities

Cash provided by operating activities for the year ended December 31, 2017 was \$55.2 million, a decline of \$8 million from the prior year. The decrease was primarily attributable to a lower level of net income, exclusive of the \$15.8 million impairment charge during 2017.

Cash provided by operating activities for the transition period ended December 31, 2016 was \$30.3 million.

Cash provided by operating activities in fiscal 2016 improved by \$18 million or 37% over the prior fiscal year. This improvement was primarily driven by the Company's \$16 million improvement in net income, as adjusted for working capital items and certain non-cash items, most notably the \$6 million legal settlement, as well as from reducing Days Sales Outstanding by 2 days.

Cash provided by operating activities in fiscal 2015 improved by \$13 million or 35% over the prior fiscal year. The improvement was primarily attributable to the timing of working capital inflows and outflows, namely a \$28 million improvement in the timing of collections of accounts receivable, offset in part by incremental net outflows of \$15 million related to the timing of payments relating to accounts payable, and accrued expenses and other liabilities.

#### **Cash Flows from Investing Activities**

Net cash used in investing activities for the year ended December 31, 2017 was \$102.8 million, principally due to \$83.4 million of acquisitions and \$20.6 million purchases of property, plant and equipment and intangible assets. Net cash used in investing activities for the year ended December 31, 2016 was \$22.4 million, principally due to \$15.9 million purchases of property, plant and equipment and intangible assets as well as \$8.3 million of acquisitions.

Net cash used in investing activities for the transition period ended December 31, 2016 was \$17.4 million, principally due to \$9.8 million purchases of property, plant and equipment and intangible assets and \$8.3 million of acquisitions.

Net cash used in investing activities was \$16.8 million in fiscal 2016, principally due to \$16.2 million purchases of property, plant and equipment and intangible assets.

Net cash used in investing activities was \$49.7 million in fiscal 2015, principally due to acquisitions totaling \$34.7 million, and purchases of property, plant and equipment of \$16.0 million.

#### **Cash Flows from Financing Activities**

Net cash provided by financing activities for the year ended December 31, 2017 was \$53.6 million, derived from our net borrowings for the year of \$71.5 million, which were primarily used to fund acquisitions, offset principally by \$15.9 million of treasury stock purchases. Net cash used in financing activities for the year ended December 31, 2016 was \$30.0 million, driven primarily by \$17.3 million of net repayments of debt and \$9.0 million of treasury stock purchases.

Net cash used in financing activities for the transition period ended December 31, 2016 was \$12.9 million, driven primarily by \$9 million of treasury stock purchases and \$2 million of net repayments of debt.

Net cash used in financing activities in fiscal 2016 of \$40 million consisted primarily of net repayments of debt totaling \$36 million.

Net cash provided by financing activities in fiscal 2015 was \$2 million.

#### **Cash Balance and Credit Facility Borrowings**

As of December 31, 2017, the Company had cash and cash equivalents totaling \$27.5 million, of which \$27.3 million is outside of the United States, and available borrowing capacity of up to \$88.2 million under its credit agreement (as defined below). Borrowings of \$156.9 million and letters of credit of \$4.9 million were outstanding under the credit agreement at December 31, 2017. We finance our operations primarily through our existing cash balances, cash collected from operations, bank borrowings and capital lease financing. We believe these sources are sufficient to fund our operations for the foreseeable future.

On December 8, 2017, the Company entered into a Fourth Amended and Restated Credit Agreement ("Credit Agreement"). The Credit Agreement increased the Company's revolving line of credit from \$175.0 million to \$250.0 million and provides that under certain circumstances the line of credit can be increased to \$300.0 million. The Company may continue to borrow up to \$30.0 million in non-U.S. Dollar currencies and use up to \$10.0 million of the credit limit for the issuance of letters of credit. The maturity date of the Credit Agreement is December 7, 2022.

Loans under the Credit Agreement bear interest at LIBOR plus an applicable LIBOR margin ranging from 1% to 2%, or a base rate less a margin of 1.25% to 0.375%, at our option, based upon our Funded Debt Leverage Ratio. Funded Debt Leverage Ratio is generally the ratio of (1) all outstanding indebtedness for borrowed money and other interest-bearing indebtedness as of the date of determination to (2) EBITDA (which is (a) net income, less (b) income (or plus loss) from discontinued operations and extraordinary items, plus (c) income tax expenses, plus (d) interest expense, plus (e) depreciation, depletion, and amortization (including non-cash loss on retirement of assets), plus (f) stock compensation expense, less (g) cash expense related to stock compensation, plus (h) certain amounts of EBITDA of acquired business for the prior twelve months, plus (i) certain expenses related to the closing of the Credit Agreement, plus (j) non-cash expenses which do not (in the current or any future period) represent a cash item (excluding non-cash gains which increase net income), plus (k) non-recurring charges (not to exceed \$5 million in the four consecutive quarters immediately preceding the date of determination) for items such as severance, lease termination charges, asset write-offs and litigation settlements paid during the period, all determined for the period of four consecutive fiscal quarters immediately preceding the date of determination. The Company has the benefit of the lowest margin if its Funded Debt Leverage Ratio is equal to or less than 0.5 to 1, and the margin increases as the ratio increases, to the maximum margin if the ratio is greater than 2.75 to 1. The Company will also bear additional costs for market disruption, regulatory changes effecting the lenders' funding costs, and default pricing of an additional 2% interest rate margin on any amounts not paid when due. Amounts borrowed under the Credit Agreement are secured by liens on substantially all of the assets of the Company and is guaranteed by some of our subsidiaries.

The Credit Agreement contains financial covenants requiring that we maintain a Funded Debt Leverage Ratio of no greater than 3.50 to 1 and an Interest Coverage Ratio of at least 3.0 to 1. Interest Coverage Ratio means the ratio, as of any date of determination, of (a) EBITDA for the 12 month period immediately preceding the date of determination, to (b) all interest, premium payments, debt discount, fees, charges and related expenses of us and our subsidiaries in connection with borrowed money (including capitalized interest) or in connection with the deferred purchase price of assets, in each case to the extent treated as interest in accordance with GAAP, paid during the 12 month period immediately preceding the date of determination. The Company can elect to increase the Funded Debt Leverage Ratio to 3.75 to 1 temporarily for four fiscal quarters immediately following the fiscal quarter in which the Company acquires another business. The Company can make this election twice during the term of the Credit Agreement.

The Credit Agreement also limits the Company's ability to, among other things, create liens, make investments, incur more indebtedness, merge or consolidate, make dispositions of property, pay dividends and make distributions to stockholders or repurchase our stock, enter into a new line of business, enter into transactions with affiliates and enter into burdensome agreements. The Credit Agreement does not limit the Company's ability to acquire other businesses or companies except that the acquired business or company must be in the Company's line of business, the Company must be in compliance with the financial covenants on a pro forma basis after taking into account the acquisition, and, if the acquired business is a separate subsidiary, in certain circumstances the lenders will receive the benefit of a guaranty of the subsidiary and liens on its assets and a pledge of its stock.

As of December 31, 2017, the Company was in compliance with the terms of the Credit Agreement, and has undertaken to continuously monitor compliance with these covenants.

## **Liquidity and Capital Resources Outlook**

### *Future Sources of Cash*

We expect our future sources of cash to include cash flow generated from our operating activities and borrowings under our Credit Agreement. Our revolving credit facility is available for cash advances required for working capital and for letters of credit to support our operations. Acquisitions are funded through available cash, borrowings under the revolving credit facility and seller notes.

### *Future Uses of Cash*

We expect our future uses of cash will primarily be for acquisitions, international expansion, stock repurchases, purchases or manufacture of field testing equipment to support growth, additional investments in technology and software products and the replacement of existing assets and equipment used in our operations. We often make purchases to support new sources of revenues, particularly in our Services segment. In addition, we will need to fund a certain amount of replacement equipment, including our fleet vehicles. We historically spend approximately 2% to 4% of our total revenues on capital expenditures, excluding acquisitions, and expect to fund these expenditures through a combination of cash and lease financing. Our cash capital expenditures, excluding acquisitions, for the year ended December 31, 2017, the transition period ended December 31, 2016 and for fiscal 2016 and 2015 were approximately 3%, 2%, 2% and 2% of revenues, respectively.

Our future acquisitions may also require capital. We acquired three companies during the year ended December 31, 2017 and, three companies during the transition period ended December 31, 2016, with an aggregate cash outlay of \$92.3 million. In some cases, additional equipment will be needed to upgrade the capabilities of these acquired companies. In addition, our future acquisition and capital spending may increase as we pursue growth opportunities. Other investments in infrastructure, training and software may also be required to match our growth, but we plan to continue using a disciplined approach to building our business. In addition, we will use cash to fund our operating leases, capital leases, long-term debt repayments and various other obligations as they arise.

We also expect to use cash to support our working capital requirements for our operations, particularly in the event of further growth and due to the impacts of seasonality on our business. Our future working capital requirements will depend on many factors, including the rate of our revenue growth, our introduction of new solutions and enhancements to existing solutions and our expansion of sales and marketing and product development activities. To the extent that our cash and cash equivalents and future cash flows from operating activities are insufficient to fund our future activities, we may need to raise additional funds through bank credit arrangements, public or private equity financings, or debt financings. We also may need to raise additional funds in the event we determine in the future to effect one or more acquisitions of businesses, technologies or products that will complement our existing operations. In the event additional funding is required, we may not be able to obtain bank credit arrangements or effect an equity or debt financing on acceptable terms.

### Contractual Obligations

We generally do not enter into long-term minimum purchase commitments. Our principal commitments, in addition to those related to our long-term debt discussed below, consist of obligations under facility leases for office space and equipment leases and contingent consideration obligations in connection with our acquisitions.

The following table summarizes our outstanding contractual obligations as of December 31, 2017:

(\$ in thousands)	Total	December 31, 2018	December 31, 2019	December 31, 2020	December 31, 2021	December 31, 2022	Thereafter
Long-term debt (1)	\$ 166,878	\$ 2,358	\$ 1,664	\$ 1,243	\$ 892	\$ 157,728	\$ 2,993
Capital lease obligations (2)	15,344	5,899	3,788	2,485	1,778	634	760
Operating lease obligations	49,432	11,542	8,888	6,902	4,881	4,304	12,915
Contingent consideration obligations (3)	5,508	3,430	1,279	799	—	—	—
Total	<u>\$ 237,162</u>	<u>\$ 23,229</u>	<u>\$ 15,619</u>	<u>\$ 11,429</u>	<u>\$ 7,551</u>	<u>\$ 162,666</u>	<u>\$ 16,668</u>

- (1) Consists primarily of the principal portion of borrowings from our senior credit facility and seller notes payable in connection with our acquisitions and includes the current portion outstanding.
- (2) Includes estimated cash interest to be paid over the remaining terms of the leases.
- (3) Consists of payments deemed reasonably likely to occur in connection with our acquisitions.

### Off-Balance Sheet Arrangements

During the year ended December 31, 2017, the transition period ended December 31, 2016 as well as fiscal 2016 and 2015, we did not have any relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities, which would have been established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes.

### Critical Accounting Policies and Estimates

The preparation of financial statements in accordance with generally accepted accounting principles requires that we make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of financial statements and the reported amounts of revenues and expenses during the reporting period. The accounting policies that we believe require more significant estimates and assumptions include: revenue recognition, long-

lived assets and goodwill. We base our estimates and assumptions on historical experience, known or expected trends and various other assumptions that we believe to be reasonable. As future events and their effects cannot be determined with precision, actual results could differ significantly from these estimates, which may cause our future results to be significantly affected.

We believe that the following critical accounting policies comprise the more significant estimates and assumptions used in the preparation of our consolidated financial statements.

### **Revenue Recognition**

Revenue is generally recognized when persuasive evidence of an arrangement exists, services have been rendered or products have been delivered, the fee is fixed or determinable, and collectability is reasonably assured, as summarized below.

#### *Services*

Most of our projects are short-term in nature and revenue is primarily derived from providing services on a time and material basis. Service arrangements generally consist of inspection professionals working under contract for a fixed period of time or on a specific customer project. Revenue is generally recognized when the service is performed in accordance with terms of each customer arrangement, upon completion of the earnings process and when collection is reasonably assured. At the end of any reporting period, earned revenue is accrued for services that have been provided which have not yet been billed. Reimbursable costs, including those related to travel and out-of-pocket expenses, are included in revenue, and equivalent amounts of reimbursable costs are included in cost of services.

#### *Products and Systems*

Sales of products and systems are recorded when the sales price is fixed and determinable and the risks and rewards of ownership are transferred (generally upon shipment) and when collectability is reasonably assured.

These arrangements occasionally contain multiple elements or deliverables, such as hardware, software (that is essential to the functionality of the hardware) and related services. We recognize revenue for delivered elements as separate units of accounting, when the delivered elements have standalone value, uncertainties regarding customer acceptance are resolved and there are no refund or return rights for the delivered elements. We establish the selling prices for each deliverable based on our vendor-specific objective evidence (“VSOE”), if available, third-party evidence, if VSOE is not available, or estimated selling price (“ESP”) if neither VSOE nor third-party evidence is available. We establish VSOE of selling price using the price charged for a deliverable when sold separately and, in rare instances, using the price established by management having the relevant authority. Third-party evidence of selling price is established by evaluating largely similar and interchangeable competitor products or services in standalone sales to similarly situated customers. We determine ESP by considering internal factors such as margin objectives, pricing practices and controls, customer segment pricing strategies and the product life cycle. Consideration is also given to market conditions such as competitor pricing strategies and industry technology life cycles. When determining ESP, we apply management judgment to establish margin objectives and pricing strategies and to evaluate market conditions and product life cycles. Changes in the aforementioned factors may result in a different allocation of revenue to the deliverables in multiple element arrangements and therefore may change the pattern and timing of revenue recognition for these elements, but will not change the total revenue recognized for the arrangement.

A portion of our revenue is generated from engineering and manufacturing of custom products under long-term contracts that may last from several months to several years, depending on the contract. Revenues from long-term contracts are recognized on the percentage-of-completion method of accounting. Under the percentage-of-completion method of accounting revenues are recognized as work is performed. The percentage of completion at any point in time is generally based on total costs or total labor dollars incurred to date in relation to the total estimated costs or total labor dollars estimated at completion. The percentage of completion is then applied to the total contract revenue to determine the amount of revenue to be recognized in the period. Application of the percentage-of-completion method of accounting requires the use of estimates of costs to be incurred for the performance of the contract. Contract costs include all direct materials, direct labor costs and those indirect costs related to contract performance, such as indirect labor, supplies, tools, repairs, and all costs associated with operation of equipment. The cost estimation process is based upon the professional knowledge and experience of our engineers, project managers and financial professionals. Factors that are considered in estimating the work to be completed include the availability and productivity of labor, the nature and complexity of the work to be performed, the effect of change orders, the availability of materials, the effect of any delays in our project performance and the recoverability of any claims. Whenever revisions of estimated contract costs and contract values indicate that the contract costs will exceed estimated revenues, thus creating a loss, a provision for the total estimated loss is recorded in that period.

## **Long-Lived Assets**

We perform a review of long-lived assets (or asset groups) for impairment when events or changes in circumstances indicate the carrying value of such assets may not be recoverable. If an indication of impairment is present, we compare the estimated undiscounted future cash flows to be generated by the asset (or asset group) to its carrying amount. If the undiscounted future cash flows are less than the carrying amount of the asset (or asset group), we record an impairment loss equal to the excess of the asset's carrying amount over its fair value. We estimate fair value based on valuation techniques such as a discounted cash flow analysis or a comparison to fair values of similar assets. As of December 31, 2017 and December 31, 2016, we had \$87.1 million and \$73.1 million in net property, plant and equipment, respectively, and \$63.7 million and \$40.0 million in intangible assets, net, respectively. During the third quarter of 2017, there was a triggering event in the Products and Systems segment that resulted in a \$2.6 million impairment charge of long-lived assets. (See Note 9 in the notes to consolidated financial statements in Item 8 of this Annual Report for further details) During the transition period ended December 31, 2016, \$0.8 million of specifically identified assets were written off.

## **Goodwill**

Goodwill represents the excess purchase price of acquired businesses over the fair values attributed to underlying net tangible assets and identifiable intangible assets. We test goodwill for impairment at a "reporting unit" level (which for the Company is represented by (i) our Services segment, (ii) our Products and Systems segment, and (iii) the European component and (iv) Brazilian component of our International segment). Our annual impairment test is conducted on the first day of our fourth quarter. In connection with the change in our fiscal year to December 31, our annual test date is October 1. For the transition period ended December 31, 2016, a December 1 date was used and historically, prior to the fiscal year end change, the Company tested for impairment annually as of March 1. Goodwill is also tested for impairment whenever an event occurs or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying amount. During the third quarter of 2017, there was a triggering event in the Products and Systems segment that resulted in a \$13.2 million goodwill impairment charge. See Note 8 in the notes to consolidated financial statements in Item 8 of this Annual Report for further details.

If the fair value of a reporting unit is less than its carrying value, this is an indicator that the goodwill assigned to that reporting unit may be impaired. As a result of the Company adopting ASU 2017-04, impairment will be recorded in the amount that fair value is less than carrying value, as the ASU eliminated step two of goodwill impairment process. The Company considers the income and market approaches to estimating the fair value of our reporting units, which requires significant judgment in evaluation of economic and industry trends, estimated future cash flows, discount rates and other factors.

## **Recent Accounting Pronouncements**

For information about recent accounting pronouncements, see Note 2 to the consolidated financial statements.

## **ITEM 7A. Quantitative and Qualitative Disclosures About Market Risk**

### **Interest Rate Sensitivity**

The company's investment portfolio primarily includes cash equivalents for which the market values are not significantly affected by changes in interest rates. Our interest rate risk results primarily from our variable rate indebtedness under our credit facility, which is influenced by movements in short-term rates. Borrowings under our \$250.0 million revolving credit facility are based on an LIBOR, plus an additional margin based on our Funded Debt Leverage Ratio. Based on the amount of variable rate debt, \$156.9 million at December 31, 2017, an increase in interest rates by one hundred basis points from our current rate would increase annual interest expense by approximately \$1.6 million.

### **Foreign Currency Risk**

We have foreign currency exposure related to our operations in foreign locations. This foreign currency exposure, particularly the Euro, British Pound Sterling, Brazilian Real, Canadian Dollar and the Indian Rupee, arises primarily from the translation of our foreign subsidiaries' financial statements into U.S. Dollars. For example, a portion of our annual sales and operating costs are denominated in British Pound Sterling and we have exposure related to sales and operating costs increasing or decreasing based on changes in currency exchange rates. If the U.S. Dollar increases in value against these foreign currencies, the value in U.S. Dollars of the assets and liabilities originally recorded in these foreign currencies will decrease. Conversely, if the U.S.

Dollar decreases in value against these foreign currencies, the value in U.S. Dollars of the assets and liabilities originally recorded in these foreign currencies will increase. Thus, increases and decreases in the value of the U.S. Dollar relative to these foreign currencies have a direct impact on the value in U.S. Dollars of our foreign currency denominated assets and liabilities, even if the value of these items has not changed in their original currency. Translation adjustments for these movements are recorded as a separate component of Accumulated Other Comprehensive Income in Shareholder Equity. We do not currently enter into forward exchange contracts to hedge exposures denominated in foreign currencies. An unfavorable 10% change (strengthening) in the average U.S. Dollar exchange rates for the year ended December 31, 2017 would cause a decrease in consolidated operating income of approximately \$0.8 million and a favorable 10% change (weakening) would cause an increase of approximately \$0.9 million. We may consider entering into hedging or forward exchange contracts in the future, as sales in international currencies increase due to growth in our International segment.

#### **Fair Value of Financial Instruments**

We do not have material exposure to market risk with respect to investments, as our investments consist primarily of highly liquid investments purchased with a remaining maturity of three months or less. We do not use derivative financial instruments for speculative or trading purposes; however, this does not preclude our adoption of specific hedging strategies in the future.

#### **Effects of Inflation and Changing Prices**

Our results of operations and financial condition have not been significantly affected by inflation and changing prices.

## ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

### Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders  
Mistras Group, Inc.:

#### *Opinions on the Consolidated Financial Statements and Internal Control Over Financial Reporting*

We have audited the accompanying consolidated balance sheets of Mistras Group, Inc. and subsidiaries (the “Company”) as of December 31, 2017 and 2016, the related consolidated statements of (loss) income, comprehensive income (loss), equity, and cash flows for the year ended December 31, 2017, the seven month transition period ended December 31, 2016, and each of the years in the two-year period ended May 31, 2016, and the related notes (collectively, the “consolidated financial statements”). We also have audited the Company’s internal control over financial reporting as of December 31, 2017, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2017 and 2016, and the results of its operations and its cash flows for the year ended December 31, 2017, the seven month transition period ended December 31, 2016, and each of the years in the two-year period ended May 31, 2016, in conformity with U.S. generally accepted accounting principles. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2017, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission.

The Company acquired three entities during 2017, and management excluded from its assessment of the effectiveness of the Company’s internal control over financial reporting as of December 31, 2017, these entities’ internal control over financial reporting associated with total assets of 4.0% and total revenues of 2.6% included in the consolidated financial statements of the Company as of and for the year ended December 31, 2017. Our audit of internal control over financial reporting of the Company also excluded an evaluation of the internal control over financial reporting of these entities.

#### *Basis for Opinions*

The Company’s management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management’s Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company’s consolidated financial statements and an opinion on the Company’s internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (“PCAOB”) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

#### *Definition and Limitations of Internal Control Over Financial Reporting*

A company’s internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company’s internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in

accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ KPMG LLP

We have served as the Company's auditor since 2013.

Short Hills, New Jersey

March 14, 2018

**Mistras Group, Inc. and Subsidiaries**  
**Consolidated Balance Sheets**  
(in thousands, except share and per share data)

	December 31,	
	2017	2016
<b>ASSETS</b>		
Current Assets		
Cash and cash equivalents	\$ 27,541	\$ 19,154
Accounts receivable, net	138,080	130,852
Inventories	10,503	10,017
Deferred income taxes	—	6,230
Prepaid expenses and other current assets	18,884	16,399
Total current assets	195,008	182,652
Property, plant and equipment, net	87,143	73,149
Intangible assets, net	63,739	40,007
Goodwill	203,438	169,940
Deferred income taxes	1,606	1,086
Other assets	3,507	2,593
Total Assets	\$ 554,441	\$ 469,427
<b>LIABILITIES AND EQUITY</b>		
Current Liabilities		
Accounts payable	\$ 10,362	\$ 6,805
Accrued expenses and other current liabilities	65,561	58,697
Current portion of long-term debt	2,358	1,379
Current portion of capital lease obligations	5,875	6,488
Income taxes payable	6,069	4,342
Total current liabilities	90,225	77,711
Long-term debt, net of current portion	164,520	85,917
Obligations under capital leases, net of current portion	8,738	9,682
Deferred income taxes	8,803	17,584
Other long-term liabilities	11,363	7,789
Total Liabilities	283,649	198,683
Commitments and contingencies		
Equity		
Preferred stock, 10,000,000 shares authorized	—	—
Common stock, \$0.01 par value, 200,000,000 shares authorized, 28,294,968 and 29,216,745 shares issued	282	292
Additional paid-in capital	222,425	217,211
Treasury stock at cost, 0 and 420,258 shares	—	(9,000)
Retained earnings	64,717	91,803
Accumulated other comprehensive loss	(16,805)	(29,724)
Total Mistras Group, Inc. stockholders' equity	270,619	270,582
Non-controlling interests	173	162
Total Equity	270,792	270,744
Total Liabilities and Equity	\$ 554,441	\$ 469,427

*The accompanying notes are an integral part of these consolidated financial statements.*

**Mistras Group, Inc. and Subsidiaries**  
**Consolidated Statements of (Loss) Income**  
(in thousands, except per share data)

	For the year ended December 31,	For the transition period ended December 31,	For the year ended May 31,	
	2017	2016	2016	2015
<b>Revenue</b>	\$ 700,970	\$ 404,161	\$ 719,181	\$ 711,252
Cost of revenue	492,238	274,298	494,911	506,281
Depreciation	21,020	12,859	21,262	20,238
<b>Gross profit</b>	187,712	117,004	203,008	184,733
Selling, general and administrative expenses	153,025	91,058	141,229	143,978
Impairment charges	15,810	—	—	—
Research and engineering	2,272	1,577	2,523	2,521
Depreciation and amortization	10,363	6,340	11,212	13,048
Acquisition-related expense (benefit), net	482	496	(1,453)	(5,167)
Litigation charges	1,600	—	6,320	—
<b>Income from operations</b>	4,160	17,533	43,177	30,353
Interest expense	4,386	2,052	4,762	4,622
<b>(Loss) income before provision for income taxes</b>	(226)	15,481	38,415	25,731
Provision for income taxes	1,942	5,870	13,765	9,740
<b>Net (loss) income</b>	(2,168)	9,611	24,650	15,991
Less: net income (loss) attributable to noncontrolling interests, net of taxes	7	43	(4)	(90)
<b>Net (loss) income attributable to Mistras Group, Inc.</b>	\$ (2,175)	\$ 9,568	\$ 24,654	\$ 16,081
(Loss) earnings per common share				
Basic	\$ (0.08)	\$ 0.33	\$ 0.85	\$ 0.56
Diluted	\$ (0.08)	\$ 0.32	\$ 0.82	\$ 0.54
Weighted average common shares outstanding:				
Basic	28,422	28,989	28,856	28,613
Diluted	28,422	30,125	29,891	29,590

*The accompanying notes are an integral part of these consolidated financial statements.*

**Mistras Group, Inc. and Subsidiaries**  
**Consolidated Statements of Comprehensive Income (Loss)**  
(in thousands)

	For the year ended December 31,	For the transition period ended December 31,	For the year ended May 31,	
	2017	2016	2016	2015
Net (loss) income	\$ (2,168)	\$ 9,611	\$ 24,650	\$ 15,991
<b>Other comprehensive income (loss):</b>				
Foreign currency translation adjustments	12,919	(9,625)	1,014	(19,602)
Comprehensive income (loss)	10,751	(14)	25,664	(3,611)
Less: net income (loss) attributable to noncontrolling interests	7	43	(4)	(90)
Foreign currency translation adjustments attributable to noncontrolling interests	4	6	1	5
Comprehensive income (loss) attributable to Mistras Group, Inc.	\$ 10,748	\$ (51)	\$ 25,669	\$ (3,516)

*The accompanying notes are an integral part of these consolidated financial statements.*

**Mistras Group, Inc. and Subsidiaries**  
**Consolidated Statements of Equity**  
(in thousands)

	Common Stock		Treasury Stock		Additional paid-in capital	Retained earnings	Accumulated other comprehensive income (loss)	Total Mistras Group, Inc. Stockholders' Equity	Noncontrolling Interest	Total Equity
	Shares	Amount	Shares	Amount						
<b>Balance at May 31, 2014</b>	28,456	\$ 284	—	\$ —	\$ 201,831	\$ 41,500	\$ (1,511)	\$ 242,104	\$ 288	\$ 242,392
Net income	—	—	—	—	—	16,081	—	16,081	(90)	15,991
Other comprehensive loss, net of tax	—	—	—	—	—	—	(19,602)	(19,602)	(5)	(19,607)
Share-based payments	21	—	—	—	6,579	—	—	6,579	—	6,579
Net settlement on vesting of restricted stock units	161	2	—	—	(1,483)	—	—	(1,481)	—	(1,481)
Excess tax benefit from share-based payment compensation	—	—	—	—	388	—	—	388	—	388
Exercise of stock options	65	1	—	—	749	—	—	750	—	750
<b>Balance at May 31, 2015</b>	28,703	\$ 287	—	\$ —	\$ 208,064	\$ 57,581	\$ (21,113)	\$ 244,819	\$ 193	\$ 245,012
Net income	—	—	—	—	—	24,654	—	24,654	(4)	24,650
Other comprehensive income, net of tax	—	—	—	—	—	—	1,014	1,014	(64)	950
Share-based payments	—	—	—	—	6,394	—	—	6,394	—	6,394
Net settlement on vesting of restricted stock units	182	2	—	—	(1,093)	—	—	(1,091)	—	(1,091)
Excess tax benefit from share-based payment compensation	—	—	—	—	(170)	—	—	(170)	—	(170)
Exercise of stock options	55	1	—	—	542	—	—	543	—	543
<b>Balance at May 31, 2016</b>	28,940	\$ 290	—	\$ —	\$ 213,737	\$ 82,235	\$ (20,099)	\$ 276,163	\$ 125	\$ 276,288
Net income	—	—	—	—	—	9,568	—	9,568	43	9,611
Other comprehensive loss, net of tax	—	—	—	—	—	—	(9,625)	(9,625)	(6)	(9,631)
Share-based payments	—	—	—	—	4,627	—	—	4,627	—	4,627
Net settlement on vesting of restricted stock units	212	2	—	—	(2,325)	—	—	(2,323)	—	(2,323)
Excess tax benefit from share-based payment compensation	—	—	—	—	568	—	—	568	—	568
Purchase of treasury stock	—	—	(420)	(9,000)	—	—	—	(9,000)	—	(9,000)
Exercise of stock options	65	—	—	—	604	—	—	604	—	604
<b>Balance at December 31, 2016</b>	29,217	\$ 292	(420)	\$ (9,000)	\$ 217,211	\$ 91,803	\$ (29,724)	\$ 270,582	\$ 162	\$ 270,744
Net loss	—	—	—	—	—	(2,175)	—	(2,175)	7	(2,168)
Other comprehensive income, net of tax	—	—	—	—	—	—	12,919	12,919	4	12,923
Share-based payments	—	—	—	—	6,588	—	—	6,588	—	6,588
Net settlement on vesting of restricted stock units	187	2	—	—	(1,649)	—	—	(1,647)	—	(1,647)
Retirement of treasury stock	(1,146)	(12)	1,146	24,923	—	(24,911)	—	—	—	—
Purchase of treasury stock	—	—	(726)	(15,923)	—	—	—	(15,923)	—	(15,923)
Exercise of stock options	37	—	—	—	275	—	—	275	—	275
<b>Balance at December 31, 2017</b>	28,295	\$ 282	—	\$ —	\$ 222,425	\$ 64,717	\$ (16,805)	\$ 270,619	\$ 173	\$ 270,792

*The accompanying notes are an integral part of these consolidated financial statements.*

**Mistras Group, Inc. and Subsidiaries**  
**Consolidated Statements of Cash Flows**  
(in thousands)

	For the year ended December 31,		For the transition period ended December 31,		For the year ended May 31,	
	2017		2016		2016	2015
<b>Cash flows from operating activities</b>						
Net (loss) income	\$	(2,168)	\$	9,611	\$	24,650
Adjustments to reconcile net income to net cash provided by operating activities						
Depreciation and amortization		31,383		19,199		32,474
Deferred income taxes		(4,854)		(174)		240
Share-based compensation expense		6,574		4,559		6,514
Impairment charges		15,810		—		—
Bad debt provision for unexpected customer bankruptcy		1,200		—		—
Charges associated with the exit of foreign operations		—		—		2,516
Fair value adjustments to contingent consideration		(463)		262		(2,066)
Other		79		559		(1,052)
Changes in operating assets and liabilities, net of effect of acquisitions						
Accounts receivable		2,490		4,123		(4,999)
Inventories		(117)		628		1,595
Prepaid expenses and other current assets		(2,464)		(4,453)		(1,812)
Accounts payable		2,574		(3,667)		254
Accrued expenses and other liabilities		4,188		(2,301)		10,187
Income taxes payable		1,007		1,913		2,139
Net cash provided by operating activities		<u>55,239</u>		<u>30,259</u>		<u>68,124</u>
<b>Cash flows from investing activities</b>						
Purchase of property, plant and equipment		(19,314)		(9,093)		(14,864)
Purchase of intangible assets		(1,255)		(697)		(1,315)
Acquisition of businesses, net of cash acquired		(83,424)		(8,262)		(1,743)
Proceeds from sale of equipment		1,196		678		1,170
Net cash used in investing activities		<u>(102,797)</u>		<u>(17,374)</u>		<u>(16,752)</u>
<b>Cash flows from financing activities</b>						
Repayment of capital lease obligations		(6,492)		(4,490)		(7,870)
Proceeds from borrowings of long-term debt		6,653		386		2,737
Repayment of long-term debt		(2,101)		(11,919)		(17,580)
Proceeds from revolver		124,000		48,400		55,800
Repayments of revolver		(50,600)		(34,300)		(69,600)
Payment of contingent consideration for business acquisitions		(560)		(795)		(3,147)
Purchases of treasury stock		(15,923)		(9,000)		—
Taxes paid related to net share settlement of share-based awards		(1,647)		(2,323)		(1,091)
Excess tax benefit from share-based compensation		—		568		(170)
Proceeds from the exercise of stock options		275		604		543
Net cash provided by (used in) financing activities		<u>53,605</u>		<u>(12,869)</u>		<u>(40,378)</u>
Effect of exchange rate changes on cash and cash equivalents		2,340		(2,050)		(361)
Net change in cash and cash equivalents		<u>8,387</u>		<u>(2,034)</u>		<u>10,633</u>
<b>Cash and cash equivalents:</b>						
Beginning of period		19,154		21,188		10,555
End of period	\$	<u>27,541</u>	\$	<u>19,154</u>	\$	<u>21,188</u>
<b>Supplemental disclosure of cash paid</b>						
Interest	\$	4,264	\$	2,079	\$	4,151
Income taxes	\$	3,063	\$	8,119	\$	10,686
<b>Noncash investing and financing</b>						
Equipment acquired through capital lease obligations	\$	3,185	\$	1,829	\$	8,248
Issuance of notes payable and other debt obligations primarily related to acquisitions	\$	—	\$	325	\$	—
				\$		20,480

*The accompanying notes are an integral part of these consolidated financial statements.*

**Mistras Group, Inc. and Subsidiaries**  
**Notes to Consolidated Financial Statements**  
**(tabular dollars in thousands, except per share data)**

## **1. Description of Business and Basis of Presentation**

### ***Description of Business***

Mistras Group, Inc. and subsidiaries (the Company) is a leading “one source” global provider of technology-enabled asset protection solutions used to evaluate the structural integrity and reliability of critical energy, industrial and public infrastructure. The Company combines industry-leading products and technologies, expertise in mechanical integrity (MI), non-destructive testing (NDT) and mechanical services and proprietary data analysis software to deliver a comprehensive portfolio of customized solutions, ranging from routine inspections to complex, plant-wide asset integrity assessments and management. These mission critical solutions enhance customers’ ability to extend the useful life of their assets, increase productivity, minimize repair costs, comply with governmental safety and environmental regulations, manage risk and avoid catastrophic disasters. The Company serves a global customer base of companies with asset-intensive infrastructure, including companies in the oil and gas, commercial aerospace and defense, fossil and nuclear power, alternative and renewable energy, public infrastructure, chemicals, transportation, primary metals and metalworking, pharmaceutical/biotechnology and food processing industries and research and engineering institutions.

### ***Principles of Consolidation***

The accompanying audited consolidated financial statements include the accounts of Mistras Group, Inc. and its wholly and majority-owned subsidiaries. For subsidiaries in which the Company’s ownership interest is less than 100%, the non-controlling interests are reported in stockholders’ equity in the accompanying consolidated balance sheets. The non-controlling interests in net income, net of tax, is classified separately in the accompanying consolidated statements of income.

On January 3, 2017, the Company’s Board of Directors approved a change in the Company’s fiscal year from May 31 to December 31, effective December 31, 2016. In connection with this change, we previously filed a Transition Report on Form 10-K to report the results of the seven-month transition period from June 1, 2016 to December 31, 2016. In this Annual Report, the periods presented are the year ended December 31, 2017, the seven-month transition period from June 1, 2016 to December 31, 2016 and the years ended May 31, 2016 and 2015. The Company has also included unaudited data for the year ended December 31, 2016 and for the seven months ended December 31, 2015 (See Note 21).

All significant intercompany accounts and transactions have been eliminated in consolidation. For fiscal 2016 and 2015, Mistras Group, Inc.’s and its subsidiaries’ fiscal years ended on May 31 except for the subsidiaries in the International segment, which ended on April 30. Accordingly, the Company’s International segment subsidiaries were consolidated on a one-month lag. Therefore, in the quarter and year of acquisition, results of acquired subsidiaries in the International segment were generally included in consolidated results for one less month than the actual number of months from the acquisition date to the end of the reporting period. As discussed in Note 7 - *Acquisitions and Dispositions*, during the lag period in fiscal 2015, the Company sold an international subsidiary, and decided to sell two additional international subsidiaries. Effective December 31, 2016, the Company’s International segment is no longer consolidated on a one month lag, and such change for the seven month transition period ended December 31, 2016 was not material.

### ***Reclassifications***

Certain amounts in prior periods have been reclassified to conform to the current year presentation. Such reclassifications did not have a material effect on the Company’s financial condition or results of operations as previously reported.

## **2. Summary of Significant Accounting Policies**

### **Revenue Recognition**

Revenue is generally recognized when persuasive evidence of an arrangement exists, services have been rendered or products have been delivered, the fee is fixed or determinable, and collectability is reasonably assured. Shipping and handling costs are included in cost of revenues. Taxes collected from customers and remitted to governmental authorities are presented in the consolidated statements of income on a net basis. One customer accounted for 11% and 12% of our revenues for the year ended December 31, 2017 and the transition period ended December 31, 2016, which primarily were generated from the Services

segment. One customer accounted for 10% of our revenues in fiscal 2016, which primarily were generated from the Services segment. No customer accounted for 10% or more of our revenues in fiscal 2015. The following revenue recognition policies define the manner in which we account for specific transaction types:

#### *Services*

Most of our projects are short-term in nature and revenue is primarily derived from providing services on a time and material basis. Service arrangements generally consist of inspection professionals working under contract for a fixed period of time or on a specific customer project. Revenue is generally recognized when the service is performed in accordance with terms of each customer arrangement, upon completion of the earnings process and when collection is reasonably assured. At the end of any reporting period, earned revenue is accrued for services that have been provided which have not yet been billed. Reimbursable costs, including those related to travel and out-of-pocket expenses, are included in revenue, and equivalent amounts of reimbursable costs are included in cost of services.

#### *Products and Systems*

Sales of products and systems are recorded when the sales price is fixed and determinable and the risks and rewards of ownership are transferred (generally upon shipment) and when collectability is reasonably assured.

These arrangements occasionally contain multiple elements or deliverables, such as hardware, software (that is essential to the functionality of the hardware) and related services. The Company recognizes revenue for delivered elements as separate units of accounting, when the delivered elements have standalone value, uncertainties regarding customer acceptance are resolved and there are no refund or return rights for the delivered elements. The Company establishes the selling prices for each deliverable based on vendor-specific objective evidence ("VSOE"), if available, third-party evidence, if VSOE is not available, or estimated selling price ("ESP") if neither VSOE nor third-party evidence is available. The Company establishes VSOE of selling price using the price charged for a deliverable when sold separately and, in rare instances, using the price established by management having the relevant authority. Third-party evidence of selling price is established by evaluating largely similar and interchangeable competitor products or services in standalone sales to similarly situated customers. The Company determines ESP, by considering internal factors such as margin objectives, pricing practices and controls, customer segment pricing strategies and the product life cycle. Consideration is also given to market conditions such as competitor pricing strategies and industry technology life cycles. When determining ESP, the Company applies management judgment to establish margin objectives and pricing strategies and to evaluate market conditions and product life cycles. Changes in the aforementioned factors may result in a different allocation of revenue to the deliverables in multiple element arrangements and therefore may change the pattern and timing of revenue recognition for these elements, but will not change the total revenue recognized for the arrangement.

A portion of the Company's revenue is generated from engineering and manufacturing of custom products under long-term contracts that may last from several months to several years, depending on the contract. Revenues from long-term contracts are recognized on the percentage-of-completion method of accounting. Under the percentage-of-completion method of accounting revenues are recognized as work is performed. The percentage of completion at any point in time is generally based on total costs or total labor dollars incurred to date in relation to the total estimated costs or total labor dollars estimated at completion. The percentage of completion is then applied to the total contract revenue to determine the amount of revenue to be recognized in the period. Application of the percentage-of-completion method of accounting requires the use of estimates of costs to be incurred for the performance of the contract. Contract costs include all direct materials, direct labor costs and those indirect costs related to contract performance, such as indirect labor, supplies, tools, repairs, and all costs associated with operation of equipment. The cost estimation process is based upon the professional knowledge and experience of our engineers, project managers and financial professionals. Factors that are considered in estimating the work to be completed include the availability and productivity of labor, the nature and complexity of the work to be performed, the effect of change orders, the availability of materials, the effect of any delays in our project performance and the recoverability of any claims. Whenever revisions of estimated contract costs and contract values indicate that the contract costs will exceed estimated revenues, thus creating a loss, a provision for the total estimated loss is recorded in that period.

#### **Use of Estimates**

The preparation of financial statements in accordance with generally accepted accounting principles requires that the Company make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue and expenses and disclosure of contingent assets and liabilities at the date of financial statements. The Company bases its estimates and assumptions on historical experience, known or expected trends and various other assumptions that it believes to be reasonable. As future

events and their effects cannot be determined with precision, actual results could differ significantly from these estimates, which may cause the Company's future results to be significantly affected.

### **Cash and Cash Equivalents**

The Company considers all highly liquid investments purchased with an original maturity of three months or less to be cash equivalents.

### **Accounts Receivable**

Accounts receivable are stated net of an allowance for doubtful accounts and sales allowances. Outstanding accounts receivable balances are reviewed periodically, and allowances are provided at such time that management believes it is probable that such balances will not be collected within a reasonable period of time. The Company extends credit to its customers based upon credit evaluations in the normal course of business, primarily with 30-day terms. Bad debts are provided for based on historical experience and management's evaluation of outstanding accounts receivable. Accounts are written off when they are deemed uncollectible. One customer accounted for 7% and 11% of our accounts receivable as of December 31, 2017 and December 31, 2016, respectively.

### **Inventories**

Inventories are stated at the lower of cost, as determined by using the first-in, first-out method, or market. Work in process and finished goods inventory include material, direct labor, variable costs and overhead.

### **Purchased and Internal-Use Software**

The Company capitalizes certain costs that are incurred to purchase or to create and implement internal-use software, which includes software coding, installation and testing. Capitalized costs are amortized on a straight-line basis over three years, the estimated useful life of the software.

### **Property, Plant and Equipment**

Property, plant and equipment are recorded at cost. Depreciation of property, plant and equipment is computed utilizing the straight-line method over the estimated useful lives of the assets. Amortization of leasehold improvements is computed utilizing the straight-line method over the shorter of the remaining lease term or estimated useful life. Repairs and maintenance costs are expensed as incurred.

### **Goodwill**

Goodwill represents the excess purchase price of acquired businesses over the fair values attributed to underlying net tangible assets and identifiable intangible assets. We test goodwill for impairment at a "reporting unit" level (which for the Company is represented by (i) our Services segment, (ii) our Products and Systems segment, and (iii) the European component and (iv) Brazilian component of our International segment). Our annual impairment test is conducted on the first day of our fourth quarter. In connection with the change in our fiscal year to December 31, our annual test date is October 1. For the transition period ended December 31, 2016, a December 1 date was used and historically, prior to the fiscal year end change, the Company tested for impairment annually as of March 1. Goodwill is also tested for impairment whenever an event occurs or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying amount. During the third quarter of 2017, there was a triggering event in the Products and Systems segment that resulted in a \$13.2 million goodwill impairment charge. See Note 8 for further details.

If the fair value of a reporting unit is less than its carrying value, this is an indicator that the goodwill assigned to that reporting unit may be impaired. As a result of the Company adopting ASU 2017-04, impairment will be recorded in the amount that fair value is less than carrying value, as the ASU eliminated step two of goodwill impairment process. The Company considers the income and market approaches to estimating the fair value of our reporting units, which requires significant judgment in evaluation of economic and industry trends, estimated future cash flows, discount rates and other factors.

### **Impairment of Long-lived Assets**

The Company reviews the recoverability of its long-lived assets (or asset groups) on a periodic basis in order to identify indicators of a possible impairment. The assessment for potential impairment is based primarily on the Company's ability to

recover the carrying value of its long-lived assets from expected future undiscounted cash flows. If the total expected future undiscounted cash flows are less than the carrying amount of the assets, a loss is recognized for the difference between fair value (computed based upon the expected future discounted cash flows) and the carrying value of the assets. During the third quarter of 2017, there was a triggering event in the Products and Systems segment that resulted in a \$2.6 million impairment charge of long-lived assets. See Note 9 for further details.

### **Research and Engineering**

Research and product development costs are expensed as incurred.

### **Advertising, Promotions and Marketing**

The costs for advertising, promotion and marketing programs are expensed as incurred and are included in selling, general and administrative expenses. Advertising expense was approximately \$1.9 million, \$1.2 million, \$1.8 million and \$2.2 million for the year ended December 31, 2017, the transition period ended December 31, 2016 and fiscal 2016 and 2015, respectively.

### **Fair Value of Financial Instruments**

The carrying amounts of cash and cash equivalents, accounts receivable, accounts payable and other financial current assets and liabilities approximate fair value based on the short-term nature of the items. The carrying value of long-term debt approximates fair value due to the variable-rate structure of the debt. The fair value of the Company's notes payable and capital lease obligations approximate their carrying amounts as those obligations bear interest at rates which management believes would currently be available to the Company for similar obligations.

### **Foreign Currency Translation**

The financial position and results of operations of the Company's foreign subsidiaries are measured using their functional currencies, which are their local currencies. Assets and liabilities of foreign subsidiaries are translated into the U.S. Dollar at the exchange rates in effect at the balance sheet date. Income and expenses are translated at the average exchange rate during the period. Translation gains and losses are reported as a component of other comprehensive (loss) income for the period and included in accumulated other comprehensive (loss) income within stockholders' equity.

Foreign currency (gains) and losses arising from transactions denominated in currencies other than the functional currency are included in net income, reported in SG&A expenses, and were approximately \$0.6 million, \$(0.7) million, \$(0.1) million and \$1.5 million for the year ended December 31, 2017, transition period ended December 31, 2016 and fiscal 2016 and 2015, respectively.

### **Concentrations of Credit Risk**

Financial instruments that potentially subject the Company to concentrations of credit risk consist principally of cash and cash equivalents and accounts receivable. At times, cash deposits may exceed the limits insured by the Federal Deposit Insurance Corporation. The Company believes it is not exposed to any significant credit risk or risk of nonperformance of financial institutions.

### **Self-Insurance**

The Company is self-insured for certain losses relating to workers' compensation and health benefits claims. The Company maintains third-party excess insurance coverage for all workers' compensation and health benefit claims in excess of approximately \$0.3 million per occurrence to reduce its exposure from such claims. Self-insured losses are accrued when it is probable that an uninsured claim has been incurred but not reported and the amount of the loss can be reasonably estimated at the balance sheet date.

### **Share-based Compensation**

The value of services received from employees and directors in exchange for an award of an equity instrument is measured based on the grant-date fair value of the award. Such value is recognized as a non-cash expense on a straight-line basis over the period the individual provides services, which is typically the vesting period of the award with the exception of awards with graded vesting that contain an internal performance measure where each tranche is recognized on a straight-line basis over its vesting period subject to the probability of meeting the performance requirements and adjusted for the number of shares

expected to be earned. As share-based compensation expense is based on awards ultimately expected to vest, the amount of expense has been reduced for estimated forfeitures. The cost of these awards is recorded in selling, general and administrative expense in the Company's consolidated statements of income.

## Income Taxes

Income taxes are accounted for under the asset and liability method. Deferred income tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and tax credit carry-forwards. Deferred income tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred income tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. A valuation allowance is provided if it is more likely than not that some or all of a deferred income tax asset will not be realized. Financial accounting standards prescribe a minimum recognition threshold a tax position is required to meet before being recognized in the financial statements. These standards also provide guidance on de-recognition, measurement, and classification of amounts relating to uncertain tax positions, accounting for and disclosure of interest and penalties, accounting in interim periods and disclosures required. Interest and penalties related to unrecognized tax positions are recognized as incurred within "provision for income taxes" in the consolidated statements of income.

## Recent Accounting Pronouncements

In August 2015, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2015-14, *Revenue from Contracts with Customers (Topic 606): Deferral of the Effective Date*, which defers the effective date of ASU 2014-09 for all entities by one year. This update is effective for public business entities for annual reporting periods beginning after December 15, 2017, including interim periods within those reporting periods. Earlier application is permitted only as of annual reporting periods beginning after December 15, 2016, including interim reporting periods within that reporting period. ASU 2014-09 will become effective for the Company beginning 2018. The ASU permits two methods of adoption: retrospectively to each prior reporting period presented (full retrospective method), or retrospectively with the cumulative effect of initially applying the guidance recognized at the date of initial application (the cumulative catch-up transition method). The ASU also requires expanded disclosures relating to the nature, amount, timing, and uncertainty of revenue and cash flows arising from contracts with customers. Additionally, qualitative and quantitative disclosures are required about customer contracts, significant judgments and changes in judgments, and assets recognized from the costs to obtain or fulfill a contract.

The Company adopted ASU 2014-09 along with the related additional ASU's on Topic 606 on January 1, 2018, utilizing the cumulative catch-up method. The result of adoption is immaterial to the Company's consolidated financial statements, largely because most of our projects are short-term in nature and billed on a time and material basis. The Company utilizes a practical expedient that provides for revenue to be recognize in an amount that corresponds directly with the value to the customer of the entity's performance completed to date. The Company will make the additional required disclosures under Topic 606, starting with the Company's condensed consolidated financial statements in the first quarter of 2018.

In November 2015, the FASB issued ASU No. 2015-17, *Income Taxes (Topic 740): Balance Sheet Classification of Deferred Taxes*. This amendment will simplify the presentation of deferred tax assets and liabilities on the balance sheet and require all deferred tax assets and liabilities to be treated as non-current. ASU 2015-17 is effective for fiscal years, and interim periods within those fiscal years beginning after December 15, 2016, with early adoption permitted. The Company adopted this guidance prospectively beginning in the first quarter of 2017, which did not have a material impact on the consolidated financial statements and related disclosures.

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)*. This amendment supersedes previous accounting guidance (*Topic 840*) and requires all leases, with the exception of leases with a term of 12 months or less, to be recorded on the balance sheet as lease assets and lease liabilities. ASU 2016-02 is effective for fiscal years, and interim periods within those fiscal years beginning after December 15, 2018, with early adoption permitted. The standard requires lessees and lessors to recognize and measure leases at the beginning of the earliest period presented using a modified retrospective approach. The Company is evaluating the effect that ASU 2016-02 will have on its consolidated financial statements and related disclosures.

In March 2016, the FASB issued ASU No. 2016-09, *Stock Compensation (Topic 718)*. This amendment simplifies certain aspects of accounting for share-based payment transactions, which include accounting for income taxes and the related impact on the statement of cash flows, an option to account for forfeitures when they occur in addition to the existing guidance to estimate the forfeitures of awards, classification of awards as either equity or liabilities and classification on the statement of cash flows for employee taxes paid to tax authorities on shares withheld for vesting. ASU 2016-09 is effective for fiscal years,

and interim periods within those fiscal years beginning after December 15, 2016, with early adoption permitted. The Company adopted this guidance prospectively beginning in the first quarter of 2017, and accordingly, is recording excess tax benefits and tax deficiencies as a component of income tax expense.

In August 2016, the FASB issued ASU No. 2016-15, *Statement of Cash Flows (Topic 230)*. This amendment will provide guidance on the presentation and classification of specific cash flow items to improve consistency within the statement of cash flows. ASU 2016-15 is effective for fiscal years, and interim periods within those fiscal years beginning after December 15, 2017, with early adoption permitted. The Company does not expect that ASU 2016-15 will have a material impact on its consolidated financial statements and related disclosures.

In November 2016, the FASB issued ASU No. 2016-18, *Statement of Cash Flows (Topic 230)*. This amendment will clarify the presentation of restricted cash on the statement of cash flows. Amounts generally described as restricted cash and restricted cash equivalents should be included with cash and cash equivalents when reconciling the beginning and ending cash balances on the statement of cash flows. ASU 2016-18 is effective for fiscal years, and interim periods within those fiscal years beginning after December 15, 2017, with early adoption permitted. The Company does not expect that ASU 2016-18 will have a material impact on its consolidated financial statements and related disclosures.

In January 2017, the FASB issued ASU No. 2017-04, *Intangibles-Goodwill and Other (Topic 350)*. This amendment eliminates Step Two of the goodwill impairment test. Under the amendments in this update, entities should perform the annual goodwill impairment test by comparing the carrying value of its reporting units to their fair value. An entity should record an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value. Tax deductibility of goodwill should be considered in evaluating any reporting unit's impairment loss to be taken. ASU 2017-04 is effective for fiscal years beginning after December 15, 2019, with early adoption permitted. The Company early adopted ASU 2017-04 in the third quarter of 2017 for its consolidated financial statements and related disclosures. See Notes 8 and 9 for information on the impairment of assets in the Products and Systems reporting unit during the three months ended September 30, 2017.

In May 2017, the FASB issued ASU 2017-09, *Compensation-Stock Compensation (Topic 718) Scope of Modification Accounting*. This amendment provides guidance concerning which changes to the terms or conditions of a share-based payment require an entity to apply modification accounting. Certain changes to stock awards, notably administrative changes, do not require modification accounting. There are three specific criteria that need to be met in order to prove that modification accounting is not required. ASU 2017-09 is effective for fiscal years, and interim period within those fiscal years, beginning after December 15, 2017, with early adoption permitted. The Company does not expect that ASU 2017-09 will have a material impact on its consolidated financial statements and related disclosures.

In December 2017, the SEC staff issued Staff Accounting Bulletin No. 118 ("SAB 118"), which provides guidance on accounting for the tax effects of the Tax Cuts and Jobs Act (the "Tax Act"). SAB 118 provides a measurement period that should not extend beyond one year from the Tax Act enactment date for companies to complete the accounting under ASC 740. In accordance with SAB 118, a company must reflect the income tax effects of those aspects of the Act for which the accounting under ASC 740 is complete. To the extent that a company's accounting for certain income tax effects of the Tax Act is incomplete but it is able to determine a reasonable estimate, it must record a provisional estimate in the financial statements. If a company cannot determine a provisional estimate to be included in the financial statements, it should continue to apply ASC 740 on the basis of the provisions of the tax laws that were in effect immediately before the enactment of the Tax Act. The Company considers the accounting for the Tax Act to be provisional as of December 31, 2017. The Company will complete the accounting for the tax effects of all of the provisions of the Tax Act within the required measurement period not to extend beyond one year from the enactment date.

### 3. Earnings per Share

Basic earnings per share is computed by dividing net income attributable to common shareholders by the weighted average number of shares outstanding during the period. Diluted earnings per share is computed by dividing net income attributable to common shareholders by the sum of (1) the weighted average number of shares of common stock outstanding during the period, and (2) the dilutive effect of assumed conversion of equity awards using the treasury stock method. With respect to the number of weighted average shares outstanding (denominator), diluted shares reflects: (i) only the exercise of options to acquire common stock to the extent that the options' exercise prices are less than the average market price of common shares during the period and (ii) the pro forma vesting of restricted stock units.

The following table sets forth the computations of basic and diluted earnings per share:

	For the year ended December 31,	For the transition period ended December 31,	For the year ended May 31,	
	2017	2016	2016	2015
Basic (loss) earnings per share				
Numerator:				
Net (loss) income attributable to Mistras Group, Inc.	\$ (2,175)	\$ 9,568	\$ 24,654	\$ 16,081
Denominator				
Weighted average common shares outstanding	28,422	28,989	28,856	28,613
Basic (loss) earnings per share	<u>\$ (0.08)</u>	<u>\$ 0.33</u>	<u>\$ 0.85</u>	<u>\$ 0.56</u>
Diluted earnings per share:				
Numerator:				
Net income attributable to Mistras Group, Inc.	\$ (2,175)	\$ 9,568	\$ 24,654	\$ 16,081
Denominator				
Weighted average common shares outstanding	28,422	28,989	28,856	28,613
Dilutive effect of stock options outstanding	—	791	712	719
Dilutive effect of restricted stock units outstanding	—	345	323	258
	<u>28,422</u>	<u>30,125</u>	<u>29,891</u>	<u>29,590</u>
Diluted (loss) earnings per share	<u>\$ (0.08)</u>	<u>\$ 0.32</u>	<u>\$ 0.82</u>	<u>\$ 0.54</u>

The following potential common shares were excluded from the computation of diluted earnings per share, as the effect would have been anti-dilutive:

	For the year ended December 31,	For the transition period ended December 31,	For the year ended May 31,	
	2017	2016	2016	2015
Potential common stock attributable to stock options outstanding	810 <sup>(1)</sup>	—	5	6
Potential common stock attributable to restricted stock units (RSUs) and performance stock units (PSUs) outstanding	353 <sup>(2)</sup>	2	24	1
Total	<u>1,163</u>	<u>2</u>	<u>29</u>	<u>7</u>

(1) - 805 shares related to stock options were excluded from the calculation of diluted EPS due to the net loss for the period.

(2) - 351 shares related to RSUs and PSUs were excluded from the calculation of diluted EPS due to the net loss for the period.

#### 4. Accounts Receivable, net

Accounts receivable consist of the following:

	December 31,	December 31,
	2017	2016
Trade accounts receivable	\$ 141,952	\$ 133,704
Allowance for doubtful accounts	(3,872)	(2,852)
Accounts receivable, net	<u>\$ 138,080</u>	<u>\$ 130,852</u>

The Company had \$14.4 million and \$16.8 million of unbilled revenues accrued as of December 31, 2017 and December 31, 2016, respectively. Unbilled revenues as of December 31, 2017 are expected to be billed in the first quarter of 2018.

#### 5. Inventories

Inventories consist of the following:

	December 31, 2017	December 31, 2016
Raw materials	\$ 5,105	\$ 5,054
Work in progress	1,192	1,246
Finished goods	2,746	2,335
Services-related consumable supplies	1,460	1,382
Inventory	<u>\$ 10,503</u>	<u>\$ 10,017</u>

## 6. Property, Plant and Equipment, net

Property, plant and equipment consist of the following:

	Useful Life (Years)	December 31, 2017	December 31, 2016
Land		\$ 2,414	\$ 1,714
Building and improvements	30-40	24,003	19,261
Office furniture and equipment	5-8	14,230	9,069
Machinery and equipment	5-7	191,721	169,928
		<u>232,368</u>	<u>199,972</u>
Accumulated depreciation and amortization		(145,225)	(126,823)
Property, plant and equipment, net		<u>\$ 87,143</u>	<u>\$ 73,149</u>

Depreciation expense was approximately \$22.4 million, \$14.0 million, \$22.9 million and \$22.2 million for the year ended December 31, 2017, the transition period ended December 31, 2016 and fiscal 2016 and 2015, respectively.

## 7. Acquisitions and Dispositions

### Acquisitions

During the year ended December 31, 2017, the Company completed three acquisitions, one that performs mechanical services at height, located in Canada, a company located in the U.S. that primarily performs chemical and specialty process services and a company in the U.S. that performs a wide variety of non-destructive testing services. Both U.S. companies primarily provide services to the aerospace industry.

In these acquisitions, the Company acquired 100% of the equity interests of the entity based in Canada and one of the entities based in the U.S. in exchange for aggregate consideration of \$79.5 million in cash, contingent consideration up to \$2.4 million to be earned based upon the acquired business achieving specific performance metrics over the initial three years of operations from the acquisition date and \$0.2 million for working capital adjustments yet to be finalized. The Company acquired the assets of one of the U.S. based entities noted above in exchange for aggregate consideration of \$4.5 million in cash and contingent consideration up to \$3.5 million to be earned based upon the acquired business achieving specific performance metrics over the initial three years of operations from the acquisition date. The Company accounted for these transactions in accordance with the acquisition method of accounting for business combinations.

During the transition period ended December 31, 2016, the Company completed three acquisitions. The Company purchased three companies, two that provide NDT services, located in Canada and one that provides mechanical services, located in the U.S.

For the Canadian acquisitions, the Company acquired 100% of the common stock of both acquirees in exchange for aggregate consideration of \$1.3 million in cash, \$0.3 million of notes payable and contingent consideration up to \$0.6 million to be earned based upon the acquired businesses achieving specific performance metrics over their initial three years of operations

from their acquisition dates. For the U.S. acquisition, the Company acquired assets of the acquiree in exchange for aggregate consideration of \$7.0 million in cash and contingent consideration up to \$2.0 million to be earned based upon the acquired businesses achieving specific performance metrics over the initial three years of operations from its acquisition date. The Company accounted for these three transactions in accordance with the acquisition method of accounting for business combinations.

Assets and liabilities of the acquired businesses were included in the consolidated balance sheets as of December 31, 2017 based on their estimated fair value on the date of acquisition as determined in a purchase price allocation, using available information and making assumptions management believes are reasonable. The Company is still in the process of completing its valuation of the assets, both tangible and intangible, and liabilities acquired for two of the acquisitions completed during the year ended December 31, 2017. Goodwill of \$41.7 million primarily relates to expected synergies and assembled workforce, of which \$39.7 million is generally deductible for tax purposes. Other intangible assets, primarily related to customer relationships and covenants not to compete, were \$31.7 million. The results of operations of each of the acquisitions completed during the year ended December 31, 2017 and the transition period ended December 31, 2016 are included in each respective operating segment's results of operations from the date of acquisition. The following table summarizes the estimated fair value of the assets acquired and liabilities assumed, the Company's allocation of purchase price and any subsequent adjustments made during the year ended December 31, 2017 and the transition period ended December 31, 2016:

	Year ended December 31, 2017	Transition Period
Number of entities	3	3
Cash paid	\$ 83,963	\$ 8,295
Working capital adjustments	150	—
Notes payable	—	325
Contingent consideration	3,407	1,630
Consideration paid	<u>\$ 87,520</u>	<u>\$ 10,250</u>
Current net assets	\$ 7,165	\$ 1,632
Debt and other long-term liabilities	(2,848)	(214)
Property, plant and equipment	11,115	953
Deferred tax asset (liability)	(1,278)	392
Intangibles	31,671	3,367
Goodwill	41,695	4,120
Net assets acquired	<u>\$ 87,520</u>	<u>\$ 10,250</u>

The amortization period for intangible assets acquired ranges from two to fourteen years. The Company recorded \$41.7 million and \$4.1 million of goodwill in connection with its acquisitions for the year ended December 31, 2017 and the transition period ended December 31, 2016, respectively, reflecting the strategic fit and revenue and earnings growth potential of these businesses.

Revenue included in the consolidated statement of income for the year ended December 31, 2017 from the three businesses acquired in 2017 for the period subsequent to the closing of the transactions was approximately \$17.9 million. Aggregate income from operations included in the consolidated statement of income for the year ended December 31, 2017 from the acquisitions for the period subsequent to the closing of each transaction was \$0.8 million, inclusive of \$0.9 million of acquisition-related expense. As these acquisitions were immaterial on an individual basis and in the aggregate, no unaudited pro forma financial information has been included in this report.

### Dispositions

On May 22, 2015, the Company completed the sale of one of its Russian subsidiaries and recognized a loss of \$0.4 million. On July 31, 2015, the Company completed the sale of its other subsidiary in Russia, as well as its subsidiary in Japan. For the year ended May 31, 2015, the Company recognized impairment charges of \$2.1 million related to these sales. Aggregate charges

associated with the exit of these three foreign operations was approximately \$2.5 million and is included within selling, general and administrative expenses on the consolidated income statement for the year ended May 31, 2015. In the aggregate, the assets and liabilities of these subsidiaries represent 0.6% and 0.3% of consolidated assets and liabilities, respectively, and are included in their natural classifications on the consolidated balance sheet as of May 31, 2015.

During the fourth quarter of 2017, the Company began the process of marketing one of its subsidiaries in the Products and Systems segment for sale. The Company determined that the classification of being held for sale has been met as of December 31, 2017. For the year ended December 31, 2017, this subsidiary represented 0.6% of consolidated revenues and loss from operations was \$3.5 million, inclusive of a \$2.6 million impairment charge for long-lived assets (See Note 9). In the aggregate, the assets and liabilities of this subsidiary represents 0.4% and 0.2% of consolidated assets and liabilities, respectively, and are included in their natural classifications on the consolidated balance sheet as of December 31, 2017.

#### Acquisition-Related expense

In the course of its acquisition activities, the Company incurs costs in connection with due diligence, professional fees, and other expenses. Additionally, the Company adjusts the fair value of acquisition-related contingent consideration liabilities on a quarterly basis. These amounts are recorded as acquisition-related (benefit) expense, net, on the consolidated statements of income and were as follows for the year ended December 31, 2017, the transition period ended December 31, 2016 and fiscal 2016 and 2015:

	For the year ended	For the Transition	For the year ended May 31,	
	December 31,	Period ended December	2016	2015
	2017	31,		
		2016		
Due diligence, professional fees and other transaction costs	\$ 945	\$ 231	\$ 629	\$ 215
Adjustments to fair value of contingent consideration liabilities	\$ (463)	\$ 265	\$ (2,082)	\$ (5,382)
Acquisition-related (benefit) expense, net	\$ 482	\$ 496	\$ (1,453)	\$ (5,167)

The Company's contingent consideration liabilities are recorded on the balance sheet in accrued expenses and other liabilities.

#### 8. Goodwill

The changes in the carrying amount of goodwill by segment is shown below:

	Services	International	Products and Systems	Total
Balance at May 31, 2016	\$ 119,683	\$ 36,340	\$ 13,197	\$ 169,220
Goodwill acquired during the year	4,120	—	—	4,120
Adjustments to preliminary purchase price allocations	(19)	—	—	(19)
Foreign currency translation	(392)	(2,989)	—	(3,381)
Balance at December 31, 2016	\$ 123,392	\$ 33,351	\$ 13,197	\$ 169,940
Goodwill acquired during the year	41,695	—	—	41,695
Impairment charge	—	—	(13,197)	(13,197)
Adjustments to preliminary purchase price allocations	(211)	—	—	(211)
Foreign currency translation	925	4,286	—	5,211
Balance at December 31, 2017	\$ 165,801	\$ 37,637	\$ —	\$ 203,438

During the second quarter of 2017, there were pending Products and Systems contract bids which management assessed as having a reasonable chance of success. During the third quarter of 2017, these contract bids were not awarded to the Company. As a result of this missed opportunity, the annual forecasting process was accelerated, resulting in lower expected future operating profits and cash flows. As such, during the third quarter of 2017, there were indicators that the carrying amount of the goodwill for the Products and Systems reporting unit may not have been recoverable due to the decline in the projected future cash flows.

The Company performed an analysis to determine any impairment of goodwill as well as long-lived assets (see Note 9). For the goodwill analysis, we used income and market approaches to estimate the fair value of the reporting unit, which required significant judgment in evaluation of economic and industry trends, estimated future cash flows, discount rates and other factors, and compared that fair value to the carrying value, and determined that the fair value of the reporting unit was less than the carrying value. The Company recorded an impairment charge of \$13.2 million, based on the difference between the fair value and the carrying value of the reporting unit, which resulted in an impairment of the entire amount of goodwill for the Products and Systems reporting unit.

The Company performed an impairment test of its remaining reporting units as of October 1, 2017 and concluded that there was no impairment. For the year ended December 31, 2017, the Company reviewed goodwill for impairment on a reporting unit basis. As of December 31, 2017, the Company did not identify any changes in circumstances that would indicate the remaining carrying value of goodwill may not be recoverable.

The Company's cumulative goodwill impairment for the periods ended December 31, 2017 was \$23.1 million, of which \$13.2 million related to the Products and Systems segment and \$9.9 million related to the International segment. The Company's cumulative goodwill impairment as of December 31, 2016 was \$9.9 million, all of which is within its International segment.

## 9. Intangible Assets

The gross carrying amount and accumulated amortization of intangible assets were as follows:

	Useful Life (Years)	December 31,				December 31,			
		2017		Impairment	Net Carrying Amount	2016		Net Carrying Amount	
Gross Amount	Accumulated Amortization	Gross Amount	Accumulated Amortization						
Customer relationships	5-14	\$ 113,299	\$ (58,107)	\$ (170)	\$ 55,022	\$ 81,559	\$ (50,417)	\$ 31,142	
Software/Technology	3-15	19,523	(14,133)	(2,411)	2,979	18,128	(12,577)	5,551	
Covenants not to compete	2-5	12,510	(10,438)	—	2,072	11,143	(9,647)	1,496	
Other	2-5	10,109	(6,411)	(32)	3,666	7,266	(5,448)	1,818	
<b>Total</b>		<b>\$ 155,441</b>	<b>\$ (89,089)</b>	<b>\$ (2,613)</b>	<b>\$ 63,739</b>	<b>\$ 118,096</b>	<b>\$ (78,089)</b>	<b>\$ 40,007</b>	

Amortization expense for the year ended December 31, 2017, the transition period ended December 31, 2016 and the years ended May 31, 2016 and 2015 was approximately \$9.0 million, \$5.2 million, \$9.6 million and \$11.1 million, respectively, including amortization of software/technology for these periods of \$0.7 million, \$0.5 million, \$1.0 million and \$0.9 million, respectively.

As described in Note 8, the Company performed an analysis to determine whether there was any impairment of long-lived assets for the Products and Systems reporting unit. We used income and market approaches to estimate the fair value of the long-lived assets, which requires significant judgment in evaluation of the useful lives of the assets, economic and industry trends, estimated future cash flows, discount rates, and other factors. The result of the analysis was an impairment of \$2.4 million to software/technology, \$0.2 million to customer relationships and less than \$0.1 million to other intangibles, which are included in the impairment charges line on the consolidated statements of income for the year ended December 31, 2017.

Amortization expense in each of the five years and thereafter subsequent to December 31, 2017 related to the Company's intangible assets is expected to be as follows:

	Expected Amortization Expense
2018	\$ 10,117
2019	8,952
2020	7,483
2021	6,411
2022	6,076
Thereafter	24,700
<b>Total</b>	<b>\$ 63,739</b>

## 10. Accrued Expenses and Other Current Liabilities

Accrued expenses and other current liabilities consist of the following:

	December 31,	
	2017	2016
Accrued salaries, wages and related employee benefits	\$ 27,185	\$ 23,442
Contingent consideration	3,430	1,826
Accrued workers' compensation and health benefits	5,181	6,351
Deferred revenues	6,338	3,743
Legal settlement accrual	1,600	6,320
Other accrued expenses	21,827	17,015
<b>Total accrued expenses and other current liabilities</b>	<b>\$ 65,561</b>	<b>\$ 58,697</b>

## 11. Long-Term Debt

Long-term debt consists of the following:

	December 31,	
	2017	2016
Senior credit facility	\$ 156,948	\$ 82,776
Notes payable	228	320
Other	9,702	4,200
Total debt	166,878	87,296
Less: Current portion	(2,358)	(1,379)
Long-term debt, net of current portion	\$ 164,520	\$ 85,917

### Senior Credit Facility

On December 8, 2017, the Company entered into a Fourth Amended and Restated Credit Agreement ("Credit Agreement"). The Credit Agreement increased the Company's revolving line of credit from \$175.0 million to \$250.0 million and provides that under certain circumstances the line of credit can be increased to \$300.0 million. The Company may continue to borrow up to \$30.0 million in non-U.S. Dollar currencies and use up to \$10.0 million of the credit limit for the issuance of letters of credit. The maturity date of the Credit Agreement is December 7, 2022. At December 31, 2017, the Company had borrowings of \$156.9 million and letters of credit of \$4.9 million were outstanding under the Credit Agreement. The Company has capitalized costs of \$0.8 million associated with debt modifications.

Loans under the Credit Agreement bear interest at LIBOR plus an applicable LIBOR margin ranging from 1% to 2%, or a base rate less a margin of 1.25% to 0.375%, at the option of the Company, based upon the Company's Funded Debt Leverage Ratio. Funded Debt Leverage Ratio is generally the ratio of (1) all outstanding indebtedness for borrowed money and other interest-

bearing indebtedness as of the date of determination to (2) EBITDA (which is (a) net income, less (b) income (or plus loss) from discontinued operations and extraordinary items, plus (c) income tax expenses, plus (d) interest expense, plus (e) depreciation, depletion, and amortization (including non-cash loss on retirement of assets), plus (f) stock compensation expense, less (g) cash expense related to stock compensation, plus (h) certain amounts of EBITDA of acquired business for the prior twelve months, plus (i) certain expenses related to the closing of the Credit Agreement, plus (j) non-cash expenses which do not (in the current or any future period) represent a cash item (excluding non-cash gains which increase net income), plus (k) non-recurring charges (not to exceed \$5 million in the four consecutive quarters immediately preceding the date of determination) for items such as severance, lease termination charges, asset write-offs and litigation settlements paid during the period, all determined for the period of four consecutive fiscal quarters immediately preceding the date of determination. The Company has the benefit of the lowest margin if its Funded Debt Leverage Ratio is equal to or less than 0.5 to 1, and the margin increases as the ratio increases, to the maximum margin if the ratio is greater than 2.75 to 1. The Company will also bear additional costs for market disruption, regulatory changes effecting the lenders' funding costs, and default pricing of an additional 2% interest rate margin on any amounts not paid when due. Amounts borrowed under the Credit Agreement are secured by liens on substantially all of the assets of the Company and is guaranteed by some of our subsidiaries.

The Credit Agreement contains financial covenants requiring that the Company maintain a Funded Debt Leverage Ratio of no greater than 3.5 to 1 and an Interest Coverage Ratio of at least 3.0 to 1. Interest Coverage Ratio means the ratio, as of any date of determination, of (a) EBITDA for the 12 month period immediately preceding the date of determination, to (b) all interest, premium payments, debt discount, fees, charges and related expenses of the Company and its subsidiaries in connection with borrowed money (including capitalized interest) or in connection with the deferred purchase price of assets, in each case to the extent treated as interest in accordance with GAAP, paid during the 12 month period immediately preceding the date of determination. The Company can elect to increase the Funded Debt Leverage Ratio to 3.75 to 1 temporarily for four fiscal quarters immediately following the fiscal quarter in which the Company acquires another business. The Company can make this election twice during the term of the Credit Agreement.

The Credit Agreement also limits the Company's ability to, among other things, create liens, make investments, incur more indebtedness, merge or consolidate, make dispositions of property, pay dividends and make distributions to stockholders or repurchase our stock, enter into a new line of business, enter into transactions with affiliates and enter into burdensome agreements. The Credit Agreement does not limit the Company's ability to acquire other businesses or companies except that the acquired business or company must be in the Company's line of business, the Company must be in compliance with the financial covenants on a pro forma basis after taking into account the acquisition, and, if the acquired business is a separate subsidiary, in certain circumstances the lenders will receive the benefit of a guaranty of the subsidiary and liens on its assets and a pledge of its stock.

As of December 31, 2017, the Company was in compliance with the terms of the Credit Agreement, and has undertaken to continuously monitor compliance with these covenants.

#### ***Notes Payable and Other Debt***

In connection with certain of its acquisitions, the Company issued subordinated notes payable to the sellers. The maturity of the notes that remain outstanding are three years from the date of acquisition and bear interest at the prime rate for the Bank of Canada, currently 3.2% as of December 31, 2017. Interest expense is recorded in the consolidated statements of income.

The Company's other debt includes local bank financing provided at the local subsidiary levels used to support working capital requirements and fund capital expenditures. At December 31, 2017, there was approximately \$9.7 million outstanding, payable at various times from 2018 to 2029. Monthly payments range from \$1 thousand to \$18 thousand. Interest rates range from 0.6% to 6.2%.

The Company has evaluated current market conditions and borrower credit quality and has determined that the carrying value of its long-term debt approximates fair value. The fair value of the Company's notes payable and capital lease obligations approximates their carrying amounts based on anticipated interest rates which management believes would currently be available to the Company for similar issues of debt.

Scheduled principal payments due under all borrowing agreements in each of the five years and thereafter subsequent to December 31, 2017 are as follows:

2018	\$	2,358
2019		1,664
2020		1,243
2021		892
2022		157,728
Thereafter		2,993
Total	\$	<u>166,878</u>

## 12. Fair Value Measurements

The Company performs fair value measurements in accordance with the guidance provided by ASC 820, Fair Value Measurements and Disclosures. ASC 820 defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. It also establishes a three level hierarchy that prioritizes the inputs used to measure fair value. The three levels of the hierarchy are defined as follows:

Level 1 — Inputs are unadjusted quoted prices in active markets for identical assets or liabilities that the Company has the ability to access at the measurement date.

Level 2 — Observable inputs other than quoted prices included in Level 1, including quoted prices for similar assets or liabilities in active markets, quoted prices for identical assets or liabilities in inactive markets, inputs other than quoted prices that are observable for the asset or liability and inputs derived principally from or corroborated by observable market data.

Level 3 — Unobservable inputs reflecting the Company's own assumptions about inputs that market participants would use in pricing the asset or liability based on the best information available.

### *Financial instruments measured at fair value on a recurring basis*

The fair value of contingent consideration liabilities was estimated using a discounted cash flow technique with significant inputs that are not observable in the market and thus represents a Level 3 fair value measurement as defined in ASC 820. The significant inputs in the Level 3 measurement not supported by market activity include the probability assessments of expected future cash flows related to the acquisitions, appropriately discounted considering the uncertainties associated with the obligation, and as calculated in accordance with the terms of the applicable acquisition agreements.

The following table represents the changes in the fair value of Level 3 contingent consideration:

Balance at May 31, 2016	\$	2,075
Acquisitions		1,630
Payments		(795)
Accretion of liability		136
Revaluation		126
Foreign currency translation		(78)
Balance at December 31, 2016	\$	<u>3,094</u>
Acquisitions		3,407
Payments		(560)
Accretion of liability		272
Revaluation		(735)
Foreign currency translation		30
Balance at December 31, 2017	\$	<u>5,508</u>

### *Financial instruments not measured at fair value on a recurring basis*

The Company has evaluated current market conditions and borrower credit quality and has determined that the carrying value of its long-term debt approximates fair value. The fair value of the Company's notes payable and capital lease obligations approximates their carrying amounts based on anticipated interest rates which management believes would currently be available to the Company for similar issuances of debt.

### 13. Share-Based Compensation

The Company has share-based incentive awards outstanding to its eligible employees and Directors under three employee stock ownership plans: (i) the 2007 Stock Option Plan (the 2007 Plan), (ii) the 2009 Long-Term Incentive Plan (the 2009 Plan) and (iii) the 2016 Long-Term Incentive Plan. No further awards may be granted under either the 2007 Plan or the 2009 Plan, although awards granted under the 2007 Plan and 2009 Plan remain outstanding in accordance with their terms. Awards granted under the 2016 Plan may be in the form of stock options, restricted stock units and other forms of share-based incentives, including performance restricted stock units, stock appreciation rights and deferred stock rights. The 2016 Plan allows for the grant of awards of up to approximately 1,700,000 shares of common stock, of which 1,438,000 shares were available for future grants as of December 31, 2017. As of December 31, 2017, there was an aggregate of approximately 2,130,000 stock options outstanding and approximately 724,000 unvested restricted stock units outstanding under the 2009 Plan and the 2007 Plan.

#### Stock Options

For the year ended December 31, 2017 and the transition period ended December 31, 2016, the Company did not have any share-based compensation expense related to stock option awards. For each of the fiscal years ended May 31, 2016 and 2015, the Company recognized share-based compensation expense related to stock option awards of less than \$0.1 million. No stock options were granted during the year ended December 31, 2017, the transition period ended December 31, 2016 or the years ended May 31, 2016 and 2015. As of December 31, 2017, no unrecognized compensation costs remained related to stock option awards. Cash proceeds from, and the intrinsic value of stock options exercised during the year ended December 31, 2017, the transition period ended December 31, 2016 and the years ended May 31, 2016 and 2015 were as follows:

	For the year ended December 31,		For the Transition Period ended December 31,		For the year ended May 31,	
	2017		2016		2016	2015
Cash proceeds from options exercised	\$	275	\$	604	\$	750
Aggregate intrinsic value of options exercised		580		993		563

A summary of the stock option activity, weighted average exercise prices, and options outstanding and exercisable as of December 31, 2017, the transition period ended December 31, 2016 and the years ended May 31, 2016 and 2015 is as follows (in thousands, except per share amounts):

	For the year ended December 31,		For the Transition Period ended December 31,		For the year ended May 31,			
	2017		2016		2016		2015	
	Common Stock Options	Weighted Average Exercise Price	Common Stock Options	Weighted Average Exercise Price	Common Stock Options	Weighted Average Exercise Price	Common Stock Options	Weighted Average Exercise Price
Outstanding at beginning of year:	2,167	\$ 13.33	2,232	\$ 13.21	2,287	\$ 13.13	2,352	\$ 13.09
Granted	—	\$ —	—	\$ —	—	\$ —	—	\$ —
Exercised	(37)	\$ 7.39	(65)	\$ 9.27	(55)	\$ 9.87	(65)	\$ 11.54
Expired or forfeited	—	\$ —	—	\$ —	—	\$ —	—	\$ —
Outstanding at end of year:	<u>2,130</u>	<u>\$ 13.43</u>	<u>2,167</u>	<u>\$ 13.33</u>	<u>2,232</u>	<u>\$ 13.21</u>	<u>2,287</u>	<u>\$ 13.13</u>

Range of Exercise Prices	For the year ended December 31, 2017				
	Total Options Outstanding	Options Outstanding		Options Exercisable	
		Weighted Average Remaining Life (Years)	Weighted Average Exercise Price	Number Exercisable	Weighted Average Exercise Price
\$10.00-\$11.54	35	1.1	\$ 10.54	35	\$ 10.54
\$13.46-\$22.35	2,095	1.7	\$ 13.48	2,095	\$ 13.48
	<u>2,130</u>			<u>2,130</u>	
Aggregate Intrinsic Value	\$ 21,374			\$ 21,374	

### Restricted Stock Unit Awards

The Company recognized approximately \$4.5 million of share-based compensation for the year ended December 31, 2017, \$2.6 million of share-based compensation for the transition period ended December 31, 2016, \$4.4 million of share-based compensation in fiscal 2016 and \$4.7 million of share-based compensation in fiscal 2015 related to restricted stock unit awards. As of December 31, 2017, there were approximately \$8.2 million of unrecognized compensation costs, net of estimated forfeitures, related to restricted stock unit awards, which are expected to be recognized over a remaining weighted average period of 2.3 years. Approximately 185,000 restricted stock units vested in the year ended December 31, 2017, of which the fair value of these units was \$3.4 million. Approximately 207,000 restricted stock units vested in the transition period ended December 31, 2016, of which the fair value of these units was \$5.1 million. Approximately 223,000 restricted stock units vested in fiscal 2016 and 232,000 restricted stock units vested in fiscal 2015. The fair value of these units was \$3.5 million and \$5.2 million, respectively. Upon vesting, restricted stock units are generally net share-settled to cover the required minimum withholding tax and the remaining amount is converted into an equivalent number of shares of common stock.

During the year ended December 31, 2017, the Company granted approximately 21,000 shares of fully-vested common stock to its five non-employee directors, in connection with its non-employee director compensation plan, which shares had a grant date fair value of approximately \$0.4 million. During the transition period ended December 31, 2016, the Company granted approximately 10,000 shares of fully-vested common stock to its five non-employee directors, in connection with its non-employee director compensation plan, which shares had a grant date fair value of approximately \$0.3 million. During the years ended May 31, 2016 and 2015, the Company granted approximately 28,000 and 21,000 shares, respectively, of fully-vested common stock to its five non-employee directors, in connection with its non-employee director compensation plan. These shares had a grant date fair value of approximately \$0.5 million and \$0.4 million, respectively, which is included in the share-based compensation expense recorded during the years ended May 31, 2016 and 2015.

	For the year ended December 31,		For the transition period ended December 31,		For the year ended May 31,			
	2017		2016		2016		2015	
	Units	Weighted Average Grant-Date Fair Value	Units	Weighted Average Grant-Date Fair Value	Units	Weighted Average Grant-Date Fair Value	Units	Weighted Average Grant-Date Fair Value
Outstanding at beginning of period:	569	\$ 20.81	575	\$ 18.85	564	\$ 20.47	628	\$ 19.37
Granted	183	\$ 21.26	219	\$ 24.48	264	\$ 16.73	192	\$ 21.87
Released	(185)	\$ 20.49	(207)	\$ 19.40	(223)	\$ 20.40	(232)	\$ 18.17
Forfeited	(35)	\$ 21.45	(18)	\$ 19.55	(30)	\$ 19.26	(24)	\$ 20.57
Outstanding at end of period:	<u>532</u>	<u>\$ 21.05</u>	<u>569</u>	<u>\$ 20.81</u>	<u>575</u>	<u>\$ 18.85</u>	<u>564</u>	<u>\$ 20.47</u>

### Performance Restricted Stock Units

The Company maintains Performance Restricted Stock Units (PRSUs) that have been granted to select executives and senior officers whose ultimate payout is based on the Company's performance over a one-year period based on three metrics, as defined: (1) Operating Income, (2) Adjusted EBITDAS and (3) Revenue. There is a discretionary portion of the PRSUs based on individual performance, at the discretion of the Compensation Committee (Discretionary PRSUs). PRSUs and Discretionary

PRSUs generally vest ratably on each of the first four anniversary dates upon completion of the performance period, for a total requisite service period of up to five years and have no dividend rights.

PRSUs are equity-classified and compensation costs are initially measured using the fair value of the underlying stock at the date of grant, assuming that the target performance conditions will be achieved. Cumulative compensation costs related to the PRSUs are subsequently adjusted for changes in the expected outcomes of the performance conditions.

Discretionary PRSUs are liability-classified and adjusted to fair value (with a corresponding adjustment to compensation expense) based upon the targeted number of shares to be awarded and the fair value of the underlying stock each reporting period until approved by the Compensation Committee, at which point they are classified as equity.

A summary of the Company's Performance Restricted Stock Unit activity is presented below:

	For the year ended December 31, 2017		For the Transition Period ended December 31, 2016	
	Units	Weighted Average Grant-Date Fair Value	Units	Weighted Average Grant-Date Fair Value
Outstanding at beginning of period:	290	\$ 16.01	328	\$ 17.02
Granted	128	\$ 20.42	105	\$ 24.90
Performance condition adjustments, net	(68)	\$ 20.55	(54)	\$ 24.49
Released	(72)	\$ 15.82	(89)	\$ 24.50
Forfeited	—	\$ —	—	\$ —
Outstanding at end of period:	<u>278</u>	<u>\$ 17.00</u>	<u>290</u>	<u>\$ 16.01</u>

In fiscal 2014, the company granted one-year, two-year and three-year PRSUs to its executive and certain other senior officers. These units had requisite service periods of three years and have no dividend rights. The actual payout of these units, before the fiscal 2016 modification as described below, was based on the Company's performance over one, two and three-year periods (based on pre-established targets) and a market condition modifier based on total shareholder return (TSR) compared to an industry peer group. The one-year and two-year performance conditions of the fiscal 2014 awards were evaluated before modification of the awards and not achieved. The one-year and two-year market conditions of the fiscal 2014 awards were evaluated before modification of the awards and achieved. Compensation costs related to the TSR conditions for the one-year and two-year 2014 awards described above were fixed at the measurement date, and not subsequently adjusted. The one-year and two-year awards related to market conditions were paid at 170% and 105%, respectively, of target, upon vesting during the transition period ended December 31, 2016. The three-year performance and market condition awards were surrendered as part of the fiscal 2016 modification described below.

In fiscal 2015, the company granted PRSUs to its executive and certain other senior officers. These units have requisite service periods of three years and have no dividend rights. The actual payout of these units, before the fiscal 2016 modification as described below, was based on the Company's performance over the three-year period (based on pre-established targets) and a market condition modifier based on (TSR) compared to an industry peer group. The 2015 awards were surrendered as part of the fiscal 2016 modification described below.

In the first quarter of fiscal 2016, the Company modified its equity compensation program and granted 154,000 PRSUs to its executive and certain other senior officers. As a condition for receiving any awards under the revised fiscal 2016 plan, the executive and senior officers surrendered and released all rights to receive any shares under the three-year 2014 awards and three-year 2015 awards with a performance or market condition. The Company has accounted for the fiscal 2016 awards as modifications in accordance with ASC 718, Compensation - Stock Compensation. These units have requisite service periods of five years and have no dividend rights.

The fiscal 2016 PRSUs increased by approximately 104,000 units to a total of 258,000 units, which represents Company performance above target as well as individual performance, and was approved by the Compensation Committee in August 2016.

For the transition period ended December 31, 2016, 105,000 PRSUs were granted. There was a 73,000 unit reduction to these awards, which represents Company performance below target, during the transition period ended December 31, 2016. As of December 31, 2016, the aggregate liability related to 12,000 outstanding Discretionary PRSUs was less than \$0.1 million and is classified within accrued expenses and other liabilities on the consolidated balance sheet. The Compensation Committee approved these PSUs in the first quarter of 2017, which reduced them by 3,000 units. The discretionary portion of these awards were reclassified from a liability to equity on the consolidated balance sheet upon Compensation Committee approval.

For the year ended December 31, 2017, 128,000 PRSUs were granted. There was a 65,000 unit reduction to these awards, which represents Company performance below target, during the year ended December 31, 2017. As of December 31, 2017, the aggregate liability related to 13,000 outstanding Discretionary PRSUs was less than \$0.1 million and is classified within accrued expenses and other liabilities on the consolidated balance sheet.

Compensation expense related to all PRSUs described above was \$1.7 million, \$1.7 million, \$1.6 million and \$1.5 million for the year ended December 31, 2017, the transition period ended December 31, 2016 and the years ended May 31, 2016 and 2015, respectively. At December 31, 2017, there was \$2.3 million of total unrecognized compensation costs related to approximately 278,000 nonvested performance restricted stock units. These costs are expected to be recognized over a weighted-average period of approximately 2.0 years.

For the year ended December 31, 2017, the transition period ended December 31, 2016 and the fiscal years ended May 31, 2016 and 2015, the income tax benefit recognized on all share based compensation arrangements referenced above was approximately \$2.2 million, \$1.6 million, \$2.2 million and \$2.3 million, respectively.

#### 14. Income Taxes

Income before provision for income taxes is as follows:

	For the year ended December 31,	For the Transition Period ended December 31,	For the year ended May 31,	
	2017	2016	2016	2015
(Loss) income before provision for income taxes from:				
U.S. operations	\$ (7,303)	\$ 5,116	\$ 27,772	\$ 26,893
Foreign operations	7,077	10,365	10,643	(1,162)
(Loss) Earnings before income taxes	<u>\$ (226)</u>	<u>\$ 15,481</u>	<u>\$ 38,415</u>	<u>\$ 25,731</u>

The provision for income taxes consists of the following:

	For the year ended December 31,	For the Transition Period ended December 31,	For the year ended May 31,	
	2017	2016	2016	2015
<b>Current</b>				
Federal	\$ 3,558	\$ 1,990	\$ 9,156	\$ 8,489
States and local	39	483	1,537	1,177
Foreign	3,131	3,569	3,672	1,493
Reserve for uncertain tax positions	71	(39)	(529)	(48)
Total current	6,799	6,003	13,836	11,111
<b>Deferred</b>				
Federal	(3,857)	6	82	(145)
States and local	(810)	(28)	(51)	(126)
Foreign	(437)	(514)	(557)	(2,416)
Total deferred	(5,104)	(536)	(526)	(2,687)
Net change in valuation allowance	247	403	455	1,316
Net deferred	(4,857)	(133)	(71)	(1,371)
Provision for income taxes	\$ 1,942	\$ 5,870	\$ 13,765	\$ 9,740

The provision for income taxes differs from the amount computed by applying the statutory federal tax rate to income tax as follows:

	For the year ended December 31,		For the Transition period ended December 31,	
	2017		2016	
Federal tax at statutory rate	\$ (79)	35.0 %	\$ 5,418	35.0 %
State taxes, net of federal benefit	(502)	221.6 %	296	1.9 %
Foreign tax	217	(95.8)%	(573)	(3.7)%
Contingent consideration	(63)	27.7 %	(4)	— %
Permanent differences	377	(166.4)%	373	2.4 %
Transition tax, net of foreign tax credits	3,942	(1,741.4)%	—	— %
Federal tax rate change due to the Tax Act	(1,956)	864.0 %	—	— %
Other	(241)	106.5 %	(43)	(0.3)%
Change in valuation allowance	247	(109.1)%	403	2.6 %
Total provision for income taxes	\$ 1,942	(857.9)%	\$ 5,870	37.9 %

On December 22, 2017, the United States enacted fundamental changes to the federal tax law following the passage of the Tax Act.

The Tax Act is complex and significantly changes the U.S. corporate tax system by, among other things, (a) reducing the federal corporate tax rate from 35% to 21% for tax years beginning after December 31, 2017, (b) replacing the prior system of taxing corporations on foreign earnings of their foreign subsidiaries when the earnings are repatriated with a partial territorial tax system that provides a 100% dividends-received deduction (DRD) to domestic corporations for foreign-sourced dividends received from 10%-or-more owned foreign corporations, (c) subjecting certain unrepatriated foreign earnings to a mandatory one-time transition tax on post-1986 earnings and profits ("the transition tax"), and (d) further limiting a public entity's ability to deduct compensation in excess of \$1 million for covered employees.

Our income tax expense for 2017 was \$1.9 million. This amount reflects a net tax benefit of \$2.3 million as a result of the Tax Act due to the remeasurement of federal deferred tax assets and liabilities from 35% to 21%. This amount also includes a

charge of \$3.9 million due to the transition tax. Additionally, we incurred a charge attributable to reducing our deferred tax assets by \$0.3 million due to changes made to executive compensation rules pursuant to the Tax Act.

	For the year ended May 31,			
	2016		2015	
Federal tax at statutory rate	\$ 13,445	35.0 %	\$ 9,006	35.0 %
State taxes, net of federal benefit	966	2.5 %	683	2.7 %
Foreign tax	(610)	(1.6)%	(517)	(2.0)%
Contingent consideration	(425)	(1.1)%	(914)	(3.6)%
Permanent differences	245	0.6 %	196	0.8 %
Other	(311)	(0.8)%	(30)	(0.1)%
Change in valuation allowance	455	1.2 %	1,316	5.1 %
Total provision for income taxes	\$ 13,765	35.8 %	\$ 9,740	37.9 %

Deferred income tax attributes resulting from differences between financial accounting amounts and income tax basis of assets and liabilities are as follows:

	December 31,	
	2017	2016
<b>Deferred income tax assets</b>		
Allowance for doubtful accounts	\$ 838	\$ 969
Inventory	265	236
Intangible assets	2,255	2,529
Accrued expenses	2,560	5,157
Net operating loss carryforward	3,729	4,094
Capital lease obligations	1,004	1,140
Capital losses	463	719
Foreign tax credit carryover	618	—
Deferred share-based compensation	4,080	5,802
Other	484	285
Deferred income tax assets	16,296	20,931
Valuation allowance	(4,044)	(3,896)
Net deferred income tax assets	12,252	17,035
<b>Deferred income tax liabilities</b>		
Property and equipment	(6,893)	(8,655)
Goodwill	(6,578)	(13,586)
Intangible assets	(5,972)	(5,051)
Other	(6)	(11)
Deferred income tax liabilities	(19,449)	(27,303)
Net deferred income taxes	\$ (7,197)	\$ (10,268)

As of December 31, 2017, the Company had federal net operating loss carry forwards (NOLs) in the amount of approximately \$0.2 million which may be utilized subject to limitation under Internal Revenue Code section 382. The federal NOLs expire at various times from 2031 to 2033. In addition, as of December 31, 2017, the Company had state and foreign NOLs of \$38.4 million and \$11.0 million, respectively. The state NOLs expire at various times from 2020 to 2037. Approximately \$0.7 million of the foreign NOLs expire at various times from 2022 to 2037, while the remainder of the Company's foreign NOLs do not expire.

In assessing the ability to realize deferred tax assets, management considers whether it is more likely than not that some portion or all of the deferred tax assets will be realized. Valuation allowances are provided when management believes the Company's deferred tax assets are not recoverable based on an assessment of estimated future taxable income that incorporates ongoing, prudent and feasible tax planning strategies. At December 31, 2017 and December 31, 2016, the Company has a valuation

allowance of approximately \$4.0 million and \$3.9 million, respectively, primarily against certain state and foreign NOLs, capital losses generated by the disposals of certain foreign subsidiaries and other specific deferred tax assets. The increase of \$0.1 million is primarily attributable to a \$0.2 million increase in against state deferred tax assets and a net \$0.1 million decrease in federal valuation allowance attributable to the Tax Act. Except for those deferred tax assets subject to the valuation allowance, management believes that it will realize all deferred tax assets as a result of sufficient future taxable income in each tax jurisdiction in which the Company has deferred tax assets.

The following table summarizes the changes in the Company's gross unrecognized tax benefits, excluding interest and penalties:

	For the year ended December 31,	For the Transition Period ended December 31,
	2017	2016
Balance at beginning of period	\$ 267	\$ 303
Additions for tax positions related to the current fiscal period	11	8
Additions for tax positions related to prior years	188	—
Decreases for tax positions related to prior years	—	(11)
Impact of foreign exchange fluctuation	10	—
Settlements	(198)	—
Reductions related to the expiration of statutes of limitations	(122)	(33)
Balance at end of period	<u>\$ 156</u>	<u>\$ 267</u>

The Company has recorded the unrecognized tax benefits in other long-term liabilities in the consolidated balance sheets. As of December 31, 2017 and December 31, 2016, there were approximately \$0.2 million and \$0.3 million of unrecognized tax benefits, respectively, including penalties and interest that if recognized would favorably affect the effective tax rate. Interest and penalties related to unrecognized tax benefits are recorded in income tax expense and are not significant for the year ended December 31, 2017, the transition period ended December 31, 2016 and the fiscal years ended May 31, 2016 and 2015. The Company anticipates a decrease to its unrecognized tax benefits of less than \$0.1 million excluding interest and penalties within the next 12 months.

The Company is subject to taxation in the United States and various states and foreign jurisdictions. The Company is no longer subject to U.S. federal income tax examinations for years ending before May 31, 2015 and generally is no longer subject to state, local or foreign income tax examinations by tax authorities for years ending before May 31, 2014.

Net income (loss) of foreign subsidiaries was \$4.1 million, \$6.9 million, \$7.5 million and \$(0.8) million for the year ended December 31, 2017, the transition period ended December 31, 2016, fiscal 2016 and 2015, respectively. Generally, it has been our practice and intention to reinvest the earnings of our non-U.S. subsidiaries in those operations. As previously noted, the Tax Act made significant changes to the taxation of undistributed earnings, requiring that all previously untaxed earnings and profits of our controlled foreign operations be subjected to the transition tax. Since these earnings have now been subjected to U.S. federal tax they would only be potentially subject to limited other taxes, including foreign withholding and certain state taxes. As of December 31, 2017, the Company has not recognized U.S. tax expense on its undistributed international earnings or losses of its foreign subsidiaries since it intends to indefinitely reinvest the earnings outside the United States.

The Company considers the accounting of the effects of the Tax Act to be estimates. The provisional amounts recorded are based on the Company's current interpretation and understanding of the Tax Act and may change as the Company receives additional clarification and implementation guidance and finalizes their analysis of all impacts and positions with regard to the Tax Act. The Company will continue to gather and evaluate the data and guidance to refine the income tax impact of the Tax Act. The effect of the change in federal corporate tax rate from 35% to 21% is subject to change based on resolution of estimates used in determining the amounts of deferred tax assets and liabilities that were remeasured. Our calculation of the transition tax is subject to further refinement as more information is gathered from our foreign subsidiaries, estimates used in the calculation are resolved, and as states provide guidance on how the transition tax may or may not apply in their respective jurisdictions. The reduction of the deferred tax asset related to executive compensation may be changed based upon actual 2018 compensation as compared to our projections of compensation that may be limited. Finally, the Tax Act also imposes a minimum tax on certain foreign subsidiaries deemed to be in excess of a routine return based on tangible asset investment, which is designed to discourage income shifting by subjecting certain foreign intangibles and other income to current U.S. tax.

Effective for tax years beginning after 2017, U.S. shareholders of certain foreign corporations are subject to current U.S. tax on their global intangible low-tax income (GILTI). We have not yet evaluated our potential liability, if any, under the minimum tax for GILTI in 2018 or future years. Accordingly, we have not yet made an accounting policy election either to account for these effects in the future period when the tax arises or to recognize them as part of the deferred taxes. Pursuant to SAB 118, the Company will complete the accounting for the tax effects of all of the provisions of the Tax Act within the required measurement period not to extend beyond one year from the enactment date.

## **15. Employee Benefit Plans**

The Company provides a 401(k) savings plan for eligible U.S. based employees. Employee contributions are discretionary up to the IRS limits each year and catch up contributions are allowed for employees 50 years of age or older. Under the 401(k) plan, employees become eligible to participate on the first day of the month after three months of continuous service. Under this plan, the Company matches 50% of the employee's contributions up to 6% of the employee's annual compensation, as defined by the plan. There is a five-year vesting schedule for the Company match. The Company's contribution to the plan was \$3.7 million, \$2.0 million, \$3.5 million and \$3.0 million for the year ended December 31, 2017, the transition period ended December 31, 2016 and the years ended May 31, 2016 and 2015, respectively.

The Company participates with other employers in contributing to the Boilermaker-Blacksmith National Pension Trust (EIN 48-6168020) ("Boilermakers") and Plumbers and Pipefitters National Pension Fund (EIN 52-6152779) ("Pipefitters"), multi-employer defined benefit pension plans, which covers certain U.S. based union employees. The plans provide multiple plan benefits with corresponding contribution rates that are collectively bargained between participating employers and their affiliated Boilermakers and Pipefitters local unions. Both the Boilermakers and Pipefitters plans are between 65 percent and 80 percent funded as of the latest Form 5500 filed. The Company's contributions to the Boilermakers and Pipefitters plans, collectively, were \$2.4 million, \$1.5 million, \$2.5 million and \$2.5 million for the year ended December 31, 2017, the transition period ended December 31, 2016 and the years ended May 31, 2016 and 2015. These contributions represented less than five percent of total contributions made to the plans.

The Company has benefit plans covering certain employees in selected foreign countries. Amounts charged to expense under these plans were not significant in any year.

## **16. Related Party Transactions**

On August 17, 2016, the Company entered into an agreement with its then Chairman, CEO and Director, Dr. Sotirios Vahaviolos, to purchase up to 1 million of his shares, commencing in October 2016. Refer to Note 20 for further details of the treasury stock repurchases from Dr. Vahaviolos.

The Company leases its headquarters under an operating lease from a shareholder and officer of the Company. On August 1, 2014, the Company extended its lease at its headquarters requiring monthly payments through October 2024. Total rent payments made during the year ended December 31, 2017 were approximately \$0.9 million. See Note 18 — *Commitments and Contingencies* for further detail related to operating leases.

The Company has a lease for office space located in France, which is partly owned by a shareholder and officer. Total rent payments made during the year ended December 31, 2017 were approximately \$0.2 million.

The Company has a lease for office space located in Brazil, which is partly owned by a shareholder and officer. Total rent payments made during the year ended December 31, 2017 were approximately \$0.1 million.

The Company receives benefits consulting services from Capital Management Enterprise ("CME"), which is owned by one of its non-employee directors, Manuel N. Stamatakis. The Company does not pay any fees directly to CME. Any compensation CME receives is from third-party benefit providers.

## **17. Obligations under Capital Leases**

The Company leases certain office space, and service equipment under capital leases, requiring monthly payments ranging from less than \$1 thousand to \$73 thousand, including effective interest rates that range from approximately 1% to 7% expiring through June 2029. The net book value of assets under capital lease obligations was \$19.5 million and \$17.6 million at December 31, 2017 and December 31, 2016, respectively.

Scheduled future minimum lease payments subsequent to December 31, 2017 are as follows:

2018	\$	5,899
2019		3,788
2020		2,485
2021		1,778
2022		634
Thereafter		760
Total minimum lease payments		15,344
Less: amount representing interest		(731)
Present value of minimum lease payments		14,613
Less: current portion of obligations under capital leases		(5,875)
Obligations under capital leases, net of current portion	\$	8,738

## 18. Commitments and Contingencies

### *Operating Leases*

The Company is party to various non-cancelable operating lease agreements, primarily for its international and domestic office and lab space. Future minimum lease payments under noncancelable operating leases in each of the five years and thereafter subsequent to December 31, 2017 are as follows:

2018	\$	11,542
2019		8,888
2020		6,902
2021		4,881
2022		4,304
Thereafter		12,915
Total	\$	49,432

Total rent expense was \$11.8 million, \$6.6 million, \$11.2 million and \$10.6 million for the year ended December 31, 2017, the transition period ended December 31, 2016 and the years ended May 31, 2016 and 2015, respectively.

### *Legal Proceedings and Government Investigations*

The Company is subject to periodic lawsuits, investigations and claims that arise in the ordinary course of business. The Company cannot predict with certainty the ultimate resolution of lawsuits, investigations and claims asserted against it. Except for the matters described below, the Company does not believe that any currently pending legal proceeding to which the Company is a party will have a material adverse effect on its business, results of operations, cash flows or financial condition. The costs of defense and amounts that may be recovered against the Company may be covered by insurance for certain matters.

### Litigation and Commercial Claims

The Company was a defendant in a consolidated class and collective action, *Edgar Vicerl and David Kruger v Mistras Group, et al*, pending in the U.S. District Court for the Northern District of California, originally filed in April 2015. The Company settled the consolidated class and collective action that resulted in the Company recording a pre-tax charge of \$6.3 million in the fourth quarter of fiscal 2016, and the Company paid the settlement in the quarter ended March 31, 2017.

The Company was a defendant in the lawsuit *AGL Services Company v. Mistras Group, Inc.*, pending in U.S. District Court for the Northern District of Georgia, filed November 2016. The case involved radiography work performed by the Company in 2012 on the construction of a pipeline project in the U.S. The owner of the pipeline project claimed damages of approximately \$5.8 million. At a trial concluded on October 26, 2017, the jury awarded the plaintiff its damage claim plus interest, which the Company believes is fully covered by insurance.

The Company's subsidiary in France has been involved in a dispute with a former owner of a business in France purchased by the Company's French subsidiary. The former owner received a judgment in his favor in the amount of approximately \$0.4 million for payment of the contingent consideration portion of the purchase price for the business. The Company recorded a reserve for the full amount of the judgment during the three months ended June 30, 2016. The Company's subsidiary appealed the judgment and the entire judgment was overturned on appeal, however the full appeals process is not yet completed, and therefore, we have not adjusted the reserve as of December 31, 2017.

The Company was a defendant in a lawsuit, *Triumph Aerostructures, LLC d/b/a Triumph Aerostructures-Vought Aircraft Division v. Mistras Group, Inc.*, pending in Texas State district court, 193rd Judicial District, Dallas County, Texas, filed September 2016. The plaintiff alleged that in 2014 Mistras delivered a defective Ultrasonic inspection system and alleged damages of approximately \$2.3 million, the amount it paid for the system. In January 2018, the Company agreed to settle this matter for a payment of \$1.6 million and Mistras subsequently obtained ownership of the underlying ultrasonic inspection system. A charge for \$1.6 million was recorded in 2017 and payment was made in February 2018.

#### Government Investigations

In May 2015, the Company received a notice from the U.S. Environmental Protection Agency ("EPA") that it performed a preliminary assessment at a leased facility the Company operates in Cudahy, California. Based upon the preliminary assessment, the EPA is conducting an investigation of the site, which includes taking groundwater and soil samples. The purpose of the investigation is to determine whether any hazardous materials were released from the facility. The Company has been informed that certain hazardous materials and pollutants have been found in the ground water in the general vicinity of the site and the EPA is attempting to ascertain the origination or source of these materials and pollutants. Given the historic industrial use of the site, the EPA determined that the site of the Cudahy facility should be examined, along with numerous other sites in the vicinity. At this time, the Company is unable to determine whether it has any liability in connection with this matter and if so, the amount or range of any such liability, and accordingly, has not established any reserves for this matter.

#### Other Potential Contingencies

Some of the Company's workforce is unionized and the terms of employment for these workers are governed by collective bargaining agreements, or CBAs. Under these CBAs, the Company's subsidiaries are required to contribute to the national pension funds for the unions representing these employees, which are multi-employer pension plans. The Company was notified that a significant project was awarded to another contractor in early 2018, and as a result, the Company and its subsidiaries may experience a significant reduction in the number of its employees covered by CBAs. Under certain circumstances, such a reduction in the number of employees participating in a multi-employer pension plan could result in a complete or partial withdrawal liability to these multi-employer pension plans under ERISA. Presently, the Company is uncertain when or whether its subsidiaries will incur withdrawal liability and, if such liability is incurred, whether it will be material.

#### **Acquisition-related contingencies**

The Company is liable for contingent consideration in connection with certain of its acquisitions. As of December 31, 2017, total potential acquisition-related contingent consideration ranged from zero to \$8.5 million and would be payable upon the achievement of specific performance metrics by certain of the acquired companies over the next 2.5 years of operations. See Note 7 - *Acquisitions* to these consolidated financial statements for further information with respect to the Company's acquisitions completed during the year ended December 31, 2017 and the transition period ended December 31, 2016.

### **19. Segment Disclosure**

The Company's three operating segments are:

- *Services*. This segment provides asset protection solutions predominantly in North America, with the largest concentration in the United States, followed by Canada, consisting primarily of non-destructive testing, and inspection

and engineering services that are used to evaluate the structural integrity and reliability of critical energy, industrial and public infrastructure.

- *International.* This segment offers services, products and systems similar to those of the other segments to select markets within Europe, the Middle East, Africa, Asia and South America, but not to customers in China and South Korea, which are served by the Products and Systems segment.
- *Products and Systems.* This segment designs, manufactures, sells, installs and services the Company's asset protection products and systems, including equipment and instrumentation, predominantly in the United States.

Costs incurred for general corporate services, including finance, legal, and certain other costs that are provided to the segments are reported within Corporate and eliminations. Sales to the International segment from the Products and Systems segment and subsequent sales by the International segment of the same items are recorded and reflected in the operating performance of both segments. Additionally, engineering charges and royalty fees charged to the Services and International segments by the Products and Systems segment are reflected in the operating performance of each segment. All such intersegment transactions are eliminated in the Company's consolidated financial reporting.

The accounting policies of the reportable segments are the same as those described in Note 2 — *Summary of Significant Accounting Policies*. Segment income from operations is one of the primary performance measures used by the Chief Executive Officer, who is the chief operating decision maker, to assess the performance of each segment and make decisions as to resource allocations. Certain general and administrative costs such as human resources, information technology and training are allocated to the segments. Segment income from operations excludes interest and other financial charges and income taxes. Corporate and other assets are comprised principally of cash, deposits, property, plant and equipment, domestic deferred taxes, deferred charges and other assets. Corporate loss from operations consists of administrative charges related to corporate personnel and other charges that cannot be readily identified for allocation to a particular segment.

Selected financial information by segment for the periods shown was as follows (intercompany transactions are eliminated in Corporate and eliminations):

	For the year ended December 31,	For the Transition Period ended December 31,	For the year ended May 31,	
	2017	2016	2016	2015
<b>Revenues</b>				
Services	\$ 543,565	\$ 293,218	\$ 553,279	\$ 540,224
International	144,265	104,013	143,025	146,953
Products and Systems	23,297	14,541	30,293	31,255
Corporate and eliminations	(10,157)	(7,611)	(7,416)	(7,180)
	<u>\$ 700,970</u>	<u>\$ 404,161</u>	<u>\$ 719,181</u>	<u>\$ 711,252</u>
	For the year ended December 31,	For the Transition Period ended December 31,	For the year ended May 31,	
	2017	2016	2016	2015
<b>Gross profit</b>				
Services	\$ 139,160	\$ 75,784	\$ 145,262	\$ 135,201
International	38,974	34,210	43,613	34,572
Products and Systems	9,798	6,920	14,022	14,314
Corporate and eliminations	(220)	90	111	646
	<u>\$ 187,712</u>	<u>\$ 117,004</u>	<u>\$ 203,008</u>	<u>\$ 184,733</u>

	For the year ended December 31,	For the Transition Period ended December 31,	For the year ended May 31,	
	2017	2016	2016	2015
<b>Income from operations</b>				
Services	\$ 46,677	\$ 22,411	\$ 52,552	\$ 49,142
International	3,537	10,597	9,293	(575)
Products and Systems	(16,991)	(254)	2,688	2,461
Corporate and eliminations	(29,063)	(15,221)	(21,356)	(20,675)
	<u>\$ 4,160</u>	<u>\$ 17,533</u>	<u>\$ 43,177</u>	<u>\$ 30,353</u>

	For the year ended December 31,	For the Transition Period ended December 31,	For the year ended May 31,	
	2017	2016	2016	2015
<b>Depreciation and amortization</b>				
Services	\$ 21,649	\$ 12,765	\$ 22,725	\$ 22,268
International	7,768	5,306	7,774	8,451
Products and Systems	2,180	1,372	2,323	2,426
Corporate and eliminations	(214)	(244)	(348)	141
	<u>\$ 31,383</u>	<u>\$ 19,199</u>	<u>\$ 32,474</u>	<u>\$ 33,286</u>

	December 31,	
	2017	2016
<b>Intangible assets, net</b>		
Services	\$ 46,864	\$ 19,550
International	13,899	14,139
Products and Systems	2,261	5,482
Corporate and eliminations	715	836
	<u>\$ 63,739</u>	<u>\$ 40,007</u>

	December 31,	
	2017	2016
<b>Total assets</b>		
Services	\$ 377,585	\$ 291,539
International	150,779	130,427
Products and Systems	12,733	28,964
Corporate and eliminations	13,344	18,497
	<u>\$ 554,441</u>	<u>\$ 469,427</u>

Revenue and long-lived assets by geographic area was as follows:

	For the year ended December 31,	For the Transition Period ended December 31,	For the year ended May 31,	
	2017	2016	2016	2015
<b>Revenue</b>				
United States	\$ 466,683	\$ 256,926	\$ 519,361	\$ 491,818
Other Americas	86,870	41,777	67,809	68,628
Europe	132,421	91,847	118,566	137,071
Asia-Pacific	14,996	13,611	13,445	13,735
	<u>\$ 700,970</u>	<u>\$ 404,161</u>	<u>\$ 719,181</u>	<u>\$ 711,252</u>

	December 31,	
	2017	2016
<b>Long-lived assets</b>		
United States	\$ 237,616	\$ 186,960
Other Americas	36,011	29,065
Europe	80,693	67,072
	<u>\$ 354,320</u>	<u>\$ 283,097</u>

## 20. Repurchase of Common Stock

On October 7, 2015, the Company's Board of Directors approved a \$50 million stock repurchase plan. As part of this plan, on August 17, 2016, the Company entered into an agreement with its Chairman and then CEO, Dr. Sotirios Vahaviolos, to purchase up to 1 million of his shares, commencing in October 2016. Pursuant to the agreement, in general, the Company agreed to purchase from Dr. Vahaviolos up to \$2 million of shares each month, at a 2% discount to the average daily price of the Company's common stock for the preceding month. During the transition period ended December 31, 2016, the Company purchased approximately 274,000 shares from Dr. Vahaviolos at an average price of \$21.90 per share and an aggregate cost of \$6.0 million as well as 146,000 shares in the open market at an average price of \$20.48 per share and an aggregate cost of approximately \$3.0 million. During the year ended December 31, 2017, the Company purchased approximately 726,000 shares from Dr. Vahaviolos at an average price of \$21.93 per share and an aggregate cost of \$15.9 million. From the inception of the plan through December 31, 2017, the Company purchased 1,000,000 shares from Dr. Vahaviolos at an average price of \$21.92 per share for an aggregate cost of approximately \$21.9 million.

The Company retired all of its repurchased shares during the fourth quarter of 2017 and they are not included in common stock issued and outstanding as of December 31, 2017. As of December 31, 2017, approximately \$25.1 million remained available to repurchase shares under the stock repurchase plan.

## 21. TWELVE MONTHS ENDED DECEMBER 31, 2016 AND SEVEN MONTHS ENDED DECEMBER 31, 2015 COMPARATIVE DATA (Unaudited)

The condensed consolidated statement of income for the twelve months ended December 31, 2016 and the seven months ended December 31, 2015 is as follows:

	Twelve Months Ended December 31, 2016		Seven Months Ended December 31, 2015	
	(unaudited)			
Revenues	\$	684,762	\$	427,913
Cost of revenues		468,929		292,718
Depreciation		21,699		12,005
Gross profit		194,134		123,190
Selling, general and administrative expenses		148,914		81,117
Research and engineering		2,670		1,431
Depreciation and amortization		10,689		6,503
Litigation charges		6,320		—
Acquisition-related benefit, net		(5)		(959)
Income from operations		25,546		35,098
Interest expense, net		3,075		3,672
Income before provision for income taxes		22,471		31,426
Provision for income taxes		8,008		11,627
Net income		14,463		19,799
Less: Net income (loss) attributable to non-controlling interests		54		(15)
Net income available to Mistras Group, Inc. shareholders	\$	14,409	\$	19,814
Net income per share: Basic	\$	0.50	\$	0.69
Net income per share: Diluted	\$	0.48	\$	0.67
Weighted average shares outstanding:				
Basic		28,960		28,810
Diluted		30,114		29,676

## 22. Selected Quarterly Financial Information (unaudited)

The following is a summary of the quarterly results of operations for calendar years 2017 and 2016.

Fiscal quarter ended	December 31, 2017		September 30, 2017		June 30, 2017		March 31, 2017	
Revenues	\$	187,643	\$	179,570	\$	170,439	\$	163,318
Gross Profit		50,319		47,897		46,343		43,153
Income (loss) from operations		6,282		(10,375)		5,003		3,250
Net income (loss) attributable to Mistras Group, Inc.	\$	884	\$	(6,968)	\$	2,217	\$	1,692
Earnings (loss) per common share:								
Basic	\$	0.03	\$	(0.25)	\$	0.08	\$	0.06
Diluted	\$	0.03	\$	(0.25)	\$	0.07	\$	0.06

Fiscal quarter ended	December 31, 2016	September 30, 2016	June 30, 2016	March 31, 2016
Revenues	\$ 170,156	\$ 168,811	\$ 178,340	\$ 167,455
Gross Profit	47,978	50,651	51,535	43,970
Income from operations	2,944	12,116	4,840	5,646
Net income attributable to Mistras Group, Inc.	\$ 963	\$ 7,238	\$ 2,761	\$ 3,447
Earnings per common share:				
Basic	\$ 0.03	\$ 0.25	\$ 0.10	\$ 0.12
Diluted	\$ 0.03	\$ 0.24	\$ 0.09	\$ 0.11

## Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

## Item 9A. Controls and Procedures

### Evaluation of Disclosure Controls and Procedures

Pursuant to Rule 13a-15(b) under the Exchange Act, our management carried out an evaluation, under the supervision and with the participation of our President and Chief Executive Officer and our Senior Vice President, Chief Financial Officer and Treasurer, of the effectiveness of the design and operation of our disclosure controls (as defined in Rule 13a-15(e) of the Exchange Act) and procedures. Based upon that evaluation, our President and Chief Executive Officer and our Senior Vice President, Chief Financial Officer and Treasurer concluded that, as of December 31, 2017, our disclosure controls and procedures were effective.

### Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934, as amended (the Exchange Act). Our internal control over financial reporting is a process designed by, or under the supervision of, our President and Chief Executive Officer and our Senior Vice President, Chief Financial Officer and Treasurer, and effected by the Company's board of directors, management and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with policies or procedures may deteriorate.

Our management assessed the effectiveness of our internal control over financial reporting as of December 31, 2017. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in the updated *Internal Control — Integrated Framework* issued in 2013. We acquired three entities during 2017, and management excluded from its assessment of the effectiveness of the Company's internal control over financial reporting as of December 31, 2017, these entities' internal control over financial reporting associated with total assets of 4.0% and total revenues of 2.6% included in the consolidated financial statements of the Company as of and for the year ended December 31, 2017. Based on that assessment, excluding the three entities acquired during 2017 as noted above, our management concluded that, as of December 31, 2017, our internal control over financial reporting was effective.

The effectiveness of the Company's internal control over financial reporting as of December 31, 2017, has been audited by KPMG LLP, an independent registered public accounting firm, as stated in their report which appears herein.

### Changes in Internal Control over Financial Reporting

There have been no changes in our internal control over financial reporting during the year ended December 31, 2017 that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

## Item 9B. Other Information

None.

**PART III****ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE****Directors**

The information required by Item 10 is incorporated herein by reference to the information to be included in our definitive proxy statement related to the 2018 annual shareholders meeting. The information concerning our executive officers required by this Item 10 is provided under the caption “Executive Officers of the Registrant” in Part I of this Annual Report.

**ITEM 11. EXECUTIVE COMPENSATION**

The information required by Item 11 is incorporated by reference to the information to be included in our definitive proxy statement related to the 2018 annual shareholders meeting.

**ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS**

The information required by Item 12 regarding Security Ownership of Certain Beneficial Owners and Management and Related Stockholders is incorporated by reference to the information to be included in our definitive proxy statement related to the 2018 annual meeting of shareholders.

**Equity Compensation Plan Information**

The following table provides certain information as of December 31, 2017 concerning the shares of our common stock that may be issued under existing equity compensation plans.

Plan Category	Number of Securities to be Issued Upon Exercise of Outstanding Options	Weighted Average Exercise Price of Outstanding Options	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans
	(in thousands, except exercise price data)		
Equity Compensation Plans Approved by Security Holders (1)	2,130	\$ 13.43	1,438
Equity Compensation Plans Not Approved by Security Holders	—	—	—
Total	2,130	\$ 13.43	1,438

(1) Includes all the Company’s plans: 2007 Stock Option Plan, 2009 Long-Term Incentive Plan and 2016 Long-Term Incentive Plan.

**ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE**

The information required by Item 13 is incorporated by reference to the information to be included in our definitive proxy statement related to the 2018 annual shareholders meeting.

**ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES**

The information required by Item 14 is incorporated by reference to the information to be included in our definitive proxy statement related to the 2018 annual shareholders meeting.

**PART IV**

**ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES**

(1) The following financial statements are filed herewith in Item 8 of Part II above:

	<u>Page</u>
<a href="#">Report of independent registered public accounting firm</a>	50
<a href="#">Consolidated Balance sheets as of December 31, 2017 and December 31, 2016</a>	51
<a href="#">Consolidated Statements of (loss) income for the year ended December 31, 2017, the transition period ended December 31, 2016 and the years ended May 31, 2016 and 2015</a>	52
<a href="#">Consolidated Statements of comprehensive income (loss) for the year ended December 31, 2017, the transition period ended December 31, 2016 and the years ended May 31, 2016 and 2015</a>	53
<a href="#">Consolidated Statements of equity for the year ended December 31, 2017, the transition period ended December 31, 2016 and the years ended May 31, 2016 and 2015</a>	54
<a href="#">Consolidated Statements of cash flows for the year ended December 31, 2017, the transition period ended December 31, 2016 and the years ended May 31, 2016 and 2015</a>	55
<a href="#">Notes to consolidated financial statements</a>	56

(2) Financial Statement Schedules

All other schedules are omitted because of the absence of conditions under which they are required or because the required information is given in the financial statements or notes thereto.

(3) Exhibits

<u>Exhibit No.</u>	<u>Description</u>
2.1	<a href="#">Membership Interest Purchase Agreement, dated December 15, 2017, among Mistras Group, Inc., WPT Holdings Inc., West Penn Non-Destructive Testing, LLC (formerly known as West Penn Non-Destructive Testing, Inc.), N. David Campbell and James C. DeChellis III (filed as exhibit 2.1 to the Current Report on Form 8-K filed on December 21, 2017 and incorporated herein by reference)</a>
3.1	<a href="#">Second Amended and Restated Certificate of Incorporation (filed as exhibit 3.1 to Registration Statement on Form S-1 (Amendment No. 4) filed on September 21, 2009 (Registration No. 333-151559) and incorporated herein by reference)</a>
3.2	<a href="#">Certificate of Amendment to the Second Amended and Restated Certificate of Incorporation (filed as exhibit 3.1 to the Quarterly Report on Form 10-Q filed on January 11, 2017 and incorporated herein by reference)</a>
3.3	<a href="#">Amended and Restated Bylaws, effective July 20, 2016 (filed as exhibit 3.1 to the Quarterly Report on Form 10-Q filed on October 7, 2016 and incorporated herein by reference)</a>
4.1	<a href="#">Specimen certificate evidencing shares of common stock (filed as exhibit 4.1 to Registration Statement on Form S-1 (Amendment No. 5) filed on September 23, 2009 (Registration No. 333-151559) and incorporated herein by reference.</a>
10.1	<a href="#">Third Amended and Restated Credit Agreement dated December 21, 2011 (filed as exhibit 10.1 to Quarterly Report on Form 10-Q filed April 9, 2012 and incorporated herein by reference)</a>
10.2	<a href="#">Third Amendment and Modification Agreement, dated October 31, 2014 to the Third Amended and Restated Credit Agreement, dated December 21, 2011 (filed as exhibit 10.1 to Quarterly Report on Form 10-Q filed January 9, 2015 and incorporated herein by reference)</a>
10.3*	<a href="#">Fourth Amended and Restated Credit Agreement dated December 8, 2017</a>
10.4	<a href="#">Form of Indemnification Agreement for directors and officers (filed as exhibit 10.1 to Registration Statement on Form S-1 (Amendment No. 4) filed on September 21, 2009 (Registration No. 333-151559) and incorporated herein by reference)</a>

10.5	<a href="#">Agreement, dated August 17, 2016, between registrant and Sotirios Vahaviolos (filed as exhibit 10.1 to the Quarterly Report on Form 10-Q filed on October 7, 2016 and incorporated herein by reference)</a>
10.6	<a href="#">Joint stipulation of settlement and release between Registrant and Plaintiffs, with respect to Visceral and Kruger, et al. v. Mistras Group, Inc., et al. (filed as exhibit 10.2 to the Quarterly Report on Form 10-Q filed on October 7, 2016 and incorporated herein by reference)</a>
10.7	<a href="#">Employment Agreement between the Company and Sotirios J. Vahaviolos (filed as exhibit 10.4 to Registration Statement on Form S-1 (Amendment No. 4) filed on September 21, 2009 (Registration No. 333-151559) and incorporated herein by reference)</a>
10.8	<a href="#">Amendment, dated July 14, 2010 to Employment Agreement, between the Company and Sotirios J. Vahaviolos (filed as exhibit 10.1 to Quarterly Report on Form 10-Q filed on October 14, 2010 and incorporated herein by reference)</a>
10.9	<a href="#">Amendment No. 2, dated January 24, 2014, to Employment Agreement between the Company and Sotirios J. Vahaviolos (filed as exhibit 10.1 to Quarterly Report on Form 10-Q filed on April 9, 2014 and incorporated herein by reference)</a>
10.10	<a href="#">2007 Stock Option Plan and form of Stock Option Agreement (filed as exhibit 10.5 to Registration Statement on Form S-1 (Amendment No. 4) filed on September 21, 2009 (Registration No. 333-151559) and incorporated herein by reference)</a>
10.11	<a href="#">2009 Long-Term Incentive Plan (filed as exhibit 10.6 to Registration Statement on Form S-1 (Amendment No. 4) filed on September 21, 2009 (Registration No. 333-151559) and incorporated herein by reference)</a>
10.12	<a href="#">Form of 2009 Long-Term Incentive Plan Stock Option Agreement (filed as exhibit 10.7 to Registration Statement on Form S-1 (Amendment No. 4) filed on September 21, 2009 (Registration No. 333-151559) and incorporated herein by reference)</a>
10.13	<a href="#">Form of 2009 Long-Term Incentive Plan Restricted Stock Agreement (filed as exhibit 10.8 to Registration Statement on Form S-1 (Amendment No. 4) filed on September 21, 2009 (Registration No. 333-151559) and incorporated herein by reference)</a>
10.14	<a href="#">Form of Restricted Stock Unit Certificate for awards under 2009 Long-Term Incentive Plan (filed as exhibit 10.1 to Quarterly Report on Form 10-Q filed on January 13, 2011 and incorporated herein by reference)</a>
10.15	<a href="#">Form of performance share unit awards letter under 2009 Long-Term Incentive Plan (filed as exhibit 10.11 to Annual Report on Form 10-K filed on August 8, 2014 and incorporated herein by reference)</a>
10.16	<a href="#">2016 Long-Term Incentive Plan (filed as exhibit B to the Definitive Proxy Statement dated September 7, 2016 and incorporated herein by reference)</a>
10.17	<a href="#">Form of Restricted Stock Unit Certificate for awards under the 2016 Long-Term Incentive Plan (filed as Exhibit 10.16 to Transition Report on Form 10-K filed on March 20, 2017 and incorporated herein by reference)</a>
10.18	<a href="#">Mistras Group Severance Plan as amended (April 2014) (filed as Exhibit 10.12 to Annual Report on Form 10-K filed on August 8, 2014 and incorporated herein by reference)</a>
10.19*	<a href="#">Description of Compensation for Non-Employee Directors</a>
21.1*	<a href="#">Subsidiaries of the Registrant</a>
23.1*	<a href="#">Consent of KPMG LLP</a>
24.1*	<a href="#">Power of Attorney (included as part of the signature page to this report)</a>
31.1*	<a href="#">Certification of Chief Executive Officer pursuant to Rule 13a-14(a) under the Securities Exchange Act of 1934</a>
31.2*	<a href="#">Certification of Chief Financial Officer pursuant to Rule 13a-14(a) under the Securities Exchange Act of 1934</a>
32.1**	<a href="#">Certification pursuant to Section 906 of the Sarbanes-Oxley Act of 2002</a>
32.2**	<a href="#">Certification pursuant to Section 906 of the Sarbanes-Oxley Act of 2002</a>

101.INS	XBRL Instance Document
101.SCH	XBRL Schema Document
101.CAL	XBRL Calculation Linkbase Document
101.LAB	XBRL Labels Linkbase Document
101.PRE	XBRL Presentation Linkbase Document
101.DEF	XBRL Definition Linkbase Document

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Exhibits 10.7 to 10.19 are management contracts or compensatory plans, contracts, or arrangements.

\* Filed herewith.

\*\* Furnished herewith.

**ITEM 16. FORM 10-K SUMMARY**

None.

**SIGNATURES**

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

MISTRAS GROUP, INC.

By: /s/ Dennis Bertolotti

Dennis Bertolotti

President and Chief Executive Officer

Date: March 14, 2018

We, the undersigned directors and officers of Mistras Group, Inc., hereby severally constitute Dennis Bertolotti, Edward J. Prajzner and Michael C. Keefe, and each of them singly, as our true and lawful attorneys with full power to each of them to sign for us, in our names in the capacities indicated below, any and all amendments to this Annual Report on Form 10-K filed with the Securities and Exchange Commission.

This power of attorney may only be revoked by a written document executed by the undersigned that expressly revokes this power by referring to the date and subject hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/Dr. Sotirios J. Vahaviolos</u> Dr. Sotirios J. Vahaviolos	Executive Chairman and Director	March 14, 2018
<u>/s/Dennis Bertolotti</u> Dennis Bertolotti	President, Chief Executive Officer and Director ( <i>Principal Executive Officer</i> )	March 14, 2018
<u>/s/ Edward J. Prajzner</u> Edward J. Prajzner	Senior Vice President, Chief Financial Officer and Treasurer ( <i>Principal Financial and Accounting Officer</i> )	March 14, 2018
<u>/s/ James J. Forese</u> James J. Forese	Director	March 14, 2018
<u>/s/ Richard H. Glanton</u> Richard H. Glanton	Director	March 14, 2018
<u>/s/ Nicholas DeBenedictis</u> Nicholas DeBenedictis	Director	March 14, 2018
<u>/s/ Michael J. Lange</u> Michael J. Lange	Director	March 14, 2018
<u>/s/ Manuel N. Stamatakis</u> Manuel N. Stamatakis	Director	March 14, 2018
<u>/s/ W. Curtis Weldon</u> W. Curtis Weldon	Director	March 14, 2018

**FOURTH AMENDED AND RESTATED**

**CREDIT AGREEMENT**

Dated December \_\_\_\_, 2017

By and among

**MISTRAS GROUP, INC.,**

as the Borrower,

**BANK OF AMERICA, N.A.,**

as Administrative Agent, a Lender and L/C Issuer,

and

The Lenders Party Hereto

**MERRILL LYNCH, PIERCE, FENNER & SMITH INCORPORATED,**

as Sole Lead Arranger, Sole Bookrunner, and Syndication Agent

and

**JPMORGAN CHASE BANK, N.A.,**

as Co-Syndication Agent

and

**KEYBANK NATIONAL ASSOCIATION,**

as Documentation Agent

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- Exhibit "B" Form of Revolving Credit Loan Note
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- Exhibit "D" Form of Assignment and Assumption
- Exhibits "E-1" - "E-4" Forms of U.S. Tax Compliance Certificate

Exhibit "F" Form of Secured Party Designation Notice

Exhibit "G" Form of Notice of Loan Prepayment

## **FOURTH AMENDED AND RESTATED CREDIT AGREEMENT**

**THIS FOURTH AMENDED AND RESTATED CREDIT AGREEMENT** (hereinafter, as it may be from time to time amended, modified, extended, renewed, substituted, and/or supplemented, referred to as this "Agreement") is entered into this \_\_\_\_\_ day of December, 2017 by and among

**MISTRAS GROUP, INC.**, a corporation duly organized, validly existing and in good standing under the laws of the State of Delaware, having its principal office located at 195 Clarksville Road, Princeton Junction, New Jersey 08550 (hereinafter referred to as the "Borrower"),

**AND**

**BANK OF AMERICA, N.A.**, a national banking association duly organized and validly existing under the laws of the United States of America, having an office located at 194 Wood Avenue South, Iselin, New Jersey 08830, in its capacity as a lender and as the issuer of letters of credit hereunder (hereinafter referred to as "Bank of America"),

**AND**

**OTHER FINANCIAL INSTITUTIONS**, that are either signatories to this Loan Agreement or who from time to time may hereafter become a lender under this Agreement (hereinafter together with Bank of America, collectively referred to as the "Lenders" and individually referred to as a "Lender"),

**AND**

**BANK OF AMERICA, N.A.**, a national banking association duly organized and validly existing under the laws of the United States of America, having an office located at 194 Wood Avenue South, Iselin, New Jersey 08830, in its capacity as the administrative agent for the Lenders hereunder (hereinafter referred to as the "Administrative Agent", as said definition is more fully described in Section 1.01 hereof).

**WITNESSETH:**

**WHEREAS**, pursuant to a certain Third Amended and Restated Credit Agreement dated December 21, 2011 (hereinafter, as amended and/or modified, referred to as the “Original Credit Agreement”), executed by and among the Borrower, Bank of America, certain other Lenders signatory thereto, and the Administrative Agent, the “Lenders” (as such term is defined in the Original Credit Agreement) agreed to make available to the Borrower a certain credit facility (hereinafter, as amended and/or modified, referred to as the “Original Credit Facility”); and

**WHEREAS**, the Borrower has requested that the Lenders amend and restate the terms, conditions, and provisions of the Original Credit Agreement and all of the loan documentation associated therewith for the purpose of amending, modifying, extending and restating the Original Credit Facility and the terms, conditions and provisions thereof in order to provide for, *inter alia*, a five (5) year senior secured amended and restated revolving credit facility in the aggregate maximum principal amount of up to US\$250,000,000.00 (hereinafter, as it may be from time to time amended, modified, extended, renewed, substituted, and/or supplemented, referred to as the “Credit Facility”), which Credit Facility (a) includes (i) a US\$10,000,000.00 sublimit for the issuance of standby and commercial letters of credit and (ii) a US\$30,000,000.00 sublimit for multicurrency borrowings in readily available and freely transferable and convertible currencies, including, but not limited to, Euros, Pounds Sterling, Canadian Dollars, and Japanese Yen, (b) is made available to the Borrower for working capital and other lawful corporate purposes set forth and described herein, and (c) is made available in full substitution and replacement for the Original Credit Facility; and

**WHEREAS**, the Lenders have agreed to make the Credit Facility available to the Borrower, subject to the terms, conditions and provisions hereinafter set forth; and

**WHEREAS**, the Borrower, the Administrative Agent and the Lenders anticipate and contemplate that the Lenders may sell, assign and transfer at times after the date hereof, a portion of their respective interests in the Credit Facility to other financial institutions described in the definition of “Eligible Assignee” set forth in Section 1.01 of this Agreement, and said additional lenders shall hereinafter be a part of and constitute a member of the Lenders; and

**WHEREAS**, the Lenders and the Borrower have requested that the Administrative Agent act as administrative and collateral agent for the Lenders in connection with the Credit Facility, and the Administrative Agent has agreed to accept such responsibilities and duties, subject to the terms, conditions and provisions hereinafter set forth.

**NOW, THEREFORE**, in consideration of these premises and the mutual representations, covenants and agreements of the Borrower, the Lenders and the Administrative Agent, each party binding itself and its respective successors and assigns, hereby promises, covenants and agrees to amend, modify and restate the Original Credit Agreement with all of the terms, conditions and provisions set forth herein below and all of the terms, conditions and provisions of the Original Credit Agreement are hereby deemed superseded, substituted and replaced by the following:

ARTICLE I.

ARTICLE II.

**DEFINITIONS AND ACCOUNTING TERMS**

**Defined Terms**

. As used in this Agreement, the following terms shall have the meanings set forth below:

“Add Back Amounts” means, for the purposes of calculating EBITDA, to the extent that the Borrower or one of its Subsidiaries acquires a Person in accordance with the terms, conditions, and provisions of this Agreement, an amount to be included by the Administrative Agent in such calculation of EBITDA, determined as follows: (a) for the first quarterly test date following such acquisition, 100% of the TTM EBITDA with respect to such acquired Person; (b) for the second quarterly test date following such acquisition, 75% of the TTM EBITDA with respect to such acquired Person; (c) for the third quarterly test date following such acquisition, 50% of the TTM EBITDA with respect to such acquired Person; and (d) for the fourth quarterly test date following such acquisition, -0-% of the TTM EBITDA with respect to such acquired Person.

“Additional Secured Obligations” means (a) all obligations arising under Secured Cash Management Agreements and Secured Hedge Agreements and (b) to the extent provided for in this Agreement and the other Loan Documents, all costs and expenses incurred in connection with enforcement and collection of the foregoing, including the fees, charges and disbursements of counsel, in each case whether direct or indirect (including those acquired by assumption), absolute or contingent, due or to become due, now existing or hereafter arising and including interest, expenses and fees that accrue after the commencement by or against any Loan Party or any Affiliate thereof of any proceeding under any Debtor Relief Laws naming such Person as the debtor in such proceeding, regardless of whether such interest, expenses and fees are allowed claims in such proceeding; provided that Additional Secured Obligations of a Guarantor shall exclude any Excluded Swap Obligations with respect to such Guarantor.

“Administrative Agent” or “Administrative Agent” means Bank of America, N.A., in its capacity as Administrative Agent under any of the Loan Documents, or any successor Administrative Agent.

“Administrative Agent’s Office” means, with respect to any currency, Administrative Agent’s address and, as appropriate, account as set forth on Schedule 10.02 attached hereto and made a part hereof with respect to such currency, or such other address or account with respect to such currency as Administrative Agent may from time to time notify Borrower and Lenders.

“Administrative Questionnaire” means an Administrative Questionnaire in a form supplied by Administrative Agent.

“Affiliate” means, with respect to a specified Person, another Person that directly, or indirectly through one or more intermediaries, Controls or is Controlled by or is under common Control with the Person specified.

“Aggregate Commitments” means the Commitments of all Lenders.

“Agreement” has the meaning assigned and ascribed to such term as set forth in the preamble to this Agreement.

“Alternative Currency” means each of Euro, Sterling, Yen, Canadian Dollars and each other currency (other than Dollars) that is approved in accordance with Section 1.06.

“Alternative Currency Equivalent” means, at any time, with respect to any amount denominated in Dollars, the equivalent amount thereof in the applicable Alternative Currency as determined by the Administrative Agent or the L/C Issuer, as the case may be, at such time on the basis of the Spot Rate (determined in respect of the most recent Revaluation Date) for the purchase of such Alternative Currency with Dollars.

“Alternative Currency Sublimit” means an amount equal to the lesser of the Aggregate Commitments and US\$30,000,000.00. The Alternative Currency Sublimit is part of, and not in addition to, the Aggregate Commitments.

“Applicable Percentage” means, with respect to any Lender at any time, the percentage (carried out to the ninth decimal place) of the Aggregate Commitments represented by such Lender’s Commitment at such time, subject to adjustment as provided in Section 2.15. If the commitment of each Lender to make Committed Loans and the obligation of the L/C Issuer to make L/C Credit Extensions have been terminated pursuant to Section 8.02 or if the Aggregate Commitments have expired, then the Applicable Percentage of each Lender with respect to the Committed Loans shall be determined based on the Applicable Percentage of such Lender most recently in effect, giving effect to any subsequent assignments. The initial Applicable Percentage of each Lender is set forth opposite the name of such Lender on Schedule 2.01 or in the Assignment and Assumption pursuant to which such Lender becomes a party hereto, as applicable.

“Applicable Rate” means, from time to time, the following percentages per annum, based upon the Funded Debt Leverage Ratio, as set forth in the most recent Compliance Certificate received by Administrative Agent pursuant to Section 6.02(a):

Pricing Level	Funded Debt Leverage Ratio	LIBOR Margin	Base Rate Margin	Commitment Fee	SBLC Fee/Comm'l L/C Fee
1	≤ 0.50:1	100.0 bps	-125.0 bps	20.0 bps	100.0 bps
2	> 0.50 but ≤ 1.00:1	125.0 bps	-100.0 bps	20.0 bps	125.0 bps
3	> 1.00 but ≤ 1.50:1	137.5 bps	-87.5 bps	25.0 bps	137.5 bps
4	> 1.50 but ≤ 2.00:1	150.0 bps	-75.0 bps	30.0 bps	150.0 bps
5	> 2.00 but ≤ 2.75:1	175.0 bps	-37.5 bps	35.0 bps	175.0 bps
6	> 2.75 but ≤ 3.50:1 Or 3.75:1 in the event a Temporary Leverage Increase is in effect.	200.0 bps	-37.5 bps	35.0 bps	200.0 bps

Any increase or decrease in the Applicable Rate resulting from a change in the Funded Debt Leverage Ratio shall become effective as of the first Business Day of the month immediately following the date a Compliance Certificate is delivered pursuant to [Section 6.02\(a\)](#); provided, however, that if a Compliance Certificate is not delivered when due in accordance with [Section 6.02\(a\)](#), then Pricing Level 6 shall apply as of the first Business Day of the month following the date such Compliance Certificate was required to have been delivered until the first Business Day of the month immediately following the delivery of such Compliance Certificate. The Applicable Rate in effect from the Closing Date until receipt of the Compliance Certificate for the period ended December 31, 2017 shall be determined based upon Pricing Level 6. In addition, at all times while the Default Rate is in effect, the highest rate set forth in each column of the Applicable Rate shall apply.

“Applicable Time” means, with respect to any borrowings and payments in any Alternative Currency, the local time in the place of settlement for such Alternative Currency as may be determined by the Administrative Agent or the L/C Issuer, as the case may be, to be necessary for timely settlement on the relevant date in accordance with normal banking procedures in the place of payment.

“Approved Fund” means any Fund that is administered or managed by (a) a Lender, (b) an Affiliate of a Lender or (c) an entity or an Affiliate of an entity that administers or manages a Lender.

“Arranger” means Merrill Lynch, Pierce, Fenner & Smith Incorporated (or any other registered broker-dealer wholly-owned by Bank of America Corporation to which all or substantially all of Bank of America Corporation’s or any of its subsidiaries’ investment banking, commercial lending services or related businesses may be transferred following the date of this Agreement), in its capacity as sole lead arranger and sole bookrunner.

“Assignee Group” means two or more Eligible Assignees that are Affiliates of one another.

“Assignment and Assumption” means an assignment and assumption entered into by a Lender and an Eligible Assignee (with the consent of any party whose consent is required by [Section 10.06\(b\)](#)), and accepted by the Administrative Agent, in substantially the form of [Exhibit “D”](#) or any other form (including an electronic documentation form generated by use of an electronic platform) approved by the Administrative Agent.

“Attributable Indebtedness” means, on any date, (a) in respect of any capital lease of any Person, the capitalized amount thereof that would appear on a balance sheet of such Person prepared as of such date in accordance with GAAP, and (b) in respect of any Synthetic Lease Obligation, the capitalized amount of the remaining lease or similar payments under the relevant lease or other applicable agreement or instrument that would appear on a balance sheet of such Person prepared as of such date in accordance with GAAP if such lease or other agreement or instrument were accounted for as a capital lease.

“Audited Financial Statements” means the audited Consolidated balance sheet of Borrower and its Subsidiaries for the seven-month transition period ended December 31, 2016 and the related Consolidated statements of income or operations, shareholders’ equity and cash flows for such fiscal year of Borrower and its Subsidiaries, including the

notes thereto.

“Availability Period” means the period from and including the Closing Date to the earliest of (a) the Maturity Date, (b) the date of termination of the Aggregate Commitments pursuant to Section 2.06, and (c) the date of termination of the commitment of each Lender to make Loans and of the obligation of the L/C Issuer to make L/C Credit Extensions pursuant to Section 8.02.

“Bail-In Action” means the exercise of any Write-Down and Conversion Powers by the applicable EEA Resolution Authority in respect of any liability of an EEA Financial Institution.

“Bail-In Legislation” means, with respect to any EEA Member Country implementing Article 55 of Directive 2014/59/EU of the European Parliament and of the Council of the European Union, the implementing law for such EEA Member Country from time to time which is described in the EU Bail-In Legislation Schedule.

“Bank of America” means Bank of America, N.A. and its successors.

“Base Rate” means for any day a fluctuating rate of interest per annum equal to the highest of (a) the Federal Funds Rate plus 0.50%, (b) the rate of interest in effect for such day as publicly announced from time to time by Bank of America as its “prime rate,” and (c) the Eurocurrency Rate plus 1.00%, subject to the interest rate floors set forth therein; provided that if the Base Rate shall be less than zero, such rate shall be deemed zero for purposes of this Agreement. The “prime rate” is a rate set by Bank of America based upon various factors including Bank of America’s costs and desired return, general economic conditions and other factors, and is used as a reference point for pricing some loans, which may be priced at, above, or below such announced rate. Any change in such prime rate announced by Bank of America shall take effect at the opening of business on the day specified in the public announcement of such change.

“Base Rate Loan” means a Committed Loan that bears interest at a rate based on the Base Rate. All Base Rate Loans shall be denominated in Dollars.

“Benefit Plan” means any of (a) an “employee benefit plan” (as defined in ERISA) that is subject to Title I of ERISA, (b) a “plan” as defined in Section 4975 of the Code or (c) any Person whose assets include (for purposes of ERISA Section 3(42) or otherwise for purposes of Title I of ERISA or Section 4975 of the Code) the assets of any such “employee benefit plan” or “plan”.

“Borrower” has the meaning assigned and ascribed to such term as set forth in the preamble to this Agreement.

“Borrower Materials” has the meaning specified in Section 6.02.

“Borrowing” means a Committed Borrowing.

“Business Day” means any day other than a Saturday, Sunday or other day on which commercial banks are authorized to close under the Laws of, or are in fact closed in, the state where the Administrative Agent’s Office is located and if such day relates to any Eurocurrency Rate Loan, means any such day that is also a London Banking Day:

(a) if such day relates to any interest rate settings as to a Eurocurrency Rate Loan denominated in Dollars, any fundings, disbursements, settlements and payments in Dollars in respect of any such Eurocurrency Rate Loan, or any other dealings in Dollars to be carried out pursuant to this Agreement in respect of any such Eurocurrency Rate Loan, means any such day that is also a London Banking Day;

(b) if such day relates to any interest rate settings as to a Eurocurrency Rate Loan denominated in Euro, any fundings, disbursements, settlements and payments in Euro in respect of any such Eurocurrency Rate Loan, or any other dealings in Euro to be carried out pursuant to this Agreement in respect of any such Eurocurrency Rate Loan, means a TARGET Day;

(c) if such day relates to any interest rate settings as to a Eurocurrency Rate Loan denominated in a currency other than Dollars or Euro, means any such day on which dealings in deposits in the relevant currency are conducted by and between banks in the London or other applicable offshore interbank market for such currency; and

(d) if such day relates to any fundings, disbursements, settlements and payments in a currency other than Dollars or Euro in respect of a Eurocurrency Rate Loan denominated in a currency other than Dollars or Euro, or any other dealings in any currency other than Dollars or Euro to be carried out pursuant to this Agreement in respect of any such Eurocurrency Rate Loan (other than any interest rate settings), means any such day on which banks are open for foreign exchange business in the principal financial center of the country of such currency.

“Canadian Dollars” and “CAD” mean lawful money of Canada.

“Cash Collateralize” means to pledge and deposit with or deliver to the Administrative Agent, for the benefit of one or more of the L/C Issuer or the Lenders, as collateral for L/C Obligations or obligations of the Lenders to fund participations in respect of L/C Obligations, cash or deposit account balances or, if the Administrative Agent and the L/C Issuer shall agree in their sole (but reasonable) discretion, other credit support, in each case, in Dollars and pursuant to documentation in form and substance reasonably satisfactory to the Administrative Agent and the L/C Issuer. “Cash Collateral” shall have a meaning correlative to the foregoing and shall include the proceeds of such cash collateral and other credit support.

“Cash Management Agreement” means any agreement that is not prohibited by the terms hereof to provide treasury or cash management services, including deposit accounts, overnight draft, credit cards, debit cards, p-cards (including purchasing cards and commercial cards), funds transfer, automated clearinghouse, zero balance accounts, returned check concentration, controlled disbursement, lockbox, account reconciliation and reporting and trade finance services and other cash management services.

“Cash Management Bank” means any Person in its capacity as a party to a Cash Management Agreement that, at the time it enters into a Cash Management Agreement with a Loan Party or any Subsidiary, is a Lender or an Affiliate of a Lender, in its capacity as a party to such Cash Management Agreement (even if such Person ceases to be a Lender or such Person’s Affiliate ceased to be a Lender); provided, however, that for any of the foregoing to be included as a “Secured Cash Management Agreement” on any date of determination by the Administrative Agent, the applicable Cash Management Bank (other than the Administrative Agent or an Affiliate of the Administrative Agent) must have delivered a Secured Party Designation Notice to the Administrative Agent prior to such date of determination.

“Change in Law” means the occurrence, after the Closing Date, of any of the following: (a) the adoption or taking effect of any law, rule, regulation or treaty, (b) any change in any law, rule, regulation or treaty or in the administration, interpretation, implementation or application thereof by any Governmental Authority or (c) the making or issuance of any request, rule, guideline or directive (whether or not having the force of law) by any Governmental Authority; provided that notwithstanding anything herein to the contrary, (i) the Dodd-Frank Wall Street Reform and Consumer Protection Act and all requests, rules, guidelines or directives thereunder or issued in connection therewith and (ii) all requests, rules, guidelines or directives promulgated by the Bank for International Settlements, the Basel Committee on Banking Supervision (or any successor or similar authority) or the United States or foreign regulatory authorities, in each case pursuant to Basel III, shall in each case be deemed to be a “Change in Law”, regardless of the date enacted, adopted or issued.

“Change of Control” means, with respect to a specified Person, an event or series of events by which:

(a) any “person” or “group” (as such terms are used in Sections 13(d) and 14(d) of the Securities Exchange Act of 1934, but excluding any employee benefit plan of such person or its subsidiaries, and any person or entity acting in its capacity as trustee, agent or other fiduciary or administrator of any such plan) becomes the “beneficial owner” (as defined in Rules 13d-3 and 13d-5 under the Securities Exchange Act of 1934, except that a person or group shall be deemed to have “beneficial ownership” of all securities that such person or group has the right to acquire, whether such right is exercisable immediately or only after the passage of time (hereinafter such right shall be referred to as an “option right”)), directly or indirectly, of more than fifty percent (50%) of the equity securities of such Person entitled to vote for members of the board of directors or equivalent governing body of such Person on a fully-diluted

basis (and taking into account all such securities that such person or group has the right to acquire pursuant to any option right); or

(b) during any period of twenty-four (24) consecutive months, a majority of the members of the board of directors or other equivalent governing body of such Person cease to be composed of individuals (i) who were members of that board or equivalent governing body on the first day of such period, (ii) whose election or nomination to that board or equivalent governing body was approved by individuals referred to in clause (i) above constituting at the time of such election or nomination at least a majority of that board or equivalent governing body or (iii) whose election or nomination to that board or other equivalent governing body was approved by individuals referred to in clauses (i) and (ii) above constituting at the time of such election or nomination at least a majority of that board or equivalent governing body; or

(c) any individual(s) or entity(s) acting in concert shall have acquired by contract or otherwise, or shall have entered into a contract or arrangement that, upon consummation thereof, will result in its or their acquisition of the power to exercise, directly or indirectly, a controlling influence over the management or policies of such Person, or control over the equity securities of such Person entitled to vote for members of the board of directors or equivalent governing body of such Person on a fully-diluted basis (and taking into account all such securities that such individual(s) or entity(s) or group has the right to acquire pursuant to any option right) representing more than fifty percent (50%) of the combined voting power of such securities.

“Closing Date” means the date hereof.

“Code” means the Internal Revenue Code of 1986, as amended and modified from time to time.

“Collateral” means any and all assets and rights and interests in or to property of the Borrower and each of the other Loan Parties, whether real or personal, tangible or intangible, in which a Lien is granted or purported to be granted pursuant to the Collateral Documents.

“Collateral Documents” means all agreements, instruments and documents now or hereafter executed and delivered in connection with this Agreement pursuant to which Liens are granted or purported to be granted to the Administrative Agent in Collateral securing all or part of the Obligations each in form and substance satisfactory to the Administrative Agent.

“Commitment” and “Commitments” means, as to each Lender, its obligation to (a) make Committed Loans to Borrower pursuant to Section 2.01 and (b) purchase participations in L/C Obligations, in an aggregate principal amount at any one time outstanding not to exceed the amount set forth opposite such Lender’s name on the portion of Schedule 2.01 describing the Committed Loans or in the Assignment and Assumption pursuant to which such Lender becomes a party hereto, as applicable, as such amount may be adjusted from time to time in accordance with this Agreement.

“Committed Borrowing” means a borrowing consisting of simultaneous Committed Loans of the same Type, in the same currency, and, in the case of Eurocurrency Rate Loans, having the same Interest Period made by each of the Lenders pursuant to Section 2.01.

“Committed Loan” and “Committed Loans” have the meanings specified in Section 2.01.

“Committed Loan Notice” means a notice of (a) a Committed Borrowing, (b) a conversion of Committed Loans from one Type to the other, or (c) a continuation of Eurocurrency Rate Loans, pursuant to Section 2.02(a), substantially in the form of Exhibit “A” or such other form as may be approved by the Administrative Agent (including any form on an electronic platform or electronic transmission system which form, platform and system shall be approved by the Administrative Agent), appropriately completed and signed by a Responsible Officer of the Borrower.

“Commodity Exchange Act” means the Commodity Exchange Act (7 U.S.C. § 1 *et seq.*), as amended from time to time, and any successor statute.

“Compliance Certificate” means a certificate substantially in the form of Exhibit “C” attached hereto and made a part hereof.

“Connection Income Taxes” means Other Connection Taxes that are imposed on or measured by net income (however denominated) or that are franchise Taxes or branch profits Taxes.

“Consolidated” means, when used with reference to financial statements or financial statement items of Borrower and its Subsidiaries or any other Person, such statements or items on a consolidated basis in accordance with the consolidation principles of GAAP.

“Contractual Obligation” means, as to any Person, any provision of any security issued by such Person or of any agreement, instrument or other undertaking to which such Person is a party or by which it or any of its property is bound.

“Control” means the possession, directly or indirectly, of the power to direct or cause the direction of the management or policies of a Person, whether through the ability to exercise voting power, by contract or otherwise. “Controlling” and “Controlled” have meanings correlative thereto.

“Credit Extension” means each of the following: (a) a Borrowing and (b) an L/C Credit Extension.

“Credit Facility” has the meaning assigned and ascribed to such term as set forth in the third recital of this Agreement.

“Debtor Relief Laws” means the Bankruptcy Code of the United States, and all other liquidation, conservatorship, bankruptcy, assignment for the benefit of creditors, moratorium, rearrangement, receivership, insolvency, reorganization, or similar debtor relief Laws of the United States or other applicable jurisdictions from time to time in effect.

“Default” means any event or condition that constitutes an Event of Default or that, with the giving of any notice, the passage of time, or both, would be an Event of Default.

“Default Rate” means (a) when used with respect to Obligations other than L/C Fees an interest rate equal to (i) the Base Rate plus (ii) the Applicable Rate, if any, applicable to Base Rate Loans plus (iii) two hundred basis points (2.0%) per annum; provided, however, that with respect to a Eurocurrency Rate Loan, the Default Rate shall be an interest rate equal to the interest rate (including any Applicable Rate) otherwise applicable to such Loan plus two hundred basis points (2.0%) per annum, and (b) when used with respect to L/C Fees, a rate equal to the Applicable Rate plus two hundred basis points (2.0%) per annum, in each case, to the fullest extent permitted by applicable Law.

“Defaulting Lender” means, subject to Section 2.15(b), any Lender that (a) has failed to (i) fund all or any portion of its Loans within two (2) Business Days of the date such Loans were required to be funded hereunder unless such Lender notifies the Administrative Agent and the Borrower in writing that such failure is the result of such Lender’s determination that one or more conditions precedent to funding (each of which conditions precedent, together with any applicable default, shall be specifically identified in such writing) has not been satisfied, or (ii) pay to the Administrative Agent, the L/C Issuer or any other Lender any other amount required to be paid by it hereunder (including in respect of its participation in Letters of Credit) within two (2) Business Days of the date when due, (b) has notified the Borrower, the Administrative Agent or the L/C Issuer in writing that it does not intend to comply with its funding obligations hereunder, or has made a public statement to that effect (unless such writing or public statement relates to such Lender’s obligation to fund a Loan hereunder and states that such position is based on such Lender’s determination that a condition precedent to funding (which condition precedent, together with any applicable default, shall be specifically identified in such writing or public statement) cannot be satisfied), (c) has failed, within three Business Days after written request by the Administrative Agent or the Borrower, to confirm in writing to the Administrative Agent and the Borrower that it will comply with its prospective funding obligations hereunder (provided that such Lender shall cease to be a Defaulting Lender pursuant to this clause (c) upon receipt of such written confirmation by the Administrative Agent and the Borrower), or (d) has, or has a direct or indirect parent company that has, (i) become

the subject of a proceeding under any Debtor Relief Law, (ii) had appointed for it a receiver, custodian, conservator, trustee, administrator, assignee for the benefit of creditors or similar Person charged with reorganization or liquidation of its business or assets, including the Federal Deposit Insurance Corporation or any other state or federal regulatory authority acting in such a capacity or (iii) become the subject of a Bail-In Action; provided that a Lender shall not be a Defaulting Lender solely by virtue of the ownership or acquisition of any Equity Interest in that Lender or any direct or indirect parent company thereof by a Governmental Authority so long as such ownership interest does not result in or provide such Lender with immunity from the jurisdiction of courts within the United States or from the enforcement of judgments or writs of attachment on its assets or permit such Lender (or such Governmental Authority) to reject, repudiate, disavow or disaffirm any contracts or agreements made with such Lender. Any determination by the Administrative Agent that a Lender is a Defaulting Lender under any one or more of clauses (a) through (d) above, and the effective date of such status, shall be conclusive and binding absent manifest error, and such Lender shall be deemed to be a Defaulting Lender (subject to Section 2.15(b)) as of the date established therefor by the Administrative Agent in a written notice of such determination, which shall be delivered by the Administrative Agent to the Borrower, the L/C Issuer and each other Lender promptly following such determination.

“Designated Jurisdiction” means any country or territory to the extent that such country or territory is the subject of any Sanction.

“Disposition” or “Dispose” means the sale, transfer, license, lease or other disposition (including any sale and leaseback transaction) of any property by any Person, including any sale, assignment, transfer or other disposal, with or without recourse, of any notes or accounts receivable or any rights and claims associated therewith.

“Dollar”, “Dollars”, and “\$” mean lawful money of the United States.

“Dollar Equivalent” means, at any time, (a) with respect to any amount denominated in Dollars, such amount, and (b) with respect to any amount denominated in any Alternative Currency, the equivalent amount thereof in Dollars as determined by the Administrative Agent or the L/C Issuer, as the case may be, at such time on the basis of the Spot Rate (determined in respect of the most recent Revaluation Date) for the purchase of Dollars with such Alternative Currency.

“EBITDA” means (a) net income less (b) income (or plus loss) from discontinued operations, plus (c) income tax expenses, plus (d) interest expense, plus (e) depreciation, depletion, and amortization (including non-cash loss on retirement of assets), plus (f) stock compensation expense, less (g) cash expense related to stock compensation, plus (h) Add Back Amounts, if applicable, in an amount not to exceed US\$20,000,000.00, plus (i) amounts expended by the Borrower in connection with the closing of the credit facilities described in this Agreement, and adjusted for certain historical expenses, accounting adjustments, and other non-cash charges, plus (j) non-cash expenses which do not (in the current or any future period) represent a cash item (excluding any non-cash gains which increase net income), plus (k) non-recurring cash charges in an aggregate amount not to exceed \$5,000,000.00 for the period of four consecutive fiscal quarters immediately preceding any date of determination, in respect of the following: (i) severance payments paid during said period; (ii) general asset write-offs recorded during said period; (iii) lease termination payments paid during said period; and (iv) litigation settlement payments paid during said period.

“EEA Financial Institution” means (a) any credit institution or investment firm established in any EEA Member Country which is subject to the supervision of an EEA Resolution Authority, (b) any entity established in an EEA Member Country which is a parent of an institution described in clause (a) of this definition, or (c) any financial institution established in an EEA Member Country which is a Subsidiary of an institution described in clauses (a) or (b) of this definition and is subject to consolidated supervision with its parent.

“EEA Member Country” means any of the member states of the European Union, Iceland, Liechtenstein, and Norway.

“EEA Resolution Authority” means any public administrative authority or any Person entrusted with public administrative authority of any EEA Member Country (including any delegee) having responsibility for the resolution of any EEA Financial Institution.

“Eligible Assignee” means any Person that (a) meets the requirements to be an assignee under Section 10.06(b)(v) and (vi) (subject to such consents, if any, as may be required under Section 10.06(b)(iii)) and (b) is a commercial bank with either (i) an investment grade credit rating from any of Moody’s, S&P or Fitch or (ii) a public debt rating from any of Moody’s, S&P or Fitch which is at least as high as the public debt rating for the then lowest rated Lender under this Agreement which is not then a Defaulting Lender.

“Environmental Laws” means any and all Federal, state, local, and foreign statutes, laws, regulations, ordinances, rules, judgments, orders, decrees, permits, concessions, grants, franchises, licenses, agreements or governmental restrictions relating to pollution and the protection of the environment or the release of any materials into the environment, including those related to hazardous substances or wastes, air emissions and discharges to waste or public systems.

“Environmental Liability” means any liability, contingent or otherwise (including any liability for damages, costs of environmental remediation, fines, penalties or indemnities), of the Borrower, any other Loan Party or any of their respective Subsidiaries directly or indirectly resulting from or based upon (a) violation of any Environmental Law, (b) the generation, use, handling, transportation, storage, treatment or disposal of any Hazardous Materials, (c) exposure to any Hazardous Materials, (d) the release or threatened release of any Hazardous Materials into the environment or (e) any contract, agreement or other consensual arrangement pursuant to which liability is assumed or imposed with respect to any of the foregoing.

“Equity Interests” means, with respect to any Person, all of the shares of capital stock of (or other ownership or profit interests in) such Person, all of the warrants, options or other rights for the purchase or acquisition from such Person of shares of capital stock of (or other ownership or profit interests in) such Person, all of the securities convertible into or exchangeable for shares of capital stock of (or other ownership or profit interests in) such Person or warrants, rights or options for the purchase or acquisition from such Person of such shares (or such other interests), and all of the other ownership or profit interests in such Person (including partnership, member or trust interests therein), whether voting or nonvoting, and whether or not such shares, warrants, options, rights or other interests are outstanding on any date of determination.

“ERISA” means the Employee Retirement Income Security Act of 1974, as amended or modified from time to time, and the rules and regulations promulgated thereunder.

“ERISA Affiliate” means any trade or business (whether or not incorporated) under common control with Borrower within the meaning of Section 414(b) or (c) of the Code (and Sections 414(m) and (o) of the Code for purposes of provisions relating to Section 412 of the Code).

“ERISA Event” means: (a) a Reportable Event with respect to a Pension Plan; (b) the withdrawal of the Borrower or any ERISA Affiliate from a Pension Plan subject to Section 4063 of ERISA during a plan year in which such entity was a “substantial employer” as defined in Section 4001(a)(2) of ERISA or a cessation of operations that is treated as such a withdrawal under Section 4062(e) of ERISA; (c) a complete or partial withdrawal by the Borrower or any ERISA Affiliate from a Multiemployer Plan or notification that a Multiemployer Plan is in reorganization; (d) the filing of a notice of intent to terminate, the treatment of a Pension Plan amendment as a termination under Section 4041 or 4041A of ERISA; (e) the institution by the PBGC of proceedings to terminate a Pension Plan; (f) any event or condition which constitutes grounds under Section 4042 of ERISA for the termination of, or the appointment of a trustee to administer, any Pension Plan; (g) the determination that any Pension Plan is considered an at-risk plan or a plan in endangered or critical status within the meaning of Sections 430, 431 and 432 of the Code or Sections 303, 304 and 305 of ERISA; (h) the imposition of any liability under Title IV of ERISA, other than for PBGC premiums due but not delinquent under Section 4007 of ERISA, upon the Borrower or any ERISA Affiliate; or (i) a failure by Borrower or any ERISA Affiliate to meet all applicable requirements under the Pension Funding Rules in respect of a Pension Plan, whether or not waived, or the failure by the Borrower or any ERISA Affiliate to make any required contribution to a Multiemployer Plan.

“EU Bail-In Legislation Schedule” means the EU Bail-In Legislation Schedule published by the Loan Market Association (or any successor person), as in effect from time to time.

“Euro” and “EUR” mean the single currency of the Participating Member States.

“Eurocurrency Rate” means:

(a) for any Interest Period, with respect to any Credit Extension:

(i) denominated in a LIBOR Quoted Currency, the rate per annum equal to the London Interbank Offered Rate (“LIBOR”), or a comparable or successor rate which rate is approved by the Administrative Agent, as published on the applicable Bloomberg screen page (or such other commercially available source providing such quotations as may be designated by the Administrative Agent from time to time) (in such case, hereinafter referred to as the “LIBOR Rate”) at or about 11:00 a.m. (London time) on the Rate Determination Date, for deposits in the relevant currency, with a term equivalent to such Interest Period; and

(ii) denominated in Canadian Dollars, the rate per annum equal to the Canadian Dollar Offered Rate (“CDOR”), or a comparable or successor rate which rate is approved by the Administrative Agent, as published on the applicable Bloomberg screen page (or such other commercially available source providing such quotations as may be designated by the Administrative Agent from time to time) (in such case, hereinafter referred to as the “CDOR Rate”) at or about 10:00 a.m. (Toronto, Ontario time) on the Rate Determination Date with a term equivalent to such Interest Period; and

(b) for any interest rate calculation with respect to a Base Rate Loan on any date, the rate per annum equal to the LIBOR Rate, at or about 11:00 a.m. (London time) determined two (2) Business Days prior to such date for Dollar deposits being delivered in the London interbank market for deposits in Dollars with a term of one (1) month commencing that day;

provided that (i) to the extent a comparable or successor rate is approved by the Administrative Agent in connection with any rate set forth in this definition, the approved rate shall be applied in a manner consistent with market practice; provided, further that to the extent such market practice is not administratively feasible for the Administrative Agent, such approved rate shall be applied in a manner as otherwise reasonably determined by the Administrative Agent and (ii) if the Eurocurrency Rate shall be less than zero, such rate shall be deemed zero for purposes of this Agreement.

“Eurocurrency Rate Loan” means a Committed Loan that bears interest at a rate based on clause (a) of the definition of “Eurocurrency Rate”. Eurocurrency Rate Loans may be denominated in Dollars or in an Alternative Currency. All Committed Loans denominated in an Alternative Currency must be Eurocurrency Rate Loans.

“Event of Default” has the meaning specified in Section 8.01.

“Excluded Swap Obligation” means, with respect to any Guarantor, any Swap Obligation if, and to the extent that, all or a portion of the Guaranty of such Guarantor of, or the grant by such Guarantor of a Lien to secure, such Swap Obligation (or any Guaranty thereof) is or becomes illegal under the Commodity Exchange Act or any rule, regulation or order of the Commodity Futures Trading Commission (or the application or official interpretation of any thereof) by virtue of such Guarantor’s failure for any reason to constitute an “eligible contract participant” as defined in the Commodity Exchange Act (determined after giving effect to Section 10.21 of this Agreement and any other “keepwell, support or other agreement” for the benefit of such Guarantor and any and all guarantors of such Guarantor’s Swap Obligations by other Loan Parties) at the time the Guaranty of such Guarantor, or a grant by such Guarantor of a Lien, becomes effective with respect to such Swap Obligation. If a Swap Obligation arises under a master agreement governing more than one swap, such exclusion shall apply only to the portion of such Swap Obligation that is attributable to swaps for which such Guaranty or Lien is or becomes excluded in accordance with the first sentence of this definition.

“Excluded Taxes” means any of the following Taxes imposed on or with respect to any Recipient or required to be withheld or deducted from a payment to a Recipient, (a) Taxes imposed on or measured by net income (however

denominated), franchise Taxes, and branch profits Taxes, in each case, (i) imposed as a result of such Recipient being organized under the laws of, or having its principal office or, in the case of any Lender, its Lending Office located in, the jurisdiction imposing such Tax (or any political subdivision thereof) or (ii) that are Other Connection Taxes, (b) in the case of a Lender, U.S. federal withholding Taxes imposed on amounts payable to or for the account of such Lender with respect to an applicable interest in a Loan or Commitment pursuant to a law in effect on the date on which (i) such Lender acquires such interest in the Loan or Commitment (other than pursuant to an assignment request by the Borrower under Section 10.13) or (ii) such Lender changes its Lending Office, except in each case to the extent that, pursuant to Section 3.01(a)(ii), (a) (iii) or (c), amounts with respect to such Taxes were payable either to such Lender's assignor immediately before such Lender became a party hereto or to such Lender immediately before it changed its Lending Office, (c) Taxes attributable to such Recipient's failure to comply with Section 3.01(e) and (d) any U.S. federal withholding Taxes imposed pursuant to FATCA.

"Existing Letters of Credit" means the Letters of Credit set forth on Schedule 1.01(E).

"FASB ASC" means the Accounting Standards Codification of the Financial Accounting Standards Board.

"FATCA" means Sections 1471 through 1474 of the Code, as of the Closing Date (or any amended or successor version that is substantively comparable and not materially more onerous to comply with), any current or future regulations or official interpretations thereof and any agreements entered into pursuant to Section 1471 (b) (1) of the Code.

"Federal Funds Rate" means, for any day, the rate per annum equal to the weighted average of the rates on overnight Federal funds transactions with members of the Federal Reserve System, as published by the Federal Reserve Bank of New York on the Business Day next succeeding such day; provided that (a) if such day is not a Business Day, the Federal Funds Rate for such day shall be such rate on such transactions on the next preceding Business Day as so published on the next succeeding Business Day, and (b) if no such rate is so published on such next succeeding Business Day, the Federal Funds Rate for such day shall be the average rate (rounded upward, if necessary, to a whole multiple of 1/100 of 1%) charged to Bank of America on such day on such transactions as determined by the Administrative Agent.

"Fee Letter" means that certain letter agreement dated November 22, 2017, by and between the Borrower and the Arranger.

"Fitch" means Fitch, Inc. and any successor thereto.

"Foreign Lender" means (a) if the Borrower is a U.S. Person, a Lender that is not a U.S. Person, and (b) if the Borrower is not a U.S. Person, a Lender that is resident or organized under the laws of a jurisdiction other than that in which the Borrower is resident for tax purposes. For purposes of this definition, the United States, each State thereof and the District of Columbia shall be deemed to constitute a single jurisdiction.

"FRB" means the Board of Governors of the Federal Reserve System of the United States.

"Fronting Exposure" means, at any time there is a Defaulting Lender, with respect to the L/C Issuer, such Defaulting Lender's Applicable Percentage of the outstanding L/C Obligations other than L/C Obligations as to which such Defaulting Lender's participation obligation has been reallocated to other Lenders or Cash Collateralized in accordance with the terms hereof.

"Fund" means any Person (other than a natural Person) that is (or will be) engaged in making, purchasing, holding or otherwise investing in commercial loans and similar extensions of credit in the ordinary course of its activities.

"Funded Debt" means, as of any date of determination thereof, all outstanding Indebtedness for borrowed money and other interest-bearing Indebtedness, including current and long term Indebtedness, but excluding the capital lease between the Borrower and S.J. Vahaviolos Partners L.L.C. relating to the Borrower's occupancy of the premises

located at 195 Clarksville Road, Princeton Junction, New Jersey.

“Funded Debt Leverage Ratio” means, as of any date of determination, the ratio of (a) Funded Debt as of said date of determination - to- (b) EBITDA for the period of four consecutive fiscal quarters immediately preceding said date of determination, taken together as one accounting period.

“GAAP” means generally accepted accounting principles in the United States set forth from time to time in the opinions and pronouncements of the Accounting Principles Board and the American Institute of Certified Public Accountants and statements and pronouncements of the Financial Accounting Standards Board (or agencies with similar functions of comparable stature and authority within the accounting profession) including, without limitation, the FASB Accounting Standards Codification, that are applicable to the circumstances as of the date of determination, consistently applied and subject to Section 1.03.

“Governmental Authority” means the government of the United States or any other nation, or of any political subdivision thereof, whether state or local, and any agency, authority, instrumentality, regulatory body, court, central bank or other entity exercising executive, legislative, judicial, taxing, regulatory or administrative powers or functions of or pertaining to government (including any supra-national bodies such as the European Union or the European Central Bank).

“Guarantee” means, as to any Person, (a) any obligation, contingent or otherwise, of such Person guaranteeing or having the economic effect of guaranteeing any Indebtedness or other obligation payable or performable by another Person (the “primary obligor”) in any manner, whether directly or indirectly, and including any obligation of such Person, direct or indirect, (i) to purchase or pay (or advance or supply funds for the purchase or payment of) such Indebtedness or other obligation, (ii) to purchase or lease property, securities or services for the purpose of assuring the obligee in respect of such Indebtedness or other obligation of the payment or performance of such Indebtedness or other obligation, (iii) to maintain working capital, equity capital or any other financial statement condition or liquidity or level of income or cash flow of the primary obligor so as to enable the primary obligor to pay such Indebtedness or other obligation, or (iv) entered into for the purpose of assuring in any other manner the obligee in respect of such Indebtedness or other obligation of the payment or performance thereof or to protect such obligee against loss in respect thereof (in whole or in part), or (b) any Lien on any assets of such Person securing any Indebtedness or other obligation of any other Person, whether or not such Indebtedness or other obligation is assumed by such Person (or any right, contingent or otherwise, of any holder of such Indebtedness to obtain any such Lien). The amount of any Guarantee shall be deemed to be an amount equal to the stated or determinable amount of the related primary obligation, or portion thereof, in respect of which such Guarantee is made or, if not stated or determinable, the maximum reasonably anticipated liability in respect thereof as determined by the guaranteeing Person in good faith. The term “Guarantee” as a verb has a corresponding meaning.

“Guarantor” means, individually and collectively, as the context may require, (a) Quality Services Laboratories, Inc., a Delaware corporation, (b) The Nacher Corporation, a Louisiana corporation, (c) Mistras International Holdings Inc., a Delaware corporation, (d) any additional guarantors added pursuant to the terms, conditions, and provisions of Section 6.13 hereof, all on a joint and several basis, and (e) with respect to the payment and performance by each Specified Loan Party of its obligations under its Guaranty with respect to Swap Obligations and/or Additional Secured Obligations, the Borrower.

“Guarantor Subsidiary” means any Person that (a) is a Majority-Owned Subsidiary, (b) has assets or operating income that represents five percent (5.0%) or more of the Consolidated assets or operating income of the Borrower, and (c) was formed or incorporated in the United States.

“Guaranty” means the Fourth Amended and Restated Guaranty Agreement dated of even date herewith executed and delivered by the Guarantors, on a joint and several basis, in favor of Administrative Agent, for the benefit of the Lenders, as said Fourth Amended and Restated Guaranty Agreement may be from time to time amended, modified, extended, renewed, substituted, and/or supplemented.

“Hazardous Materials” means all explosive or radioactive substances or wastes and all hazardous or toxic

substances, wastes or other pollutants, including petroleum or petroleum distillates, asbestos or asbestos-containing materials, polychlorinated biphenyls, radon gas, infectious or medical wastes and all other substances or wastes of any nature regulated pursuant to any Environmental Law.

“Hedge Bank” means any Person that, at the time it enters into a Swap Contract, or any transactions or confirmations thereunder, permitted under Article VI or VII, is a Lender or an Affiliate of a Lender, in its capacity as a party to such Swap Contract.

“Holding Company” means any holding company formed for the purposes of holding the Equity Interests of Borrower.

“Honor Date” has the meaning set forth in Section 2.03(c).

“IFRS” means international accounting standards within the meaning of IAS Regulation 1606/2002 to the extent applicable to the relevant financial statements delivered under or referred to herein.

“Increase Effective Date” has the meaning specified in Section 2.13(f).

“Indebtedness” means, as to any Person at a particular time, without duplication, all of the following, whether or not included as indebtedness or liabilities in accordance with GAAP:

(a) all obligations of such Person for borrowed money and all obligations of such Person evidenced by bonds, debentures, notes, loan agreements or other similar instruments;

(b) the maximum amount of all direct or contingent obligations of such Person arising under letters of credit (including standby and commercial), bankers’ acceptances, bank guaranties, surety bonds and similar instruments;

(c) net obligations of such Person under any Swap Contract;

(d) all obligations (including, without limitation, earnout obligations) of such Person to pay the deferred purchase price of property or services (other than trade accounts payable in the ordinary course of business and, in each case, not past due for more than ninety (90) days or such longer period as permitted in the ordinary course of business); provided, however, such obligations shall not include contingent purchase price amounts required to be recorded pursuant to GAAP until such time, if at all, as the Borrower has determined that such purchase price amounts are no longer contingent;

(e) indebtedness (excluding prepaid interest thereon) secured by a Lien on property owned or being purchased by such Person (including indebtedness arising under conditional sales or other title retention agreements), whether or not such indebtedness shall have been assumed by such Person or is limited in recourse;

(f) capital leases and Synthetic Lease Obligations;

(g) all obligations of such Person to purchase, redeem, retire, defease or otherwise make any payment in respect of any Equity Interest in such Person or any other Person or any warrant, right or option to acquire such Equity Interest, valued, in the case of a redeemable preferred interest, at the greater of its voluntary or involuntary liquidation preference plus accrued and unpaid dividends; and

(h) all Guarantees of such Person in respect of any of the foregoing.

For all purposes hereof, the Indebtedness of any Person shall include the Indebtedness of any partnership or joint venture (other than a joint venture that is itself a corporation or limited liability company) in which such Person is a general partner or a joint venturer, unless such Indebtedness is expressly made non-recourse to such Person. The amount of any net obligation under any Swap Contract on any date shall be deemed to be the Swap Termination Value thereof as of such date. The amount of any capital lease or Synthetic Lease Obligation as of any date shall be deemed

to be the amount of Attributable Indebtedness in respect thereof as of such date.

“Indemnified Taxes” means (a) Taxes, other than Excluded Taxes, imposed on or with respect to any payment made by or on account of any obligation of any Loan Party under any Loan Document and (b) to the extent not otherwise described in the foregoing clause (a), Other Taxes.

“Indemnitee” and “Indemnitees” has the meaning specified in Section 10.04(b).

“Information” has the meaning specified in Section 10.07.

“Interest Coverage Ratio” means the ratio, as of any date of determination thereof, of (a) EBITDA for the twelve (12) month period immediately preceding said date of determination, taken together as one accounting period, -to- (b) all interest, premium payments, debt discount, fees, charges and related expenses of the Borrower and its Subsidiaries in connection with borrowed money (including capitalized interest) or in connection with the deferred purchase price of assets, in each case to the extent treated as interest in accordance with GAAP, paid during the twelve (12) month period immediately preceding said date of determination.

“Interest Payment Date” means (a) as to any Loan other than a Base Rate Loan, the last day of each Interest Period applicable to such Loan and the Maturity Date; provided, however, that if any Interest Period for a Eurocurrency Rate Loan exceeds three months, the respective dates that fall every three months after the beginning of such Interest Period shall also be Interest Payment Dates; and (b) as to any Base Rate Loan, the last Business Day of each March, June, September and December and the Maturity Date.

“Interest Period” means, as to each Eurocurrency Rate Loan, the period commencing on the date such Eurocurrency Rate Loan is disbursed or converted to or continued as a Eurocurrency Rate Loan and ending on the date one (1), two (2) or three (3) months thereafter, as selected by the Borrower in its Committed Loan Notice; provided that:

(a) any Interest Period that would otherwise end on a day that is not a Business Day shall be extended to the next succeeding Business Day unless, in the case of a Eurocurrency Rate Loan, such Business Day falls in another calendar month, in which case such Interest Period shall end on the next preceding Business Day;

(b) any Interest Period pertaining to a Eurocurrency Rate Loan that begins on the last Business Day of a calendar month (or on a day for which there is no numerically corresponding day in the calendar month at the end of such Interest Period) shall end on the last Business Day of the calendar month at the end of such Interest Period; and

(c) no Interest Period shall extend beyond the Maturity Date.

“Internal Control Event” means a material weakness in, or fraud that involves management or other employees who have a significant role in the Borrower’s internal controls over financial reporting.

“Investment” means, as to any Person, any direct or indirect acquisition or investment by such Person, whether by means of (a) the purchase or other acquisition of capital stock or other securities of another Person, (b) a loan, advance or capital contribution to, Guarantee or assumption of debt of, or purchase or other acquisition of any other debt or equity participation or interest in, another Person, including any partnership or joint venture interest in such other Person and any arrangement pursuant to which the investor Guarantees Indebtedness of such other Person, or (c) the purchase or other acquisition (in one transaction or a series of transactions) of assets of another Person which constitute all or substantially all of the assets of such Person or of a division, line of business or other business unit of such Person. For purposes of covenant compliance, the amount of any Investment shall be the amount actually invested, without adjustment for subsequent increases or decreases in the value of such Investment.

“IRS” means the United States Internal Revenue Service.

“ISP” means, with respect to any Letter of Credit, the “International Standby Practices 1998” published by the Institute of International Banking Law & Practice, Inc. (or such later version thereof as may be in effect at the time of issuance).

“Issuer Documents” means with respect to any Letter of Credit, the L/C Application and any other document, agreement and instrument entered into by the L/C Issuer and the Borrower (or any Subsidiary) or in favor of the L/C Issuer and relating to such Letter of Credit.

“Judgment Currency.” has the meaning specified in Section 10.20.

“Law” and “Laws” means, collectively, all international, foreign, Federal, state and local statutes, treaties, rules, guidelines, regulations, ordinances, codes and administrative or judicial precedents or authorities, including the interpretation or administration thereof by any Governmental Authority charged with the enforcement, interpretation or administration thereof, and all applicable administrative orders, directed duties, requests, licenses, authorizations and permits of, and agreements with, any Governmental Authority, in each case whether or not having the force of law.

“L/C Advance” and “L/C Advances” mean, with respect to each Lender, such Lender’s funding of its participation in any L/C Borrowing in accordance with its Applicable Percentage. All L/C Advances shall be denominated in Dollars.

“L/C Application” means an application and agreement for the issuance or amendment of a Letter of Credit in the form from time to time in use by the L/C Issuer.

“L/C Borrowing” and “L/C Borrowings” means an extension of credit resulting from a drawing under any Letter of Credit which has not been reimbursed on the date when made or refinanced as a Committed Borrowing. All L/C Borrowings shall be denominated in Dollars.

“L/C Credit Extension” means, with respect to any Letter of Credit, the issuance thereof or extension of the expiry date thereof, or the increase of the amount thereof.

“L/C Expiration Date” means the day that is thirty days prior to the Maturity Date then in effect (or, if such day is not a Business Day, the next preceding Business Day).

“L/C Fee” has the meaning specified in Section 2.03(h).

“L/C Issuer” means Bank of America, N.A. in its capacity as issuer of Letters of Credit hereunder, or any successor issuer of Letters of Credit hereunder.

“L/C Obligations” means, as at any date of determination, (a) the aggregate amount available to be drawn under all outstanding Letters of Credit plus (b) the aggregate of all Unreimbursed Amounts, including all L/C Borrowings. For purposes of computing the amount available to be drawn under any Letter of Credit, the amount of such Letter of Credit shall be determined in accordance with Section 1.09. For all purposes of this Agreement, if on any date of determination a Letter of Credit has expired by its terms but any amount may still be drawn thereunder by reason of the operation of Rule 3.14 of the ISP, such Letter of Credit shall be deemed to be “outstanding” in the amount so remaining available to be drawn.

“L/C Sublimit” means an amount equal to \$10,000,000.00. The L/C Sublimit is part of, and not in addition to, the Aggregate Commitments. The initial portion of the L/C Sublimit applicable to each Lender is set forth opposite the name of such Lender on Schedule 2.01 or in the Assignment and Assumption pursuant to which such Lender becomes a party hereto, as applicable.

“Lender” and “Lenders” have the meaning assigned and ascribed to such terms as set forth in the preamble to this Agreement.

“Lending Office” means, as to the Administrative Agent, the L/C Issuer or any Lender, the office or offices of such Person described as such in such Person’s Administrative Questionnaire, or such other office or offices as such Person may from time to time notify the Borrower and the Administrative Agent; which office may include any Affiliate of such Person or any domestic or foreign branch of such Person or such Affiliate.

“Letter of Credit” and “Letters of Credit” means any letter of credit issued hereunder and shall include the Existing Letters of Credit. A Letter of Credit may be a sight commercial letter of credit or a standby letter of credit. Letters of Credit may be issued in Dollars or in an Alternative Currency.

“LIBOR” has the meaning specified in the definition of Eurocurrency Rate.

“LIBOR Quoted Currency” means Dollars, Euro, Sterling, and Yen, in each case, as long as there is a published LIBOR rate with respect thereto.

“LIBOR Screen Rate” means the LIBOR quote on the applicable screen page the Administrative Agent designates to determine LIBOR (or such other commercially available source providing such quotations as may be designated by the Administrative Agent from time to time).

“LIBOR Successor Rate” has the meaning specified in Section 2.16.

“LIBOR Successor Rate Conforming Changes” means, with respect to any proposed LIBOR Successor Rate, any conforming changes to the definition of Base Rate, Interest Period, timing and frequency of determining rates and making payments of interest and other administrative matters as may be appropriate, in the discretion of the Administrative Agent, to reflect the adoption of such LIBOR Successor Rate and to permit the administration thereof by the Administrative Agent in a manner substantially consistent with market practice (or, if the Administrative Agent determines that adoption of any portion of such market practice is not administratively feasible or that no market practice for the administration of such LIBOR Successor Rate exists, in such other manner of administration as the Administrative Agent determines in consultation with the Borrower).

“Lien” means any mortgage, pledge, hypothecation, assignment, deposit arrangement, encumbrance, lien (statutory or otherwise), charge, or preference, priority or other security interest or preferential arrangement in the nature of a security interest of any kind or nature whatsoever (including any conditional sale or other title retention agreement, any easement, right of way or other encumbrance on title to real property, and any financing lease having substantially the same economic effect as any of the foregoing).

“Loan” and “Loans” mean an extension of credit by a Lender to the Borrower under Article II in the form of a Committed Loan.

“Loan Documents” means, collectively, (a) this Agreement, (b) the Notes, (c) the Guaranty, (d) the Collateral Documents, (e) the Fee Letter, (f) each Issuer Document, (g) any agreement creating or perfecting rights in Cash Collateral pursuant to the provisions of Section 2.14, and (h) all other certificates, agreements, documents and instruments executed and delivered, in each case, by or on behalf of any Loan Party pursuant to the foregoing (but specifically excluding any Secured Hedge Agreement or any Secured Cash Management Agreement); provided, however, that for purposes of Section 10.01, “Loan Documents” shall mean this Agreement, the Guaranty and the Collateral Documents.

“Loan Party” and “Loan Parties” means, individually and collectively, the Borrower and each Person (other than Administrative Agent, the L/C Issuer, or any Lender) executing a Loan Document including, without limitation, each Guarantor and such each Person executing a Collateral Document.

“London Banking Day” means any day on which dealings in Dollar deposits are conducted by and between banks in the London interbank eurodollar market.

“Majority-Owned Subsidiary” of the Borrower means a Subsidiary of which the Borrower owns, directly or

indirectly through another Subsidiary, more than fifty percent (50%) of the issued and outstanding capital stock or other equity interests.

“Master Agreement” has the meaning set forth in the definition of “Swap Contract.”

“Material Adverse Effect” means (a) a material adverse change in, or a material adverse effect upon, the operations, business, properties, liabilities (actual or contingent), or condition (financial or otherwise) of the Borrower or the Borrower and its Subsidiaries taken as a whole; (b) a material impairment of the ability of the Borrower to perform its obligations under this Agreement; or (c) a material adverse effect upon the legality, validity, binding effect or enforceability against any Loan Party of any Loan Document to which it is a party which could reasonably be expected to have a material adverse effect upon the rights of the Lenders hereunder.

“Maturity Date” means December \_\_\_\_\_, 2022.

“Minimum Collateral Amount” means, at any time, (a) with respect to Cash Collateral consisting of cash or deposit account balances provided to reduce or eliminate Fronting Exposure during any period when a Lender constitutes a Defaulting Lender, an amount equal to one hundred five percent (105%) of the Fronting Exposure of the L/C Issuer with respect to Letters of Credit issued and outstanding at such time and (b) with respect to Cash Collateral consisting of cash or deposit account balances provided in accordance with the provisions of Section 2.14(a)(i), (a)(ii) or (a)(iii), an amount equal to one hundred five percent (105%) of the Outstanding Amount of all L/C Obligations.

“Moody’s” means Moody’s Investors Service, Inc. and any successor thereto.

“Multiemployer Plan” means any employee benefit plan of the type described in Section 4001(a)(3) of ERISA, to which the Borrower or any ERISA Affiliate makes or is obligated to make contributions, or during the preceding five (5) plan years, has made or been obligated to make contributions.

“Multiple Employer Plan” means a Plan which has two or more contributing sponsors (including the Borrower or any ERISA Affiliate) at least two of whom are not under common control, as such a plan is described in Section 4064 of ERISA.

“Non-Consenting Lender” means any Lender that does not approve any consent, waiver or amendment that (a) requires the approval of all Lenders or all affected Lenders in accordance with the terms of Section 10.01 and (b) has been approved by the Required Lenders.

“Non-Defaulting Lender” means, at any time, each Lender that is not a Defaulting Lender at such time.

“Note” and “Notes” means one or more promissory notes made by Borrower in favor of a Lender evidencing Committed Loans made by such Lender, substantially in the form of Exhibit “B” attached hereto and made a part hereof, as said promissory note(s) may be from time to time amended, modified, extended, renewed, substituted, and/or supplemented.

“Notice of Loan Prepayment” means a notice of prepayment with respect to a Loan, which notice shall be substantially in the form of Exhibit “G” attached hereto or such other form as may be approved by the Administrative Agent (including any form on an electronic platform or electronic transmission system as shall be approved by the Administrative Agent), appropriately completed and signed by a Responsible Officer.

“Obligations” means: (a) all advances to, and debts, liabilities, obligations, covenants and duties of, any Loan Party arising under any Loan Document or otherwise with respect to any Loan, or Letter of Credit, (b) to the extent provided for in this Agreement and the other Loan Documents, all costs and expenses incurred in connection with enforcement and collection of the foregoing, including the fees, charges and disbursements of counsel, in each case whether direct or indirect (including those acquired by assumption), absolute or contingent, due or to become due, now existing or hereafter arising and including interest, expenses and fees that accrue after the commencement by or against any Loan Party or any Affiliate thereof pursuant to any proceeding under any Debtor Relief Laws naming such

Person as the debtor in such proceeding, regardless of whether such interest, expenses and fees are allowed claims in such proceeding, and (c) all Additional Secured Obligations; provided that Obligations of a Guarantor shall exclude any Excluded Swap Obligations with respect to such Guarantor.

“OFAC” means the Office of Foreign Assets Control of the United States Department of the Treasury.

“Organization Documents” means: (a) with respect to any corporation, the certificate or articles of incorporation and the bylaws (or equivalent or comparable constitutive documents with respect to any non-U.S. jurisdiction); (b) with respect to any limited liability company, the certificate or articles of formation or organization and operating agreement; and (c) with respect to any partnership, joint venture, trust or other form of business entity, the partnership, joint venture or other applicable agreement of formation or organization and any agreement, instrument, filing or notice with respect thereto filed in connection with its formation or organization with the applicable Governmental Authority in the jurisdiction of its formation or organization and, if applicable, any certificate or articles of formation or organization of such entity, as any of the foregoing may be from time to time amended, modified, substituted, and/or supplemented.

“Original Credit Agreement” has the meaning assigned and ascribed to such term as set forth in the first recital of this Agreement.

“Original Credit Facility” has the meaning assigned and ascribed to such term as set forth in the first recital of this Agreement.

“Other Connection Taxes” means, with respect to any Recipient, Taxes imposed as a result of a present or former connection between such Recipient and the jurisdiction imposing such Tax (other than connections arising from such Recipient having executed, delivered, become a party to, performed its obligations under, received payments under, received or perfected a security interest under, engaged in any other transaction pursuant to or enforced any Loan Document, or sold or assigned an interest in any Loan or Loan Document).

“Other Taxes” means all present or future stamp, court or documentary, intangible, recording, filing or similar Taxes that arise from any payment made under, from the execution, delivery, performance, enforcement or registration of, from the receipt or perfection of a security interest under, or otherwise with respect to, any Loan Document, except any such Taxes that are Other Connection Taxes imposed with respect to an assignment (other than an assignment made pursuant to Section 3.06).

“Outstanding Amount” means (a) with respect to Committed Loans on any date, the Dollar Equivalent amount of the aggregate outstanding principal amount thereof after giving effect to any borrowings and prepayments or repayments of such Committed Loans occurring on such date, and (b) with respect to any L/C Obligations on any date, the Dollar Equivalent amount of the aggregate outstanding amount of such L/C Obligations on such date after giving effect to any L/C Credit Extension occurring on such date and any other changes in the aggregate amount of the L/C Obligations as of such date, including as a result of any reimbursements by Borrower of Unreimbursed Amounts.

“Overnight Rate” means, for any day, (a) with respect to any amount denominated in Dollars, the greater of (i) the Federal Funds Rate and (ii) an overnight rate determined by the Administrative Agent or the L/C Issuer, as the case may be, in accordance with banking industry rules on interbank compensation, and (b) with respect to any amount denominated in an Alternative Currency, the rate of interest per annum at which overnight deposits in the applicable Alternative Currency, in an amount approximately equal to the amount with respect to which such rate is being determined, would be offered for such day by a branch or Affiliate of Bank of America in the applicable offshore interbank market for such currency to major banks in such interbank market.

“Participant” has the meaning specified in Section 10.06(d).

“Participant Register” has the meaning specified in Section 10.06(d).

“Participating Member State” means any member state of the European Union that adopts or has adopted the

Euro as its lawful currency in accordance with legislation of the European Union relating to Economic and Monetary Union.

“PBGC” means the Pension Benefit Guaranty Corporation.

“PCAOB” means the Public Company Accounting Oversight Board.

“Pension Act” means the Pension Protection Act of 2006.

“Pension Funding Rules” means the rules of the Code and ERISA regarding minimum required contributions (including any installment payment thereof) to Pension Plans and set forth in, with respect to plan years ending prior to the effective date of the Pension Act, Section 412 of the Code and Section 302 of ERISA, each as in effect prior to the Pension Act and, thereafter, Section 412, 430, 431, 432 and 436 of the Code and Sections 302, 303, 304 and 305 of ERISA.

“Pension Plan” means any employee pension benefit plan (including a Multiple Employer Plan or a Multiemployer Plan) that is maintained or is contributed to by the Borrower and any ERISA Affiliate and is either covered by Title IV of ERISA or is subject to the minimum funding standards under Section 412 of the Code.

“Person” means any natural person, corporation, limited liability company, trust, joint venture, association, company, partnership, Governmental Authority, or other entity.

“Plan” means any employee benefit plan within the meaning of Section 3(3) of ERISA (including a Pension Plan), maintained for employees of the Borrower or any ERISA Affiliate or any such Plan to which the Borrower or any ERISA Affiliate is required to contribute on behalf of any of its employees.

“Platform” has the meaning specified in Section 6.02.

“Pledged Subsidiary” means any Person that (a) is a direct or indirect foreign Subsidiary of the Borrower, (b) has assets or operating income that represents five percent (5.0%) or more of the Consolidated assets or operating income of the Borrower, and (c) is a Majority-Owned Subsidiary.

“PTE” means a prohibited transaction class exemption issued by the U.S. Department of Labor, as any such exemption may be amended from time to time.

“Public Lender” has the meaning specified in Section 6.02.

“Qualified ECP Guarantor” means, at any time, each Loan Party with total assets exceeding \$10,000,000.00 or that qualifies at such time as an “eligible contract participant” under the Commodity Exchange Act and can cause another Person to qualify as an “eligible contract participant” at such time under Section 1a(18)(A)(v)(II) of the Commodity Exchange Act.

“Rate Determination Date” means two (2) Business Days prior to the commencement of such Interest Period (or such other day as is generally treated as the rate fixing day by market practice in such interbank market, as determined by the Administrative Agent; provided that to the extent such market practice is not administratively feasible for the Administrative Agent, then “Rate Determination Date” means such other day as otherwise reasonably determined by the Administrative Agent).

“Recipient” means the Administrative Agent, any Lender, the L/C Issuer or any other recipient of any payment to be made by or on account of any obligation of any Loan Party hereunder.

“Register” has the meaning specified in Section 10.06(c).

“Related Parties” means, with respect to any Person, such Person’s Affiliates and the partners, directors, officers, employees, agents, trustees, administrators, managers, advisors and representatives of such Person and of

such Person's Affiliates.

"Reportable Event" means any of the events set forth in Section 4043(c) of ERISA, other than events for which the thirty (30) day notice period has been waived.

"Request for Credit Extension" means (a) with respect to a Borrowing, conversion or continuation of Committed Loans, a Committed Loan Notice and (b) with respect to an L/C Credit Extension, a L/C Application.

"Required Lenders" means, at any time, Lenders having Total Credit Exposures representing 66 2/3% or more of the Total Credit Exposures of all Lenders. The Total Credit Exposure of any Defaulting Lender shall be disregarded in determining Required Lenders at any time; provided that the amount of any participation in any Unreimbursed Amounts that such Defaulting Lender has failed to fund that have not been reallocated to and funded by another Lender shall be deemed to be held by the Lender that is the L/C Issuer in making such determination.

"Resignation Effective Date" has the meaning set forth in Section 9.06.

"Responsible Officer" means the chief executive officer, president, chief financial officer, treasurer, assistant treasurer or controller of a Loan Party, solely for purposes of the delivery of incumbency certificates pursuant to Section 4.01, the secretary or any assistant secretary of a Loan Party, and, solely for purposes of notices given pursuant to Article II, any other officer or employee of the applicable Loan Party so designated by any of the foregoing officers in a notice to the Administrative Agent or any other officer or employee of the applicable Loan Party designated in or pursuant to an agreement between the applicable Loan Party and the Administrative Agent. Any document delivered hereunder that is signed by a Responsible Officer of a Loan Party shall be conclusively presumed to have been authorized by all necessary corporate, partnership and/or other action on the part of such Loan Party and such Responsible Officer shall be conclusively presumed to have acted on behalf of such Loan Party. To the extent requested by the Administrative Agent, each Responsible Officer will provide an incumbency certificate and to the extent requested by the Administrative Agent, appropriate authorization documentation, in form and substance reasonably satisfactory to the Administrative Agent.

"Restricted Payment" means any dividend or other distribution (whether in cash, securities or other property) with respect to any capital stock or other Equity Interest of the Borrower or any Subsidiary, or any payment (whether in cash, securities or other property), including any sinking fund or similar deposit, on account of the purchase, redemption, retirement, acquisition, cancellation or termination of any such capital stock or other Equity Interest or on account of any return of capital to the Borrower's stockholders, partners or members (or the equivalent Person thereof).

"Revaluation Date" means (a) with respect to any Loan, each of the following: (i) each date of a Borrowing of a Eurocurrency Rate Loan denominated in an Alternative Currency, (ii) each date of a continuation of a Eurocurrency Rate Loan denominated in an Alternative Currency pursuant to Section 2.02, and (iii) such additional dates as the Administrative Agent shall determine or the Required Lenders shall require; and (b) with respect to any Letter of Credit, each of the following: (i) each date of issuance, amendment and/or extension of a Letter of Credit denominated in an Alternative Currency, (ii) each date of any payment by the L/C Issuer under any Letter of Credit denominated in an Alternative Currency, (iii) in the case of all Existing Letters of Credit denominated in Alternative Currencies, the Closing Date, and (iv) such additional dates as the Administrative Agent or the L/C Issuer shall determine or the Required Lenders shall require.

"Revolving Credit Exposure" means, as to any Lender at any time, the aggregate principal amount at such time of its outstanding Committed Loans and such Lender's participation in L/C Obligations at such time.

"S&P" means Standard & Poor's Financial Services LLC, a subsidiary of The McGraw-Hill Companies, Inc., and any successor thereto.

"Same Day Funds" means (a) with respect to disbursements and payments in Dollars, immediately available funds, and (b) with respect to disbursements and payments in an Alternative Currency, same day or other funds as may

be determined by the Administrative Agent or the L/C Issuer, as the case may be, to be customary in the place of disbursement or payment for the settlement of international banking transactions in the relevant Alternative Currency.

“Sanction(s)” means any sanction administered or enforced by the United States Government (including without limitation, OFAC), the United Nations Security Council, the European Union, Her Majesty’s Treasury (“HMT”) or other relevant sanctions authority.

“Sarbanes-Oxley” means the Sarbanes-Oxley Act of 2002.

“Scheduled Unavailability Date” has the meaning specified in Section 2.16.

“SEC” means the Securities and Exchange Commission, or any Governmental Authority succeeding to any of its principal functions.

“Secured Cash Management Agreement” means any Cash Management Agreement that is entered into by and between any Loan Party and any Cash Management Bank.

“Secured Hedge Agreement” means any interest rate, currency, foreign exchange, or commodity Swap Contract, or any transactions or confirmations thereunder, permitted under Article VI or VII that is entered into by and between any Loan Party and any Hedge Bank. For purposes of clarity, the defined term “Secured Hedge Agreement” shall not include any transactions or confirmations with a Lender or an Affiliate of such Lender entered into after such Lender ceases to be a Lender or such Affiliate ceases to be an Affiliate of such Lender.

“Secured Party Designation Notice” means a notice from any Lender or an Affiliate of a Lender substantially in the form of Exhibit “F” attached hereto and made a part hereof.

“Securities Laws” means the Securities Act of 1933, the Securities Exchange Act of 1934, Sarbanes-Oxley and the applicable accounting and auditing principles, rules, standards and practices promulgated, approved or incorporated by the SEC or the PCAOB.

“Solvent” and “Solvency” mean, with respect to any Person on any date of determination, that on such date (a) the fair value of the property of such Person is greater than the total amount of liabilities, including contingent liabilities, of such Person, (b) the present fair saleable value of the assets of such Person is not less than the amount that will be required to pay the probable liability of such Person on its debts as they become absolute and matured, (c) such Person does not intend to, and does not believe that it will, incur debts or liabilities beyond such Person’s ability to pay such debts and liabilities as they mature, (d) such Person is not engaged in business or a transaction, and is not about to engage in business or a transaction, for which such Person’s property would constitute an unreasonably small capital, and (e) such Person is able to pay its debts and liabilities, contingent obligations and other commitments as they mature in the ordinary course of business. The amount of contingent liabilities at any time shall be computed as the amount that, in the light of all the facts and circumstances existing at such time, represents the amount that can reasonably be expected to become an actual or matured liability.

“Special Notice Currency” means at any time an Alternative Currency, other than (a) the currency of a country that is a member of the Organization for Economic Cooperation and Development at such time located in North America or Europe and (b) Yen.

“Specified Loan Party” means any Loan Party that is not then an “eligible contract participant” under the Commodity Exchange Act (determined prior to giving effect to Section 10.21 of this Agreement).

“Spot Rate” for a currency means the rate determined by the Administrative Agent or the L/C Issuer, as applicable, to be the rate quoted by the Person acting in such capacity as the spot rate for the purchase by such Person of such currency with another currency through its principal foreign exchange trading office at approximately 11:00 a.m. on the date two (2) Business Days prior to the date as of which the foreign exchange computation is made; provided that the Administrative Agent or the L/C Issuer may obtain such spot rate from another financial institution designated

by the Administrative Agent or the L/C Issuer if the Person acting in such capacity does not have as of the date of determination a spot buying rate for any such currency; and provided further that the L/C Issuer may use such spot rate quoted on the date as of which the foreign exchange computation is made in the case of any Letter of Credit denominated in an Alternative Currency.

“Sterling” and “£” mean the lawful currency of the United Kingdom.

“Subordinated Notes” means a collective reference to any subordinated promissory note entered into by the Borrower or any Subsidiary as evidence of Indebtedness incurred under Section 7.03(f)(ii), which promissory note is subject to a Subordination Agreement in favor of the Administrative Agent, for the benefit of the Lenders, as any such promissory note may be from time to time amended, modified, extended, renewed, substituted, and/or supplemented.

“Subordination Agreement” and “Subordination Agreements” means any subordination agreement entered into by the Borrower or any Subsidiary in connection with Subordinated Notes, as any such subordination agreement may be from time to time amended, modified, extended, renewed, substituted, and/or supplemented.

“Subsidiary” of a Person means a corporation, partnership, joint venture, limited liability company or other business entity of which a majority of the shares of securities or other interests having ordinary voting power for the election of directors or other governing body (other than securities or interests having such power only by reason of the happening of a contingency) are at the time beneficially owned, or the management of which is otherwise controlled, directly, or indirectly through one or more intermediaries, or both, by such Person. Unless otherwise specified, all references herein to a “Subsidiary” or to “Subsidiaries” shall refer to a Subsidiary or Subsidiaries of the Borrower.

“Swap Contract” means (a) any and all rate swap transactions, basis swaps, credit derivative transactions, forward rate transactions, commodity swaps, commodity options, forward commodity contracts, equity or equity index swaps or options, bond or bond price or bond index swaps or options or forward bond or forward bond price or forward bond index transactions, interest rate options, forward foreign exchange transactions, cap transactions, floor transactions, collar transactions, currency swap transactions, cross-currency rate swap transactions, currency options, spot contracts, or any other similar transactions or any combination of any of the foregoing (including any options to enter into any of the foregoing), whether or not any such transaction is governed by or subject to any master agreement, and (b) any and all transactions of any kind, and the related confirmations, which are subject to the terms and conditions of, or governed by, any form of master agreement published by the International Swaps and Derivatives Association, Inc., any International Foreign Exchange Master Agreement, or any other master agreement (any such master agreement, together with any related schedules, shall be hereinafter referred to as a “Master Agreement”), including any such obligations or liabilities under any Master Agreement.

“Swap Obligations” means with respect to any Guarantor any obligation to pay or perform under any agreement, contract or transaction that constitutes a “swap” within the meaning of Section 1a(47) of the Commodity Exchange Act.

“Swap Termination Value” means, in respect of any one or more Swap Contracts, after taking into account the effect of any legally enforceable netting agreement relating to such Swap Contracts, (a) for any date on or after the date such Swap Contracts have been closed out and termination value(s) determined in accordance therewith, such termination value(s), and (b) for any date prior to the date referenced in clause (a), the amount(s) determined as the mark-to-market value(s) for such Swap Contracts, as determined based upon one or more mid-market or other readily available quotations provided by any recognized dealer in such Swap Contracts (which may include a Lender or any Affiliate of a Lender).

“Synthetic Lease Obligation” means the monetary obligation of a Person under (a) a so-called synthetic, off-balance sheet or tax retention lease, or (b) an agreement for the use or possession of property creating obligations that do not appear on the balance sheet of such Person but which, upon the application of any Debtor Relief Laws to such Person, would be characterized as the indebtedness of such Person (without regard to accounting treatment).

“TARGET Day” means any day on which TARGET2 (or, if such payment system ceases to be operative, such

other payment system, if any, determined by the Administrative Agent to be a suitable replacement) is open for the settlement of payments in Euro.

“TARGET2” means the Trans-European Automated Real-time Gross Settlement Express Transfer payment system which utilizes a single shared platform and which was launched on November 19, 2007.

“Taxes” means all present or future taxes, levies, imposts, duties, deductions, withholdings (including backup withholding), assessments, fees or other charges imposed by any Governmental Authority, including any interest, additions to tax or penalties applicable thereto.

“Temporary Leverage Increase” has the meaning specified in Section 6.12(b).

“Threshold Amount” means \$3,500,000.00.

“Total Credit Exposure” means, as to any Lender at any time, the unused Commitments and Revolving Credit Exposure of such Lender at such time.

“Total Outstandings” means the aggregate Outstanding Amount of all Loans and all L/C Obligations.

“TTM EBITDA” means an amount equal to the “Designated Percentage” (as such term is defined below) of the actual historical EBITDA of any Person acquired by the Borrower or one of its Subsidiaries in accordance with the terms, conditions, and provisions of this Agreement, as such EBITDA is calculated as agreed between the Borrower and the Administrative Agent, based on the Administrative Agent’s review of the acquired Person’s financial statements for the twelve (12) month period immediately preceding the last day of the last fiscal quarter of the acquired Person occurring prior to the date of acquisition or such Person’s Federal tax returns covering all or any portion of said period. For the purposes of this definition, the term “Designated Percentage” shall mean (a) in the event the acquired Person’s financial statements are “audited” statements, one hundred percent (100%), (b) in the event the acquired Person’s financial statements are “reviewed” statements, seventy-five percent (75%), (c) in the event the acquired Person’s Federal tax returns are reviewed by the Administrative Agent, seventy-five percent (75%), and (d) in the event the acquired Person’s financial statements are “compiled” statements, fifty percent (50%).

“Type” means, with respect to a Committed Loan, its character as a Base Rate Loan or a Eurocurrency Rate Loan.

“UCC” means the Uniform Commercial Code as in effect in the State of New York; provided that, if perfection or the effect of perfection or non-perfection or the priority of any security interest in any Collateral is governed by the Uniform Commercial Code as in effect in a jurisdiction other than the State of New York, “UCC” means the Uniform Commercial Code as in effect from time to time in such other jurisdiction for purposes of the provisions hereof relating to such perfection, effect of perfection or non-perfection or priority.

“UCP” means, with respect to any Letter of Credit, the Uniform Customs and Practice for Documentary Credits, International Chamber of Commerce (“ICC”) Publication No. 600 (or such later version thereof as may be in effect at the time of issuance).

“United States” and “U.S.” mean the United States of America.

“Unreimbursed Amount” has the meaning specified in Section 2.03(c)(i).

“U.S. Person” means any Person that is a “United States Person” as defined in Section 7701(a)(30) of the Code.

“U.S. Tax Compliance Certificate” has the meaning specified in Section 3.01(e)(ii)(B)(III).

“Wholly-Owned Subsidiary” of the Borrower means a Subsidiary of which the Borrower owns, directly or indirectly through another Subsidiary, ninety-five percent (95%) or more of the issued and outstanding capital stock

or other equity interests.

“Write-Down and Conversion Powers” means, with respect to any EEA Resolution Authority, the write-down and conversion powers of such EEA Resolution Authority from time to time under the Bail-In Legislation for the applicable EEA Member Country, which write-down and conversion powers are described in the EU Bail-In Legislation Schedule.

“Yen” and “¥” mean the lawful currency of Japan.

#### **Other Interpretive Provisions**

. With reference to this Agreement and each other Loan Document, unless otherwise specified herein or in such other Loan Document:

(a) The definitions of terms herein shall apply equally to the singular and plural forms of the terms defined. Whenever the context may require, any pronoun shall include the corresponding masculine, feminine and neuter forms. The words “include,” “includes” and “including” shall be deemed to be followed by the phrase “without limitation.” The word “will” shall be construed to have the same meaning and effect as the word “shall.” Unless the context requires otherwise, (i) any definition of or reference to any agreement, instrument or other document (including the Loan Documents and any Organization Document) shall be construed as referring to such agreement, instrument or other document as from time to time amended, amended and restated, modified, extended, restated or supplemented from time to time (subject to any restrictions on such amendments, supplements or modifications set forth herein or in any other Loan Document), (ii) any reference herein to any Person shall be construed to include such Person’s successors and assigns, (iii) the words “hereto,” “herein,” “hereof” and “hereunder,” and words of similar import when used in any Loan Document, shall be construed to refer to such Loan Document in its entirety and not to any particular provision thereof, (iv) all references in a Loan Document to Articles, Sections, Exhibits and Schedules shall be construed to refer to Articles and Sections of, and Exhibits and Schedules to, the Loan Document in which such references appear, (v) any reference to any law shall include all statutory and regulatory rules, regulations, orders and provisions consolidating, amending, replacing or interpreting such law and any reference to any law or regulation shall, unless otherwise specified, refer to such law or regulation as amended, modified, extended, restated, replaced or supplemented from time to time, and (vi) the words “asset” and “property” shall be construed to have the same meaning and effect and to refer to any and all tangible and intangible assets and properties, including cash, securities, accounts and contract rights.

(b) In the computation of periods of time from a specified date to a later specified date, the word “from” means “from and including;” the words “to” and “until” each mean “to but excluding;” and the word “through” means “to and including.”

(c) Section headings herein and in the other Loan Documents are included for convenience of reference only and shall not affect the interpretation of this Agreement or any other Loan Document.

#### **Accounting Terms**

(a) Generally. All accounting terms not specifically or completely defined herein shall be construed in conformity with, and all financial data (including financial ratios and other financial calculations) required to be submitted pursuant to this Agreement shall be prepared in conformity with, GAAP applied on a consistent basis, as in effect from time to time, applied in a manner consistent with that used in preparing the Audited Financial Statements, except as otherwise specifically prescribed herein. Notwithstanding the foregoing, for purposes of determining compliance with any covenant (including the computation of any financial covenant) contained herein, Indebtedness of the Borrower and its Subsidiaries shall be deemed to be carried at 100% of the outstanding principal amount thereof, and the effects of FASB ASC 825 and FASB ASC 470-20 on financial liabilities shall be disregarded.

(b) Changes in GAAP. If at any time any change in GAAP (including the adoption of IFRS) would affect the computation of any financial ratio or requirement set forth in any Loan Document, and either the Borrower or the Required Lenders shall so request, the Administrative Agent, the Lenders and the Borrower shall negotiate in good faith to amend such ratio or requirement to preserve the original intent thereof in light of such change in GAAP (subject to the approval of the Required Lenders); provided that, until so amended, (i) such ratio or requirement shall continue to be computed in accordance with GAAP prior to such change therein and (ii) the Borrower shall provide to the Administrative Agent and the Lenders financial statements and other documents required under this Agreement or as

reasonably requested hereunder setting forth a reconciliation between calculations of such ratio or requirement made before and after giving effect to such change in GAAP. Without limiting the foregoing, leases shall continue to be classified and accounted for on a basis consistent with that reflected in the Audited Financial Statements for all purposes of this Agreement, notwithstanding any change in GAAP relating thereto, unless the parties hereto shall enter into a mutually acceptable amendment addressing such changes, as provided for above.

(c) **Consolidation of Variable Interest Entities.** All references herein to Consolidated financial statements of Borrower and its Subsidiaries or to the determination of any amount for Borrower and its Subsidiaries on a Consolidated basis or any similar reference shall, in each case, be deemed to include each variable interest entity that the Borrower is required to consolidate pursuant to FASB ASC 810 as if such variable interest entity were a Subsidiary as defined herein.

**Rounding**

. Any financial ratios required to be maintained by the Borrower pursuant to this Agreement shall be calculated by dividing the appropriate component by the other component, carrying the result to one place more than the number of places by which such ratio is expressed herein and rounding the result up or down to the nearest number (with a rounding-up if there is no nearest number).

**Exchange Rates; Currency Equivalents.**

(a) The Administrative Agent or the L/C Issuer, as applicable, shall determine the Spot Rates as of each Revaluation Date to be used for calculating Dollar Equivalent amounts of Credit Extensions and Outstanding Amounts denominated in Alternative Currencies. Such Spot Rates shall become effective as of such Revaluation Date and shall be the Spot Rates employed in converting any amounts between the applicable currencies until the next Revaluation Date to occur. Except for purposes of financial statements delivered by Loan Parties hereunder or calculating financial covenants hereunder or except as otherwise provided herein, the applicable amount of any currency (other than Dollars) for purposes of the Loan Documents shall be such Dollar Equivalent amount as so determined by the Administrative Agent or the L/C Issuer, as applicable.

(b) Wherever in this Agreement in connection with a Committed Borrowing, conversion, continuation or prepayment of a Eurocurrency Rate Loan or the issuance, amendment or extension of a Letter of Credit, an amount, such as a required minimum or multiple amount, is expressed in Dollars, but such Committed Borrowing, Eurocurrency Rate Loan or Letter of Credit is denominated in an Alternative Currency, such amount shall be the relevant Alternative Currency Equivalent of such Dollar amount (rounded to the nearest unit of such Alternative Currency, with 0.5 of a unit being rounded upward), as determined by the Administrative Agent or the L/C Issuer, as the case may be.

**Additional Alternative Currencies.**

(a) The Borrower may from time to time request that Eurocurrency Rate Loans be made and/or Letters of Credit be issued in a currency other than those specifically listed in the definition of "Alternative Currency;" provided that such requested currency is a lawful currency (other than Dollars) that is readily available and freely transferable and convertible into Dollars. In the case of any such request with respect to the making of Eurocurrency Rate Loans, such request shall be subject to the approval of the Administrative Agent and the Lenders; and in the case of any such request with respect to the issuance of Letters of Credit, such request shall be subject to the approval of the Administrative Agent and the L/C Issuer. The approval of the Administrative Agent, the Lenders, and/or the L/C Issuer required under this Section 1.06 shall not be unreasonably withheld, conditioned or delayed.

(b) Any such request shall be made to the Administrative Agent not later than 11:00 a.m., seven (7) Business Days prior to the date of the desired Credit Extension (or such other time or date as may be agreed by the Administrative Agent and, in the case of any such request pertaining to Letters of Credit, the L/C Issuer, in its or their sole discretion). In the case of any such request pertaining to Eurocurrency Rate Loans, the Administrative Agent shall promptly notify each Lender thereof; and in the case of any such request pertaining to Letters of Credit, the Administrative Agent shall promptly notify the L/C Issuer thereof. Each Lender (in the case of any such request pertaining to Eurocurrency Rate Loans) or the L/C Issuer (in the case of a request pertaining to Letters of Credit) shall notify the Administrative Agent, not later than 11:00 a.m., seven (7) Business Days after receipt of such request whether it consents, in its sole discretion, to the making of Eurocurrency Rate Loans or the issuance of Letters of Credit, as the case may be, in such requested currency.

(c) Any failure by a Lender or the L/C Issuer, as the case may be, to respond to such request within the time period specified in the preceding sentence shall be deemed to be a refusal by such Lender or the L/C Issuer, as the case may be, to permit Eurocurrency Rate Loans to be made or Letters of Credit to be issued in such requested

currency. If the Administrative Agent and all the Lenders consent to making Eurocurrency Rate Loans in such requested currency, the Administrative Agent shall so notify the Borrower and such currency shall thereupon be deemed for all purposes to be an Alternative Currency hereunder for purposes of any Committed Borrowings of Eurocurrency Rate Loans; and if the Administrative Agent and the L/C Issuer consent to the issuance of Letters of Credit in such requested currency, the Administrative Agent shall so notify the Borrower and such currency shall thereupon be deemed for all purposes to be an Alternative Currency hereunder for purposes of any Letter of Credit issuances. If the Administrative Agent shall fail to obtain consent to any request for an additional currency under this Section 1.06, the Administrative Agent shall promptly so notify the Borrower.

**Change of Currency.**

(a) Each obligation of the Borrower to make a payment denominated in the national currency unit of any member state of the European Union that adopts the Euro as its lawful currency after the date hereof shall be redenominated into Euro at the time of such adoption. If, in relation to the currency of any such member state, the basis of accrual of interest expressed in this Agreement in respect of that currency shall be inconsistent with any convention or practice in the London interbank market for the basis of accrual of interest in respect of the Euro, such expressed basis shall be replaced by such convention or practice with effect from the date on which such member state adopts the Euro as its lawful currency; provided that if any Committed Borrowing in the currency of such member state is outstanding immediately prior to such date, such replacement shall take effect, with respect to such Committed Borrowing, at the end of the then current Interest Period.

(b) Each provision of this Agreement shall be subject to such reasonable changes of construction as the Administrative Agent may from time to time specify to be appropriate to reflect the adoption of the Euro by any member state of the European Union and any relevant market conventions or practices relating to the Euro.

(c) Each provision of this Agreement also shall be subject to such reasonable changes of construction as the Administrative Agent may from time to time specify to be appropriate to reflect a change in currency of any other country and any relevant market conventions or practices relating to the change in currency.

**Times of Day**

Unless otherwise specified, all references herein to times of day shall be references to Eastern time (daylight or standard, as applicable).

**Letter of Credit Amounts**

Unless otherwise specified herein the amount of a Letter of Credit at any time shall be deemed to be the Dollar Equivalent of the stated amount of such Letter of Credit in effect at such time; provided, however, that with respect to any Letter of Credit that, by its terms or the terms of any Issuer Document related thereto, provides for one or more automatic increases in the stated amount thereof, the amount of such Letter of Credit shall be deemed to be the Dollar Equivalent of the maximum stated amount of such Letter of Credit after giving effect to all such increases, whether or not such maximum stated amount is in effect at such time.

**UCC Terms**

Terms defined in the UCC in effect on the Closing Date and not otherwise defined herein shall, unless the context otherwise indicates, have the meanings provided by those definitions. Subject to the foregoing, the term "UCC" refers, as of any date of determination, to the UCC then in effect.

ARTICLE III.

ARTICLE IV.

**THE COMMITMENTS AND CREDIT EXTENSIONS**

**Loans**

Subject to the terms and conditions set forth herein, each Lender severally agrees to make certain loans (hereinafter each such loan shall be referred to as a "Committed Loan" and all such loans shall be collectively referred to as the "Committed Loans") to the Borrower in Dollars or in one or more Alternative Currencies from time to time, on any Business Day during the Availability Period, in an aggregate amount not to exceed at any time outstanding the amount of such Lender's Commitment; provided, however, that after giving effect to any Borrowing of a Committed Loan, (i) the Total Outstandings shall not exceed the Aggregate Commitments, (ii) the Revolving Credit Exposure of any Lender shall not exceed such Lender's Commitment, and (iii) the aggregate Outstanding Amount of all Committed

Loans denominated in Alternative Currencies shall not exceed the Alternative Currency Sublimit. Within the limits of each Lender's Commitment, and subject to the other terms and conditions hereof, Borrower may borrow under this Section 2.01, prepay under Section 2.05, and reborrow under this Section 2.01. The Committed Loans may be Base Rate Loans or Eurocurrency Rate Loans, as further provided herein, and the Borrower shall execute and deliver a Note to each Lender requesting a Note.

### **Borrowings, Conversions and Continuations of Committed Loans**

(a) **Notice of Borrowing.** Each Committed Borrowing, each conversion of Committed Loans from one Type to the other, and each continuation of Eurocurrency Rate Loans shall be made upon Borrower's irrevocable notice to Administrative Agent, which may be given by: (x) telephone or (y) a Committed Loan Notice; provided that any telephonic notice must be confirmed immediately by delivery to the Administrative Agent of a Committed Loan Notice. Each such Committed Loan Notice must be received by Administrative Agent not later than 11:00 a.m. (i) three Business Days prior to the requested date of any Borrowing of, conversion to or continuation of Eurocurrency Rate Loans denominated in Dollars or of any conversion of Eurocurrency Rate Loans denominated in Dollars to Base Rate Loans, (ii) four Business Days (or five Business Days in the case of a Special Notice Currency) prior to the requested date of any Borrowing or continuation of Eurocurrency Rate Loans denominated in Alternative Currencies, and (iii) on the requested date of any Borrowing of Base Rate Loans. Each Borrowing of, conversion to or continuation of Eurocurrency Rate Loans shall be in a principal amount of \$500,000.00 or a whole multiple of \$100,000.00 in excess thereof. Except as provided in Section 2.03(c), each conversion to Base Rate Loans shall be in a principal amount of \$500,000.00 or a whole multiple of \$100,000.00 in excess thereof. Each Committed Loan Notice and each telephonic notice shall specify (A) whether the Borrower is requesting a Committed Borrowing, a conversion of Committed Loans from one Type to the other, or a continuation of Eurocurrency Rate Loans, (B) the requested date of the Borrowing, conversion or continuation, as the case may be (which shall be a Business Day), (C) the principal amount of Committed Loans to be borrowed, converted or continued, (D) the Type of Committed Loans to be borrowed or to which existing Committed Loans are to be converted, (E) if applicable, the duration of the Interest Period with respect thereto, and (F) the currency of the Committed Loans to be borrowed. If the Borrower fails to specify a currency in a Committed Loan Notice requesting a Borrowing, then the Committed Loans so requested shall be made in Dollars. If the Borrower fails to specify a Type of Committed Loan in a Committed Loan Notice or if the Borrower fails to give a timely notice requesting a conversion or continuation, then the applicable Committed Loans shall be made as, converted to, or continued as Eurocurrency Rate Loans in Dollars with an Interest Period of one (1) month; provided, however, that in the case of a failure to timely request a continuation of Committed Loans denominated in an Alternative Currency, such Loans shall be continued as Eurocurrency Rate Loans in their original currency with an Interest Period of one (1) month. If the Borrower requests a Borrowing of, conversion to, or continuation of Eurocurrency Rate Loans in any such Committed Loan Notice, but fails to specify an Interest Period, it will be deemed to have specified an Interest Period of one (1) month. No Committed Loan may be converted into or continued as a Committed Loan denominated in a different currency, but instead must be repaid in the original currency of such Committed Loan and reborrowed in the other currency.

(b) **Advances.** Following receipt of a Committed Loan Notice, the Administrative Agent shall promptly notify each Lender of the amount (and the currency) of its Applicable Percentage of the applicable Committed Loans, and if no timely notice of a conversion or continuation is provided by the Borrower, the Administrative Agent shall notify each Lender of the details of any automatic conversion to Base Rate Loans or continuation of Committed Loans denominated in a currency other than Dollars, in each case as described in the preceding subsection. In the case of a Committed Borrowing, each Lender shall make the amount of its Committed Loan available to the Administrative Agent in Same Day Funds at the Administrative Agent's Office for the applicable currency not later than 2:00 p.m., in the case of any Committed Loan denominated in Dollars, and not later than the Applicable Time specified by the Administrative Agent, in the case of any Committed Loan in an Alternative Currency, in each case on the Business Day specified in the applicable Committed Loan Notice. Upon satisfaction of the applicable conditions set forth in Section 4.02 (and, if such Borrowing is the initial Credit Extension, Section 4.01), Administrative Agent shall make all funds so received available to the Borrower in like funds as received by Administrative Agent either by (i) crediting

the account of the Borrower on the books of Bank of America with the amount of such funds or (ii) wire transfer of such funds, in each case in accordance with instructions provided to (and reasonably acceptable to) Administrative Agent by Borrower; provided, however, that if, on the date the Committed Loan Notice with respect to such Borrowing denominated in Dollars is given by Borrower, there are L/C Borrowings outstanding, then the proceeds of such Borrowing first, shall be applied, to the payment in full of any such L/C Borrowings, and second, shall be made available to the Borrower as provided above.

(c) Eurocurrency Rate Loans. Except as otherwise provided herein, a Eurocurrency Rate Loan may be continued or converted only on the last day of an Interest Period for such Eurocurrency Rate Loan. During the existence of a Default, no Loans may be requested as, converted to or continued as Eurocurrency Rate Loans (whether in Dollars or any Alternative Currency) without the prior express written consent of the Required Lenders, and the Required Lenders may demand that any or all of the then outstanding Eurocurrency Rate Loans denominated in an Alternative Currency be prepaid, or redenominated into Dollars in the amount of the Dollar Equivalent thereof, on the last day of the then current Interest period with respect thereto, and Borrower agrees to pay all amounts due under Section 3.05 in accordance with the terms thereof due to any such conversion.

(d) Interest Rates. Administrative Agent shall promptly notify the Borrower and the Lenders of the interest rate applicable to any Interest Period for Eurocurrency Rate Loans upon determination of such interest rate. At any time that Base Rate Loans are outstanding, the Administrative Agent shall notify the Borrower and the Lenders of any change in Bank of America's prime rate used in determining the Base Rate promptly following the public announcement of such change.

(e) Interest Periods. After giving effect to all Committed Borrowings, all conversions of Committed Loans from one Type to the other, and all continuations of Committed Loans as the same Type, there shall not be more than four (4) Interest Periods in effect with respect to Committed Loans.

### Letters of Credit

(a) The Letter of Credit Commitment.

(i) Subject to the terms and conditions set forth herein, (A) the L/C Issuer agrees, in reliance upon the agreements of the Lenders set forth in this Section 2.03, (1) from time to time on any Business Day during the period from the Closing Date until the L/C Expiration Date, to issue Letters of Credit denominated in Dollars or in one or more Alternative Currencies for the account of the Borrower, and to amend or extend Letters of Credit previously issued by it, in accordance with subsection (b) below, and (2) to honor drawings under the Letters of Credit; and (B) the Lenders severally agree to participate in Letters of Credit issued for the account of the Borrower and any drawings thereunder; provided that after giving effect to any L/C Credit Extension with respect to any Letter of Credit, (x) the Total Outstandings shall not exceed the Aggregate Commitments, (y) the aggregate Outstanding Amount of the Committed Loans of any Lender, plus such Lender's Applicable Percentage of the Outstanding Amount of all L/C Obligations, shall not exceed such Lender's Commitment, and (z) the Outstanding Amount of the L/C Obligations shall not exceed the L/C Sublimit. Each request by the Borrower for the issuance or amendment of a Letter of Credit shall be deemed to be a representation by the Borrower that the L/C Credit Extension so requested complies with the conditions set forth in the proviso to the preceding sentence. Within the foregoing limits, and subject to the terms and conditions hereof, the Borrower's ability to obtain Letters of Credit shall be fully revolving, and accordingly the Borrower may, during the foregoing period, obtain Letters of Credit to replace Letters of Credit that have expired or that have been drawn upon and reimbursed. All Existing Letters of Credit shall be deemed to have been issued pursuant hereto, and from and after the Closing Date shall be subject to and governed by the terms and conditions hereof. All commercial Letters of Credit issued hereunder shall require payment upon presentation of a sight draft.

(ii) The L/C Issuer shall not issue any Letter of Credit, if:

(A) subject to Section 2.03(b)(iv), the expiry date of such requested Letter of Credit would occur more than twelve (12) months after the date of issuance or last extension, unless the Required Lenders have approved such expiry date; or

(B) the expiry date of such requested Letter of Credit would occur after the L/C Expiration Date, unless all the Lenders have approved such expiry date.

(iii) The L/C Issuer shall not be under any obligation to issue any Letter of Credit if:

(A) any order, judgment or decree of any Governmental Authority or arbitrator shall by its terms purport to enjoin or restrain the L/C Issuer from issuing such Letter of Credit, or any Law applicable to the

L/C Issuer or any request or directive (whether or not having the force of law) from any Governmental Authority with jurisdiction over the L/C Issuer shall prohibit, or request that the L/C Issuer refrain from, the issuance of letters of credit generally or such Letter of Credit in particular or shall impose upon the L/C Issuer with respect to such Letter of Credit any restriction, reserve or capital requirement (for which the L/C Issuer is not otherwise compensated hereunder) not in effect on the Closing Date, or shall impose upon the L/C Issuer any unreimbursed loss, cost or expense which was not applicable on the Closing Date and which in each case the L/C Issuer in good faith deems material to it;

(B) the issuance of such Letter of Credit would violate one or more policies of the L/C Issuer applicable to letters of credit generally, a copy of which policies has previously been provided to the Borrower or is provided in connection with the Borrower's L/C Application

(C) except as otherwise agreed by Administrative Agent and the L/C Issuer, such Letter of Credit is in an initial stated amount less than \$10,000.00, in the case of a commercial Letter of Credit, or \$100,000.00, in the case of a standby Letter of Credit;

(D) except as otherwise agreed by the Administrative Agent and the L/C Issuer, such Letter of Credit is to be denominated in a currency other than Dollars or an Alternative Currency;

(E) any Lender is at that time a Defaulting Lender, unless the L/C Issuer has entered into arrangements, including the delivery of Cash Collateral, satisfactory to the L/C Issuer (in its sole and absolute discretion) with the Borrower or such Lender to eliminate the L/C Issuer's actual or potential Fronting Exposure (after giving effect to Section 2.15(a)(iv)) with respect to the Defaulting Lender arising from either the Letter of Credit then proposed to be issued or that Letter of Credit and all other L/C Obligations as to which the L/C Issuer has actual or potential Fronting Exposure, as it may elect in its sole and absolute discretion;

(F) unless specifically provided for in this Agreement, such Letter of Credit contains any provisions for automatic reinstatement of the stated amount after any drawing thereunder; or

(G) the L/C Issuer does not as of the issuance date of such requested Letter of Credit issue Letters of Credit in the requested currency.

(iv) The L/C Issuer shall not amend any Letter of Credit if the L/C Issuer would not be permitted at such time to issue such Letter of Credit in its amended form under the terms hereof.

(v) The L/C Issuer shall be under no obligation to amend any Letter of Credit if (A) the L/C Issuer would have no obligation at such time to issue such Letter of Credit in its amended form under the terms hereof, or (B) the beneficiary of such Letter of Credit does not accept the proposed amendment to such Letter of Credit.

(vi) The L/C Issuer shall act on behalf of the Lenders with respect to any Letters of Credit issued by it and the documents associated therewith, and the L/C Issuer shall have all of the benefits and immunities (A) provided to Administrative Agent in Article IX with respect to any acts taken or omissions suffered by the L/C Issuer in connection with Letters of Credit issued by it or proposed to be issued by it and Issuer Documents pertaining to such Letters of Credit as fully as if the term "Administrative Agent" or "Administrative Agent" as used in Article IX included the L/C Issuer with respect to such acts or omissions, and (B) as additionally provided herein with respect to the L/C Issuer.

(b) Procedures for Issuance and Amendment of Letters of Credit; Auto-Extension Letters of Credit.

(i) Each Letter of Credit shall be issued or amended, as the case may be, upon the request of the Borrower delivered to the L/C Issuer (with a copy to the Administrative Agent) in the form of a L/C Application, appropriately completed and signed by a Responsible Officer of the Borrower. Such L/C Application may be sent by facsimile, by United States mail, by overnight courier, by electronic transmission using the system provided by the L/C Issuer, by personal delivery or by any other means acceptable to the L/C Issuer. Such L/C Application must be received by the L/C Issuer and Administrative Agent not later than 11:00 a.m. at least two Business Days (or such later date and time as Administrative Agent and the L/C Issuer may agree in a particular instance in their sole discretion) prior to the proposed issuance date or date of amendment, as the case may be. In the case of a request for an initial issuance of a Letter of Credit, such L/C Application shall specify in form and detail satisfactory to the L/C Issuer: (A) the proposed issuance date of the requested Letter of Credit (which shall be a Business Day); (B) the amount and currency thereof; (C) the expiry date thereof; (D) the name and address of the beneficiary thereof; (E) the documents to be presented by such beneficiary in case of any drawing thereunder, (F) the full text of any certificate to be presented by such beneficiary in case of any drawing thereunder; (G) the purpose and nature of the requested Letter of Credit; and (H) such other matters as the L/C Issuer reasonably may require. In the case of a request for an amendment of any outstanding Letter of Credit, such L/C Application shall specify in form and detail satisfactory to the L/C Issuer (1)

the Letter of Credit to be amended, (2) the proposed date of amendment thereof (which shall be a Business Day), (3) the nature of the proposed amendment and (4) such other matters as the L/C Issuer reasonably may require. Additionally, the Borrower shall furnish to the L/C Issuer and the Administrative Agent such other documents and information pertaining to such requested Letter of Credit issuance or amendment, including any Issuer Documents, as the L/C Issuer or the Administrative Agent reasonably may require.

(ii) Promptly after receipt of any L/C Application at the address set forth in Section 10.02, the L/C Issuer will confirm with the Administrative Agent (by telephone or in writing) that the Administrative Agent has received a copy of such L/C Application from the Borrower and, if not, the L/C Issuer will provide the Administrative Agent with a copy thereof. Unless the L/C Issuer has received written notice from any Lender, the Administrative Agent or any Loan Party, at least one (1) Business Day prior to the requested date of issuance or amendment of the applicable Letter of Credit, that one or more applicable conditions contained in Article IV shall not then be satisfied, then, subject to the terms and conditions hereof, the L/C Issuer shall, on the requested date, issue a Letter of Credit for the account of the Borrower or enter into the applicable amendment, as the case may be, in each case in accordance with the L/C Issuer's usual and customary business practices. Immediately upon the issuance of each Letter of Credit, each Lender shall be deemed to, and hereby irrevocably and unconditionally agrees to, purchase from the L/C Issuer a risk participation in such Letter of Credit in an amount equal to the product of such Lender's Applicable Percentage times the amount of such Letter of Credit.

(iii) Promptly after its delivery of any Letter of Credit or any amendment to a Letter of Credit to an advising bank with respect thereto or to the beneficiary thereof, the L/C Issuer will also deliver to the Borrower and the Administrative Agent a true and complete copy of such Letter of Credit or amendment.

(iv) If the Borrower so requests in any applicable L/C Application, the L/C Issuer may, in its sole and absolute discretion, agree to issue a Letter of Credit that has automatic extension provisions (hereinafter each such Letter of Credit that has automatic extension provisions shall be referred to as an "Auto-Extension Letter of Credit"); provided that any such Auto-Extension Letter of Credit must permit the L/C Issuer to prevent any such extension at least once in each twelve (12) month period (commencing with the date of issuance of such Letter of Credit) by giving prior notice to the beneficiary thereof not later than a day (hereinafter referred to as the "Non-Extension Notice Date") in each such twelve (12) month period to be agreed upon at the time such Letter of Credit is issued. Unless otherwise directed by the L/C Issuer, the Borrower shall not be required to make a specific request to the L/C Issuer for any such extension. Once an Auto-Extension Letter of Credit has been issued, the Lenders shall be deemed to have authorized (but may not require) the L/C Issuer to permit the extension of such Letter of Credit at any time to an expiry date not later than the L/C Expiration Date; provided, however, that the L/C Issuer shall not permit any such extension if (A) the L/C Issuer has determined that it would not be permitted, or would have no obligation, at such time to issue such Letter of Credit in its revised form (as extended) under the terms hereof (by reason of the provisions of clause (ii) or (iii) of Section 2.03(a) or otherwise), or (B) it has received notice (which may be by telephone or in writing) on or before the day that is seven (7) Business Days before the Non-Extension Notice Date (1) from the Administrative Agent that the Required Lenders have elected not to permit such extension or (2) from Administrative Agent, any Lender or the Borrower that one or more of the applicable conditions specified in Section 4.02 is not then satisfied, and in each such case directing the L/C Issuer not to permit such extension.

(v) If the Borrower so requests in any applicable L/C Application, the L/C Issuer may, in its sole and absolute discretion, agree to issue a Letter of Credit that permits the automatic reinstatement of all or a portion of the stated amount thereof after any drawing thereunder (hereinafter each such Letter of Credit that permits the automatic reinstatement of all or a portion of the stated amount thereof after any drawing thereunder shall be referred to as an "Auto-Reinstatement Letter of Credit"). Unless otherwise directed by the L/C Issuer, the Borrower shall not be required to make a specific request to the L/C Issuer to permit such reinstatement. Once an Auto-Reinstatement Letter of Credit has been issued, except as provided in the following sentence, the Lenders shall be deemed to have authorized (but may not require) the L/C Issuer to reinstate all or a portion of the stated amount thereof in accordance with the provisions of such Letter of Credit. Notwithstanding the foregoing to the contrary, if such Auto-Reinstatement Letter of Credit permits the L/C Issuer to decline to reinstate all or any portion of the stated amount thereof after a drawing thereunder by giving notice of such non-reinstatement within a specified number of days after such drawing (hereinafter referred to as the "Non-Reinstatement Deadline"), the L/C Issuer shall not permit such reinstatement if it has received a notice (which may be by telephone or in writing) on or before the day that is five (5) Business Days before the Non-Reinstatement Deadline (A) from the Administrative Agent that the Required Lenders have elected not to permit such reinstatement or (B) from Administrative Agent, any Lender or Borrower that one or more of the applicable conditions

specified in Section 4.02 is not then satisfied (treating such reinstatement as an L/C Credit Extension for purposes of this clause) and, in each case, directing the L/C Issuer not to permit such reinstatement.

(c) Drawings and Reimbursements; Funding of Participations.

(i) Upon receipt from the beneficiary of any Letter of Credit of any notice of a drawing under such Letter of Credit, the L/C Issuer shall notify the Borrower and the Administrative Agent thereof. In the case of a Letter of Credit denominated in an Alternative Currency, the Borrower shall reimburse the L/C Issuer in such Alternative Currency, unless (A) the L/C Issuer (at its option) shall have specified in such notice that it will require reimbursement in Dollars, or (B) in the absence of any such requirement for reimbursement in Dollars, the Borrower shall have notified the L/C Issuer promptly following receipt of the notice of drawing that the Borrower will reimburse the L/C Issuer in Dollars. In the case of any such reimbursement in Dollars of a drawing under a Letter of Credit denominated in an Alternative Currency, the L/C Issuer shall notify the Borrower of the Dollar Equivalent of the amount of the drawing promptly following the determination thereof. Not later than 11:00 a.m. on the date of any payment by the L/C Issuer under a Letter of Credit to be reimbursed in Dollars, or the Applicable Time on the date of any payment by the L/C Issuer under a Letter of Credit to be reimbursed in an Alternative Currency (hereinafter each such date shall be referred to as an "Honor Date"), the Borrower shall reimburse the L/C Issuer through the Administrative Agent in an amount equal to the amount of such drawing and in the applicable currency. If the Borrower fails to so reimburse the L/C Issuer by such time, the Administrative Agent shall promptly notify each Lender of the Honor Date, the amount of the unreimbursed drawing (expressed in Dollars in the amount of the Dollar Equivalent thereof in the case of a Letter of Credit denominated in an Alternative Currency) (hereinafter referred to as the "Unreimbursed Amount"), and the amount of such Lender's Applicable Percentage thereof. In such event, the Borrower shall be deemed to have requested a Committed Borrowing of Base Rate Loans to be disbursed on the Honor Date in an amount equal to the Unreimbursed Amount, without regard to the minimum and multiples specified in Section 2.02 for the principal amount of Base Rate Loans, but subject to the amount of the unutilized portion of the Aggregate Commitments and the conditions set forth in Section 4.02 (other than the delivery of a Committed Loan Notice). Any notice given by the L/C Issuer or the Administrative Agent pursuant to this Section 2.03(c)(i) may be given by telephone if immediately confirmed in writing; provided that the lack of such an immediate confirmation shall not affect the conclusiveness or binding effect of such notice.

(ii) Each Lender shall upon any notice pursuant to Section 2.03(c)(i) make funds available (and the Administrative Agent may apply Cash Collateral provided for this purpose) for the account of the L/C Issuer, in Dollars, at the Administrative Agent's Office for Dollar-denominated payments in an amount equal to its Applicable Percentage of the Unreimbursed Amount not later than 1:00 p.m. on the Business Day specified in such notice by the Administrative Agent, whereupon, subject to the provisions of Section 2.03(c)(iii), each Lender that so makes funds available shall be deemed to have made a Base Rate Loan to Borrower in such amount. The Administrative Agent shall remit the funds so received to the L/C Issuer in Dollars.

(iii) With respect to any Unreimbursed Amount that is not fully refinanced by a Committed Borrowing of Base Rate Loans because the conditions set forth in Section 4.02 cannot be satisfied or for any other reason, the Borrower shall be deemed to have incurred from the L/C Issuer an L/C Borrowing in the amount of the Unreimbursed Amount that is not so refinanced, which L/C Borrowing shall be due and payable on demand (together with interest) and shall bear interest at the Default Rate. In such event, each Lender's payment to Administrative Agent for the account of the L/C Issuer pursuant to Section 2.03(c)(ii) shall be deemed payment in respect of its participation in such L/C Borrowing and shall constitute an L/C Advance from such Lender in satisfaction of its participation obligation under this Section 2.03.

(iv) Until each Lender funds its Committed Loan or L/C Advance pursuant to this Section 2.03(c) to reimburse the L/C Issuer for any amount drawn under any Letter of Credit, interest in respect of such Lender's Applicable Percentage of such amount shall be solely for the account of the L/C Issuer.

(v) Each Lender's obligation to make Committed Loans or L/C Advances to reimburse the L/C Issuer for amounts drawn under Letters of Credit, as contemplated by this Section 2.03(c), shall be absolute and unconditional and shall not be affected by any circumstance, including (A) any setoff, counterclaim, recoupment, defense or other right which such Lender may have against the L/C Issuer, the Borrower or any other Person for any reason whatsoever, (B) the occurrence or continuance of a Default or (C) any other occurrence, event or condition, whether or not similar to any of the foregoing; provided, however, that each Lender's obligation to make Committed Loans pursuant to this Section 2.03(c) is subject to the conditions set forth in Section 4.02 (other than delivery by the Borrower of a Committed Loan Notice). No such making of an L/C Advance shall relieve or otherwise impair the

obligation of the Borrower to reimburse the L/C Issuer for the amount of any payment made by the L/C Issuer under any Letter of Credit, together with interest as provided herein.

(vi) If any Lender fails to make available to the Administrative Agent for the account of the L/C Issuer any amount required to be paid by such Lender pursuant to the foregoing provisions of this Section 2.03(c) by the time specified in Section 2.03(c)(ii), then, without limiting the other provisions of this Agreement, the L/C Issuer shall be entitled to recover from such Lender (acting through Administrative Agent), on demand, such amount with interest thereon for the period from the date such payment is required to the date on which such payment is immediately available to the L/C Issuer at a rate per annum equal to the applicable Overnight Rate from time to time in effect, plus any administrative, processing or similar fees customarily charged by the L/C Issuer in connection with the foregoing. If such Lender pays such amount (with interest and fees as aforesaid), the amount so paid shall constitute such Lender's Committed Loan included in the relevant Committed Borrowing or L/C Advance in respect of the relevant L/C Borrowing, as the case may be. A certificate of the L/C Issuer submitted to any Lender (through the Administrative Agent) with respect to any amounts owing under this clause (vi) shall be conclusive absent manifest error.

(d) Repayment of Participations.

(i) At any time after the L/C Issuer has made a payment under any Letter of Credit and has received from any Lender such Lender's L/C Advance in respect of such payment in accordance with Section 2.03(c), if Administrative Agent receives for the account of the L/C Issuer any payment in respect of the related Unreimbursed Amount or interest thereon (whether directly from the Borrower or otherwise, including proceeds of Cash Collateral applied thereto by the Administrative Agent), the Administrative Agent will distribute to such Lender its Applicable Percentage thereof in the same funds as those received by the Administrative Agent.

(ii) If any payment received by the Administrative Agent for the account of the L/C Issuer pursuant to Section 2.03(c)(i) is required to be returned under any of the circumstances described in Section 10.05 (including pursuant to any settlement entered into by the L/C Issuer in its discretion), each Lender shall pay to the Administrative Agent for the account of the L/C Issuer its Applicable Percentage thereof on demand of the Administrative Agent, plus interest thereon from the date of such demand to the date such amount is returned by such Lender, at a rate per annum equal to the applicable Overnight Rate from time to time in effect. The obligations of the Lenders under this clause (ii) shall survive the payment in full of the Obligations and the termination of this Agreement.

(e) Obligations Absolute. The obligation of the Borrower to reimburse the L/C Issuer for each drawing under each Letter of Credit and to repay each L/C Borrowing shall be absolute, unconditional and irrevocable, and shall be paid strictly in accordance with the terms of this Agreement under all circumstances, including the following:

(i) any lack of validity or enforceability of such Letter of Credit, this Agreement, or any other Loan Document;

(ii) the existence of any claim, counterclaim, setoff, defense or other right that the Borrower may have at any time against any beneficiary or any transferee of such Letter of Credit (or any Person for whom any such beneficiary or any such transferee may be acting), the L/C Issuer or any other Person, whether in connection with this Agreement, the transactions contemplated hereby or by such Letter of Credit or any agreement or instrument relating thereto, or any unrelated transaction;

(iii) any draft, demand, endorsement, certificate or other document presented under or in connection with such Letter of Credit proving to be forged, fraudulent, invalid or insufficient in any respect or any statement therein being untrue or inaccurate in any respect; or any loss or delay in the transmission or otherwise of any document required in order to make a drawing under such Letter of Credit;

(iv) waiver by the L/C Issuer of any requirement that exists for the L/C Issuer's protection and not the protection of the Borrower or any waiver by the L/C Issuer which does not in fact materially prejudice the Borrower;

(v) honor of a demand for payment presented electronically even if such Letter of Credit requires that demand be in the form of a draft;

(vi) any payment made by the L/C Issuer in respect of an otherwise complying item presented after the date specified as the expiration date of, or the date by which documents must be received under such Letter of Credit if presentation after such date is authorized by the UCC, the ISP or the UCP, as applicable;

(vii) any payment by the L/C Issuer under such Letter of Credit against presentation of a draft or certificate that does not strictly comply with the terms of such Letter of Credit; or any payment made by the L/C Issuer under such Letter of Credit to any Person purporting to be a trustee in bankruptcy, debtor-in-possession, assignee for the benefit of creditors, liquidator, receiver or other representative of or successor to any beneficiary or any transferee

of such Letter of Credit, including any arising in connection with any proceeding under any Debtor Relief Law; or

(viii) any adverse change in the relevant exchange rates or in the availability of the relevant Alternative Currency to the Borrower or in the relevant currency markets generally; or

(ix) any other circumstance or happening whatsoever, whether or not similar to any of the foregoing, including any other circumstance that might otherwise constitute a defense available to, or a discharge of, the Borrower.

The Borrower shall promptly examine a copy of each Letter of Credit and each amendment thereto that is delivered to it and, in the event of any claim of noncompliance with the Borrower's instructions or other irregularity, the Borrower will promptly notify the L/C Issuer. The Borrower shall be conclusively deemed to have waived any such claim against the L/C Issuer and its correspondents unless such notice is given as aforesaid.

(f) Role of L/C Issuer. Each Lender and the Borrower agree that, in paying any drawing under a Letter of Credit, the L/C Issuer shall not have any responsibility to obtain any document (other than any sight or time draft, certificates and documents expressly required by the Letter of Credit) or to ascertain or inquire as to the validity or accuracy of any such document or the authority of the Person executing or delivering any such document. None of the L/C Issuer, the Administrative Agent, any of their respective Related Parties or any correspondent, participant or assignee of the L/C Issuer shall be liable to any Lender for (i) any action taken or omitted in connection herewith at the request or with the approval of Lenders or the Required Lenders, as applicable, (ii) any action taken or omitted in the absence of gross negligence or willful misconduct or (iii) the due execution, effectiveness, validity or enforceability of any document or instrument related to any Letter of Credit or Issuer Document. The Borrower hereby assumes all risks of the acts or omissions of any beneficiary or transferee with respect to its use of any Letter of Credit; provided, however, that this assumption is not intended to, and shall not, preclude Borrower's pursuing such rights and remedies as it may have against the beneficiary or transferee at law or under any other agreement. None of the L/C Issuer, the Administrative Agent, any of their respective Related Parties or any correspondent, participant or assignee of the L/C Issuer, shall be liable or responsible for any of the matters described in clauses (i) through (v) of Section 2.03(e); provided, however, that anything in such clauses to the contrary notwithstanding, Borrower may have a claim against the L/C Issuer, and the L/C Issuer may be liable to the Borrower, to the extent, but only to the extent, of any direct, as opposed to consequential or exemplary, damages suffered by the Borrower which the Borrower proves, as determined by a final nonappealable judgment of a court of competent jurisdiction, were caused by the L/C Issuer's willful misconduct or gross negligence or the L/C Issuer's willful failure to pay under any Letter of Credit after the presentation to it by the beneficiary of a sight or time draft and certificate(s) strictly complying with the terms and conditions of a Letter of Credit. In furtherance and not in limitation of the foregoing, the L/C Issuer may accept documents that appear on their face to be in order, without responsibility for further investigation, regardless of any notice or information to the contrary, and the L/C Issuer shall not be responsible for the validity or sufficiency of any instrument transferring, endorsing or assigning or purporting to transfer, endorse or assign a Letter of Credit or the rights or benefits thereunder or proceeds thereof, in whole or in part, which may prove to be invalid or ineffective for any reason. The L/C Issuer may send a Letter of Credit or conduct any communication to or from the beneficiary via the Society for Worldwide Interbank Financial Telecommunication ("SWIFT") message or overnight courier, or any other commercially reasonable means of communicating with a beneficiary.

(g) Applicability of ISP and UCP; Limitation of Liability. Unless otherwise expressly agreed by the L/C Issuer and the Borrower when a Letter of Credit is issued (including any such agreement applicable to any Existing Letter of Credit), (i) the rules of the ISP shall apply to each standby Letter of Credit, and (ii) the rules of the UCP shall apply to each commercial Letter of Credit. Notwithstanding the foregoing to the contrary, the L/C Issuer shall not be responsible to the Borrower for, and the L/C Issuer's rights and remedies against the Borrower shall not be impaired by, any action or inaction of the L/C Issuer required or permitted under any law, order, or practice that is required or permitted to be applied to any Letter of Credit or this Agreement, including the Law or any order of a jurisdiction where the L/C Issuer or the beneficiary is located, the practice stated in the ISP or UCP, as applicable, or in the decisions, opinions, practice statements, or official commentary of the ICC Banking Commission, the Bankers Association for Finance and Trade - International Financial Services Association (BAFT-IFSA), or the Institute of International Banking Law & Practice, whether or not any Letter of Credit chooses such law or practice.

(h) L/C Fees. The Borrower shall pay to the Administrative Agent for the account of each Lender in

accordance, subject to Section 2.15, with its Applicable Percentage, in Dollars, an L/C fee (hereinafter referred to as the “L/C Fee”) (i) for each commercial Letter of Credit equal to the Applicable Rate times the Dollar Equivalent of the daily amount available to be drawn under such Letter of Credit, and (ii) for each standby Letter of Credit equal to the Applicable Rate times the Dollar Equivalent of the daily amount available to be drawn under such Letter of Credit. For purposes of computing the daily amount available to be drawn under any Letter of Credit, the amount of such Letter of Credit shall be determined in accordance with Section 1.09. L/C Fees shall be (1) due and payable on the last Business Day of each March, June, September and December and the Maturity Date, commencing with the first such date to occur after the issuance of such Letter of Credit, on the L/C Expiration Date and thereafter on demand and (2) computed on a quarterly basis in arrears. If there is any change in the Applicable Rate during any quarter, the daily amount available to be drawn under each Letter of Credit shall be computed and multiplied by the Applicable Rate separately for each period during such quarter that such Applicable Rate was in effect. Notwithstanding anything to the contrary contained herein, upon the request of the Required Lenders, while any Event of Default exists, all L/C Fees shall accrue at the Default Rate.

(i) Fronting Fee and Documentary and Processing Charges Payable to L/C Issuer. The Borrower shall pay directly to the L/C Issuer for its own account, in Dollars, a fronting fee with respect to each Letter of Credit, at the rate per annum specified in the Fee Letter, computed on the Dollar Equivalent of the daily amount available to be drawn under such Letter of Credit and on a quarterly basis in arrears. Such fronting fee shall be due and payable on the last Business Day of each March, June, September and December, in respect of the quarterly period then ended (or portion thereof, in the case of the first payment), commencing with the first such date to occur after the issuance of such Letter of Credit, on the L/C Expiration Date and thereafter on demand. For purposes of computing the daily amount available to be drawn under any Letter of Credit, the amount of such Letter of Credit shall be determined in accordance with Section 1.09. In addition, the Borrower shall pay directly to the L/C Issuer for its own account, in Dollars, the reasonable and customary issuance, presentation, amendment and other processing fees, and other standard costs and charges, of the L/C Issuer relating to letters of credit as from time to time in effect. Such customary fees and standard costs and charges are due and payable on demand and are nonrefundable.

(j) Conflict with Issuer Documents. In the event of any conflict between the terms hereof and the terms of any Issuer Document, the terms hereof shall govern and control.

#### Repayment of Loans

The Borrower shall repay to the Administrative Agent, for the ratable account of the Lenders, on the Maturity Date the aggregate principal amount of all Committed Loans outstanding on such date.

#### Prepayments

(a) The Borrower may, upon notice to the Administrative Agent pursuant to delivery to the Administrative Agent of a Notice of Loan Prepayment, at any time or from time to time voluntarily prepay Committed Loans in whole or in part without premium or penalty; provided that (i) such notice must be received by the Administrative Agent not later than 11:00 a.m. (A) three (3) Business Days prior to any date of prepayment of Eurocurrency Rate Loans denominated in Dollars, (B) four (4) Business Days (or five (5), in the case of prepayment of Loans denominated in Special Notice Currencies) prior to any date of prepayment of Eurocurrency Rate Loans denominated in Alternative Currencies, and (C) on the date of prepayment of Base Rate Loans; (ii) any prepayment of Eurocurrency Rate Loans denominated in Dollars shall be in a principal amount of \$500,000.00 or a whole multiple of \$100,000.00 in excess thereof; (iii) any prepayment of Eurocurrency Rate Loans denominated in Alternative Currencies shall be in a minimum principal amount of \$500,000.00 or a whole multiple of \$100,000.00 in excess thereof; and (iv) any prepayment of Base Rate Loans shall be in a principal amount of \$500,000.00 or a whole multiple of \$100,000.00 in excess thereof or, in each case, if less, the entire principal amount thereof then outstanding. Each such notice shall specify the date and amount of such prepayment and the Type(s) of Committed Loans to be prepaid and, if Eurocurrency Rate Loans are to be prepaid, the Interest Period(s) of such Loans. The Administrative Agent will promptly notify each Lender of its receipt of each such notice, and of the amount of such Lender’s Applicable Percentage of such prepayment. If such notice is given by the Borrower, the Borrower shall make such prepayment and the payment amount specified in such notice shall be due and payable on the date specified therein. Any

prepayment of a Eurocurrency Rate Loan shall be accompanied by all accrued interest on the amount prepaid, together with any additional amounts required pursuant to Section 3.05. Each such prepayment shall be applied to the Committed Loans of the Lenders in accordance with their respective Applicable Percentages.

(b) If the Administrative Agent notifies the Borrower at any time that the Total Outstandings at such time exceed the Aggregate Commitments then in effect, then, within three Business Days after receipt of such notice, the Borrowers shall prepay Loans and/or the Borrower shall Cash Collateralize the L/C Obligations in an aggregate amount sufficient to reduce such Outstanding Amount as of such date of payment to an amount not to exceed 100% of the Aggregate Commitments then in effect; provided, however, that the Borrower shall not be required to Cash Collateralize the L/C Obligations pursuant to this Section 2.05(b) unless after the prepayment in full of the Committed Loans the Total Outstandings exceed the Aggregate Commitments then in effect. The Administrative Agent may, at any time and from time to time after the initial deposit of such Cash Collateral, request that additional Cash Collateral be provided in order to protect against the results of further exchange rate fluctuations.

(c) If the Administrative Agent notifies the Borrower at any time that the Outstanding Amount of all Loans denominated in Alternative Currencies at such time exceeds an amount equal to 105% of the Alternative Currency Sublimit then in effect, then, within three Business Days after receipt of such notice, the Borrowers shall prepay Loans in an aggregate amount sufficient to reduce such Outstanding Amount as of such date of payment to an amount not to exceed 100% of the Alternative Currency Sublimit then in effect.

**Termination or Reduction of Commitments**

The Borrower may, upon notice to the Administrative Agent, terminate the Aggregate Commitments, or from time to time permanently reduce the Aggregate Commitments; provided that (a) any such notice shall be received by the Administrative Agent not later than 11:00 a.m. five (5) Business Days prior to the date of termination or reduction, (b) any such partial reduction shall be in an aggregate amount of \$5,000,000.00 or any whole multiple of \$1,000,000.00 in excess thereof, (c) the Borrower shall not terminate or reduce the Aggregate Commitments if, after giving effect thereto and to any concurrent prepayments hereunder, the Total Outstandings would exceed the Aggregate Commitments, and (d) if, after giving effect to any reduction of the Aggregate Commitments, the L/C Sublimit or the Alternative Currency Sublimit exceeds the amount of the Aggregate Commitments, such Sublimit shall be automatically reduced by the amount of such excess. The Administrative Agent will promptly notify the Lenders of any such notice of termination or reduction of the Aggregate Commitments. Any reduction of the Aggregate Commitments shall be applied to the Commitment of each Lender according to its Applicable Percentage. All fees accrued until the effective date of any termination of the Aggregate Commitments shall be paid on the effective date of such termination.

**Interest and Default Rate**

(a) Subject to the provisions of subsection (b) below, (i) each Eurocurrency Rate Loan shall bear interest on the outstanding principal amount thereof for each Interest Period at a rate per annum equal to the Eurocurrency Rate for such Interest Period plus the Applicable Rate and (ii) each Base Rate Loan shall bear interest on the outstanding principal amount thereof from the applicable borrowing date at a rate per annum equal to the Base Rate plus the Applicable Rate.

(b) (i) If any amount of principal of any Loan is not paid when due (without regard to any applicable grace periods), whether at stated maturity, by acceleration or otherwise, such amount shall thereafter bear interest at a fluctuating interest rate per annum at all times equal to the Default Rate to the fullest extent permitted by applicable Laws.

(ii) If any amount (other than principal of any Loan) payable by the Borrower under any Loan Document is not paid when due (without regard to any applicable grace periods), whether at stated maturity, by acceleration or otherwise, then upon the request of the Required Lenders, such amount shall thereafter bear interest at a fluctuating interest rate per annum at all times equal to the Default Rate to the fullest extent permitted by applicable Laws.

(iii) Upon the request of the Required Lenders, while any Event of Default exists (including a payment default), all outstanding Obligations (including L/C Fees) may accrue at a fluctuating interest rate per annum at all times equal to the Default Rate to the fullest extent permitted by applicable Laws.

(iv) Accrued and unpaid interest on past due amounts (including interest on past due interest) shall

be due and payable upon demand.

(c) Interest on each Loan shall be due and payable in arrears on each Interest Payment Date applicable thereto and at such other times as may be specified herein. Interest hereunder shall be due and payable in accordance with the terms hereof before and after judgment, and before and after the commencement of any proceeding under any Debtor Relief Law.

(d) For the purposes of the Interest Act (Canada), (i) whenever a rate of interest or fee rate hereunder is calculated on the basis of a year (the “deemed year”) that contains fewer days than the actual number of days in the calendar year of calculation, such rate of interest or fee rate shall be expressed as a yearly rate by multiplying such rate of interest or fee rate by the actual number of days in the calendar year of calculation and dividing it by the number of days in the deemed year, (ii) the principle of deemed reinvestment of interest shall not apply to any interest calculation hereunder and (iii) the rates of interest stipulated herein are intended to be nominal rates and not effective rates or yields.

#### **Fees**

. In addition to certain fees described in subsections (h) and (i) of Section 2.03:

(a) **Commitment Fee.** The Borrower shall pay to the Administrative Agent for the account of each Lender in accordance with its Applicable Percentage, a commitment fee, in Dollars, equal to the Applicable Rate times the daily amount by which the Aggregate Commitments exceed the sum of (i) the Outstanding Committed Loan Amount of Committed Loans plus (ii) the Outstanding Committed Loan Amount of L/C Obligations, calculated on the basis of a 360-day year and the number of actual days elapsed. The commitment fee shall accrue at all times during the Availability Period, including at any time during which one or more of the conditions in Article IV is not met, and shall be due and payable quarterly in arrears on the last Business Day of each March, June, September and December, commencing with the first such date to occur after the Closing Date, and on the last day of the Availability Period. The commitment fee shall be calculated quarterly in arrears, and if there is any change in the Applicable Rate during any quarter, the actual daily amount shall be computed and multiplied by the Applicable Rate separately for each period during such quarter that such Applicable Rate was in effect.

(b) **Other Fees.** The Borrower shall pay (i) to the Arranger and the Administrative Agent for their own respective accounts, in Dollars, fees in the amounts and at the times specified in the Fee Letter and (ii) to the Lenders, in Dollars, such fees as shall have been separately agreed upon in writing in the amounts and at the times so specified. Such fees shall be fully earned when paid and shall not be refundable for any reason whatsoever.

#### **Computation of Interest and Fees; Retroactive Adjustments of Applicable Rate**

(a) All computations of interest for Base Rate Loans (including Base Rate Loans determined by reference to the Eurocurrency Rate) shall be made on the basis of a year of 365 or 366 days, as the case may be, and actual days elapsed. All other computations of fees and interest shall be made on the basis of a 360-day year and actual days elapsed (which results in more fees or interest, as applicable, being paid than if computed on the basis of a 365-day year), or, in the case of interest in respect of Committed Loans denominated in Alternative Currencies as to which market practice differs from the foregoing, in accordance with such market practice. Interest shall accrue on each Loan for the day on which the Loan is made, and shall not accrue on a Loan, or any portion thereof, for the day on which the Loan or such portion is paid, provided that any Loan that is repaid on the same day on which it is made shall, subject to Section 2.11(a), bear interest for one (1) day. Each determination by the Administrative Agent of an interest rate or fee hereunder shall be conclusive and binding for all purposes, absent manifest error.

(b) If, as a result of any restatement of or other adjustment to the financial statements of the Borrower and its Subsidiaries or for any other reason, the Borrower or the Lenders determine that (i) the Funded Debt Leverage Ratio as calculated by the Borrower as of any applicable date was inaccurate in a material respect and (ii) a proper calculation of the Funded Debt Leverage Ratio would have resulted in higher pricing for such period, the Borrower shall immediately and retroactively be obligated to pay to the Administrative Agent for the account of the applicable Lenders or the L/C Issuer, as the case may be, promptly within ten (10) days of written demand by the Administrative Agent (or, after the occurrence of the entry of an order for relief with respect to the Borrower under the Bankruptcy

Code of the United States, automatically and without further action by the Administrative Agent, any Lender or the L/C Issuer), an amount equal to the excess of the amount of interest and fees that should have been paid for such period over the amount of interest and fees actually paid for such period. This paragraph shall not limit the rights of the Administrative Agent, any Lender or the L/C Issuer, as the case may be, under Section 2.03(c)(iii), 2.03(h) or 2.07(b) or under Article VIII. The Borrower's obligations under this paragraph shall survive the termination of the Aggregate Commitments and the repayment of all other Obligations hereunder.

### **Evidence of Debt**

(a) The Credit Extensions made by each Lender shall be evidenced by one or more accounts or records maintained by such Lender and by the Administrative Agent in the ordinary course of business. The accounts or records maintained by the Administrative Agent and each Lender shall be conclusive absent manifest error of the amount of the Credit Extensions made by the Lenders to the Borrower and the interest and payments thereon. Any failure to so record or any error in doing so shall not, however, limit or otherwise affect the obligation of the Borrower hereunder to pay any amount owing with respect to the Obligations. In the event of any conflict between the accounts and records maintained by any Lender and the accounts and records of the Administrative Agent in respect of such matters, the accounts and records of the Administrative Agent shall control in the absence of manifest error. Upon the request of any Lender made through the Administrative Agent, the Borrower shall execute and deliver to such Lender (through the Administrative Agent) a Note, which shall evidence such Lender's Loans in addition to such accounts or records. Each Lender may attach schedules to its Note and endorse thereon the date, Type (if applicable), amount, currency and maturity of its Loans and payments with respect thereto.

(b) In addition to the accounts and records referred to in subsection (a), each Lender and the Administrative Agent shall maintain in accordance with its usual practice accounts or records evidencing the purchases and sales by such Lender of participations in Letters of Credit. In the event of any conflict between the accounts and records maintained by the Administrative Agent and the accounts and records of any Lender in respect of such matters, the accounts and records of the Administrative Agent shall control in the absence of manifest error.

### **Payments Generally; Administrative Agent's Clawback**

(a) (i) General. All payments to be made by the Borrower shall be made without condition or deduction for any counterclaim, defense, recoupment or setoff. Except as otherwise expressly provided herein and except with respect to principal of and interest on Loans denominated in an Alternative Currency, all payments by the Borrower hereunder shall be made to the Administrative Agent, for the account of the respective Lenders to which such payment is owed, at the applicable Administrative Agent's Office in Dollars and in Same Day Funds not later than 2:00 p.m. on the dates specified herein. Except as otherwise expressly provided herein, all payments by the Borrower hereunder with respect to principal and interest on Loans denominated in an Alternative Currency shall be made to the Administrative Agent, for the account of the respective Lenders to which such payment is owed, at the applicable Administrative Agent's Office in such Alternative Currency and in Same Day Funds not later than the Applicable Time specified by the Administrative Agent on the dates specified herein. Without limiting the generality of the foregoing, the Administrative Agent may require that any payments due under this Agreement be made in the United States. If, for any reason, the Borrower is prohibited by any Law from making any required payment hereunder in an Alternative Currency, the Borrower shall make such payment in Dollars in the Dollar Equivalent of the Alternative Currency payment amount. The Administrative Agent will promptly distribute to each Lender its Applicable Percentage (or other applicable share as provided herein) of such payment in Same Day Funds by wire transfer to such Lender's Lending Office. All payments received by the Administrative Agent (A) after 2:00 p.m., in the case of payments in Dollars, or (B) after the Applicable Time specified by the Administrative Agent in the case of payments in an Alternative Currency, shall in each case be deemed received on the next succeeding Business Day and any applicable interest or fee shall continue to accrue. If any payment to be made by Borrower shall come due on a day other than a Business Day, payment shall be made on the next following Business Day, and such extension of time shall be reflected in computing interest or fees, as the case may be.

(ii) On each date when the payment of any principal, interest or fees are due hereunder or under

any Note, the Borrower agrees to maintain on deposit in an ordinary checking account maintained by the Borrower with the Administrative Agent (hereinafter, as such account shall be designated by the Borrower in a written notice to the Administrative Agent from time to time, referred to as the "Borrower Account") an amount sufficient to pay such principal, interest or fees in full on such date. The Borrower hereby authorizes the Administrative Agent (A) to deduct automatically all principal, interest or fees when due hereunder or under any Note from the Borrower Account, and (B) if and to the extent any payment of principal, interest or fees under this Agreement or any Note is not made when due to deduct any such amount from any or all of the accounts of the Borrower maintained at the Administrative Agent. The Administrative Agent agrees to provide written notice to the Borrower of any automatic deduction made pursuant to this Section 2.11(a)(ii) showing in reasonable detail the amounts of such deduction. Lenders agree to reimburse the Borrower promptly based on their Applicable Percentage for any amounts deducted from such accounts in excess of amount due hereunder and under any other Loan Documents. The Borrower's failure to deposit funds into the Borrower Account as required under the terms of this Agreement in no way relieves the Borrower of its obligation to make any payment due under the terms of this Agreement on such date.

(b) (i) Funding by Lenders; Presumption by Administrative Agent. Unless the Administrative Agent shall have received notice from a Lender prior to the proposed date of any Committed Borrowing of Eurocurrency Rate Loans (or, in the case of any Committed Borrowing of Base Rate Loans, prior to 12:00 noon on the date of such Committed Borrowing) that such Lender will not make available to the Administrative Agent such Lender's share of such Committed Borrowing, the Administrative Agent may assume that such Lender has made such share available on such date in accordance with Section 2.02 (or, in the case of a Committed Borrowing of Base Rate Loans, that such Lender has made such share available in accordance with and at the time required by Section 2.02) and may, in reliance upon such assumption, make available to the Borrower a corresponding amount. In such event, if a Lender has not in fact made its share of the applicable Committed Borrowing available to Administrative Agent, then the applicable Lender and the Borrower severally agree to pay to the Administrative Agent forthwith on demand such corresponding amount in Same Day Funds with interest thereon, for each day from and including the date such amount is made available to the Borrower to but excluding the date of payment to the Administrative Agent, at (A) in the case of a payment to be made by such Lender, the Overnight Rate, plus any administrative, processing or similar fees customarily charged by the Administrative Agent in connection with the foregoing and (B) in the case of a payment to be made by the Borrower, the interest rate applicable to Base Rate Loans. If the Borrower and such Lender shall pay such interest to the Administrative Agent for the same or an overlapping period, the Administrative Agent shall promptly remit to the Borrower the amount of such interest paid by the Borrower for such period. If such Lender pays its share of the applicable Committed Borrowing to the Administrative Agent, then the amount so paid shall constitute such Lender's Committed Loan included in such Committed Borrowing. Any payment by the Borrower shall be without prejudice to any claim the Borrower may have against a Lender that shall have failed to make such payment to the Administrative Agent.

(ii) Payments by Borrower; Presumptions by Administrative Agent. Unless the Administrative Agent shall have received notice from the Borrower prior to the date on which any payment is due to the Administrative Agent for the account of the Lenders or the L/C Issuer hereunder that the Borrower will not make such payment, the Administrative Agent may assume that the Borrower has made such payment on such date in accordance herewith and may, in reliance upon such assumption, distribute to Lenders or the L/C Issuer, as the case may be, the amount due. In such event, if the Borrower has not in fact made such payment, then each of Lenders or the L/C Issuer, as the case may be, severally agrees to repay to the Administrative Agent forthwith on demand the amount so distributed to such Lender or the L/C Issuer, in Same Day Funds with interest thereon, for each day from and including the date such amount is distributed to it to but excluding the date of payment to the Administrative Agent, at the Overnight Rate. A notice of the Administrative Agent to any Lender or the Borrower with respect to any amount owing under this subsection (b) shall be conclusive, absent manifest error.

(c) Failure to Satisfy Conditions Precedent. If any Lender makes available to the Administrative Agent funds for any Loan to be made by such Lender as provided in the foregoing provisions of this Article II, and such funds are not made available to the Borrower by the Administrative Agent because the conditions to the applicable Credit Extension set forth in Article IV are not satisfied or waived in accordance with the terms hereof, the Administrative Agent shall return such funds (in like funds as received from such Lender)

to such Lender, without interest.

(d) Obligations of Lenders Several. The obligations of the Lenders hereunder to make Committed Loans, to fund participations in Letters of Credit and to make payments pursuant to Section 10.04(c) are several and not joint. The failure of any Lender to make any Committed Loan, to fund any such participation or to make any payment under Section 10.04(c) on any date required hereunder shall not relieve any other Lender of its corresponding obligation to do so on such date, and no Lender shall be responsible for the failure of any other Lender to so make its Committed Loan, to purchase its participation or to make its payment under Section 10.04(c).

(e) Funding Source. Nothing herein shall be deemed to obligate any Lender to obtain the funds for any Loan in any particular place or manner or to constitute a representation by any Lender that it has obtained or will obtain the funds for any Loan in any particular place or manner.

**Sharing of Payments by Lenders**

. If any Lender shall, by exercising any right of setoff or counterclaim or otherwise, obtain payment in respect of any principal of or interest on any of the Committed Loans made by it, or the participations in L/C Obligations held by it resulting in such Lender's receiving payment of a proportion of the aggregate amount of such Committed Loans or participations and accrued interest thereon greater than its pro rata share thereof as provided herein, then the Lender receiving such greater proportion shall (a) notify the Administrative Agent of such fact, and (b) purchase (for cash at face value) participations in the Committed Loans and subparticipations in L/C Obligations of the other Lenders, or make such other adjustments as shall be equitable, so that the benefit of all such payments shall be shared by the Lenders ratably in accordance with the aggregate amount of principal of and accrued interest on their respective Committed Loans and other amounts owing them, provided that:

(i) if any such participations or subparticipations are purchased and all or any portion of the payment giving rise thereto is recovered, such participations or subparticipations shall be rescinded and the purchase price restored to the extent of such recovery, without interest; and

(ii) the provisions of this Section 2.12 shall not be construed to apply to (A) any payment made by or on behalf of the Borrower pursuant to and in accordance with the express terms of this Agreement (including the application of funds arising from the existence of a Defaulting Lender), (B) the application of Cash Collateral provided for in Section 2.14, or (C) any payment obtained by a Lender as consideration for the assignment of or sale of a participation in any of its Committed Loans or subparticipations in L/C Obligations to any assignee or participant, other than an assignment to the Borrower or any Subsidiary thereof (as to which the provisions of this Section shall apply).

Each Loan Party consents to the foregoing and agrees, to the extent it may effectively do so under applicable Law, that any Lender acquiring a participation pursuant to the foregoing arrangements may exercise against such Loan Party rights of setoff and counterclaim with respect to such participation as fully as if such Lender were a direct creditor of such Loan Party in the amount of such participation.

**Increase in Commitments.**

(a) Request for Increase. Provided no Default then exists, upon notice to the Administrative Agent (which shall promptly notify the Lenders), the Borrower may from time to time, request an increase in the Aggregate Commitments by an amount (for all such requests) not exceeding an additional \$50,000,000.00; provided that (i) any such request for an increase shall be in a minimum amount of \$5,000,000.00, and (ii) the Borrower may make a maximum of two such requests. At the time of sending such notice, the Borrower (in consultation with the Administrative Agent) shall specify the time period within which each Lender is requested to respond (which shall in no event be less than seven (7) Business Days from the date of delivery of such notice to the Lenders).

(b) Lender Elections to Increase. Each Lender shall notify the Administrative Agent within such time period whether or not it agrees to increase its Commitment and, if so, whether by an amount equal to, greater than, or less than its Applicable Percentage of such requested increase. Any Lender not responding within such time period shall be deemed to have declined to increase its Commitment.

(c) Notification by Administrative Agent; Additional Lenders. The Administrative Agent shall notify the Borrower and each Lender of the Lenders' responses to each request made hereunder. To achieve the full amount of a requested increase, the Borrower may also invite additional Eligible Assignees to become Lenders pursuant to a joinder agreement in form and substance reasonably satisfactory to the Administrative Agent and its counsel.

(d) Effective Date and Allocations. If the Aggregate Commitments are increased in accordance with this Section 2.13, the Administrative Agent and the Borrower shall determine the effective date (hereinafter referred to as the “Increase Effective Date”) and the final allocation of such increase. The Administrative Agent shall promptly notify the Borrower and the Lenders of the final allocation of such increase and the Increase Effective Date.

(e) Conditions to Effectiveness of Increase. As a condition precedent to such increase, (i) the Borrower shall deliver to the Administrative Agent a certificate of each Loan Party dated as of the Increase Effective Date (in sufficient copies for each Lender) signed by a Responsible Officer of such Loan Party (x) certifying and attaching the resolutions adopted by such Loan Party approving or consenting to such increase, and (y) in the case of the Borrower, certifying that, before and after giving effect to such increase, (A) the representations and warranties contained in Article V and the other Loan Documents are true and correct on and as of the Increase Effective Date, except to the extent that such representations and warranties specifically refer to an earlier date, in which case they are true and correct as of such earlier date, and except that for purposes of this Section 2.13, the representations and warranties contained in subsections (a) and (b) of Section 5.05 shall be deemed to refer to the most recent statements furnished pursuant to subsections (a) and (b), respectively, of Section 6.01, and (B) no Default then exists. The Borrower shall prepay any Committed Loans outstanding on the Increase Effective Date (and pay any additional amounts required pursuant to Section 3.05) to the extent necessary to keep the outstanding Committed Loans ratable with any revised Applicable Percentages arising from any nonratable increase in the Commitments under this Section 2.13.

(f) Conflicting Provisions. This Section 2.13 shall supersede any provisions in Section 2.12 or 10.01 to the contrary.

**Cash Collateral.**

(g) Certain Credit Support Events. If (i) the L/C Issuer has honored any full or partial drawing request under any Letter of Credit and such drawing has resulted in an L/C Borrowing, (ii) as of the L/C Expiration Date, any L/C Obligation for any reason remains outstanding, (iii) the Borrower shall be required to provide Cash Collateral pursuant to Section 8.02(c), or (iv) there shall exist a Defaulting Lender, the Borrower shall immediately (in the case of clause (iii) above) or within one (1) Business Day (in all other cases) following any request by the Administrative Agent or the L/C Issuer, provide Cash Collateral in an amount not less than the applicable Minimum Collateral Amount (determined in the case of Cash Collateral provided pursuant to clause (iv) above, after giving effect to Section 2.15(a)(iv) and any Cash Collateral provided by the Defaulting Lender).

(h) Grant of Security Interest. The Borrower, and to the extent provided by any Defaulting Lender, such Defaulting Lender, hereby grants to (and subjects to the control of) the Administrative Agent, for the benefit of the Administrative Agent, the L/C Issuer and the Lenders, and agrees to maintain, a first priority security interest in all such cash, deposit accounts and all balances therein, and all other property so provided as collateral pursuant hereto, and in all proceeds of the foregoing, all as security for the obligations to which such Cash Collateral may be applied pursuant to Section 2.14(c). If at any time the Administrative Agent reasonably determines in good faith that Cash Collateral is subject to any right or claim of any Person other than the Administrative Agent or the L/C Issuer as herein provided, or that the total amount of such Cash Collateral is less than the Minimum Collateral Amount, the Borrower will, promptly upon ten (10) days written demand by the Administrative Agent, pay or provide to the Administrative Agent additional Cash Collateral in an amount sufficient to eliminate such deficiency. All Cash Collateral (other than credit support not constituting funds subject to deposit) shall be maintained in blocked, non-interest bearing deposit accounts at Bank of America. The Borrower shall pay on demand therefor from time to time all customary account opening, activity and other administrative fees and charges in connection with the maintenance and disbursement of Cash Collateral.

(i) Application. Notwithstanding anything to the contrary contained in this Agreement, Cash Collateral provided under any of this Section 2.14 or Sections 2.03, 2.04, 2.05, 2.15 or 8.02 in respect of Letters of Credit shall be held and applied to the satisfaction of the specific L/C Obligations, obligations to fund participations therein (including, as to Cash Collateral provided by a Defaulting Lender, any interest accrued on such obligation) and other obligations for which the Cash Collateral was so provided, prior to any other application of such property as may otherwise be provided for herein.

(j) Release. Cash Collateral (or the appropriate portion thereof) provided to reduce Fronting Exposure or to secure other obligations shall be released promptly following (i) the elimination of the applicable Fronting Exposure or other obligations giving rise thereto (including by the termination of Defaulting Lender status of the applicable Lender (or, as appropriate, its assignee following compliance with Section 10.06(b)(vi))) or (ii) the

determination by the Administrative Agent and the L/C Issuer that there exists excess Cash Collateral; provided, however, (x) any such release shall be without prejudice to, and any disbursement or other transfer of Cash Collateral shall be and remain subject to, any other Lien conferred under the Loan Documents and the other applicable provisions of the Loan Documents, and (y) the Person providing Cash Collateral and the L/C Issuer may agree that Cash Collateral shall not be released but instead held to support future anticipated Fronting Exposure or other obligations.

**Defaulting Lenders.**

(k) Adjustments. Notwithstanding anything to the contrary contained in this Agreement, if any Lender becomes a Defaulting Lender, then, until such time as that Lender is no longer a Defaulting Lender, to the extent permitted by applicable Law:

(i) Waivers and Amendments. Such Defaulting Lender's right to approve or disapprove any amendment, waiver or consent with respect to this Agreement shall be restricted as set forth in the definition of "Required Lenders" and Section 10.01.

(ii) Defaulting Lender Waterfall. Any payment of principal, interest, fees or other amounts received by the Administrative Agent for the account of such Defaulting Lender (whether voluntary or mandatory, at maturity, pursuant to Article VIII or otherwise) or received by the Administrative Agent from a Defaulting Lender pursuant to Section 10.08 shall be applied at such time or times as may be determined by the Administrative Agent as follows: *first*, to the payment of any amounts owing by such Defaulting Lender to the Administrative Agent hereunder; *second*, to the payment on a pro rata basis of any amounts owing by such Defaulting Lender to the L/C Issuer hereunder; *third*, to Cash Collateralize the L/C Issuer's Fronting Exposure with respect to such Defaulting Lender in accordance with Section 2.14; *fourth*, as the Borrower may request (so long as no Default or Event of Default exists), to the funding of any Loan in respect of which such Defaulting Lender has failed to fund its portion thereof as required by this Agreement, as determined by the Administrative Agent; *fifth*, if so determined by the Administrative Agent and the Borrower, to be held in a deposit account and released pro rata in order to (x) satisfy such Defaulting Lender's potential future funding obligations with respect to Loans under this Agreement and (y) Cash Collateralize the L/C Issuer's future Fronting Exposure with respect to such Defaulting Lender with respect to future Letters of Credit issued under this Agreement, in accordance with Section 2.14; *sixth*, to the payment of any amounts owing to the Lenders or the L/C Issuer as a result of any judgment of a court of competent jurisdiction obtained by any Lender or the L/C Issuer against such Defaulting Lender as a result of such Defaulting Lender's breach of its obligations under this Agreement; *seventh*, so long as no Default or Event of Default exists, to the payment of any amounts owing to the Borrower as a result of any judgment of a court of competent jurisdiction obtained by the Borrower against such Defaulting Lender as a result of such Defaulting Lender's breach of its obligations under this Agreement; and *eighth*, to such Defaulting Lender or as otherwise directed by a court of competent jurisdiction; provided that if (x) such payment is a payment of the principal amount of any Committed Loans or L/C Borrowings in respect of which such Defaulting Lender has not fully funded its appropriate share, and (y) such Committed Loans were made or the related Letters of Credit were issued at a time when the conditions set forth in Section 4.02 were satisfied or waived, such payment shall be applied solely to pay the Committed Loans of, and L/C Obligations owed to, all Non-Defaulting Lenders on a pro rata basis prior to being applied to the payment of any Committed Loans of, or L/C Obligations owed to, such Defaulting Lender until such time as all Committed Loans and funded and unfunded participations in L/C Obligations are held by the Lenders pro rata in accordance with the Commitments hereunder without giving effect to Section 2.15(a)(iv). Any payments, prepayments or other amounts paid or payable to a Defaulting Lender that are applied (or held) to pay amounts owed by a Defaulting Lender or to post Cash Collateral pursuant to this Section 2.15(a)(ii) shall be deemed paid to and redirected by such Defaulting Lender, and each Lender irrevocably consents hereto.

(iii) Certain Fees.

(A) No Defaulting Lender shall be entitled to receive any fee payable under Section 2.08(a) for any period during which that Lender is a Defaulting Lender (and the Borrower shall not be required to pay any such fee that otherwise would have been required to have been paid to that Defaulting Lender).

(B) Each Defaulting Lender shall be entitled to receive L/C Fees for any period during which that Lender is a Defaulting Lender only to the extent allocable to its Applicable Percentage of the stated amount of Letters of Credit for which it has provided Cash Collateral pursuant to Section 2.14.

(C) With respect to any fee payable under Section 2.08(a) or any L/C Fees not required to be paid to any Defaulting Lender pursuant to clause (A) or (B) above, the Borrower shall (x) pay to each Non-Defaulting Lender that portion of any such fee otherwise payable to such Defaulting Lender with respect to such Defaulting Lender's participation in L/C Obligations that has been reallocated to such Non-Defaulting Lender pursuant to clause (iv) below, (y) pay to the L/C Issuer the amount of any such fee otherwise payable to such Defaulting Lender to the extent allocable to the L/C Issuer's Fronting Exposure to such Defaulting Lender, and (z) not be required to pay the remaining amount of any such fee.

(iv) Reallocation of Applicable Percentages to Reduce Fronting Exposure. All or any part of such Defaulting Lender's participation in L/C Obligations shall be reallocated among the Non-Defaulting Lenders in accordance with their respective Applicable Percentages (calculated without regard to such Defaulting Lender's Commitment) but only to the extent that (x) the conditions set forth in Section 4.02 are satisfied at the time of such reallocation (and, unless the Borrower shall have otherwise notified the Administrative Agent at such time, the Borrower shall be deemed to have represented and warranted that such conditions are satisfied at such time), and (y) such reallocation does not cause the aggregate Revolving Credit Exposure of any Non-Defaulting Lender to exceed such Non-Defaulting Lender's Commitment. No reallocation hereunder shall constitute a waiver or release of any claim of any party hereunder against a Defaulting Lender arising from that Lender having become a Defaulting Lender, including any claim of a Non-Defaulting Lender as a result of such Non-Defaulting Lender's increased exposure following such reallocation.

(v) Cash Collateral. If the reallocation described in clause (a)(iv) above cannot, or can only partially, be effected, the Borrower shall, without prejudice to any right or remedy available to it hereunder or under applicable Law, Cash Collateralize the L/C Issuers' Fronting Exposure in accordance with the procedures set forth in Section 2.14.

(l) Defaulting Lender Cure. If the Borrower, the Administrative Agent and the L/C Issuer agree in writing that a Lender is no longer a Defaulting Lender, the Administrative Agent will so notify the parties hereto, whereupon as of the effective date specified in such notice and subject to any conditions set forth therein (which may include arrangements with respect to any Cash Collateral), that Lender will, to the extent applicable, purchase at par that portion of outstanding Loans of the other Lenders or take such other actions as the Administrative Agent may determine to be necessary to cause the Committed Loans and funded and unfunded participations in Letters of Credit to be held on a pro rata basis by the Lenders in accordance with their Applicable Percentages (without giving effect to Section 2.15(a)(iv)), whereupon such Lender will cease to be a Defaulting Lender; provided that no adjustments will be made retroactively with respect to fees accrued or payments made by or on behalf of the Borrower while that Lender was a Defaulting Lender; and provided, further, that except to the extent otherwise expressly agreed by the affected parties, no change hereunder from Defaulting Lender to Lender will constitute a waiver or release of any claim of any party hereunder arising from that Lender's having been a Defaulting Lender.

Proposed LIBOR Amendment. Notwithstanding anything to the contrary in this Agreement or any other Loan Documents, if the Administrative Agent determines (which determination shall be conclusive absent manifest error), or the Borrower or Required Lenders notify the Administrative Agent (with, in the case of the Required Lenders, a copy to Borrower) that the Borrower or Required Lenders (as applicable) have determined, that:

- (a) adequate and reasonable means do not exist for ascertaining LIBOR for any requested Interest Period, including, without limitation, because the LIBOR Screen Rate is not available or published on a current basis and such circumstances are unlikely to be temporary; or
- (b) the administrator of the LIBOR Screen Rate or a Governmental Authority having jurisdiction over the Administrative Agent has made a public statement identifying a specific date after which LIBOR or the LIBOR Screen Rate shall no longer be made available, or used for determining the interest rate of loans (such specific date, the "Scheduled Unavailability Date"); or
- (c) syndicated loans currently being executed, or that include language similar to that contained in this Section, are being executed or amended (as applicable) to incorporate or adopt a new benchmark interest rate to replace LIBOR,

then, reasonably promptly after such determination by the Administrative Agent or receipt by the Administrative Agent of such notice, as applicable, the Administrative Agent and the Borrower may amend this Agreement to replace LIBOR with an alternate benchmark rate (including any mathematical or other adjustments to the benchmark (if any) incorporated therein), giving due consideration to any evolving or then existing convention for similar U.S. dollar denominated syndicated credit facilities for such alternative benchmarks (any such proposed rate, a "LIBOR Successor Rate"), together with any proposed LIBOR Successor Rate Conforming Changes and any such amendment shall become effective at 5:00 p.m. (New York time) on the fifth (5<sup>th</sup>) Business Day after the Administrative Agent shall have posted such proposed amendment to all Lenders and the Borrower unless, prior to such time, Lenders comprising the Required Lenders have delivered to the Administrative Agent written notice that such Required Lenders do not accept such amendment. If no LIBOR Successor Rate has been determined and the circumstances under clause (a) above exist or the Scheduled Unavailability Date has occurred (as applicable), the Administrative Agent will promptly so notify the Borrower and each Lender. Thereafter, (i) the obligation of the Lenders to make or maintain Eurocurrency Rate Loans shall be suspended, (to the extent of the affected Eurocurrency Rate Loans or Interest Periods), and (ii) the Eurocurrency Rate component shall no longer be utilized in determining the Base Rate. Upon receipt of such notice, the Borrower may revoke any pending request for a Borrowing of, conversion to or continuation of Eurocurrency Rate Loans (to the extent of the affected Eurocurrency Rate Loans or Interest Periods) or, failing that, will be deemed to have converted such request into a request for a Borrowing of Base Rate Loans (subject to the foregoing clause (ii)) in the amount specified therein. Notwithstanding anything else herein, any definition of LIBOR Successor Rate shall provide that in no event shall such LIBOR Successor Rate be less than zero for purposes of this Agreement.

ARTICLE V.

ARTICLE VI.

**TAXES, YIELD PROTECTION AND ILLEGALITY**

**Taxes**

(a) Payments Free of Taxes; Obligation to Withhold; Payments on Account of Taxes.

(i) Any and all payments by or on account of any obligation of any Loan Party under any Loan Document shall be made without deduction or withholding for any Taxes, except as required by applicable Laws. If any applicable Laws (as determined in the good faith discretion of the Administrative Agent) require the deduction or withholding of any Tax from any such payment by the Administrative Agent or a Loan Party, then the Administrative Agent or such Loan Party shall be entitled to make such deduction or withholding, upon the basis of the information and documentation to be delivered pursuant to subsection (e) below.

(ii) If any Loan Party or the Administrative Agent shall be required by the Code to withhold or deduct any Taxes, including both United States Federal backup withholding and withholding taxes, from any payment, then (A) the Administrative Agent shall withhold or make such deductions as are determined by the Administrative Agent to be required based upon the information and documentation it has received pursuant to subsection (e) below, (B) the Administrative Agent shall timely pay the full amount withheld or deducted to the relevant Governmental Authority in accordance with the Code, and (C) to the extent that the withholding or deduction is made on account of Indemnified Taxes, the sum payable by the applicable Loan Party shall be increased as necessary so that after any required withholding or the making of all required deductions (including deductions applicable to additional sums payable under this Section 3.01) the applicable Recipient receives an amount equal to the sum it would have received had no such withholding or deduction been made.

(iii) If any Loan Party or the Administrative Agent shall be required by any applicable Laws other than the Code to withhold or deduct any Taxes from any payment, then (A) such Loan Party or the Administrative Agent, as required by such Laws, shall withhold or make such deductions as are determined by it to be required based upon the information and documentation it has received pursuant to subsection (e) below, (B) such Loan Party or the Administrative Agent, to the extent required by such Laws, shall timely pay the full amount withheld or deducted to the relevant Governmental Authority in accordance with such Laws, and (C) to the extent that the withholding or deduction is made on account of Indemnified Taxes, the sum payable by the applicable Loan Party shall be increased as necessary so that after any required withholding or the making of all required deductions (including deductions applicable to additional sums payable under this Section 3.01) the applicable Recipient receives an amount equal to the sum it would have received had no such withholding or deduction been made

(b) Payment of Other Taxes by the Borrower. Without limiting the provisions of subsection (a) above,

the Borrower shall timely pay to the relevant Governmental Authority in accordance with applicable law, or at the option of the Administrative Agent timely reimburse it for the payment of, any Other Taxes.

(c) Tax Indemnifications. (i) Each of the Loan Parties shall, and does hereby, jointly and severally indemnify each Recipient, and shall make payment in respect thereof within 10 days after written demand therefor, for the full amount of any Indemnified Taxes (including Indemnified Taxes imposed or asserted on or attributable to amounts payable under this Section 3.01) payable or paid by such Recipient or required to be withheld or deducted from a payment to such Recipient, and any penalties, interest and reasonable expenses arising therefrom or with respect thereto, whether or not such Indemnified Taxes were correctly or legally imposed or asserted by the relevant Governmental Authority. A certificate as to the amount of such payment or liability delivered to the Borrower by a Lender or the L/C Issuer (with a copy to the Administrative Agent), or by the Administrative Agent on its own behalf or on behalf of a Lender or the L/C Issuer, shall be conclusive absent manifest error. The Borrower shall, and do hereby, jointly and severally indemnify the Administrative Agent, and shall make payment in respect thereof within 15 days after written demand therefor, for any amount which a Lender or the L/C Issuer for any reason fails to pay indefeasibly to the Administrative Agent as required pursuant to Section 3.01(c)(ii) below.

(i) Each Lender and the L/C Issuer shall, and does hereby, severally (and not jointly) indemnify, and shall make payment in respect thereof within 10 days after written demand therefor, (x) the Administrative Agent against any Indemnified Taxes attributable to such Lender or the L/C Issuer (but only to the extent that any Loan Party has not already indemnified the Administrative Agent for such Indemnified Taxes and without limiting the obligation of such Loan Party to do so), (y) the Administrative Agent and the Loan Parties, as applicable, against any Taxes attributable to such Lender's failure to comply with the provisions of Section 10.06(d) relating to the maintenance of a Participant Register and (z) the Administrative Agent and the Loan Parties, as applicable, against any Excluded Taxes attributable to such Lender or the L/C Issuer, in each case, that are payable or paid by the Administrative Agent or the Loan Parties in connection with any Loan Document, and any reasonable expenses arising therefrom or with respect thereto, whether or not such Taxes were correctly or legally imposed or asserted by the relevant Governmental Authority. A certificate as to the amount of such payment or liability delivered to any Lender by the Administrative Agent shall be conclusive absent manifest error. Each Lender and the L/C Issuer hereby authorizes the Administrative Agent to set off and apply any and all amounts at any time owing to such Lender or the L/C Issuer, as the case may be, under this Agreement or any other Loan Document against any amount due to the Administrative Agent under this clause (ii).

(d) Evidence of Payments. Upon request by the Borrower or the Administrative Agent, as the case may be, after any payment of Taxes by the Borrower or by the Administrative Agent to a Governmental Authority as provided in this Section 3.01, the Borrower shall deliver to the Administrative Agent or the Administrative Agent shall deliver to the Borrower, as the case may be, the original or a certified copy of a receipt issued by such Governmental Authority evidencing such payment, a copy of any return required by Laws to report such payment or other evidence of such payment reasonably satisfactory to the Borrower or the Administrative Agent, as the case may be.

(e) Status of Lenders; Tax Documentation.

(i) Any Lender that is entitled to an exemption from or reduction of withholding Tax with respect to payments made under any Loan Document shall deliver to the Borrower and the Administrative Agent, at the time or times reasonably requested by the Borrower or the Administrative Agent, such properly completed and executed documentation reasonably requested by the Borrower or the Administrative Agent as will permit such payments to be made without withholding or at a reduced rate of withholding. In addition, any Lender, if reasonably requested by the Borrower or the Administrative Agent, shall deliver such other documentation prescribed by applicable law or reasonably requested by the Borrower or the Administrative Agent as will enable the Borrower or the Administrative Agent to determine whether or not such Lender is subject to backup withholding or information reporting requirements. Notwithstanding anything to the contrary in the preceding two sentences, the completion, execution and submission of such documentation (other than such documentation set forth in Section 3.01(e)(ii)(A), (ii)(B) and (ii)(D) below) shall not be required if in the Lender's reasonable judgment such completion, execution or submission would subject such Lender to any material unreimbursed cost or expense or would materially prejudice the legal or commercial position of such Lender.

(ii) Without limiting the generality of the foregoing, in the event that the Borrower is a U.S. Person,

(A) any Lender that is a U.S. Person shall deliver to the Borrower and the Administrative Agent on or prior to the date on which such Lender becomes a Lender under this Agreement (and from time to time

thereafter upon the reasonable request of the Borrower or the Administrative Agent), executed copies of IRS Form W-9 certifying that such Lender is exempt from U.S. federal backup withholding tax;

(B) any Foreign Lender shall, to the extent it is legally entitled to do so, deliver to the Borrower and the Administrative Agent (in such number of copies as shall be requested by the recipient) on or prior to the date on which such Foreign Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of the Borrower or the Administrative Agent), whichever of the following is applicable:

- I. in the case of a Foreign Lender claiming the benefits of an income tax treaty to which the United States is a party (x) with respect to payments of interest under any Loan Document, executed copies of IRS Form W-8BEN-E (or W-8BEN, as applicable) establishing an exemption from, or reduction of, U.S. federal withholding Tax pursuant to the “interest” article of such tax treaty and (y) with respect to any other applicable payments under any Loan Document, IRS Form W-8BEN-E (or W-8BEN, as applicable) establishing an exemption from, or reduction of, U.S. federal withholding Tax pursuant to the “business profits” or “other income” article of such tax treaty;
- II. executed copies of IRS Form W-8ECI;
- III. in the case of a Foreign Lender claiming the benefits of the exemption for portfolio interest under Section 881(c) of the Code, (x) a certificate substantially in the form of Exhibit “E-1” to the effect that such Foreign Lender is not a “bank” within the meaning of Section 881(c)(3)(A) of the Code, a “10 percent shareholder” of the Borrower within the meaning of Section 881(c)(3)(B) of the Code, or a “controlled foreign corporation” described in Section 881(c)(3)(C) of the Code (a “U.S. Tax Compliance Certificate”) and (y) executed copies of IRS Form W-8BEN-E (or W-8BEN, as applicable); or
- IV. to the extent a Foreign Lender is not the beneficial owner, executed copies of IRS Form W-8IMY, accompanied by IRS Form W-8ECI, IRS Form W-8BEN-E (or W-8BEN, as applicable), a U.S. Tax Compliance Certificate substantially in the form of Exhibit “E-2” or Exhibit “E-3”, IRS Form W-9, and/or other certification documents from each beneficial owner, as applicable; provided that if the Foreign Lender is a partnership and one or more direct or indirect partners of such Foreign Lender are claiming the portfolio interest exemption, such Foreign Lender may provide a U.S. Tax Compliance Certificate substantially in the form of Exhibit “E-4” on behalf of each such direct and indirect partner;

(C) any Foreign Lender shall, to the extent it is legally entitled to do so, deliver to the Borrower and the Administrative Agent (in such number of copies as shall be requested by the recipient) on or prior to the date on which such Foreign Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of the Borrower or the Administrative Agent), executed copies (or originals, as required) of any other form prescribed by applicable Law as a basis for claiming exemption from or a reduction in U.S. federal withholding Tax, duly completed, together with such supplementary documentation as may be prescribed by applicable Law to permit the Borrower or the Administrative Agent to determine the withholding or deduction required to be made; and

(D) if a payment made to a Lender under any Loan Document would be subject to U.S. federal withholding Tax imposed by FATCA if such Lender were to fail to comply with the applicable reporting requirements of FATCA (including those contained in Section 1471(b) or 1472(b) of the Code, as applicable), such Lender shall deliver to the Borrower and the Administrative Agent at the time or times prescribed by Law and at such time or times reasonably requested by the Borrower or the Administrative Agent such documentation prescribed by applicable law (including as prescribed by Section 1471(b)(3)(C)(i) of the Code) and such additional documentation reasonably requested by the Borrower or the Administrative Agent as may be necessary for the Borrower and the Administrative Agent to comply with their obligations under FATCA and to determine that such Lender has complied with such Lender’s obligations under FATCA or to determine the amount to deduct and withhold from such payment. Solely for purposes of this clause (D), “FATCA” shall include any amendments made to FATCA after the date of this Agreement.

(iii) Each Lender agrees that if any form or certification it previously delivered pursuant to this Section 3.01 expires or becomes obsolete or inaccurate in any respect, it shall update such form or certification or promptly notify the Borrower and the Administrative Agent in writing of its legal inability to do so.

(f) Treatment of Certain Refunds. Unless required by applicable Laws, at no time shall the Administrative Agent have any obligation to file for or otherwise pursue on behalf of a Lender or the L/C Issuer, or have any obligation to pay to any Lender or the L/C Issuer, any refund of Taxes withheld or deducted from funds paid for the account of such Lender or the L/C Issuer, as the case may be. If any Recipient determines, in its sole discretion exercised in good faith, that it has received a refund of any Taxes as to which it has been indemnified by any Loan Party or with respect to which any Loan Party has paid additional amounts pursuant to this Section 3.01, it shall pay to the Loan Parties an amount equal to such refund (but only to the extent of indemnity payments made, or additional amounts paid, by the Loan Parties under this Section 3.01 with respect to the Taxes giving rise to such refund), net of all out-of-pocket expenses (including Taxes) incurred by such Recipient, and without interest (other than any interest paid by the relevant Governmental Authority with respect to such refund), provided that such Loan Party, upon the request of the Recipient, agrees to repay the amount paid over to such Loan Party (plus any penalties, interest or other charges imposed by the relevant Governmental Authority) to the Recipient in the event the Recipient is required to repay such refund to such Governmental Authority. Notwithstanding anything to the contrary in this subsection, in no event will the applicable Recipient be required to pay any amount to any Loan Party pursuant to this subsection the payment of which would place the Recipient in a less favorable net after-Tax position than such Recipient would have been in if the Tax subject to indemnification and giving rise to such refund had not been deducted, withheld or otherwise imposed and the indemnification payments or additional amounts with respect to such Tax had never been paid. This subsection shall not be construed to require any Recipient to make available its tax returns (or any other information relating to its taxes that it deems confidential) to any Loan Party or any other Person.

(g) Survival. Each party's obligations under this Section 3.01 shall survive the resignation or replacement of the Administrative Agent or any assignment of rights by, or the replacement of, a Lender or the L/C Issuer, the termination of the Commitments and the repayment, satisfaction or discharge of all other Obligations.

**Illegality**

. If any Lender determines that any Law has made it unlawful, or that any Governmental Authority has asserted that it is unlawful, for any Lender or its applicable Lending Office to perform any of its obligations hereunder or to make, maintain or fund, or charge interest with respect to any Credit Extension or to determine or charge interest rates based upon the Eurocurrency Rate, or any Governmental Authority has imposed material restrictions on the authority of such Lender to purchase or sell, or to take deposits of, Dollars or any Alternative Currency in the applicable interbank market, then, on notice thereof by such Lender to the Borrower through the Administrative Agent, (i) any obligation of such Lender to issue, make, maintain, fund or charge interest with respect to any such Credit Extension or continue Eurocurrency Rate Loans in the affected currency or currencies or, in the case of Eurocurrency Rate Loans in Dollars, to convert Base Rate Loans to Eurocurrency Rate Loans shall be suspended, and (ii) if such notice asserts the illegality of such Lender making or maintaining Base Rate Loans the interest rate on which is determined by reference to the Eurocurrency Rate component of the Base Rate, the interest rate on which Base Rate Loans of such Lender shall, if necessary to avoid such illegality, be determined by the Administrative Agent without reference to the Eurocurrency Rate component of the Base Rate, in each case until such Lender notifies Administrative Agent and Borrower that the circumstances giving rise to such determination no longer exist. Upon receipt of such notice, (x) the Borrower shall, upon demand from such Lender (with a copy to Administrative Agent), prepay or, if applicable, and such Loans are denominated in Dollars, convert such Eurocurrency Rate Loans of such Lender to Base Rate Loans (the interest rate on which Base Rate Loans of such Lender shall, if necessary to avoid such illegality, be determined by the Administrative Agent without reference to the Eurocurrency Rate component of the Base Rate), either on the last day of the Interest Period therefor, if such Lender may lawfully continue to maintain such Eurocurrency Rate Loans to such day, or immediately, if such Lender may not lawfully continue to maintain such Eurocurrency Rate Loans and (y) if such notice asserts the illegality of such Lender determining or charging interest rates based upon the Eurocurrency Rate, the Administrative Agent shall during the period of such suspension compute the Base Rate applicable to such Lender without reference to the Eurocurrency Rate component thereof until the Administrative Agent is advised in writing by such Lender that it is no longer illegal for such Lender to determine or charge interest rates based upon the Eurocurrency Rate. Notwithstanding the foregoing to the contrary and despite the illegality for such a Lender to make, maintain or fund Eurocurrency Rate Loans, that Lender shall remain committed to make Base Rate Loans and shall be entitled to

recover interest thereon at the Base Rate. Upon any such prepayment or conversion, Borrower shall also pay accrued interest on the amount so prepaid or converted.

#### **Inability to Determine Rates**

. If the Required Lenders determine that for any reason in connection with any request for a Eurocurrency Rate Loan or a conversion to or continuation thereof that (a) deposits (whether in Dollars or an Alternative Currency) are not being offered to banks in the applicable offshore interbank market for such currency for the applicable amount and Interest Period of such Eurocurrency Rate Loan, (b) adequate and reasonable means do not exist for determining the Eurocurrency Rate for any requested Interest Period with respect to a proposed Eurocurrency Rate Loan (whether in Dollars or an Alternative Currency) or in connection with an existing or proposed Base Rate Loan, or (c) the Eurocurrency Rate for any requested Interest Period with respect to a proposed Eurocurrency Rate Loan does not adequately and fairly reflect the cost to such Lenders of funding such Loan, the Administrative Agent will promptly so notify the Borrower and each Lender. Thereafter, (i) the obligation of the Lenders to make or maintain Eurocurrency Rate Loans in the affected currency or currencies shall be suspended, and (ii) in the event of a determination described in the preceding sentence with respect to the Eurocurrency Rate component of the Base Rate, the utilization of the Eurocurrency Rate component in determining the Base Rate shall be suspended, in each case until the Administrative Agent (upon the instruction of the Required Lenders) revokes such notice. Upon receipt of such notice, the Borrower may revoke any pending request for a Borrowing of, conversion to or continuation of Eurocurrency Rate Loans in the affected currency or currencies or, failing that, will be deemed to have converted such request into a request for a Borrowing of Base Rate Loans in the amount specified therein.

#### **Increased Costs; Reserves on Eurodollar Rate Loans**

(a) **Increased Costs Generally.** If any Change in Law shall:

(i) impose, modify or deem applicable any reserve, special deposit, compulsory loan, insurance charge or similar requirement against assets of, deposits with or for the account of, or credit extended or participated in by, any Lender (except any reserve requirement reflected in the Eurocurrency Rate) or the L/C Issuer;

(ii) subject any Recipient to any Taxes (other than (A) Indemnified Taxes, (B) Taxes described in clauses (b) through (d) of the definition of Excluded Taxes and (C) Connection Income Taxes) on its loans, loan principal, letters of credit, commitments, or other obligations, or its deposits, reserves, other liabilities or capital attributable thereto; or

(iii) impose on any Lender or the L/C Issuer or the London interbank market any other condition, cost or expense affecting this Agreement or Eurocurrency Rate Loans made by such Lender or any Letter of Credit or participation therein;

and the result of any of the foregoing shall be to increase the cost to such Lender of making, converting to, continuing or maintaining any Loan the interest on which is determined by reference to the Eurocurrency Rate (or of maintaining its obligation to make any such Loan), or to increase the cost to such Lender or the L/C Issuer of participating in, issuing or maintaining any Letter of Credit (or of maintaining its obligation to participate in or to issue any Letter of Credit), or to reduce the amount of any sum received or receivable by such Lender or the L/C Issuer hereunder (whether of principal, interest or any other amount) then, upon request of such Lender or the L/C Issuer, Borrower will pay to such Lender or the L/C Issuer, as the case may be, such additional amount or amounts as will compensate such Lender or the L/C Issuer, as the case may be, for such additional costs incurred or reduction suffered.

(b) **Capital Requirements.** If any Lender or the L/C Issuer determines that any Change in Law affecting such Lender or the L/C Issuer or any Lending Office of such Lender or such Lender's or the L/C Issuer's holding company, if any, regarding capital or liquidity requirements has or would have the effect of reducing the rate of return on such Lender's or the L/C Issuer's capital or on the capital of such Lender's or the L/C Issuer's holding company, if any, as a consequence of this Agreement, the Commitments of such Lender or the Loans made by, or participations in Letters of Credit held by, such Lender, or the Letters of Credit issued by the L/C Issuer, to a level below that which such Lender or the L/C Issuer or such Lender's or the L/C Issuer's holding company could have achieved but for such Change in Law (taking into consideration such Lender's or the L/C Issuer's policies and the policies of such Lender's or the L/C Issuer's holding company with respect to capital adequacy), then from time to time Borrower will pay to such Lender or the L/C Issuer,

as the case may be, such additional amount or amounts as will compensate such Lender or the L/C Issuer or such Lender's or the L/C Issuer's holding company for any such reduction suffered.

(c) **Certificates for Reimbursement.** A certificate of a Lender or the L/C Issuer setting forth the amount or amounts necessary to compensate such Lender or the L/C Issuer or its holding company, as the case may be, as specified in subsection (a) or (b) of this Section 3.04 and delivered to Borrower shall be conclusive absent manifest error. Borrower shall pay such Lender or the L/C Issuer, as the case may be, the amount shown as due on any such certificate within ten (10) days after receipt thereof.

(d) **Delay in Requests.** Failure or delay on the part of any Lender or the L/C Issuer to demand compensation pursuant to the foregoing provisions of this Section 3.04 shall not constitute a waiver of such Lender's or the L/C Issuer's right to demand such compensation, provided that Borrower shall not be required to compensate a Lender or the L/C Issuer pursuant to the foregoing provisions of this Section 3.04 for any increased costs incurred or reductions suffered more than nine (9) months prior to the date that such Lender or the L/C Issuer, as the case may be, notifies Borrower of the Change in Law giving rise to such increased costs or reductions and of such Lender's or the L/C Issuer's intention to claim compensation therefor (except that, if the Change in Law giving rise to such increased costs or reductions is retroactive, then the nine (9) month period referred to above shall be extended to include the period of retroactive effect thereof).

**Compensation for Losses**

Upon demand of any Lender (with a copy to Administrative Agent) from time to time, Borrower shall promptly compensate such Lender for and hold such Lender harmless from any loss, cost or expense incurred by it as a result of:

- (a) any continuation, conversion, payment or prepayment of any Loan other than a Base Rate Loan on a day other than the last day of the Interest Period for such Loan (whether voluntary, mandatory, automatic, by reason of acceleration, or otherwise); or
- (b) any failure by Borrower (for a reason other than the failure of such Lender to make a Loan) to prepay, borrow, continue or convert any Loan other than a Base Rate Loan on the date or in the amount notified by Borrower; or
- (c) any failure by any Borrower to make payment of any Loan or drawing under any Letter of Credit (or interest due thereon) denominated in an Alternative Currency on its scheduled due date or any payment thereof in a different currency; or
- (d) any assignment of a Eurocurrency Rate Loan on a day other than the last day of the Interest Period therefor as a result of a request by the Borrower pursuant to Section 10.13,

including any loss of anticipated profits, any foreign exchange losses and any loss or expense arising from the liquidation or reemployment of funds obtained by it to maintain such Loan or from fees payable to terminate the deposits from which such funds were obtained or from the performance of any foreign exchange contract. The Borrower shall also pay any customary administrative fees charged by such Lender in connection with the foregoing. For purposes of calculating amounts payable by Borrower to Lenders under this Section 3.05, each Lender shall be deemed to have funded each Eurocurrency Rate Loan made by it at the Eurocurrency Rate for such Loan by a matching deposit or other borrowing in the applicable offshore interbank market for such currency for a comparable amount and for a comparable period, whether or not such Eurocurrency Rate Loan was in fact so funded.

**Mitigation Obligations; Replacement of Lenders**

(m) **Designation of a Different Lending Office.** If any Lender requests compensation under Section 3.04, or requires the Borrower to pay any Indemnified Taxes or additional amounts to any Lender, the L/C Issuer, or any Governmental Authority for the account of any Lender or the L/C Issuer pursuant to Section 3.01, or if any Lender gives a notice pursuant to Section 3.02, then at the request of the Borrower such Lender or the L/C Issuer shall, as applicable, use reasonable efforts to designate a different Lending Office for funding or booking its Loans hereunder or to assign its rights and obligations hereunder to another of its offices, branches or affiliates, if, in the judgment of such Lender or the L/C Issuer, such designation or assignment (i) would eliminate or reduce amounts payable pursuant to Section 3.01 or 3.04, as the case may be, in the future, or eliminate the need for the notice pursuant to Section 3.02, as applicable, and (ii) in each case, would not subject such Lender or the L/C Issuer, as the case may be, to any unreimbursed cost or expense and would not

otherwise be disadvantageous to such Lender or the L/C Issuer, as the case may be. The Borrower hereby agrees to pay all reasonable costs and expenses incurred by any Lender or the L/C Issuer in connection with any such designation or assignment.

(n) **Replacement of Lenders.** If any Lender requests compensation under Section 3.04, or if the Borrower is required to pay any Indemnified Taxes or additional amounts to any Lender or any Governmental Authority for the account of any Lender pursuant to Section 3.01 and, in each case, such Lender has declined or is unable to designate a different lending office in accordance with Section 3.06(a), the Borrower may replace such Lender in accordance with Section 10.13.

**Survival**

. All of the Borrower's obligations under this Article III shall survive termination of the Aggregate Commitments, repayment of all other Obligations hereunder, resignation of the Administrative Agent, and the Maturity Date.

ARTICLE VII.

ARTICLE VIII.

**CONDITIONS PRECEDENT TO CREDIT EXTENSIONS**

**Conditions of Initial Credit Extension**

. The obligation of the L/C Issuer and each Lender to make its initial Credit Extension hereunder is subject to satisfaction of the following conditions precedent:

(a) Administrative Agent's receipt of the following, each of which shall be originals, telecopies (followed promptly by originals), or pdfs sent by electronic mail (followed promptly by originals) unless otherwise specified, each properly executed by a Responsible Officer of the signing Loan Party, each dated the Closing Date (or, in the case of certificates of governmental officials, a recent date before the Closing Date) and each in form and substance satisfactory to Administrative Agent and each of the Lenders:

(i) executed counterparts of this Agreement, all Collateral Documents and the Guaranty sufficient in number for distribution to Administrative Agent, each Lender and Borrower;

(ii) Notes executed by Borrower in favor of each Lender requesting a Note;

(iii) such certificates of resolutions or other action, incumbency certificates and/or other certificates of Responsible Officers of each Loan Party as Administrative Agent may reasonably require evidencing the identity, authority and capacity of each Responsible Officer thereof authorized to act as a Responsible Officer in connection with this Agreement and the other Loan Documents to which such Loan Party is a party;

(iv) such documents and certifications as Administrative Agent may reasonably require to evidence that each Loan Party is duly organized or formed, and that each Loan Party is validly existing, in good standing and qualified to engage in business in each jurisdiction where its ownership, lease or operation of properties or the conduct of its business requires such qualification, except to the extent that failure to do so could not reasonably be expected to have a Material Adverse Effect;

(v) a favorable opinion of counsel to the Loan Parties acceptable to Administrative Agent addressed to Administrative Agent and each Lender, as to the matters set forth concerning the Loan Parties and the Loan Documents in form and substance acceptable to Administrative Agent;

(vi) a certificate of a Responsible Officer of each Loan Party either (A) attaching copies of all consents, licenses and approvals required in connection with the execution, delivery and performance by such Loan Party and the validity against such Loan Party of the Loan Documents to which it is a party, and such consents, licenses and approvals shall be in full force and effect, or (B) stating that no such consents, licenses or approvals are so required;

(vii) evidence that all insurance required to be maintained pursuant to the Loan Documents has been obtained and is in effect;

(viii) a duly completed Compliance Certificate as of the last day of the fiscal quarter of Borrower most recently ended prior to the Closing Date, signed by a Responsible Officer of Borrower; and

(ix) such other assurances, certificates, documents, consents or opinions as Administrative Agent, the L/C Issuer or the Required Lenders reasonably may require.

(b) Any fees required to be paid on or before the Closing Date shall have been paid.

(c) Unless waived by Administrative Agent, Borrower shall have paid the reasonable fees, charges and disbursements of counsel to Administrative Agent (directly to such counsel if requested by Administrative Agent) to the extent invoiced prior to or on the Closing Date and permitted by the terms of this Agreement and/or the other Loan

Documents, plus such additional amounts of such fees, charges and disbursements as shall constitute its reasonable estimate of such fees, charges and disbursements incurred or to be incurred by it through the closing proceedings (provided that such estimate shall not thereafter preclude a final settling of accounts between Borrower and Administrative Agent).

Without limiting the generality of the provisions of Section 9.04, for purposes of determining compliance with the conditions specified in this Section 4.01, each Lender that has signed this Agreement shall be deemed to have consented to, approved or accepted or to be satisfied with, each document or other matter required thereunder to be consented to or approved by or acceptable or satisfactory to a Lender unless Administrative Agent shall have received notice from such Lender prior to the proposed Closing Date specifying its objection thereto.

#### **Conditions to all Credit Extensions**

. The obligation of each Lender to honor any Request for Credit Extension (other than a Committed Loan Notice requesting only a conversion of Committed Loans to the other Type, or a continuation of Eurocurrency Rate Loans) is subject to the following conditions precedent:

(a) The representations and warranties of Borrower and each other Loan Party contained in Article V (other than those set forth and contained in Section 5.05(c)) or any other Loan Document, or which are contained in any document furnished at any time under or in connection herewith or therewith, shall be true and correct on and as of the date of such Credit Extension, except to the extent that such representations and warranties specifically refer to an earlier date, in which case they shall be true and correct as of such earlier date, and except that for purposes of this Section 4.02, the representations and warranties contained in subsections (a) and (b) of Section 5.05 shall be deemed to refer to the most recent statements furnished pursuant to clauses (a) and (b), respectively, of Section 6.01.

(b) No Default shall exist, or would result from such proposed Credit Extension or from the application of the proceeds thereof.

(c) Administrative Agent and, if applicable, the L/C Issuer shall have received a Request for Credit Extension in accordance with the requirements hereof.

(d) Administrative Agent shall have received, in form and substance satisfactory to it, such other assurances, certificates, documents or consents related to the foregoing as Administrative Agent or the Required Lenders reasonably may require.

(e) In the case of a Credit Extension to be denominated in an Alternative Currency, there shall not have occurred any change in national or international financial, political or economic conditions or currency exchange rates or exchange controls which in the reasonable good faith opinion of the Administrative Agent, the Required Lenders (in the case of any Loans to be denominated in an Alternative Currency) or the L/C Issuer (in the case of any Letter of Credit to be denominated in an Alternative Currency) would make it impracticable for such Credit Extension to be denominated in the relevant Alternative Currency.

Each Request for Credit Extension (other than a Committed Loan Notice requesting only a conversion of Committed Loans to the other Type, or a continuation of Eurocurrency Rate Loans) submitted by Borrower shall be deemed to be a representation and warranty that the conditions specified in Sections 4.02(a) and (b) have been satisfied on and as of the date of the applicable Credit Extension.

ARTICLE IX.

ARTICLE X.

#### **REPRESENTATIONS AND WARRANTIES**

Borrower represents and warrants to Administrative Agent and the Lenders that:

#### **Existence, Qualification and Power**

. Each Loan Party (a) is duly organized or formed, validly existing and, as applicable, in good standing under the Laws of the jurisdiction of its incorporation or organization, (b) has all requisite power and authority and all requisite governmental licenses, authorizations, consents and approvals to (i) own or lease its assets and carry on its business and (ii) execute, deliver and perform its obligations under the Loan Documents to which it is a party, and (c) is duly qualified and is licensed and, as applicable, in good standing under the Laws of each jurisdiction where its ownership, lease or operation of properties or the conduct of its business requires such qualification or license; except in each case referred to in clauses (b)(i) or (c) above, to the extent that failure to do so could not reasonably be expected to have a

Material Adverse Effect. The copy of the Organization Documents of each Loan Party provided to the Administrative Agent pursuant to the terms of this Agreement is a true and correct copy of each such document, each of which is valid and in full force and effect.

**Authorization; No Contravention**

The execution, delivery and performance by each Loan Party of each Loan Document to which such Person is party, have been duly authorized by all necessary corporate or other organizational action, and do not and will not (a) contravene the terms of any of such Person's Organization Documents; (b) conflict with or result in any breach or contravention of, or the creation of any Lien under, or require any payment to be made under (i) any Contractual Obligation to which such Person is a party or affecting such Person or the properties of such Person or any of its Subsidiaries or (ii) any order, injunction, writ or decree of any Governmental Authority or any arbitral award to which such Person or its property is subject; or (c) violate any applicable Law except in the case of subsections (b) and (c) where such breach, contravention or payment could not reasonably be expected to have a Material Adverse Effect.

**Governmental Authorization; Other Consents**

No approval, consent, exemption, authorization, or other action by, or notice to, or filing with, any Governmental Authority or any other Person is necessary or required in connection with (a) the execution, delivery or performance by, or enforcement against, any Loan Party of this Agreement or any other Loan Document, (b) the grant by any Loan Party of the Liens granted by it pursuant to the Collateral Documents, (c) the perfection or maintenance of the Liens created under the Collateral Documents (including the first priority nature thereof) or (d) the exercise by the Administrative Agent or any Lender of its rights under the Loan Documents or the remedies in respect of the Collateral pursuant to the Collateral Documents, in any case, other than (i) authorizations, approvals, actions, notices and filings which have been duly obtained and (ii) filings to perfect the Liens created by the Collateral Documents.

**Binding Effect**

This Agreement has been, and each other Loan Document, when delivered hereunder, will have been, duly executed and delivered by each Loan Party that is party thereto. This Agreement constitutes, and each other Loan Document when so delivered will constitute, a legal, valid and binding obligation of such Loan Party, enforceable against each Loan Party that is party thereto in accordance with its terms.

**Financial Statements; No Material Adverse Effect; No Internal Control Event**

(a) (i) The Audited Financial Statements (i) were prepared in accordance with GAAP consistently applied throughout the period covered thereby, except as otherwise expressly noted therein; (ii) fairly present the Consolidated financial condition of Borrower and its Subsidiaries as of the date thereof and their results of operations for the period covered thereby in accordance with GAAP consistently applied throughout the period covered thereby, except as otherwise expressly noted therein; and (iii) show all material indebtedness and other liabilities, direct or contingent, of Borrower and its Consolidated Subsidiaries as of the date thereof, including liabilities for taxes, material commitments and Indebtedness.

(b) The unaudited Consolidated balance sheets of Borrower and its Subsidiaries dated September 30, 2017, and the related Consolidated statements of income or operations, shareholders' equity and cash flows for the fiscal quarter ended on that date (i) were prepared in accordance with GAAP consistently applied throughout the period covered thereby, except as otherwise expressly noted therein, and (ii) fairly present the Consolidated financial condition of Borrower and its Subsidiaries as of the date thereof and their results of operations for the period covered thereby, subject, in the case of clauses (i) and (ii), to the absence of footnotes and to normal year-end audit adjustments.

(c) Since the date of the Audited Financial Statements, there has been no event or circumstance, either individually or in the aggregate, that has had or could reasonably be expected to have a Material Adverse Effect.

(d) To the best knowledge of Borrower, no Internal Control Event exists or has occurred since the date of the Audited Financial Statements that has resulted in or could reasonably be expected to result in a misstatement in any material respect, in any financial information delivered or to be delivered to Administrative Agent or Lenders, of (i) covenant compliance calculations provided hereunder or (ii) the assets, liabilities, financial condition or results of operations of Borrower and its Subsidiaries on a Consolidated basis.

(e) The forecasted balance sheet and statements of income and cash flows of Borrower and its Consolidated

Subsidiaries delivered pursuant to Section 6.01(c) were prepared in good faith on the basis of the assumptions stated therein, which assumptions were fair in light of the conditions existing at the time of delivery of such forecasts, and represented, at the time of delivery, Borrower's best estimate of its future financial condition and performance.

**Litigation**

. There are no actions, suits, proceedings, claims or disputes pending or, to the knowledge of Borrower after due and diligent investigation, threatened or contemplated, at law, in equity, in arbitration or before any Governmental Authority, by or against Borrower or any of its Subsidiaries or against any of their properties or revenues that (a) purport to affect or pertain to this Agreement or any other Loan Document, or any of the transactions contemplated hereby, or (b) except as specifically disclosed in Schedule 5.06, either individually or in the aggregate, if determined adversely, could reasonably be expected to have a Material Adverse Effect, and there has been no adverse change in the status, or financial effect on any Loan Party or any Subsidiary thereof, of the matters described on Schedule 5.06.

**No Default**

. Neither any Loan Party nor any Subsidiary thereof is in default under or with respect to any Contractual Obligation that could, either individually or in the aggregate, reasonably be expected to have a Material Adverse Effect. No Default has occurred and is continuing or would result from the consummation of the transactions contemplated by this Agreement or any other Loan Document.

**Ownership of Property; Liens**

. Each of Borrower and each Subsidiary has good record and marketable title in fee simple to, or valid leasehold interests in, all real property necessary or used in the ordinary conduct of its business, except for such defects in title as could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect. The property of Borrower and its Subsidiaries is subject to no Liens, other than Liens permitted by Section 7.01, including Liens listed on Schedule 7.01.

**Environmental Compliance**

. Borrower and its Subsidiaries conduct in the ordinary course of business a review of the effect of existing Environmental Laws and claims alleging potential liability or responsibility for violation of any Environmental Law on their respective businesses, operations and properties, and as a result thereof Borrower has reasonably concluded that, except as specifically disclosed in Schedule 5.09, such Environmental Laws and claims could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

**Insurance**

. The properties of Borrower and its Subsidiaries are insured with financially sound and reputable insurance companies not Affiliates of Borrower, in such amounts (after giving effect to any self-insurance compatible with the following standards), with such deductibles and covering such risks as Borrower reasonably believes appropriate. All insurance with respect to the Collateral shall (a) contain a breach of warranty clause in favor of the Administrative Agent, (b) provide that no cancellation, reduction in amount or change in coverage thereof shall be effective until at least ten (10) days after receipt by the Administrative Agent of written notice thereof (30 days for nonpayment of premium) and (c) be reasonably satisfactory in all material respects to the Administrative Agent.

**Taxes**

. Borrower and its Subsidiaries have filed all foreign and domestic Federal, state and other material tax returns and reports required to be filed, and have paid all foreign and domestic Federal, state and other material taxes, assessments, fees and other governmental charges levied or imposed upon them or their properties, income or assets otherwise due and payable, except those which are being contested in good faith by appropriate proceedings diligently conducted and for which adequate reserves have been provided in accordance with GAAP. There is no proposed tax assessment against Borrower or any Subsidiary that would, if made, have a Material Adverse Effect, nor is there any tax sharing agreement applicable to Borrower or any Subsidiary.

**ERISA Compliance**

- (a) Each Plan is in compliance with the applicable provisions of ERISA, the Code and other

Federal or state laws except for any failure to comply which, either individually or in the aggregate, could not reasonably be expected to result in a Material Adverse Effect. Each Pension Plan that is intended to be a qualified plan under Section 401(a) of the Code has received a favorable determination letter from the Internal Revenue Service to the effect that the form of such Plan is qualified under Section 401(a) of the Code and the trust related thereto has been determined by the Internal Revenue Service to be exempt from federal income tax under Section 501(a) of the Code, or an application for such a letter is currently being processed by the Internal Revenue Service. To the best knowledge of the Borrower, nothing has occurred that would prevent or cause the loss of such tax-qualified status.

(b) There are no pending or, to the best knowledge of the Borrower, threatened claims, actions or lawsuits, or action by any Governmental Authority, with respect to any Plan that could reasonably be expected to have a Material Adverse Effect. There has been no prohibited transaction or violation of the fiduciary responsibility rules with respect to any Plan that has resulted or could reasonably be expected to result in a Material Adverse Effect.

(c) Except as set forth and described on Schedule 5.12(c) attached hereto and made a part hereof, (i) no ERISA Event has occurred, and neither the Borrower nor any ERISA Affiliate is aware of any fact, event or circumstance that could reasonably be expected to constitute or result in an ERISA Event with respect to any Pension Plan; (ii) the Borrower and each ERISA Affiliate has met all applicable requirements under the Pension Funding Rules in respect of each Pension Plan, and no waiver of the minimum funding standards under the Pension Funding Rules has been applied for or obtained; (iii) as of the most recent valuation date for any Pension Plan, the funding target attainment percentage (as defined in Section 430(d)(2) of the Code) is 60% or higher and neither the Borrower nor any ERISA Affiliate knows of any facts or circumstances that could reasonably be expected to cause the funding target attainment percentage for any such plan to drop below 60% as of the most recent valuation date; (iv) neither the Borrower nor any ERISA Affiliate has incurred any liability to the PBGC other than for the payment of premiums, and there are no premium payments which have become due that are unpaid; (v) neither the Borrower nor any ERISA Affiliate has engaged in a transaction that could be subject to Section 4069 or Section 4212(c) of ERISA; and (vi) no Pension Plan has been terminated by the plan administrator thereof nor by the PBGC, and no event or circumstance has occurred or exists that could reasonably be expected to cause the PBGC to institute proceedings under Title IV of ERISA to terminate any Pension Plan.

(d) Neither the Borrower nor any ERISA Affiliate maintains or contributes to, or has any unsatisfied obligation to contribute to, or liability under, any active or terminated Pension Plan other than (i) on the Closing Date, those listed on Schedule 5.12(d) attached hereto and (ii) thereafter, Pension Plans not otherwise prohibited by this Agreement.

(e) The Borrower is not and will not be using “plan assets” (within the meaning of 29 CFR § 2510.3-101, as modified by Section 3(42) of ERISA) of one or more Benefit Plans in connection with the Loans, the Letters of Credit or the Commitments.

#### **Subsidiaries; Equity Interests**

. As of the Closing Date, Borrower has no Subsidiaries other than those specifically disclosed in Part (a) of Schedule 5.13, and the outstanding Equity Interests in such Subsidiaries have been validly issued, are fully paid and nonassessable and are owned by a Loan Party in the amounts specified on Part (a) of Schedule 5.13 free and clear of all Liens. Borrower has no equity investments in any other corporation or entity other than those specifically disclosed in Part (b) of Schedule 5.13.

#### **Margin Regulations; Investment Company Act; Public Utility Holding Company Act**

(a) Neither Borrower nor any Subsidiary is engaged or will engage, principally or as one of its important activities, in the business of purchasing or carrying margin stock (within the meaning of Regulation U issued by the FRB), or extending credit for the purpose of purchasing or carrying margin stock.

(b) None of Borrower, any Person Controlling Borrower, or any Subsidiary (i) is a “holding company,” or a “subsidiary company” of a “holding company,” or an “affiliate” of a “holding company” or of a “subsidiary company” of a “holding company,” within the meaning of the Public Utility Holding Company Act of 1935, or (ii) is or is required to be registered as an “investment company” under the Investment Company Act of 1940.

#### **Disclosure**

. Borrower has disclosed to Administrative Agent and Lenders all agreements, instruments and corporate or

other restrictions to which it or any of its Subsidiaries is subject, and all other matters known to it, that, individually or in the aggregate, could reasonably be expected to result in a Material Adverse Effect. No report, financial statement, certificate or other information furnished (whether in writing or orally) by or on behalf of any Loan Party to the Administrative Agent or any Lender in connection with the transactions contemplated hereby and the negotiation of this Agreement or delivered hereunder or under any other Loan Document (in each case, as modified or supplemented by other information so furnished) contains any material misstatement of fact or omits to state any material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided that, with respect to projected financial information, the Borrower represents only that such information was prepared in good faith based upon assumptions believed to be reasonable at the time.

#### **Compliance with Laws**

. Each Loan Party and each Subsidiary thereof is in compliance in all material respects with the requirements of all Laws and all orders, writs, injunctions and decrees applicable to it or to its properties, except in such instances in which (a) such requirement of Law or order, writ, injunction or decree is being contested in good faith by appropriate proceedings diligently conducted or (b) the failure to comply therewith, either individually or in the aggregate, could not reasonably be expected to have a Material Adverse Effect.

#### **Taxpayer Identification Number**

. Borrower's true and correct U.S. taxpayer identification number is set forth on Schedule 10.02 attached hereto and made a part hereof.

#### **Intellectual Property; Licenses, Etc**

. Borrower and its Subsidiaries own, or possess the right to use, all of the trademarks, service marks, trade names, copyrights, patents, patent rights, franchises, licenses and other intellectual property rights that are reasonably necessary for the operation of their respective businesses, without conflict with the rights of any other Person. To the best knowledge of Borrower, no slogan or other advertising device, product, process, method, substance, part or other material now employed, or now contemplated to be employed, by Borrower or any Subsidiary infringes upon any rights held by any other Person. No claim or litigation regarding any of the foregoing is pending or, to the best knowledge of Borrower, threatened, which, either individually or in the aggregate, could reasonably be expected to have a Material Adverse Effect.

#### **Rights in Collateral; Priority of Liens**

. Borrower and each other Loan Party own the property granted by it as Collateral under the Collateral Documents, free and clear of any and all Liens in favor of third parties, other than Liens permitted under Section 7.01, including Liens set forth on Schedule 7.01. Upon the proper filing of UCC financing statements and trademark and patent assignments, the Liens granted pursuant to the Collateral Documents will constitute valid and enforceable first, prior and perfected Liens in favor of Administrative Agent, for the ratable benefit of Administrative Agent and Lenders on all collateral on which a lien may be perfected by the filing of such UCC financing statements and trademark and patent assignments, subject only to the Liens set forth on Schedule 7.01.

#### **Sanctions Concerns and Anti-Corruption Laws**

(a) Sanctions Concerns. No Loan Party, nor any Subsidiary, nor, to the knowledge of the Loan Parties and their Subsidiaries, any director, officer, employee, agent, affiliate or representative thereof, is an individual or entity that is, or is owned or controlled by any individual or entity that is (i) currently the subject or target of any Sanctions, (ii) included on OFAC's List of Specially Designated Nationals, HMT's Consolidated List of Financial Sanctions Targets and the Investment Ban List, or any similar list enforced by any other relevant sanctions authority or (iii) located, organized or resident in a Designated Jurisdiction.

(b) Anti-Corruption Laws. The Loan Parties and their Subsidiaries have conducted their business in compliance with the United States Foreign Corrupt Practices Act of 1977, the UK Bribery Act 2010 and other similar anti-corruption legislation in other jurisdictions, and have instituted and maintained policies and procedures designed to promote and achieve compliance with such laws.

### **Solvency**

. Each Loan Party is, individually and together with its Subsidiaries on a Consolidated basis, Solvent.

### **Casualty, Etc.**

. Neither the businesses nor the properties of any Loan Party or any of its Subsidiaries are affected by any fire, explosion, accident, strike, lockout or other labor dispute, drought, storm, hail, earthquake, embargo, act of God or of the public enemy or other casualty (whether or not covered by insurance) that, either individually or in the aggregate, could reasonably be expected to have a Material Adverse Effect.

### **Responsible Officers**

. Set forth on Schedule 1.01(R) attached hereto are Responsible Officers, holding the offices indicated next to their respective names, as of the Closing Date and as of the last date such Schedule was required to be updated in accordance with Sections 6.02(a), 6.13 and 6.15 and such Responsible Officers are the duly elected and qualified officers of such Loan Party and are duly authorized to execute and deliver, on behalf of the respective Loan Party, this Agreement, the Notes and the other Loan Documents.

### **Collateral Representations**

(a) Collateral Documents. The provisions of the Collateral Documents are effective to create in favor of the Administrative Agent for the benefit of the Secured Parties a legal, valid and enforceable first priority Lien (subject to Liens permitted pursuant to Section 7.01 below) on all rights, title and interests of the respective Loan Parties in the Collateral described therein. Except for filings completed prior to the Closing Date and as contemplated hereby and by the Collateral Documents, no filing or other action will be necessary to perfect or protect such Liens.

(b) Intellectual Property. Set forth on Schedule 5.24(b), as of the Closing Date and as of the last date such Schedule was required to be updated in accordance with Sections 6.02(a), 6.13 and 6.15, is a list of all intellectual property registered in the United States of America (including all applications for registration and issuance) owned by each of the Loan Parties or that each of the Loan Parties has the right to (including the name/title, current owner, registration or application number, and registration or application date and such other information as reasonably requested by Administrative Agent).

(c) Documents, Instruments, and Tangible Chattel Paper. The Loan Parties do not own or possess any material “Documents”, “Instruments”, or “Tangible Chattel Paper” (as each of the foregoing terms is defined in the UCC).

(d) Deposit Accounts, Electronic Chattel Paper, Letter-of-Credit Rights, and Securities Accounts. Set forth on Schedule 5.24(d), as of the Closing Date and as of the last date such Schedule was required to be updated in accordance with Sections 6.02(a), 6.13 and 6.15, is a description of all “Deposit Accounts” and “Securities Accounts” (as each of the foregoing terms is defined in the UCC) of the Loan Parties in the United States of America, including the name of (A) the applicable Loan Party, and (B) in the case of a Deposit Account, the depository institution and average amount held in such Deposit Account and whether such account is a zero balance account or a payroll account.

(e) Commercial Tort Claims. The Loan Parties do not own or possess any material “Commercial Tort Claims” (as such term is defined in the UCC).

(f) Pledged Equity Interests. Set forth on Schedule 5.24(f), as of the Closing Date and as of the last date such Schedule was required to be updated in accordance with Sections 6.02(a), 6.13 and 6.15, is a list of all Equity Interests pledged or required to be pledged to Administrative Agent pursuant to this Agreement and/or the Collateral Documents, in each case, detailing the owner/pledgor, the Person whose Equity Interests are pledged, the number of shares of each class of Equity Interests, the certificate number and percentage

ownership of outstanding shares of each class of Equity Interests and the class or nature of such Equity Interests (i.e. voting, non-voting, preferred, etc.).

(g) Properties. Set forth on Schedule 5.24(g), as of the Closing Date and as of the last date such Schedule was required to be updated in accordance with Sections 6.02(a), 6.13 and 6.15, is a list of (i) the headquarters location of Borrower and (ii) each other domestic location of "Equipment" (as such term is defined in the Security Agreement) where the aggregate value of said Equipment has been deemed material by Administrative Agent, in its reasonable discretion.

**EEA Financial Institutions**

. No Loan Party is an EEA Financial Institution.

ARTICLE XI.

ARTICLE XII.

**AFFIRMATIVE COVENANTS**

So long as any Lender shall have any Commitment hereunder, any Loan or other Obligation hereunder shall remain unpaid or unsatisfied, or any Letter of Credit shall remain outstanding, Borrower shall, and shall (except in the case of the covenants set forth in Sections 6.01, 6.02, and 6.03) cause each Subsidiary to:

**Financial Statements**

. Deliver to Administrative Agent (whether in hard copy or through a link sent via electronic mail to a copy thereof on the Internet) a sufficient number of copies for delivery by Administrative Agent to each Lender, in form and detail satisfactory to Administrative Agent and the Required Lenders:

(a) promptly after being filed with the SEC, but in any event within seventy-five (75) days after the end of each fiscal year of Borrower (or within such shorter time period as the Borrower may be required to file the foregoing with the SEC), a Consolidated balance sheet of Borrower and its Subsidiaries as at the end of such fiscal year, and the related Consolidated statements of income or operations, shareholders' equity and cash flows for such fiscal year, setting forth in each case in comparative form the figures for the previous fiscal year, all in reasonable detail and prepared in accordance with GAAP, such consolidated statements to be audited and accompanied by a report and opinion of KPMG US LLP or another independent certified public accounting firm of recognized standing reasonably acceptable to the Administrative Agent, which report and opinion shall be prepared in accordance with generally accepted auditing standards and applicable Securities Laws and shall not be subject to any "going concern" or like qualification or exception or any qualification or exception as to the scope of such audit or with respect to the absence of any material misstatement; and

(b) promptly after being filed with the SEC, but in any event within forty-five (45) days after the end of each of the first three fiscal quarters of each fiscal year of Borrower, a Consolidated balance sheet of Borrower and its Subsidiaries as at the end of such fiscal quarter, and the related Consolidated statements of income or operations, shareholders' equity and cash flows for such fiscal quarter and for the portion of Borrower's fiscal year then ended, setting forth in each case in comparative form the figures for the corresponding fiscal quarter of the previous fiscal year and the corresponding portion of the previous fiscal year, all in reasonable detail, such Consolidated statements to be certified by the chief executive officer, chief financial officer, treasurer or controller of Borrower as fairly presenting the financial condition, results of operations, shareholders' equity and cash flows of Borrower and its Subsidiaries in accordance with GAAP, subject only to normal year-end audit adjustments and the absence of footnotes; and

(c) as soon as available, but in any event at least fifteen (15) days before the end of each fiscal year of Borrower, forecasts prepared by management of Borrower, in form satisfactory to Administrative Agent and the Required Lenders, of Consolidated balance sheets and statements of income or operations of Borrower and its Subsidiaries for the immediately following fiscal year (including the fiscal year in which the Maturity Date occurs), prepared on an annual basis.

Notwithstanding the foregoing provisions of this Section to the contrary, the Borrower shall not be obligated to provide to the Administrative Agent and the Lenders any financial statements, reports or other information required herein which has been filed with or furnished to the SEC and which is publicly available through the SEC's electronic data

gathering and retrieval system (“EDGAR”).

**Certificates: Other Information**

. Deliver to Administrative Agent a sufficient number of copies for delivery by Administrative Agent to each Lender, in form and detail satisfactory to Administrative Agent and the Required Lenders:

(a) concurrently with the delivery of the financial statements referred to in Sections 6.01(a) and (b), a duly completed Compliance Certificate signed by the chief financial officer or president of Borrower and, concurrently with the delivery of the financial statements referred to in Section 6.01(a), on an annual basis, the following updated Schedules to this Agreement (which may be attached to the Compliance Certificate) to the extent required to make the representation related to such Schedule true and correct as of the date of such Compliance Certificate: Schedules 1.01(R), 5.12(d), 5.13, 5.24(b), 5.24(c), 5.24(d), 5.24(e), 5.24(f), and 5.24(g);

(b) promptly after any request by Administrative Agent or any Lender, copies of any detailed audit reports, management letters or recommendations submitted to the board of directors (or the audit committee of the board of directors) of Borrower by independent accountants in connection with the accounts or books of Borrower or any Subsidiary, or any audit of any of them;

(c) promptly after the same are available, copies of each annual report, proxy or financial statement, reporting notice, or other report or communication sent to the stockholders of Borrower, and copies of any annual, regular, periodic and special reports and registration statements which Borrower may file or be required to file with the SEC under Section 13 or 15(d) of the Securities Exchange Act of 1934, and not otherwise required to be delivered to Administrative Agent pursuant hereto;

(d) promptly after the furnishing thereof, copies of any statement or report furnished to any holder of debt securities of any Loan Party or any Subsidiary thereof pursuant to the terms of any indenture, loan or credit or similar agreement and not otherwise required to be furnished to the Lenders pursuant to Section 6.01 or any other clause of this Section 6.02;

(e) promptly, and in any event within five Business Days after receipt thereof by any Loan Party or any Subsidiary thereof, copies of each notice or other correspondence received from the Securities and Exchange Commission (or comparable agency in any applicable non-U.S. jurisdiction) concerning any investigation or possible investigation or other inquiry by such agency regarding financial or other operational results of any Loan Party or any Subsidiary thereof; and

(f) promptly, such additional information regarding the business, financial or corporate affairs of Borrower or any Subsidiary, or compliance with the terms of the Loan Documents, as Administrative Agent or any Lender may from time to time reasonably request.

Notwithstanding the foregoing provisions of this Section to the contrary, the Borrower shall not be obligated to provide to the Administrative Agent and the Lenders any financial statements, reports or other information required herein which has been filed with or furnished to the SEC and which is publicly available through the SEC’s electronic data gathering and retrieval system (“EDGAR”).

Borrower hereby acknowledges that (A) Administrative Agent and/or an Affiliate thereof may, but shall not be obligated to, make available to Lenders and the L/C Issuer materials and/or information provided by or on behalf of Borrower hereunder (hereinafter collectively referred to as “Borrower Materials”) by posting the Borrower Materials on IntraLinks, Syndtrak, ClearPar or a substantially similar electronic transmission system (hereinafter referred to as the “Platform”) and (B) certain Lenders (hereinafter each such Lender shall be referred to as a “Public Lender”) may have personnel who do not wish to receive material non-public information with respect to Borrower or its Affiliates, or the respective securities of any of the foregoing, and who may be engaged in investment and other market-related activities with respect to such Persons’ securities. The Borrower hereby agrees that it will use commercially reasonable efforts to identify that portion of the Borrower Materials that may be distributed to the Public Lenders and that (1) all such Borrower Materials shall be clearly and conspicuously marked “PUBLIC” which, at a minimum, shall mean that the word “PUBLIC” shall appear prominently on the first page thereof; (2) by marking Borrower Materials “PUBLIC,” the Borrower shall be deemed to have authorized Administrative Agent, any Affiliate thereof, the Arranger, the L/C Issuer and the Lenders to treat such Borrower Materials as not containing any material non-public information (although it may be sensitive and proprietary) with respect to Borrower or its securities for purposes of United States federal and state securities laws (provided, however, that to the extent such Borrower Materials constitute Information, they shall

be treated as set forth in Section 10.07); (3) all Borrower Materials marked "PUBLIC" are permitted to be made available through a portion of the Platform designated "Public Side Information;" and (4) Administrative Agent and any Affiliate thereof and the Arranger shall be entitled to treat any Borrower Materials that are not marked "PUBLIC" as being suitable only for posting on a portion of the Platform not designated "Public Side Information."

#### **Notices**

. Promptly, but in any event within five (5) Business Days, notify Administrative Agent and each Lender for which the Administrative Agent has provided an address:

- (a) of the occurrence of any Default;
- (b) of any matter that has resulted or could reasonably be expected to result in a Material Adverse Effect;
- (c) of the occurrence of any ERISA Event;
- (d) of any material change in accounting policies or financial reporting practices by Borrower or any Subsidiary, and
- (e) of Borrower's determination at any time of the occurrence or existence of any Internal Control Event.

Each notice pursuant to this Section 6.03 shall be accompanied by a statement of a Responsible Officer of Borrower setting forth details of the occurrence referred to therein and, to the extent applicable, stating what action Borrower has taken and proposes to take with respect thereto. Each notice pursuant to Section 6.03(a) shall describe with particularity any and all provisions of this Agreement and any other Loan Document that have been breached.

#### **Payment of Obligations**

. Pay and discharge as the same shall become due and payable, its obligations and liabilities in excess of \$500,000.00, including (a) all tax liabilities, assessments and governmental charges or levies upon it or its properties or assets, unless the same are being contested in good faith by appropriate proceedings diligently conducted and adequate reserves in accordance with GAAP are being maintained by Borrower or such Subsidiary; (b) all lawful claims which, if unpaid, would by law become a Lien upon its property; and (c) all Indebtedness, as and when due and payable, but subject to any subordination provisions contained in any instrument or agreement evidencing such Indebtedness.

#### **Preservation of Existence, Etc**

. (a) Preserve, renew and maintain in full force and effect its legal existence and good standing under the Laws of the jurisdiction of its organization except in a transaction permitted by Section 7.04 or 7.05; (b) take all reasonable action to maintain all rights, privileges, permits, licenses and franchises necessary or desirable in the normal conduct of its business, except to the extent that failure to do so could not reasonably be expected to have a Material Adverse Effect; and (c) preserve or renew any registered patents, trademarks, trade names and service marks, the non-preservation of which could reasonably be expected to have a Material Adverse Effect.

#### **Maintenance of Properties**

. (a) Maintain, preserve and protect all of its material properties and equipment necessary in the operation of its business in good working order and condition, ordinary wear and tear excepted; and (b) make all necessary repairs thereto and renewals and replacements thereof except where the failure to do so could not reasonably be expected to have a Material Adverse Effect,

#### **Maintenance of Insurance**

. Maintain with financially sound and reputable insurance companies not Affiliates of Borrower, insurance with respect to its properties and business against loss or damage of the kinds customarily insured against by Persons engaged in the same or similar business, of such types and in such amounts (after giving effect to any self-insurance compatible with the following standards) as are customarily carried under similar circumstances by such other Persons and providing for not less than ten (10) days' prior notice to Administrative Agent of termination, lapse or cancellation of such insurance (thirty (30) days for nonpayment of premium). Borrower shall cause its carriers to name the Administrative Agent as additional insured and, in the case of property or casualty insurance for all tangible Collateral, first loss payee, and shall provide the Administrative Agent with a certificate or certificates evidencing such coverages and the payment of premiums therefore, on or before the Closing Date and at such times as the insurance in question is modified or renewed.

### **Compliance with Laws**

. Comply in all material respects with the requirements of all Laws and all orders, writs, injunctions and decrees applicable to it or to its business or property, except in such instances in which (a) such requirement of Law or order, writ, injunction or decree is being contested in good faith by appropriate proceedings diligently conducted or (b) the failure to comply therewith could not reasonably be expected to have a Material Adverse Effect.

### **Books and Records**

. Maintain (a) proper books of record and account, in which full, true and correct entries in conformity with GAAP consistently applied shall be made of all financial transactions and matters involving the assets and business of Borrower or such Subsidiary, as the case may be and (b) such books of record and account in material conformity with all applicable requirements of any Governmental Authority having regulatory jurisdiction over Borrower or such Subsidiary, as the case may be. Borrower shall maintain at all times books and records pertaining to the Collateral in such detail, form and scope as Administrative Agent or any Lender shall reasonably require.

### **Inspection Rights**

(a) Permit representatives and independent contractors of Administrative Agent and each Lender to visit and inspect any of its properties, to examine its corporate, financial and operating records, and make copies thereof or abstracts therefrom, and to discuss its affairs, finances and accounts with its directors, officers, and independent public accountants, all at the expense of Borrower and at such reasonable times during normal business hours and as often as may be reasonably desired, upon reasonable advance notice to the Borrower; provided, however, that when an Event of Default exists the Administrative Agent or any Lender (or any of their respective representatives or independent contractors) may do any of the foregoing at the expense of Borrower at any time during normal business hours and without advance notice.

(b) If requested by Administrative Agent in its sole discretion, permit Administrative Agent and its representatives, upon reasonable advance notice to Borrower, to conduct, at the expense of Borrower, an annual (i.e., not more frequently than once per twelve (12) month period) field exam on the accounts receivable, inventory, payables, controls and systems of Borrower and its Subsidiaries; provided, however, that at any time while an Event of Default has occurred and is continuing, Administrative Agent shall not be limited to one such field exam per twelve (12) month period.

### **Use of Proceeds**

. Use the proceeds of the Committed Loans and Letters of Credit for working capital and other lawful corporate purposes, including, without limitation, financing such acquisitions as may be permitted in accordance with the terms, conditions, and provisions of Section 7.02(f).

### **Financial Covenants**

(a) Minimum Consolidated Interest Coverage Ratio. Maintain, on a Consolidated basis, an Interest Coverage Ratio of at least 3.0 -to- 1.0. This ratio will be calculated at the end of each reporting period for which this Agreement requires Borrower to deliver financial statements, using the results of the twelve-month period ending with that reporting period.

(b) Maximum Funded Debt Leverage Ratio. Maintain, on a Consolidated basis, a Funded Debt Leverage Ratio not exceeding 3.50 -to- 1.0. This ratio will be calculated at the end of each reporting period for which this Agreement requires Borrower to deliver financial statements, using the results of the twelve-month period ending with that reporting period. Notwithstanding the foregoing to the contrary, for the four (4) fiscal quarters immediately following the fiscal quarter in which any acquisition permitted by the terms of this Agreement occurs, at Borrower's election, the maximum permitted Funded Debt Leverage Ratio may be temporarily increased to 3.75 -to- 1.0 (hereinafter such temporary increase shall be referred to as a "Temporary Leverage Increase"), and then such maximum permitted ratio shall automatically reduce back down to 3.50 -to- 1.0 commencing in the fifth (5th) fiscal quarter immediately following the fiscal quarter in which said permitted acquisition occurred; provided, however, in no event shall Borrower

be permitted to elect a Temporary Leverage Increase more than two (2) times during the term of the Credit Facility.

**Additional Guarantors; Pledges of Stock; Security Interests**

. Notify Administrative Agent concurrently with the delivery of the financial statements referred to in Section 6.01(a), on an annual basis, if any Person becomes a Guarantor Subsidiary, a Pledged Subsidiary, or a Holding Company and, promptly thereafter (and in any event within thirty (30) days):

(a) cause any such Person that becomes a Guarantor Subsidiary or a Holding Company, (i) to become a Guarantor by executing and delivering to the Administrative Agent a joinder to the Guaranty or such other document as the Administrative Agent shall deem appropriate for such purpose, (ii) to subject all of its tangible and intangible personal property now owned or hereafter acquired by it to a first priority, perfected Lien (subject to Liens permitted under the terms of Section 7.01 and the other Loan Documents) in favor of the Administrative Agent for the benefit of the Secured Parties to secure the Obligations pursuant to the terms and conditions of the Collateral Documents, and (iii) to deliver to the Administrative Agent (1) documents of the types referred to in clauses (iii) and (iv) of Section 4.01(a), (2) with respect to any such Person which has assets or operating income that represents fifteen percent (15.0%) or more of the assets or operating income of the Borrower, favorable opinions of counsel to such Person (which opinions shall cover, among other things, the legality, validity, binding effect and enforceability of the documentation referred to in the foregoing clause (i)), and (3) updated Schedules 1.01(R), 5.12(d), 5.13, 5.24(b), 5.24(c), 5.24(d), 5.24(e), 5.24(f), and 5.24(g), all in form, content and scope reasonably satisfactory to Administrative Agent; and/or

(b) take such action, and cause the appropriate Subsidiaries to take such action, from time to time as shall be necessary to ensure that sixty-five percent (65%) of the Equity Interests in any such Person that becomes a Pledged Subsidiary shall be pledged, directly (if such Pledged Subsidiary is owned by a domestic Person) or indirectly (if such Pledged Subsidiary is owned by a foreign Person), to the Administrative Agent, for the benefit of the Lenders, (i) by executing and delivering to the Administrative Agent a pledge agreement, or such other document as Administrative Agent shall deem appropriate for such purpose, and (ii) by delivering to the Administrative Agent (1) documents of the types referred to in clauses (iii) and (iv) of Section 4.01(a) with respect to such Pledged Subsidiary, (2) with respect to any such Pledged Subsidiary which has assets or operating income that represents fifteen percent (15.0%) or more of the assets or operating income of the Borrower, favorable opinions of counsel to such Pledged Subsidiary and to such pledging Borrower or Subsidiary (which shall cover, among other things, the legality, validity, binding effect and enforceability of the documentation referred to in the foregoing clause (i)), and (3) updated Schedules 1.01(R), 5.12(d), 5.13, 5.24(b), 5.24(c), 5.24(d), 5.24(e), 5.24(f), and 5.24(g), all in form, content and scope reasonably satisfactory to Administrative Agent. Administrative Agent acknowledges and agrees that it has waived the requirements described in the foregoing Section 6.13(b)(ii) with respect to Borrower's pledge of the Equity Interests in (1) Mistras Group Limited (f/k/a Physical Acoustics Limited) and (2) Mistras Canada, Inc., which pledges have been completed as of the Closing Date.

Borrower and Administrative Agent have agreed that the requirements described in the foregoing Section 6.13(b)(ii) with respect to the pledge by Mistras International Holdings Inc. of the Equity Interests in Mistras Group GmbH shall be completed on or before January 31, 2018. In addition, Borrower and Administrative Agent hereby acknowledge and agree that the first annual review of whether any Person has become a Guarantor Subsidiary, a Pledged Subsidiary, or a Holding Company shall take place in connection with the filing of the annual financial statements of Borrower for the fiscal year ending on December 31, 2017.

**Collateral Records**

. To execute and deliver promptly, and to cause each other Loan Party to execute and deliver promptly, to Administrative Agent, from time to time, solely for Administrative Agent's convenience in maintaining a record of the Collateral, such written statements and schedules as Administrative Agent may reasonably require designating, identifying or describing the Collateral. The failure by Borrower or any other Loan Party, however, to promptly give Administrative Agent such statements or schedules shall not affect, diminish, modify or otherwise limit the Liens on the Collateral granted pursuant to the Collateral Documents.

**Security Interests; Landlord Subordinations**

(a) To, and to cause each other Loan Party to, (i) defend the Collateral against all claims and demands of all Persons at any time claiming the same or any interest therein, (ii) comply with the requirements of all United States state and federal laws in order to grant to Administrative Agent and Lenders valid and perfected security interests in the Collateral subject only to Liens set forth on Schedule 7.01, with perfection, in the case of any investment property, deposit account or letter of credit, being effected by giving Administrative Agent control of such investment property or deposit account or letter of credit, rather than by the filing of a Uniform Commercial Code (“UCC”) financing statement with respect to such investment property, and (iii) do whatever Administrative Agent may reasonably request, from time to time, to effect the purposes of this Agreement and other Loan Documents, including (1) filing notices of liens, UCC financing statements, fixture filings and amendments, renewals and continuations thereof, (2) cooperating with Administrative Agent’s representatives, (3) keeping stock records, (4) using reasonable efforts to obtain waivers from landlords and mortgagees and from warehousemen and their landlords and mortgagees, (5) paying claims which might, if unpaid, become a lien on the Collateral, and (6) concurrently with the delivery of any Collateral pursuant to the terms of this Section, provide the Administrative Agent with the applicable updated Schedules 1.01(R), 5.12(d), 5.13, 5.24(b), 5.24(c), 5.24(d), 5.24(e), 5.24(f), and 5.24(g), all in form, content and scope reasonably satisfactory to Administrative Agent. Administrative Agent is hereby authorized by Borrower to file any UCC financing statements covering the Collateral whether or not Borrower’s signatures appear thereon.

(b) In the case of (i) the headquarters location of Borrower located at 195 Clarksville Road, Princeton Junction, New Jersey 08550 and (ii) each other domestic location of Equipment where the aggregate value of said Equipment has been deemed material by Administrative Agent, in its reasonable discretion, said locations as of the Closing Date being set forth and described on Schedule 5.24(g) attached hereto and made a part hereof, the Loan Parties will use their respective commercially reasonable efforts to provide the Administrative Agent with a landlord subordination agreement in form and substance reasonably acceptable to Administrative Agent from the landlords on such real property. Administrative Agent and Borrower hereby acknowledge and agree that said landlord subordination agreements described under the foregoing Section 6.15(b)(ii) may be provided by Borrower on a post-closing basis.

#### **Deposits**

. Maintain its primary deposit relationship, including, without limitation, operating accounts bearing interest at competitive, market rates and cash management services, with the Administrative Agent, such services to be provided at reasonable, competitive market costs to the Borrower and its Subsidiaries.

#### **Further Assurances**

. Promptly upon request by Administrative Agent, or any Lender through Administrative Agent, (a) correct any material defect or error that may be discovered in any Loan Document or in the execution, acknowledgment, filing or recordation thereof, and (b) do, execute, acknowledge, deliver, record, re-record, file, re-file, register and re-register any and all such further acts, deeds, certificates, assurances and other instruments (including promptly completing any registration or stamping of documents as may be applicable) as Administrative Agent, or any Lender through Administrative Agent, may reasonably require from time to time in order to (i) carry out more effectively the purposes of the Loan Documents, (ii) to the fullest extent permitted by applicable Law, subject any Loan Party’s or any of its Subsidiaries’ properties, assets, rights or interests to the Liens now or hereafter intended to be covered by any of the Collateral Documents, (iii) perfect and maintain the validity, effectiveness and priority of any of the Collateral Documents and any of the Liens intended to be created thereunder and (iv) assure, convey, grant, assign, transfer, preserve, protect and confirm more effectively unto the Secured Parties the rights granted or now or hereafter intended to be granted to the Secured Parties under any Loan Document or under any other instrument executed in connection with any Loan Document to which any Loan Party or any of its Subsidiaries is or is to be a party, and cause each of its Subsidiaries to do so.

#### **Anti-Corruption Laws**

. Conduct its business in compliance in all material respects with the United States Foreign Corrupt Practices Act of 1977, the UK Bribery Act 2010 and other similar anti-corruption legislation in other jurisdictions and maintain policies and procedures designed to promote and achieve compliance with such laws.

ARTICLE XIII.

ARTICLE XIV.

**NEGATIVE COVENANTS**

So long as any Lender shall have any Commitment hereunder, any Loan or other Obligation hereunder shall remain unpaid or unsatisfied, or any Letter of Credit shall remain outstanding, Borrower shall not, nor shall it permit any Subsidiary to, directly or indirectly:

### **Liens**

. Create, incur, assume or suffer to exist any Lien upon any of its property, assets or revenues, whether now owned or hereafter acquired, except for the following:

(a) Liens pursuant to any Loan Document;

(b) Liens existing on the Closing Date and listed on Schedule 7.01 and any renewals or extensions thereof, provided that (i) the property covered thereby is not changed, (ii) the amount secured or benefited thereby is not increased except as expressly contemplated by Section 7.03(b), (iii) the direct or any contingent obligor with respect thereto is not changed, and (iv) any renewal or extension of the obligations secured or benefited thereby is permitted by Section 7.03(b);

(c) Liens for Taxes not yet due or which are being contested in good faith and by appropriate proceedings diligently conducted, if adequate reserves with respect thereto are maintained on the books of the applicable Person in accordance with GAAP;

(d) statutory liens such as carriers', warehousemen's, mechanics', materialmen's, repairmen's or other like Liens arising in the ordinary course of business which are not overdue for a period of more than thirty (30) days or which are being contested in good faith and by appropriate proceedings diligently conducted, provided that adequate reserves with respect thereto are maintained on the books of the applicable Person;

(e) pledges or deposits in the ordinary course of business in connection with workers' compensation, unemployment insurance and other social security legislation, other than any Lien imposed by ERISA;

(f) deposits to secure the performance of bids, trade contracts and leases (other than Indebtedness), statutory obligations, surety and appeal bonds, performance bonds and other obligations of a like nature incurred in the ordinary course of business;

(g) easements, rights-of-way, restrictions and other similar encumbrances affecting real property which, in the aggregate, are not substantial in amount, and which do not in any case materially detract from the value of the property subject thereto or materially interfere with the ordinary conduct of the business of the applicable Person;

(h) Liens securing judgments for the payment of money (or appeal or other surety bonds relating to such judgments) not constituting an Event of Default under Section 8.01(h);

(i) Liens securing Indebtedness permitted under Section 7.03(e); provided that (i) such Liens do not at any time encumber any property other than the property financed by such Indebtedness and (ii) the Indebtedness secured thereby does not exceed the cost or fair market value, whichever is lower, of the property being acquired on the date of acquisition;

(j) Liens existing solely with respect to cash or deposit account balances used to Cash Collateralize obligations of a Lender to the L/C Issuer, in accordance with the terms, conditions, and provisions of Section 2.03(a)(iii)(E); and

(k) Liens securing Indebtedness permitted under Section 7.03(g).

### **Investments**

Make any Investments, except:

(a) Investments held by Borrower or such Subsidiary in the form of cash equivalents or short-term marketable debt securities;

(b) loans to officers, directors and employees of Borrower and Subsidiaries in an aggregate amount not to exceed \$500,000.00 at any time outstanding;

(c) Investments (i) of Borrower in any Wholly-Owned Subsidiary, (ii) of Borrower or any Wholly-Owned Subsidiary in other Subsidiaries, not to exceed \$4,000,000.00 in the aggregate in any twelve (12) month period, and (iii) of any Wholly-Owned Subsidiary in Borrower or in another Wholly-Owned Subsidiary;

(d) Investments of Borrower or its Subsidiaries for strategic purposes in non-Subsidiary joint ventures, not to exceed \$4,000,000.00 individually in any twelve (12) month period;

(e) Investments consisting of extensions of credit in the nature of accounts receivable or notes receivable arising from the grant of trade credit in the ordinary course of business, and Investments received in satisfaction or

partial satisfaction thereof from financially troubled account debtors to the extent reasonably necessary in order to prevent or limit loss;

(f) the purchase or other acquisition of all or substantially all of the Equity Interests in, or all or substantially all of the assets of, any Person that, upon the consummation thereof, will be wholly-owned directly by the Borrower or one or more of its Wholly-Owned Subsidiaries (including as a result of a merger or consolidation); provided that, with respect to each purchase or other acquisition made pursuant to this Section 7.02(f):

(i) any such newly-created or acquired Subsidiary shall comply with the requirements of Section 6.13;

(ii) the lines of business of the Person to be (or the property of which is to be) so purchased or otherwise acquired shall be substantially the same lines of business as one or more of the principal businesses of the Borrower and its Subsidiaries in the ordinary course;

(iii) (A) immediately before and immediately after giving pro forma effect to any such purchase or other acquisition, no Default shall have occurred and be continuing and (B) immediately after giving effect to such purchase or other acquisition, the Borrower and its Subsidiaries shall be in pro forma compliance with all of the covenants set forth in Section 6.12, such compliance to be evidenced by the Borrower to the reasonable satisfaction of the Administrative Agent and the Required Lenders on the basis of the financial information most recently delivered to the Administrative Agent and the Lenders pursuant to Section 6.01(a) or (b) as though such purchase or other acquisition had been consummated as of the first day of the fiscal period covered thereby; and

(iv) in the event the total cash and noncash consideration paid by or on behalf of the Borrower and its Subsidiaries for any such purchase or other acquisition exceeds \$10,000,000.00, the Borrower shall have delivered to the Administrative Agent, at least five Business Days prior to the date on which any such purchase or other acquisition is to be consummated, written notice of such purchase or other acquisition, and, if requested by the Administrative Agent, all material purchase or acquisition documents related thereto; and

(g) Guarantees permitted by Section 7.03.

**Indebtedness**

. Create, incur, assume or suffer to exist any Indebtedness, except:

(a) Indebtedness under the Loan Documents;

(b) Indebtedness outstanding on the date hereof and listed on Schedule 7.03 and any refinancings, refundings, renewals or extensions thereof; provided that (i) the amount of such Indebtedness is not increased at the time of such refinancing, refunding, renewal or extension except by an amount equal to a reasonable premium or other reasonable amount paid, and fees and expenses reasonably incurred, in connection with such refinancing and by an amount equal to any existing commitments unutilized thereunder and (ii) the terms relating to principal amount, amortization, maturity, collateral (if any) and subordination (if any), and other material terms taken as a whole, of any such refinancing, refunding, renewing or extending of Indebtedness, and of any agreement entered into and of any instrument issued in connection therewith, are no less favorable in any material respect to the Loan Parties or the Lenders than the terms of any agreement or instrument governing the Indebtedness being refinanced, refunded, renewed or extended and the interest rate applicable to any such refinancing, refunding, renewing or extending Indebtedness does not exceed the then applicable market interest rate;

(c) Guarantees of Borrower or any Subsidiary in respect of Indebtedness otherwise permitted hereunder of Borrower or any Subsidiary;

(d) obligations (contingent or otherwise) of Borrower or any Subsidiary existing or arising under any Swap Contract, provided that (i) such obligations are (or were) entered into by such Person in the ordinary course of business for the purpose of directly mitigating risks associated with liabilities, commitments, investments, assets, or property held or reasonably anticipated by such Person, or changes in the value of securities issued by such Person, and not for purposes of speculation or taking a "market view" and (ii) such Swap Contract does not contain any provision exonerating the non-defaulting party from its obligation to make payments on outstanding transactions to the defaulting party;

(e) Indebtedness in respect of capital leases, Synthetic Lease Obligations and purchase money obligations for fixed or capital assets within the limitations set forth in Section 7.01(i); provided, however, that the aggregate amount of all such Indebtedness at any one time outstanding shall not exceed \$35,000,000.00;

(f) (i) Indebtedness assumed in connection with acquisitions permitted under this Agreement or (ii) Indebtedness incurred in connection with the payment of the purchase price for acquisitions permitted under this Agreement, which Indebtedness is unsecured and has been subordinated to the payment of the Obligations on terms approved by the Administrative Agent in writing, or is otherwise approved by the Administrative Agent in writing; provided that, in the case of each of the foregoing clauses (i) and (ii), (A) immediately before and immediately after giving pro forma effect to any such incurrence of Indebtedness, no Default shall have occurred and be continuing and (B) immediately after giving effect to such incurrence of Indebtedness, the Borrower and its Subsidiaries shall be in pro forma compliance with all of the covenants set forth in Section 6.12, such compliance to be evidenced by the Borrower to the reasonable satisfaction of the Administrative Agent and the Required Lenders on the basis of the financial information most recently delivered to the Administrative Agent and the Lenders pursuant to Section 6.01(a) or (b) as though such purchase or other acquisition had been consummated as of the first day of the fiscal period covered thereby; and

(g) Indebtedness in respect of mortgages and other Indebtedness not otherwise permitted under this Section 7.03; provided, however, that the aggregate amount of all such Indebtedness at any one time outstanding shall not exceed \$25,000,000.00.

**Fundamental Changes**

. Merge, dissolve, liquidate, consolidate with or into another Person, or Dispose of (whether in one transaction or in a series of transactions) all or substantially all of its assets (whether now owned or hereafter acquired) to or in favor of any Person, except that, so long as no Default exists or would result therefrom:

(a) any Subsidiary may merge with (i) Borrower, provided that Borrower shall be the continuing or surviving Person, or

(ii) any one or more other Subsidiaries, provided that when any Majority-Owned Subsidiary is merging with another Subsidiary, the Majority-Owned Subsidiary shall be the continuing or surviving Person, and provided further that if a Guarantor is merging with another Subsidiary, the Guarantor shall be the surviving Person; and

(b) any Subsidiary may Dispose of all or substantially all of its assets (upon voluntary liquidation or otherwise) to Borrower or to another Subsidiary; provided that if the transferor in such a transaction is a Majority-Owned Subsidiary, then the transferee must either be Borrower or a Majority-Owned Subsidiary and provided further that if the transferor of such assets is a Guarantor, the transferee must either be Borrower or a Guarantor.

**Dispositions**

. Make any Disposition or enter into any agreement to make any Disposition, except:

(a) Dispositions of obsolete or worn out property or equipment, whether now owned or hereafter acquired, in the ordinary course of business;

(b) Dispositions of inventory in the ordinary course of business;

(c) Dispositions of equipment to the extent that (i) such equipment is exchanged for credit against the purchase price of similar replacement equipment or (ii) the proceeds of such Disposition are reasonably promptly applied to the purchase price of such replacement equipment;

(d) Dispositions of property by any Subsidiary to Borrower or to a Majority-Owned Subsidiary; provided that if the transferor of such property is a Guarantor, the transferee thereof must either be Borrower or a Guarantor;

(e) Dispositions permitted by Section 7.04; and

(f) Dispositions of up to \$500,000.00 individually or in a series of related Dispositions;

provided, however, that any Disposition pursuant to clauses (a) through (e) shall be for fair market value.

**Restricted Payments**

. Declare or make, directly or indirectly, any Restricted Payment, or incur any obligation (contingent or otherwise) to do so, or issue or sell any Equity Interests (other than Equity Interests in the Borrower, which may be issued or sold without restriction hereunder), except that, so long as no Default shall exist at the time of any action described below or would result therefrom, the Borrower and its Subsidiaries may declare or make any Restricted Payment so long as the Funded Debt Leverage Ratio, calculated on a pro forma basis to include said Restricted Payment, does not exceed 2.50 -to- 1.0, such calculation to be evidenced by the Borrower to the reasonable satisfaction of the Administrative Agent and the Required Lenders.

**Change in Nature of Business**

. Engage in any material line of business substantially different from those lines of business conducted by Borrower and its Subsidiaries on the date hereof or any business substantially related or incidental thereto.

#### **Transactions with Affiliates**

. Enter into any transaction of any kind with any Affiliate of Borrower, whether or not in the ordinary course of business, other than on fair and reasonable terms substantially as favorable to Borrower or such Subsidiary as would be obtainable by Borrower or such Subsidiary at the time in a comparable arm's length transaction with a Person other than an Affiliate, provided that the foregoing restriction shall not apply to transactions between or among Borrower and any Guarantor or between and among Guarantors, so long as the effect of such transactions is not to circumvent the limitations contained in Section 7.02.

#### **Burdensome Agreements**

. Enter into any Contractual Obligation (other than this Agreement or any other Loan Document) that (a) limits the ability (i) of any Subsidiary to make Restricted Payments to Borrower or any Guarantor or to otherwise transfer property to Borrower or any Guarantor, (ii) of any Subsidiary to Guarantee the Indebtedness of Borrower or (iii) of Borrower or any Subsidiary to create, incur, assume or suffer to exist Liens on property of such Person; provided, however, that this clause (iii) shall not prohibit any negative pledge incurred or provided in favor of any holder of Indebtedness permitted under Section 7.03(e) solely to the extent any such negative pledge relates to the property financed by or the subject of such Indebtedness; or (b) requires the grant of a Lien to secure an obligation of such Person if a Lien is granted to secure another obligation of such Person.

#### **Use of Proceeds**

. Use the proceeds of any Credit Extension, whether directly or indirectly, and whether immediately, incidentally or ultimately, to purchase or carry margin stock (within the meaning of Regulation U of the FRB) or to extend credit to others for the purpose of purchasing or carrying margin stock or to refund indebtedness originally incurred for such purpose.

. **Prepayment of Subordinated Notes.** Prepay any Subordinated Notes; provided, however, that so long as no Default then exists or would result from any such prepayment, the Borrower may make any prepayment of any Subordinated Notes at any time when the Funded Debt Leverage Ratio is less than 2.50 -to- 1.0.

#### **Intentionally Omitted**

. **Sanctions.** Directly or indirectly, use any Credit Extension or the proceeds of any Credit Extension, or lend, contribute or otherwise make available such Credit Extension or the proceeds of any Credit Extension to any Person, to fund any activities of or business with any Person, or in any Designated Jurisdiction, that, at the time of such funding, is the subject of Sanctions, or in any other manner that will result in a violation by any Person (including any Person participating in the transaction, whether as Lender, Arranger, Administrative Agent, L/C Issuer, or otherwise) of Sanctions.

. **Anti-Corruption Laws.** Directly or indirectly, use any Credit Extension or the proceeds of any Credit Extension for any purpose which would breach the United States Foreign Corrupt Practices Act of 1977, the UK Bribery Act 2010 and other similar anti-corruption legislation in other jurisdictions.

### ARTICLE XV.

#### ARTICLE XVI.

#### **EVENTS OF DEFAULT AND REMEDIES**

#### **Events of Default**

. Any of the following shall constitute an Event of Default:

(a) **Non-Payment.** Borrower or any other Loan Party fails to pay (i) when and as required to be paid herein, and in the currency required hereunder, any amount of principal of any Loan or any L/C Obligation, or (ii) within three (3) days after the same becomes due, any interest on any Loan or on any L/C Obligation, or any fee due hereunder, or (iii) within five (5) days after the same becomes due, any other amount payable hereunder or under any other Loan Document; or

(b) Specific Covenants. Borrower fails to perform or observe any term, covenant or agreement contained in any of Sections 6.01, 6.02, 6.03, 6.05, 6.07, 6.08, 6.10, 6.11, 6.12 or 6.13; or Borrower fails to perform or observe any term, covenant or agreement contained Article VII, or any Guarantor fails to perform or observe any term, covenant or agreement contained in Article III of the Guaranty; or

(c) Other Defaults. Any Loan Party fails to perform or observe any other covenant or agreement (not specified in subsection (a) or (b) above) contained in this Agreement or any other Loan Document on its part to be performed or observed and such failure continues for thirty (30) days after written notice thereof from the Administrative Agent; provided, however, that if such failure is susceptible of cure but cannot reasonably be cured within such thirty (30) day period and provided further that the applicable Loan Party shall have commenced to cure such failure within such thirty (30) day period and thereafter diligently and expeditiously proceeds to cure the same, such thirty (30) day period shall be extended for such time as is reasonably necessary for such Loan Party, in the exercise of due diligence, to cure such failure (but in any event not more than ninety (90) days total from receipt of such written notice); or

(d) Representations and Warranties. Any representation, warranty, certification or statement of fact made or deemed made by or on behalf of Borrower or any other Loan Party herein, in any other Loan Document, or in any document delivered in connection herewith or therewith shall be incorrect or misleading in any material respect when made or deemed made; or

(e) Cross-Default. (i) Borrower or any Subsidiary (A) fails to make any payment when due (whether by scheduled maturity, required prepayment, acceleration, demand, or otherwise) in respect of any Indebtedness or Guarantee (other than Indebtedness hereunder and Indebtedness under Swap Contracts), such failed payment having an aggregate principal amount (including any payments owing due to acceleration caused by such failed payment) of more than the Threshold Amount, or (B) fails to observe or perform any other agreement or condition relating to any such Indebtedness or Guarantee or contained in any instrument or agreement evidencing, securing or relating thereto, or any other event occurs, the effect of which default or other event is to cause, or to permit the holder or holders of such Indebtedness or the beneficiary or beneficiaries of such Guarantee (or a trustee or Administrative Agent on behalf of such holder or holders or beneficiary or beneficiaries) to cause, with the giving of notice if required, such Indebtedness to be demanded or to become due or to be repurchased, prepaid, defeased or redeemed (automatically or otherwise), or an offer to repurchase, prepay, defease or redeem such Indebtedness to be made, prior to its stated maturity, or such Guarantee to become payable or cash collateral in respect thereof to be demanded; or (ii) there occurs under any Swap Contract an Early Termination Date (as defined in such Swap Contract) resulting from (A) any event of default under such Swap Contract as to which Borrower or any Subsidiary is the "Defaulting Party" (as such term is defined in such Swap Contract) or (B) any "Termination Event" (as so defined) under such Swap Contract as to which Borrower or any Subsidiary is an "Affected Party" (as so defined) and, in either event, the Swap Termination Value owed by Borrower or such Subsidiary as a result thereof is greater than the Threshold Amount; or

(f) Insolvency Proceedings, Etc. Any Loan Party institutes or consents to the institution of any proceeding under any Debtor Relief Law, or makes an assignment for the benefit of creditors; or applies for or consents to the appointment of any receiver, trustee, custodian, conservator, liquidator, rehabilitator or similar officer for it or for all or any material part of its property; or any receiver, trustee, custodian, conservator, liquidator, rehabilitator or similar officer is appointed without the application or consent of such Person and the appointment continues undischarged or unstayed for sixty (60) calendar days; or any proceeding under any Debtor Relief Law relating to any such Person or to all or any material part of its property is instituted without the consent of such Person and continues undismissed or unstayed for sixty (60) calendar days, or an order for relief is entered in any such proceeding; or

(g) Inability to Pay Debts; Attachment. (i) Borrower or any Subsidiary becomes unable or admits in writing its inability or fails generally to pay its debts as they become due, or (ii) any writ or warrant of attachment or execution or similar process is issued or levied against all or any material part of the property of any such Person and is not released, vacated or fully bonded within thirty (30) days after its issue or levy; or

(h) Judgments. There is entered against Borrower or any Subsidiary (i) one or more final judgments or orders for the payment of money in an aggregate amount (as to all such judgments or orders) exceeding the Threshold Amount (to the extent not covered by independent third-party insurance as to which the insurer is rated at least "A" by A.M. Best Company, has been notified of the potential claim and does not dispute coverage), or (ii) any one or more non-monetary final judgments that have, or could reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect and, in either case, enforcement proceedings are commenced by any creditor upon such judgment or order and said judgment or order, as applicable, is not satisfied, stayed, or fully-bonded within thirty (30) days of the commencement of said enforcement proceedings; or

(i) **ERISA.** (i) An ERISA Event occurs with respect to a Pension Plan or Multiemployer Plan which has resulted or could reasonably be expected to result in liability of Borrower under Title IV of ERISA to the Pension Plan, Multiemployer Plan or the PBGC which, either individually or in the aggregate, could reasonably be expected to have a Material Adverse Effect, or (ii) Borrower or any ERISA Affiliate fails to pay when due, after the expiration of any applicable grace period, any installment payment with respect to its withdrawal liability under Section 4201 of ERISA under a Multiemployer Plan in an aggregate amount in excess of the Threshold Amount; or

(j) **Invalidity of Loan Documents.** This Agreement, any Collateral Document, or the Guaranty or any provision thereof, at any time after its execution and delivery and for any reason other than as expressly permitted hereunder or thereunder or satisfaction in full of all the Obligations, ceases to be in full force and effect; or any Loan Party or any other Person contests in any manner the validity or enforceability of any Loan Document or any provision thereof; or any Loan Party denies that it has any or further liability or obligation under any Loan Document, or purports to revoke, terminate or rescind any Loan Document or any provision thereof; or

(k) **Change of Control.** There occurs any Change of Control with respect to Borrower and/or any Guarantor except as expressly permitted by Section 7.04 or Section 7.05.

Without limiting the provisions of Article IX, if a Default shall have occurred under the Loan Documents, then such Default will continue to exist until it either is cured (to the extent specifically permitted) in accordance with the Loan Documents or is otherwise expressly waived by Administrative Agent (with the approval of the Required Lenders (in their sole discretion) as determined in accordance with Section 10.01); and once an Event of Default occurs under the Loan Documents, then such Event of Default will continue to exist until it is expressly waived by the Required Lenders or by Administrative Agent with the approval of the Required Lenders, as required hereunder in Section 10.01.

#### **Remedies Upon Event of Default**

. If any Event of Default occurs and is continuing, Administrative Agent shall, at the request of, or may, with the consent of, the Required Lenders, take any or all of the following actions:

(a) declare the Commitment of each Lender to make Loans and any obligation of the L/C Issuer to make L/C Credit Extensions to be terminated, whereupon such commitments and obligation shall be terminated;

(b) declare the unpaid principal amount of all outstanding Loans, all interest accrued and unpaid thereon, and all other amounts owing or payable hereunder or under any other Loan Document to be immediately due and payable, without presentment, demand, protest or other notice of any kind, all of which are hereby expressly waived by Borrower;

(c) require that Borrower Cash Collateralize the L/C Obligations (in an amount equal to the Minimum Collateral Amount with respect thereto); and

(d) exercise on behalf of itself, the Lenders and the L/C Issuer all rights and remedies available to it, the Lenders and the L/C Issuer under the Loan Documents or applicable Law or equity;

provided, however, that upon the occurrence of an actual or deemed entry of an order for relief with respect to Borrower under the Bankruptcy Code of the United States, the obligation of each Lender to make Loans and any obligation of the L/C Issuer to make L/C Credit Extensions shall automatically terminate, the unpaid principal amount of all outstanding Loans and all interest and other amounts as aforesaid shall automatically become due and payable, and the obligation of Borrower to Cash Collateralize the L/C Obligations as aforesaid shall automatically become effective, in each case without further act of Administrative Agent or any Lender.

#### **Application of Funds**

. After the exercise of remedies provided for in Section 8.02 (or after the Loans have automatically become immediately due and payable and the L/C Obligations have automatically been required to be Cash Collateralized as set forth in the proviso to Section 8.02) or if at any time insufficient funds are received by and available to Administrative Agent to pay fully all Obligations then due hereunder, any amounts received on account of the Obligations shall, subject to the provisions of Sections 2.14 and 2.15, be applied by Administrative Agent in the following order:

First, to payment of that portion of the Obligations constituting fees, indemnities, expenses and other amounts (including, to the extent permitted under this Agreement and/or the other Loan Documents, reasonable fees, charges and disbursements of counsel to Administrative Agent and amounts payable under Article III), payable to Administrative Agent in its capacity as such;

Second, to payment of that portion of the Obligations constituting fees, indemnities and other amounts (other than principal, interest and L/C Fees) payable to Lenders and the L/C Issuer (including, to the extent permitted under this Agreement and/or the other Loan Documents, fees, charges and disbursements of counsel to the respective Lenders and the L/C Issuer (including fees and time charges for attorneys who may be employees of any Lender or the L/C Issuer) arising under the Loan Documents and amounts payable under Article III), ratably among them in proportion to the respective amounts described in this clause Second payable to them;

Third, to payment of that portion of the Obligations constituting accrued and unpaid L/C Fees and interest on the Loans, L/C Borrowings and other Obligations arising under the Loan Documents, ratably among Lenders and the L/C Issuer in proportion to the respective amounts described in this clause Third payable to them;

Fourth, to payment of that portion of the Obligations constituting unpaid principal of the Loans, L/C Borrowings and Obligations then owing under Secured Hedge Agreements and Secured Cash Management Agreements and to the to the Administrative Agent for the account of the L/C Issuer, to Cash Collateralize that portion of L/C Obligations comprised of the aggregate undrawn amount of Letters of Credit to the extent not otherwise Cash Collateralized by the Borrower pursuant to Sections 2.03 and 2.14, in each case, ratably among Administrative Agent, the Lenders, the L/C Issuer, the Hedge Banks and the Cash Management Banks in proportion to the respective amounts described in this clause Fourth held by them; and

Last, the balance, if any, after all of the Obligations have been indefeasibly paid in full, to Borrower or as otherwise required by applicable Law.

Subject to Section 2.03(c), amounts used to Cash Collateralize the aggregate undrawn amount of Letters of Credit pursuant to clause Fourth above shall be applied to satisfy drawings under such Letters of Credit as they occur. If any amount remains on deposit as Cash Collateral after all Letters of Credit have either been fully drawn or expired, such remaining amount shall be applied to the other Obligations, if any, in the order set forth above. Excluded Swap Obligations with respect to any Guarantor shall not be paid with amounts received from such Guarantor or its assets, but appropriate adjustments shall be made with respect to payments from other Loan Parties to preserve the allocation to the Obligations otherwise set forth above in this Section.

Notwithstanding the foregoing to the contrary, Obligations arising under Secured Cash Management Agreements and Secured Hedge Agreements shall be excluded from the application described above if the Administrative Agent has not received a Secured Party Designation Notice, together with such supporting documentation as the Administrative Agent may request, from the applicable Cash Management Bank or Hedge Bank, as the case may be. Each Cash Management Bank or Hedge Bank not a party to this Agreement that has given the notice contemplated by the preceding sentence shall, by such notice, be deemed to have acknowledged and accepted the appointment of the Administrative Agent pursuant to the terms of Article IX hereof for itself and its Affiliates as if a “Lender” party hereto.

ARTICLE XVII.

ARTICLE XVIII.

**ADMINISTRATIVE AGENT**

**Appointment and Authorization of Administrative Agent**

(a) Each of the Lenders and the L/C Issuer hereby irrevocably appoints, designates and authorizes Bank of America to act on its behalf as Administrative Agent hereunder and under the other Loan Documents and authorizes Administrative Agent to take such actions on its behalf and to exercise such powers as are delegated to Administrative Agent by the terms hereof or thereof, together with such actions and powers as are reasonably incidental thereto. The provisions of this Article IX are solely for the benefit of Administrative Agent, the Lenders and the L/C Issuer, and neither Borrower nor any other Loan Party shall have rights as a third party beneficiary of any of such provisions. It is understood and agreed that the use of the term “agent” herein or in any other Loan Documents (or any other similar term) with reference to the Administrative Agent is not intended to connote any fiduciary or other implied (or express) obligations arising under agency doctrine

of any applicable Law. Instead such term is used as a matter of market custom, and is intended to create or reflect only an administrative relationship between contracting parties. In addition, to the extent required under the laws of any jurisdiction other than the United States of America, each of the Lenders and Secured Parties hereby grants to Administrative Agent any required powers of attorney to execute any Collateral Document or other Loan Document governed by the laws of such jurisdiction on such Lender's or Secured Party's behalf.

(b) Administrative Agent shall also act as the "collateral agent" under the Loan Documents, and each of the Lenders (including in its capacities as a potential Hedge Bank and a potential Cash Management Bank) and the L/C Issuer hereby irrevocably appoints and authorizes Administrative Agent to act as the agent of such Lender and the L/C Issuer for purposes of acquiring, holding and enforcing any and all Liens on Collateral granted by any of the Loan Parties to secure any of the Obligations, together with such powers and discretion as are reasonably incidental thereto. In this connection, Administrative Agent, as "collateral agent" and any co-agents, sub-agents and attorneys-in-fact appointed by Administrative Agent pursuant to Section 9.05 or otherwise for purposes of holding or enforcing any Lien on the Collateral (or any portion thereof) granted under the Collateral Documents, or for exercising any rights and remedies thereunder at the direction of Administrative Agent, shall be entitled to the benefits of all provisions of this Article IX and Article X, as though such co-agents, sub-agents and attorneys-in-fact were the "collateral agent" under the Loan Documents as if set forth in full herein with respect thereto.

#### **Rights as a Lender**

The Person serving as Administrative Agent hereunder shall have the same rights and powers in its capacity as a Lender as any other Lender and may exercise the same as though it were not Administrative Agent and the term "Lender" or "Lenders" shall, unless otherwise expressly indicated or unless the context otherwise requires, include the Person serving as Administrative Agent hereunder in its individual capacity. Such Person and its Affiliates may accept deposits from, lend money to, own securities of, act as the financial advisor or in any other advisory capacity for and generally engage in any kind of banking, trust, financial advisory, underwriting or other business with Borrower or any Subsidiary or other Affiliate thereof as if such Person were not Administrative Agent hereunder and without any duty to account therefor to Lenders or to provide notice to or consent of the Lenders with respect thereto.

#### **Exculpatory Provisions**

(a) Administrative Agent shall not have any duties or obligations except those expressly set forth herein and in the other Loan Documents, and its duties hereunder shall be administrative in nature. Without limiting the generality of the foregoing, Administrative Agent and its Related Parties:

(i) shall not be subject to any fiduciary or other implied duties, regardless of whether a Default has occurred and is continuing;

(ii) shall not have any duty to take any discretionary action or exercise any discretionary powers, except discretionary rights and powers expressly contemplated hereby or by the other Loan Documents that Administrative Agent is required to exercise as directed in writing by the Required Lenders (or such other number or percentage of the Lenders as shall be expressly provided for herein or in the other Loan Documents), provided that Administrative Agent shall not be required to take any action that, in its opinion or the opinion of its counsel, may expose Administrative Agent to liability or that is contrary to any Loan Document or applicable Law, including for the avoidance of doubt any action that may be in violation of the automatic stay under any Debtor Relief Law or that may effect a forfeiture, modification or termination of property of a Defaulting Lender in violation of any Debtor Relief Law; and

(iii) shall not, except as expressly set forth herein and in the other Loan Documents, have any duty or responsibility to disclose, and shall not be liable for the failure to disclose, any information relating to Borrower or any of its Affiliates that is communicated to or obtained by the Person serving as Administrative Agent or any of its Affiliates in any capacity.

(a) Neither Administrative Agent nor any of its Related Parties shall be liable for any action taken or not taken by Administrative Agent under or in connection with this Agreement or any other Loan Document or the transactions contemplated hereby or thereby (i) with the consent or at the request of the Required Lenders (or such other number or percentage of the Lenders as shall be necessary), or as Administrative Agent shall believe in good faith shall be necessary, under the circumstances as provided in Sections 8.02 and 10.01) or (ii) in the absence of its

own gross negligence or willful misconduct as determined by a court of competent jurisdiction by final and nonappealable judgment. Administrative Agent shall be deemed not to have knowledge of any Default unless and until written notice describing such Default is given to Administrative Agent by Borrower, a Lender or the L/C Issuer.

(b) Neither Administrative Agent nor any of its Related Parties have any duty or obligation to any Lender or participant or any other Person to ascertain or inquire into (i) any statement, warranty or representation made in or in connection with this Agreement or any other Loan Document, (ii) the contents of any certificate, report or other document delivered hereunder or thereunder or in connection herewith or therewith, (iii) the performance or observance of any of the covenants, agreements or other terms or conditions set forth herein or therein or the occurrence of any Default, (iv) the validity, enforceability, effectiveness or genuineness of this Agreement, any other Loan Document or any other agreement, instrument or document, or the creation, perfection or priority of any Lien purported to be created by the Collateral Documents or (v) the satisfaction of any condition set forth in Article IV or elsewhere herein, other than to confirm receipt of items expressly required to be delivered to Administrative Agent.

#### **Reliance by Administrative Agent**

Administrative Agent shall be entitled to rely upon, and shall be fully protected in relying and shall not incur any liability for relying upon, any notice, request, certificate, consent, statement, instrument, document or other writing (including any electronic message, internet or Intranet website posting or other distribution) believed by it to be genuine and to have been signed, sent or otherwise authenticated by the proper Person. Administrative Agent also may rely upon any statement made to it orally or by telephone and believed by it to have been made by the proper Person, and shall be fully protected in relying and shall not incur any liability for relying thereon. In determining compliance with any condition hereunder to the making of a Loan, or the issuance, extension, renewal or increase of a Letter of Credit, that by its terms must be fulfilled to the satisfaction of a Lender or the L/C Issuer, Administrative Agent may presume that such condition is satisfactory to such Lender or the L/C Issuer unless Administrative Agent shall have received notice to the contrary from such Lender or the L/C Issuer prior to the making of such Loan or the issuance of such Letter of Credit. Administrative Agent may consult with legal counsel (who may be counsel for Borrower), independent accountants and other experts selected by it, and shall not be liable for any action taken or not taken by it in accordance with the advice of any such counsel, accountants or experts. For purposes of determining compliance with the conditions specified in Section 4.01, each Lender that has signed this Agreement shall be deemed to have consented to, approved or accepted or to be satisfied with, each document or other matter required thereunder to be consented to or approved by or acceptable or satisfactory to a Lender unless Administrative Agent shall have received notice from such Lender prior to the proposed Closing Date specifying its objections.

#### **Delegation of Duties**

Administrative Agent may perform any and all of its duties and exercise its rights and powers hereunder or under any other Loan Document by or through any one or more sub-agents appointed by Administrative Agent. Administrative Agent and any such sub-agent may perform any and all of its duties and exercise its rights and powers by or through their respective Related Parties. The exculpatory provisions of this Article IX shall apply to any such sub-agent and to the Related Parties of Administrative Agent and any such sub-agent, and shall apply to their respective activities in connection with the syndication of the credit facilities provided for herein as well as activities as Administrative Agent. The Administrative Agent shall not be responsible for the negligence or misconduct of any sub-agents except to the extent that a court of competent jurisdiction determines in a final and nonappealable judgment that Administrative Agent acted with gross negligence or willful misconduct in the selection of such sub-agents.

#### **Resignation of Administrative Agent**

(o) The Administrative Agent may at any time give notice of its resignation to the Lenders, the L/C Issuer and the Borrower. Upon receipt of any such notice of resignation, the Required Lenders shall have the right, in consultation with the Borrower, to appoint a successor, which shall either be a Lender or another bank with an office in the United States (or an Affiliate of any such bank with an office in the United States) acceptable to the Required Lenders and the Borrower. If no such successor shall have been so appointed by the Required Lenders and shall have accepted such appointment within thirty (30) days after the retiring Administrative Agent gives notice of its resignation (or such earlier day as shall be agreed by the Required Lenders) (hereinafter referred to as the “Resignation Effective Date”), then the retiring Administrative Agent may (but shall not be obligated to) on behalf of the Lenders and the L/C Issuer, appoint a successor

Administrative Agent meeting the qualifications set forth above; provided that in no event shall any successor Administrative Agent be a Defaulting Lender. Whether or not a successor has been appointed, such resignation shall become effective in accordance with such notice on the Resignation Effective Date.

(p) If the Person serving as Administrative Agent is a Defaulting Lender pursuant to clause (d) of the definition thereof, the Required Lenders may, to the extent permitted by applicable Law, by notice in writing to the Borrower and such Person remove such Person as Administrative Agent and, in consultation with the Borrower, appoint a successor. If no such successor shall have been so appointed by the Required Lenders and shall have accepted such appointment within thirty (30) days (or such earlier day as shall be agreed by the Required Lenders) (hereinafter referred to as the “Removal Effective Date”), then such removal shall nonetheless become effective in accordance with such notice on the Removal Effective Date.

(q) With effect from the Resignation Effective Date or the Removal Effective Date (as applicable) (i) the retiring or removed Administrative Agent shall be discharged from its duties and obligations hereunder and under the other Loan Documents (except that in the case of any collateral security held by the Administrative Agent on behalf of the Lenders or the L/C Issuer under any of the Loan Documents, the retiring or removed Administrative Agent shall continue to hold such collateral security until such time as a successor Administrative Agent is appointed) and (ii) except for any indemnity payments or other amounts then owed to the retiring or removed Administrative Agent, all payments, communications and determinations provided to be made by, to or through the Administrative Agent shall instead be made by or to each Lender and the L/C Issuer directly, until such time, if any, as the Required Lenders appoint a successor Administrative Agent as provided for above. Upon the acceptance of a successor’s appointment as Administrative Agent hereunder, such successor shall succeed to and become vested with all of the rights, powers, privileges and duties of the retiring (or removed) Administrative Agent (other than as provided in Section 3.01(g) and other than any rights to indemnity payments or other amounts owed to the retiring or removed Administrative Agent as of the Resignation Effective Date or the Removal Effective Date, as applicable), and the retiring or removed Administrative Agent shall be discharged from all of its duties and obligations hereunder or under the other Loan Documents (if not already discharged therefrom as provided above in this Section). The fees payable by the Borrower to a successor Administrative Agent shall be the same as those payable to its predecessor unless otherwise agreed between the Borrower and such successor. After the retiring or removed Administrative Agent’s resignation or removal hereunder and under the other Loan Documents, the provisions of this Article and Section 10.04 shall continue in effect for the benefit of such retiring or removed Administrative Agent, its sub-agents and their respective Related Parties in respect of any actions taken or omitted to be taken by any of them (A) while the retiring or removed Administrative Agent was acting as Administrative Agent and (B) after such resignation or removal for as long as any of them continues to act in any capacity hereunder or under the other Loan Documents, including, without limitation, (1) acting as collateral agent or otherwise holding any collateral security on behalf of any of the Secured Parties and (2) in respect of any actions taken in connection with transferring the agency to any successor Administrative Agent.

(r) Any resignation by Bank of America as Administrative Agent pursuant to this Section shall also constitute its resignation as L/C Issuer. If Bank of America resigns as L/C Issuer, it shall retain all the rights, powers, privileges and duties of the L/C Issuer hereunder with respect to all Letters of Credit outstanding as of the effective date of its resignation as L/C Issuer and all L/C Obligations with respect thereto, including the right to require the Lenders to make Base Rate Loans or fund risk participations in Unreimbursed Amounts pursuant to Section 2.03(c). Upon the appointment by the Borrower of a successor L/C Issuer hereunder (which successor shall in all cases be a Lender other than a Defaulting Lender), (i) such successor shall succeed to and become vested with all of the rights, powers, privileges and duties of the retiring L/C Issuer, (ii) the retiring L/C Issuer shall be discharged from all of their respective duties and obligations hereunder or under the other Loan Documents, and (iii) the successor L/C Issuer shall issue letters of credit in substitution for the Letters of Credit, if any, outstanding at the time of such succession or make other arrangements satisfactory to Bank of America to effectively assume the obligations of Bank of America with respect to such Letters of Credit.

#### **Non-Reliance on Administrative Agent and Other Lenders**

. Each Lender and the L/C Issuer acknowledges that it has, independently and without reliance upon Administrative Agent or any other Lender or any of their Related Parties and based on such documents and information as it has deemed appropriate, made its own credit analysis and decision to enter into this Agreement. Each Lender and the L/C Issuer also acknowledges that it will, independently and without reliance upon Administrative Agent or any other Lender or any of their Related Parties and based on such documents and information as it shall from time to time deem appropriate, continue to make its own decisions in taking or not taking action under or based upon this

Agreement, any other Loan Document or any related agreement or any document furnished hereunder or thereunder.

**No Other Duties, Etc**

. Anything herein to the contrary notwithstanding, none of the titles listed on the cover page hereof shall have any powers, duties or responsibilities under this Agreement or any of the other Loan Documents, except in its capacity, as applicable, as Administrative Agent, the Arranger, a Lender or the L/C Issuer hereunder.

**Administrative Agent May File Proofs of Claim; Credit Bidding**

. In case of the pendency of any proceeding under any Debtor Relief Law or any other judicial proceeding relative to any Loan Party, Administrative Agent (irrespective of whether the principal of any Loan or L/C Obligation shall then be due and payable as herein expressed or by declaration or otherwise and irrespective of whether Administrative Agent shall have made any demand on Borrower) shall be entitled and empowered, by intervention in such proceeding or otherwise:

(a) to file and prove a claim for the whole amount of the principal and interest owing and unpaid in respect of the Loans, L/C Obligations and all other Obligations that are owing and unpaid and to file such other documents as may be necessary or advisable in order to have the claims of Lenders, the L/C Issuer and Administrative Agent (including any claim for the reasonable compensation, expenses, disbursements and advances of Lenders, the L/C Issuer and Administrative Agent and their respective Administrative Agents and counsel and all other amounts due Lenders, the L/C Issuer and Administrative Agent under Sections 2.03(i) and (j), 2.09 and 10.04) allowed in such judicial proceeding; and

(b) to collect and receive any monies or other property payable or deliverable on any such claims and to distribute the same; and any custodian, receiver, assignee, trustee, liquidator, sequestrator or other similar official in any such judicial proceeding is hereby authorized by each Lender and the L/C Issuer to make such payments to Administrative Agent and, in the event that Administrative Agent shall consent to the making of such payments directly to Lenders and the L/C Issuer, to pay to Administrative Agent any amount due for the reasonable compensation, expenses, disbursements and advances of Administrative Agent and its agents and counsel, and any other amounts due Administrative Agent under Sections 2.08, 2.11 or 10.04.

Nothing contained herein shall be deemed to authorize Administrative Agent to authorize or consent to or accept or adopt on behalf of any Lender or the L/C Issuer any plan of reorganization, arrangement, adjustment or composition affecting the Obligations or the rights of any Lender or the L/C Issuer or to authorize Administrative Agent to vote in respect of the claim of any Lender or the L/C Issuer in any such proceeding.

The Secured Parties hereby irrevocably authorize Administrative Agent, at the direction of the Required Lenders, to credit bid all or any portion of the Obligations (including accepting some or all of the Collateral in satisfaction of some or all of the Obligations pursuant to a deed in lieu of foreclosure or otherwise) and in such manner purchase (either directly or through one or more acquisition vehicles) all or any portion of the Collateral (a) at any sale thereof conducted under the provisions of the Bankruptcy Code of the United States, including under Sections 363, 1123 or 1129 of the Bankruptcy Code of the United States, or any similar Laws in any other jurisdictions to which a Loan Party is subject, (b) at any other sale or foreclosure or acceptance of collateral in lieu of debt conducted by (or with the consent or at the direction of) Administrative Agent (whether by judicial action or otherwise) in accordance with any applicable Law. In connection with any such credit bid and purchase, the Obligations owed to the Secured Parties shall be entitled to be, and shall be, credit bid on a ratable basis (with Obligations with respect to contingent or unliquidated claims receiving contingent interests in the acquired assets on a ratable basis that would vest upon the liquidation of such claims in an amount proportional to the liquidated portion of the contingent claim amount used in allocating the contingent interests) in the asset or assets so purchased (or in the Equity Interests or debt instruments of the acquisition vehicle or vehicles that are used to consummate such purchase). In connection with any such bid (i) Administrative Agent shall be authorized to form one or more acquisition vehicles to make a bid, (ii) to adopt documents providing for the governance of the acquisition vehicle or vehicles (provided that any actions by Administrative Agent with respect to such acquisition vehicle or vehicles, including any disposition of the assets or Equity Interests thereof shall be governed, directly or indirectly, by the vote of the Required Lenders, irrespective of the termination of this Agreement and without giving effect to the limitations on actions by the Required Lenders contained in clauses (a) through (h) of

Section 10.01, and (iii) to the extent that Obligations that are assigned to an acquisition vehicle are not used to acquire Collateral for any reason (as a result of another bid being higher or better, because the amount of Obligations assigned to the acquisition vehicle exceeds the amount of debt credit bid by the acquisition vehicle or otherwise), such Obligations shall automatically be reassigned to the Lenders pro rata and the Equity Interests and/or debt instruments issued by any acquisition vehicle on account of the Obligations that had been assigned to the acquisition vehicle shall automatically be cancelled, without the need for any Secured Party or any acquisition vehicle to take any further action.

#### **Guaranty Matters**

Each Lender (including in its capacities as a potential Hedge Bank and a potential Cash Management Bank) and the L/C Issuer hereby irrevocably authorizes Administrative Agent, at its option and in its discretion, to release any Guarantor from its obligations under the Guaranty if such Person ceases to be a Subsidiary as a result of a transaction permitted hereunder. Upon request by Administrative Agent at any time, each Lender and the L/C Issuer will confirm in writing Administrative Agent's authority to release any Guarantor from its obligations under the Guaranty pursuant to this Section 9.10.

#### **Collateral Matters**

(a) Each Lender (including in its capacities as a potential Hedge Bank and a potential Cash Management Bank) and the L/C Issuer hereby irrevocably authorizes and directs Administrative Agent to enter into the Collateral Documents for the benefit of such Lender and the L/C Issuer. Each Lender and the L/C Issuer hereby agrees, and each holder of any Note by the acceptance thereof will be deemed to agree, that, except as otherwise set forth in Section 10.01, any action taken by the Required Lenders, in accordance with the provisions of this Agreement or the Collateral Documents, and the exercise by the Required Lenders of the powers set forth herein or therein, together with such other powers as are reasonably incidental thereto, shall be authorized and binding upon all of Lenders and the L/C Issuer. Administrative Agent is hereby authorized (but not obligated) on behalf of all of Lenders and the L/C Issuer, without the necessity of any notice to or further consent from any Lender or the L/C Issuer from time to time prior to, an Event of Default, to take any action with respect to any Collateral or Collateral Documents which may be necessary to perfect and maintain perfected the Liens upon the Collateral granted pursuant to the Collateral Documents.

(b) Each Lender and the L/C Issuer hereby irrevocably authorize Administrative Agent, at its option and in its discretion,

(i) to release any Lien on any property granted to or held by Administrative Agent under any Loan Document (A) upon termination of the Aggregate Commitments and payment in full of all Obligations (other than (1) contingent indemnification obligations and (2) obligations and liabilities under Secured Cash Management Agreements and Secured Hedge Agreements as to which arrangements satisfactory to the applicable Cash Management Bank or Hedge Bank shall have been made) and the expiration or termination of all Letters of Credit, (B) that is sold or to be sold as part of or in connection with any sale permitted hereunder or under any other Loan Document, (C) subject to Section 10.01, if approved, authorized or ratified in writing by the Required Lenders, or (D) in connection with any foreclosure sale or other disposition of Collateral after the occurrence of an Event of Default; and

(ii) to subordinate any Lien on any property granted to or held by Administrative Agent under any Loan Document to the holder of any Lien on such property that is permitted by this Agreement or any other Loan Document.

Upon request by Administrative Agent at any time, each Lender and the L/C Issuer will confirm in writing Administrative Agent's authority to release or subordinate its interest in particular types or items of Collateral pursuant to this Section 9.11.

(c) Subject to subsection (b) above, Administrative Agent shall (and is hereby irrevocably authorized by each Lender and the L/C Issuer to) execute such documents as may be necessary to evidence the release or subordination of the Liens granted to Administrative Agent for the benefit of Administrative Agent and Lenders and the L/C Issuer herein or pursuant hereto upon the applicable Collateral; provided that (i) Administrative Agent shall not be required to execute any such document on terms which, in Administrative Agent's opinion, would expose Administrative Agent to or create any liability or entail any consequence other than the release or subordination of such Liens without recourse or warranty and (ii) such release or

subordination shall not in any manner discharge, affect or impair the Obligations or any Liens upon (or obligations of Borrower or any other Loan Party in respect of) all interests retained by Borrower or any other Loan Party, including the proceeds of the sale, all of which shall continue to constitute part of the Collateral. In the event of any sale or transfer of Collateral, or any foreclosure with respect to any of the Collateral, Administrative Agent shall be authorized to deduct all expenses reasonably incurred by Administrative Agent from the proceeds of any such sale, transfer or foreclosure.

(d) Administrative Agent shall have no obligation whatsoever to any Lender, the L/C Issuer or any other Person to assure that the Collateral exists or is owned by Borrower or any other Loan Party or is cared for, protected or insured or that the Liens granted to Administrative Agent herein or in any of the Collateral Documents or pursuant hereto or thereto have been properly or sufficiently or lawfully created, perfected, protected or enforced or are entitled to any particular priority, or to exercise or to continue exercising at all or in any manner or under any duty of care, disclosure or fidelity any of the rights, authorities and powers granted or available to Administrative Agent in this Section 9.11 or in any of the Collateral Documents, it being understood and agreed that in respect of the Collateral, or any act, omission or event related thereto, Administrative Agent may act in any manner it may deem appropriate, in its sole discretion, given Administrative Agent's own interest in the Collateral as one of Lenders and that Administrative Agent shall have no duty or liability whatsoever to Lenders or the L/C Issuer.

(e) Each Lender and the L/C Issuer hereby appoints each other Lender as Administrative Agent for the purpose of perfecting Lenders' and the L/C Issuer's security interest in assets which, in accordance with Article 9 of the UCC can be perfected only by possession. Should any Lender or the L/C Issuer (other than Administrative Agent) obtain possession of any such Collateral, such Lender or the L/C Issuer shall notify Administrative Agent thereof, and, promptly upon Administrative Agent's request therefor shall deliver such Collateral to Administrative Agent or in accordance with Administrative Agent's instructions.

. **Secured Cash Management Agreements and Secured Hedge Agreements.** No Cash Management Bank or Hedge Bank that obtains the benefits of Section 8.03, any Guaranty or any Collateral by virtue of the provisions hereof or of any Guaranty or any Collateral Document shall have any right to notice of any action or to consent to, direct or object to any action hereunder or under any other Loan Document or otherwise in respect of the Collateral (including the release or impairment of any Collateral) other than in its capacity as a Lender and, in such case, only to the extent expressly provided in the Loan Documents. Notwithstanding any other provision of this Article IX to the contrary, the Administrative Agent shall not be required to verify the payment of, or that other satisfactory arrangements have been made with respect to, Obligations arising under Secured Cash Management Agreements and Secured Hedge Agreements unless the Administrative Agent has received written notice of such Obligations, together with such supporting documentation as the Administrative Agent may request, from the applicable Cash Management Bank or Hedge Bank, as the case may be.

. **ERISA Matters**  
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(a) Each Lender (x) represents and warrants, as of the date such Person became a Lender party hereto, to, and (y) covenants, from the date such Person became a Lender party hereto to the date such Person ceases being a Lender party hereto, for the benefit of, the Administrative Agent, the Arranger and their respective Affiliates, and not, for the avoidance of doubt, to or for the benefit of the Borrower or any other Loan Party, that at least one of the following is and will be true:

(i) such Lender is not using "plan assets" (within the meaning of 29 CFR § 2510.3-101, as modified by Section 3(42) of ERISA) of one or more Benefit Plans in connection with the Loans, the Letters of Credit or the Commitments;

(ii) the transaction exemption set forth in one or more PTEs, such as PTE 84-14 (a class exemption for certain transactions determined by independent qualified professional asset managers), PTE 95-60 (a class exemption for certain transactions involving insurance company general accounts), PTE 90-1 (a class exemption for certain transactions involving insurance company pooled separate accounts), PTE 91-38 (a class exemption for certain transactions involving bank collective investment funds) or PTE 96-23 (a class exemption for certain transactions determined by in-house asset managers), is applicable with respect to such Lender's entrance into, participation in, administration of and performance of the Loans, the Letters of Credit, the Commitments and this Agreement;

(iii) (A) such Lender is an investment fund managed by a “Qualified Professional Asset Manager” (within the meaning of Part VI of PTE 84-14), (B) such Qualified Professional Asset Manager made the investment decision on behalf of such Lender to enter into, participate in, administer and perform the Loans, the Letters of Credit, the Commitments and this Agreement, (C) the entrance into, participation in, administration of and performance of the Loans, the Letters of Credit, the Commitments and this Agreement satisfies the requirements of sub-sections (b) through (g) of Part I of PTE 84-14 and (D) to the best knowledge of such Lender, the requirements of subsection (a) of Part I of PTE 84-14 are satisfied with respect to such Lender’s entrance into, participation in, administration of and performance of the Loans, the Letters of Credit, the Commitments and this Agreement; or

(iv) such other representation, warranty and covenant as may be agreed in writing between the Administrative Agent, in its sole discretion, and such Lender.

(b) In addition, unless Section 9.13(a)(i) above is true with respect to a Lender or such Lender has not provided another representation, warranty and covenant as provided in Section 9.13(a)(iv) above, such Lender further (x) represents and warrants, as of the date such Person became a Lender party hereto, to, and (y) covenants, from the date such Person became a Lender party hereto to the date such Person ceases being a Lender party hereto, for the benefit of, the Administrative Agent, the Arranger and their respective Affiliates, and not, for the avoidance of doubt, to or for the benefit of the Borrower or any other Loan Party, that:

(i) none of the Administrative Agent, the Arranger or any of their respective Affiliates is a fiduciary with respect to the assets of such Lender (including in connection with the reservation or exercise of any rights by the Administrative Agent under this Agreement, any Loan Document or any documents related to hereto or thereto);

(ii) the Person making the investment decision on behalf of such Lender with respect to the entrance into, participation in, administration of and performance of the Loans, the Letters of Credit, the Commitments and this Agreement is independent (within the meaning of 29 CFR § 2510.3-21) and is a bank, an insurance carrier, an investment adviser, a broker-dealer or other person that holds, or has under management or control, total assets of at least \$50 million, in each case as described in 29 CFR § 2510.3-21(c)(1)(i)(A)-(E);

(iii) the Person making the investment decision on behalf of such Lender with respect to the entrance into, participation in, administration of and performance of the Loans, the Letters of Credit, the Commitments and this Agreement is capable of evaluating investment risks independently, both in general and with regard to particular transactions and investment strategies (including in respect of the Obligations);

(iv) the Person making the investment decision on behalf of such Lender with respect to the entrance into, participation in, administration of and performance of the Loans, the Letters of Credit, the Commitments and this Agreement is a fiduciary under ERISA or the Code, or both, with respect to the Loans, the Letters of Credit, the Commitments and this Agreement and is responsible for exercising independent judgment in evaluating the transactions hereunder; and

(v) no fee or other compensation is being paid directly to the Administrative Agent, the Arranger or any their respective Affiliates for investment advice (as opposed to other services) in connection with the Loans, the Letters of Credit, the Commitments or this Agreement.

(c) The Administrative Agent, for itself and on behalf of the Arranger, hereby informs the Lenders that each such Person is not undertaking to provide impartial investment advice, or to give advice in a fiduciary capacity, in connection with the transactions contemplated hereby, and that such Person has a financial interest in the transactions contemplated hereby in that such Person or an Affiliate thereof (i) may receive interest or other payments with respect to the Loans, the Letters of Credit, the Commitments and this Agreement, (ii) may recognize a gain if it extended the Loans, the Letters of Credit or the Commitments for an amount less than the amount being paid for an interest in the Loans, the Letters of Credit or the Commitments by such Lender or (iii) may receive fees or other payments in connection with the transactions contemplated hereby, the Loan Documents or otherwise, including structuring fees, commitment fees, arrangement fees, facility fees, upfront fees, underwriting fees, ticking fees, agency fees, administrative agent or

collateral agent fees, utilization fees, minimum usage fees, letter of credit fees, fronting fees, deal-away or alternate transaction fees, amendment fees, processing fees, term out premiums, banker's acceptance fees, breakage or other early termination fees or fees similar to the foregoing.

ARTICLE XIX.

ARTICLE XX.

MISCELLANEOUS

Amendments, Etc

No amendment or waiver of any provision of this Agreement or any other Loan Document, and no consent to any departure by Borrower or any other Loan Party therefrom, shall be effective unless in writing signed by the Required Lenders (or by Administrative Agent with the consent of the Required Lenders) and Borrower or the applicable Loan Party, as the case may be, and acknowledged by Administrative Agent, and each such waiver or consent shall be effective only in the specific instance and for the specific purpose for which given; provided, however, that no such amendment, waiver or consent shall:

(a) waive any condition set forth in Section 4.01(a) without the written consent of each Lender; provided, however, in the sole and absolute discretion of Administrative Agent, only a waiver by Administrative Agent shall be required with respect to immaterial matters or items specified in Sections 4.01(a)(iii) or (iv) with respect to which Borrower has given assurances satisfactory to Administrative Agent that such items shall be delivered promptly following the Closing Date;

(b) extend or increase the Commitment of any Lender (or reinstate any Commitment terminated pursuant to Section 8.02) without the written consent of such Lender (it being understood and agreed that a waiver of any condition precedent in Section 4.02 or of any Default or a mandatory reduction in Commitments is not considered an extension or increase in Commitments of any Lender);

(c) postpone any date fixed by this Agreement or any other Loan Document for any payment (excluding mandatory prepayments) of principal, interest, fees or other amounts due to Lenders (or any of them) hereunder or under such other Loan Document without the written consent of each Lender entitled to such payment;

(d) reduce the principal of, or the rate of interest specified herein on, any Loan or L/C Borrowing, or (subject to clause (iii) of the second proviso to this Section 10.01) any fees or other amounts payable hereunder or under any other Loan Document, without the written consent of each Lender entitled to such amount; provided, however, that only the consent of the Required Lenders shall be necessary (i) to amend the definition of "Default Rate" or to waive any obligation of Borrower to pay interest or L/C Fees at the Default Rate or (ii) to amend any financial covenant hereunder (or any defined term used therein) even if the effect of such amendment would be to reduce the rate of interest on any Loan or L/C Borrowing or to reduce any fee payable hereunder;

(e) change Section 2.12 or Section 8.03 in a manner that would alter the pro rata sharing of payments required thereby without the written consent of each Lender;

(f) amend Section 1.06 of the definition of "Alternative Currency" without the written consent of each Lender;

(g) change any provision of this Section 10.01 or the definition of "Required Lenders" or any other provision hereof specifying the number or percentage of Lenders required to amend, waive or otherwise modify any rights hereunder or make any determination or grant any consent hereunder, without the written consent of each Lender; or

(h) release any Guarantor from the Guaranty or release the Liens on all or substantially all of the Collateral in any transaction or series of related transactions except in accordance with the terms of any Loan Document, without the written consent of each Lender;

and, provided further that (i) no amendment, waiver or consent shall, unless in writing and signed by the L/C Issuer in addition to the Lenders required above, affect the rights or duties of the L/C Issuer under this Agreement or any Issuer Document relating to any Letter of Credit issued or to be issued by it, (ii) no amendment, waiver or consent shall, unless in writing and signed by Administrative Agent in addition to the Lenders required above, affect the rights or duties of Administrative Agent under this Agreement or any other Loan Document, and (iii) the Fee Letter may be amended, or rights or privileges thereunder waived, in a writing executed only by the parties thereto. Notwithstanding anything contained herein to the contrary, (A) no Defaulting Lender shall have any right to approve or disapprove any amendment, waiver or consent hereunder (and any amendment, waiver or consent which by its terms requires the consent of all Lenders or each affected Lender may be effected with the consent of the applicable Lenders other than

Defaulting Lenders), except that (1) the Commitment of any Defaulting Lender may not be increased or extended without the consent of such Lender and (2) any waiver, amendment or modification requiring the consent of all Lenders or each affected Lender that by its terms affects any Defaulting Lender disproportionately adversely relative to other affected Lenders shall require the consent of such Defaulting Lender, (B) each Lender is entitled to vote as such Lender sees fit on any bankruptcy reorganization plan that affects the Loans, and each Lender acknowledges that the provisions of Section 1126(c) of the Bankruptcy Code of the United States supersedes the unanimous consent provisions set forth herein and (C) the Required Lenders shall determine whether or not to allow a Loan Party to use cash collateral in the context of a bankruptcy or insolvency proceeding and such determination shall be binding on all of the Lenders.

Notwithstanding anything to the contrary herein, (a) this Agreement may be amended and restated without the consent of any Lender (but with the consent of Borrower and Administrative Agent) if, upon giving effect to such amendment and restatement, such Lender shall no longer be a party to this Agreement (as so amended and restated), the Commitments of such Lender shall have terminated, such Lender shall have no other commitment or other obligation hereunder and shall have been paid in full all principal, interest and other amounts owing to it or accrued for its account under this Agreement, and (b) Administrative Agent may amend or modify this Agreement and any other Loan Document with the prior consent of the Borrower, such consent not to be unreasonably withheld, conditioned, or delayed and such consent not being required while any Event of Default has occurred and is outstanding, to (i) to cure any ambiguity, omission, mistake, defect or inconsistency therein or (ii) grant a new Lien for the benefit of the Secured Parties, extend an existing Lien over additional property for the benefit of the Secured Parties or join additional Persons as Loan Parties.

#### **Notices; Effectiveness; Electronic Communications**

(a) **Notices Generally.** Except (x) in the case of notices and other communications expressly permitted to be given by telephone (and except as provided in subsection (b) below) and (y) in the case of notice of the occurrence of a Default or an Event of Default or the acceleration of the Obligations hereunder, which such notices shall only be given in writing and by hand-delivery, overnight courier service or certified mail, all notices and other communications provided for herein shall be in writing and shall be delivered by hand or overnight courier service, mailed by certified or registered mail or sent by fax transmission or e-mail transmission as follows, and all notices and other communications expressly permitted hereunder to be given by telephone shall be made to the applicable telephone number, as follows:

(i) if to the Borrower or any other Loan Party, the Administrative Agent or the L/C Issuer, to the address, fax number, e-mail address or telephone number specified for such Person on Schedule 10.02; and

(ii) if to any other Lender, to the address, fax number, e-mail address or telephone number specified in its Administrative Questionnaire (including, as appropriate, notices delivered solely to the Person designated by a Lender on its Administrative Questionnaire then in effect for the delivery of notices that may contain material non-public information relating to the Borrower).

Notices and other communications sent by hand or overnight courier service, or mailed by certified or registered mail, shall be deemed to have been given when received; notices and other communications sent by fax transmission shall be deemed to have been given when sent (except that, if not given during normal business hours for the recipient, shall be deemed to have been given at the opening of business on the next Business Day for the recipient). Notices and other communications delivered through electronic communications to the extent provided in subsection (b) below, shall be effective as provided in such subsection (b).

(b) **Electronic Communications.** Notices and other communications to Administrative Agent, the Lenders and the L/C Issuer hereunder may be delivered or furnished by electronic communication (including e-mail, FPML messaging and Internet or intranet websites) pursuant to procedures approved by the Administrative Agent, provided that the foregoing shall not apply to notices to any Lender or the L/C Issuer pursuant to Article II if such Lender or the L/C Issuer, as applicable, has notified the Administrative Agent that it is incapable of receiving notices under such Article by electronic communication. The Administrative Agent, the L/C Issuer or the Borrower may each, in its discretion, agree to accept notices and other communications to it hereunder by electronic communications pursuant to procedures approved by it, provided that approval of such procedures may be limited to particular notices or communications.

Unless the Administrative Agent otherwise prescribes, (i) notices and other communications sent to an e-mail address shall be deemed received upon the sender's receipt of an acknowledgment from the intended recipient (such as by the "return receipt requested" function, as available, return e-mail or other written acknowledgment) and (ii) notices and other communications posted to an Internet or intranet website shall be deemed received by the intended recipient upon the sender's receipt of an acknowledgment from the intended recipient (such as by the "return receipt requested" function, as available, return e-mail address or other written acknowledgment) indicating that such notice or communication is available and identifying the website address therefor; provided that, for both clauses (i) and (ii), if such notice, email or other communication is not sent during the normal business hours of the recipient, such notice, email or communication shall be deemed to have been sent at the opening of business on the next Business Day for the recipient.

(c) The Platform. THE PLATFORM IS PROVIDED "AS IS" AND "AS AVAILABLE." THE "ADMINISTRATIVE AGENT PARTIES" (AS SUCH TERM IS DEFINED BELOW) DO NOT WARRANT THE ACCURACY OR COMPLETENESS OF THE BORROWER MATERIALS OR THE ADEQUACY OF THE PLATFORM, AND EXPRESSLY DISCLAIM LIABILITY FOR ERRORS IN OR OMISSIONS FROM THE BORROWER MATERIALS. NO WARRANTY OF ANY KIND, EXPRESS, IMPLIED OR STATUTORY, INCLUDING ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT OF THIRD PARTY RIGHTS OR FREEDOM FROM VIRUSES OR OTHER CODE DEFECTS, IS MADE BY ANY ADMINISTRATIVE AGENT PARTY IN CONNECTION WITH THE BORROWER MATERIALS OR THE PLATFORM. In no event shall the Administrative Agent or any of its Related Parties (hereinafter collectively referred to as the "Administrative Agent Parties") have any liability to the Borrower, any Lender, the L/C Issuer or any other Person for losses, claims, damages, liabilities or expenses of any kind (whether in tort, contract or otherwise) arising out of the Borrower's, any Loan Party's or the Administrative Agent's transmission of Borrower Materials or notices through the Platform, any other electronic platform or electronic messaging service, or through the Internet.

(d) Change of Address, Etc. Each of the Borrower, the Administrative Agent and the L/C Issuer may change its address, fax number or telephone number or e-mail address for notices and other communications hereunder by notice to the other parties hereto. Each other Lender may change its address, fax number, e-mail address or telephone number for notices and other communications hereunder by notice to the Borrower, the Administrative Agent and the L/C Issuer. In addition, each Lender agrees to notify the Administrative Agent from time to time to ensure that the Administrative Agent has on record (i) an effective address, contact name, telephone number, fax number and e-mail address to which notices and other communications may be sent and (ii) accurate wire instructions for such Lender. Furthermore, each Public Lender agrees to cause at least one (1) individual at or on behalf of such Public Lender to at all times have selected the "Private Side Information" or similar designation on the content declaration screen of the Platform in order to enable such Public Lender or its delegate, in accordance with such Public Lender's compliance procedures and applicable Law, including United States Federal and state securities Laws, to make reference to Borrower Materials that are not made available through the "Public Side Information" portion of the Platform and that may contain material non-public information with respect to the Borrower or its securities for purposes of United States Federal or state securities laws.

(e) Reliance by Administrative Agent, L/C Issuer and Lenders. The Administrative Agent, the L/C Issuer and the Lenders shall be entitled to rely and act upon any notices (including, without limitation, telephonic or electronic notices, Committed Loan Notices, L/C Applications and Notice of Loan Prepayment) purportedly given by or on behalf of the Borrower even if (i) such notices were not made in a manner specified herein, were incomplete or were not preceded or followed by any other form of notice specified herein; provided, however, that such notices are made consistent with past practices among the parties, or (ii) the terms thereof, as understood by the recipient, varied from any confirmation thereof. The Borrower shall indemnify the Administrative Agent, the L/C Issuer, each Lender and the Related Parties of each of them from all losses, costs, expenses and liabilities resulting from the reliance by such Person on each notice purportedly given by or on behalf of the Borrower. All telephonic notices to and other telephonic communications with the Administrative Agent may be recorded by either party, and each of the parties hereto hereby consents to such recording.

**No Waiver; Cumulative Remedies; Enforcement**

. No failure by any Lender, the L/C Issuer or Administrative Agent to exercise, and no delay by any such Person in exercising, any right, remedy, power or privilege hereunder or under any other Loan Document shall operate

as a waiver thereof; nor shall any single or partial exercise of any right, remedy, power or privilege hereunder or under any other Loan Document preclude any other or further exercise thereof or the exercise of any other right, remedy, power or privilege. The rights, remedies, powers and privileges herein provided, and provided under each other Loan Document, are cumulative and not exclusive of any rights, remedies, powers and privileges provided by law.

Notwithstanding anything to the contrary contained herein or in any other Loan Document, the authority to enforce rights and remedies hereunder and under the other Loan Documents against the Loan Parties or any of them shall be vested exclusively in, and all actions and proceedings at law in connection with such enforcement shall be instituted and maintained exclusively by, the Administrative Agent in accordance with Section 8.02 for the benefit of all the Lenders and the L/C Issuer; provided, however, that the foregoing shall not prohibit (a) the Administrative Agent from exercising on its own behalf the rights and remedies that inure to its benefit (solely in its capacity as Administrative Agent) hereunder and under the other Loan Documents, (b) the L/C Issuer from exercising the rights and remedies that inure to its benefit (solely in its capacity as L/C Issuer) hereunder and under the other Loan Documents, (c) any Lender from exercising setoff rights in accordance with Section 10.08 (subject to the terms of Section 2.12), or (d) any Lender from filing proofs of claim or appearing and filing pleadings on its own behalf during the pendency of a proceeding relative to any Loan Party under any Debtor Relief Law; and provided, further, that if at any time there is no Person acting as Administrative Agent hereunder and under the other Loan Documents, then (i) the Required Lenders shall have the rights otherwise ascribed to the Administrative Agent pursuant to Section 8.02 and (ii) in addition to the matters set forth in clauses (b), (c) and (d) of the preceding proviso and subject to Section 2.12, any Lender may, with the consent of the Required Lenders, enforce any rights and remedies available to it and as authorized by the Required Lenders.

### **Expenses; Indemnity; Damage Waiver**

(a) Costs and Expenses. Borrower shall pay (i) all reasonable out of pocket expenses incurred by Administrative Agent and its Affiliates (including, to the extent permitted under this Agreement and/or the other Loan Documents, the reasonable fees, charges and disbursements of counsel for Administrative Agent set forth in Section 4.01(c) hereof), in connection with the syndication of the credit facilities provided for herein, the preparation, negotiation, execution, delivery and administration of this Agreement and the other Loan Documents or any amendments, modifications or waivers of the provisions hereof or thereof (whether or not the transactions contemplated hereby or thereby shall be consummated), (ii) all reasonable out of pocket expenses incurred by the L/C Issuer in connection with the issuance, amendment, renewal or extension of any Letter of Credit or any demand for payment thereunder and (iii) all out of pocket expenses incurred by Administrative Agent, any Lender or the L/C Issuer (including the reasonable fees, charges and disbursements of any counsel for Administrative Agent, any Lender or the L/C Issuer), in connection with the enforcement or protection of its rights (A) in connection with this Agreement and the other Loan Documents, including its rights under this Section 10.04, or (B) in connection with the Loans made or Letters of Credit issued hereunder, including all such out of pocket expenses incurred during any workout, restructuring or negotiations in respect of such Loans or Letters of Credit.

(b) Indemnification by Borrower. Borrower shall indemnify Administrative Agent (and any sub-Administrative Agent thereof), each Lender and the L/C Issuer, and each Related Party of any of the foregoing Persons (each such Person being called an "Indemnatee" and all such Persons being collectively called "Indemnitees") against, and hold each Indemnatee harmless from, any and all losses, claims, damages, liabilities and related expenses (including the reasonable fees, charges and disbursements of any counsel for any Indemnatee), incurred by any Indemnatee or asserted against any Indemnatee by any Person (including the Borrower or any other Loan Party) other than such Indemnatee and its Related Parties arising out of, in connection with, or as a result of (i) the execution or delivery of this Agreement, any other Loan Document or any agreement or instrument contemplated hereby or thereby, the performance by the parties hereto of their respective obligations hereunder or thereunder, the consummation of the transactions contemplated hereby or thereby, or, in the case of Administrative Agent (and any sub-Administrative Agent thereof) and its Related Parties only, the administration of this Agreement and the other Loan Documents (including in respect of any matters addressed in Section 3.01), (ii) any Loan or Letter of Credit or the use or proposed use of the proceeds therefrom (including any refusal by the L/C Issuer to honor a demand for payment under a Letter of Credit if the documents presented in connection with such demand do not strictly comply with the terms of such

Letter of Credit), (iii) any actual or alleged presence or release of Hazardous Materials on or from any property owned or operated by Borrower or any of its Subsidiaries, or any Environmental Liability related in any way to Borrower or any of its Subsidiaries, or (iv) any actual or prospective claim, litigation, investigation or proceeding relating to any of the foregoing, whether based on contract, tort or any other theory, whether brought by a third party or by Borrower or any other Loan Party, and regardless of whether any Indemnitee is a party thereto; provided that such indemnity shall not, as to any Indemnitee, be available to the extent that such losses, claims, damages, liabilities or related expenses (A) are determined by a court of competent jurisdiction by final and nonappealable judgment to have resulted from the gross negligence or willful misconduct of such Indemnitee, or (B) result from a claim brought by Borrower or any other Loan Party against an Indemnitee for breach in bad faith of such Indemnitee's obligations hereunder or under any other Loan Document, if Borrower or such Loan Party has obtained a final and nonappealable judgment in its favor on such claim as determined by a court of competent jurisdiction. Without limiting the provisions of Section 3.01(c), this Section 10.04(b) shall not apply with respect to Taxes other than any Taxes that represent losses, claims, damages, etc. arising from any non-Tax claim.

(c) Reimbursement by Lenders. To the extent that Borrower for any reason fails to indefeasibly pay any amount required under subsections (a) or (b) of this Section 10.04 to be paid by it to Administrative Agent (or any sub-Administrative Agent thereof), the L/C Issuer or any Related Party of any of the foregoing, each Lender severally agrees to pay to Administrative Agent (or any such sub-Administrative Agent), the L/C Issuer or such Related Party, as the case may be, such Lender's pro rata share (determined as of the time that the applicable unreimbursed expense or indemnity payment is sought based on each Lender's share of the Total Credit Exposure at such time) of such unpaid amount (including any such unpaid amount in respect of a claim asserted by such Lender), such payment to be made severally among them based on such Lenders' Applicable Percentage (determined as of the time that the applicable unreimbursed expense or indemnity payment is sought); provided that the unreimbursed expense or indemnified loss, claim, damage, liability or related expense, as the case may be, was incurred by or asserted against Administrative Agent (or any such sub-Administrative Agent) or the L/C Issuer in its capacity as such, or against any Related Party of any of the foregoing acting for Administrative Agent (or any such sub-Administrative Agent) or L/C Issuer in connection with such capacity. The obligations of the Lenders under this subsection (c) are subject to the provisions of Section 2.11(d).

(d) Waiver of Consequential Damages, Etc. To the fullest extent permitted by applicable law, Borrower shall not assert, and hereby waives, and acknowledges that no other Person shall have, any claim against any Indemnitee, on any theory of liability, for special, indirect, consequential or punitive damages (as opposed to direct or actual damages) arising out of, in connection with, or as a result of, this Agreement, any other Loan Document or any agreement or instrument contemplated hereby, the transactions contemplated hereby or thereby, any Loan or Letter of Credit or the use of the proceeds thereof. No Indemnitee referred to in subsection (b) above shall be liable for any damages arising from the use by unintended recipients of any information or other materials distributed to such unintended recipients by such Indemnitee through telecommunications, electronic or other information transmission systems in connection with this Agreement or the other Loan Documents or the transactions contemplated hereby or thereby other than for direct or actual damages resulting from the gross negligence or willful misconduct of such Indemnitee as determined by a final and nonappealable judgment of a court of competent jurisdiction.

(e) Payments. All amounts due under this Section 10.04 shall be payable not later than ten Business Days after demand therefor.

(f) Survival. The agreements in this Section 10.04 and the indemnity provisions of Section 10.02(e) shall survive the resignation of Administrative Agent and the L/C Issuer, the replacement of any Lender, the termination of the Aggregate Commitments and the repayment, satisfaction or discharge of all the other Obligations.

**Payments Set Aside**

. To the extent that any payment by or on behalf of Borrower is made to Administrative Agent, the L/C Issuer or any Lender, or Administrative Agent, the L/C Issuer or any Lender exercises its right of setoff, and such payment or the proceeds of such setoff or any part thereof is subsequently invalidated, declared to be fraudulent or preferential, set aside or required (including pursuant to any settlement entered into by Administrative Agent, the L/C Issuer or such Lender in its discretion) to be repaid to a trustee, receiver or any other party, in connection with any proceeding under any Debtor Relief Law or otherwise, then (a) to the extent of such recovery, the obligation or part thereof originally intended to be satisfied shall be revived and continued in full force and effect as if such payment had not been made or such setoff had not occurred, and (b) each Lender and the L/C Issuer severally agrees to pay to Administrative Agent upon demand its applicable share (without duplication) of any amount so recovered from or

repaid by Administrative Agent, plus interest thereon from the date of such demand to the date such payment is made at a rate per annum equal to the applicable Overnight Rate from time to time in effect, in the applicable currency of such recovery or payment. The obligations of the Lenders and the L/C Issuer under clause (b) of the preceding sentence shall survive the payment in full of the Obligations and the termination of this Agreement.

### **Successors and Assigns**

(a) **Successors and Assigns Generally.** The provisions of this Agreement and the other Loan Documents shall be binding upon and inure to the benefit of the parties hereto and thereto and their respective successors and assigns permitted hereby, except neither Borrower nor any other Loan Party may assign or otherwise transfer any of its rights or obligations hereunder without the prior written consent of Administrative Agent, the L/C Issuer and each Lender and no Lender may assign or otherwise transfer any of its rights or obligations hereunder except (i) to an assignee in accordance with the provisions of subsection (b) of this Section 10.06, (ii) by way of participation in accordance with the provisions of subsection (d) of this Section 10.06, or (iii) by way of pledge or assignment of a security interest subject to the restrictions of subsection (f) of this Section 10.06 (and any other attempted assignment or transfer by any party hereto shall be null and void). Nothing in this Agreement, expressed or implied, shall be construed to confer upon any Person (other than the parties hereto, their respective successors and assigns permitted hereby, Participants, to the extent provided in subsection (d) of this Section 10.06 and, to the extent expressly contemplated hereby, the Related Parties of each of Administrative Agent, the L/C Issuer and the Lenders) any legal or equitable right, remedy or claim under or by reason of this Agreement.

(b) **Assignments by Lenders.** Any Lender may at any time assign to one or more assignees all or a portion of its rights and obligations under this Agreement and the other Loan Documents (including all or a portion of its Commitment and the Loans (including for purposes of this subsection (b), participations in L/C Obligations) at the time owing to it); provided that any such assignment shall be subject to the following conditions:

(i) **Minimum Amounts.**

(A) in the case of an assignment of the entire remaining amount of the assigning Lender's Commitment and the Loans at the time owing to it or contemporaneous assignments to related Approved Funds (determined after giving effect to such Assignments) that equal at least the amount specified in subsection (b)(i)(B) of this Section in the aggregate, or in the case of an assignment to a Lender or an Affiliate of a Lender no minimum amount need be assigned; and

(B) in any case not described in subsection (b)(i)(A) of this Section 10.06, the aggregate amount of the Commitment (which for this purpose includes Loans outstanding thereunder) or, if the Commitment is not then in effect, the principal outstanding balance of the Loans of the assigning Lender subject to each such assignment, determined as of the date the Assignment and Assumption with respect to such assignment is delivered to Administrative Agent or, if a "Trade Date" is specified in the Assignment and Assumption, as of the Trade Date, shall not be less than \$5,000,000.00 unless each of Administrative Agent and, so long as no Event of Default has occurred and is continuing, Borrower otherwise consents (each such consent not to be unreasonably withheld or delayed); provided, however, that concurrent assignments to members of an Assignee Group and concurrent assignments from members of an Assignee Group to a single assignee (or to an assignee and members of its Assignee Group) will be treated as a single assignment for purposes of determining whether such minimum amount has been met.

(ii) **Proportionate Amounts.** Each partial assignment shall be made as an assignment of a proportionate part of all the assigning Lender's rights and obligations under this Agreement and the other Loan Documents with respect to the Loans or the Commitment assigned.

(iii) **Required Consents.** No consent shall be required for any assignment except to the extent required by subsection (b)(i)(B) of this Section 10.06 and, in addition:

(A) the consent of Borrower (such consent not to be unreasonably withheld or delayed) shall be required unless (1) an Event of Default has occurred and is continuing at the time of such assignment or (2) such assignment is to a Lender or an Affiliate of a Lender or an Approved Fund; provided that Borrower shall be deemed to have consented to any such assignment unless it shall object thereto by written notice to Administrative Agent within five (5) Business Days after having received notice thereof;

(B) the consent of Administrative Agent (such consent not to be unreasonably withheld)

or delayed) shall be required if such assignment is to a Person that is not a Lender or an Affiliate of such Lender or an Approved Fund with respect to such Lender; and

(C) the consent of the L/C Issuer (such consent not to be unreasonably withheld or delayed) shall be required for any assignment that increases the obligation of the assignee to participate in exposure under one or more Letters of Credit (whether or not then outstanding).

(iv) Assignment and Assumption. The parties to each assignment shall execute and deliver to Administrative Agent an Assignment and Assumption, together with a processing and recordation fee in the amount, if any, required as set forth in Schedule 10.06; provided, however, that the Administrative Agent may, in its sole and absolute discretion, elect to waive such processing and recordation fee in the case of any assignment. The assignee, if it is not a Lender, shall deliver to Administrative Agent an Administrative Questionnaire. The Administrative Agent shall deliver a copy of such Assignment and Assumption to the Borrower, in accordance with Section 10.02.

(v) No Assignment to Certain Persons. No such assignment shall be made (A) to the Borrower or any of the Borrower's Affiliates or Subsidiaries, (B) to any Defaulting Lender or any of its Subsidiaries, or any Person who, upon becoming a Lender hereunder, would constitute any of the foregoing Persons described in this clause (B), or (C) to a natural Person.

(vi) Certain Additional Payments. In connection with any assignment of rights and obligations of any Defaulting Lender hereunder, no such assignment shall be effective unless and until, in addition to the other conditions thereto set forth herein, the parties to the assignment shall make such additional payments to the Administrative Agent in an aggregate amount sufficient, upon distribution thereof as appropriate (which may be outright payment, purchases by the assignee of participations or subparticipations, or other compensating actions, including funding, with the consent of the Borrower and the Administrative Agent, the applicable pro rata share of Loans previously requested but not funded by the Defaulting Lender, to each of which the applicable assignee and assignor hereby irrevocably consent), to (A) pay and satisfy in full all payment liabilities then owed by such Defaulting Lender to the Administrative Agent, the L/C Issuer or any Lender hereunder (and interest accrued thereon) and (B) acquire (and fund as appropriate) its full pro rata share of all Loans and participations in Letters of Credit in accordance with its Applicable Percentage. Notwithstanding the foregoing to the contrary, in the event that any assignment of rights and obligations of any Defaulting Lender hereunder shall become effective under applicable Law without compliance with the provisions of this paragraph, then the assignee of such interest shall be deemed to be a Defaulting Lender for all purposes of this Agreement until such compliance occurs.

Subject to acceptance and recording thereof by Administrative Agent pursuant to subsection (c) of this Section 10.06, from and after the effective date specified in each Assignment and Assumption, the assignee thereunder shall be a party to this Agreement and, to the extent of the interest assigned by such Assignment and Assumption, have the rights and obligations of a Lender under this Agreement, and the assigning Lender thereunder shall, to the extent of the interest assigned by such Assignment and Assumption, be released from its obligations under this Agreement (and, in the case of an Assignment and Assumption covering all of the assigning Lender's rights and obligations under this Agreement, such Lender shall cease to be a party hereto) but shall continue to be entitled to the benefits of Sections 3.01, 3.04, 3.05, and 10.04 with respect to facts and circumstances occurring prior to the effective date of such assignment; provided that, except to the extent otherwise expressly agreed by the affected parties, no assignment by a Defaulting Lender will constitute a waiver or release of any claim of any party hereunder arising from that Lender's having been a Defaulting Lender. Upon request, Borrower (at its expense) shall execute and deliver a Note to the assignee Lender. Any assignment or transfer by a Lender of rights or obligations under this Agreement that does not comply with this subsection shall be treated for purposes of this Agreement as a sale by such Lender of a participation in such rights and obligations in accordance with subsection (d) of this Section 10.06.

(c) Register. Administrative Agent, acting solely for this purpose as a non-fiduciary agent of Borrower (and such agency being solely for tax purposes), shall maintain at the Administrative Agent's Office a copy of each Assignment and Assumption delivered to it (or the equivalent thereof in electronic form) and a register for the recordation of the names and addresses of the Lenders, and the Commitments of, and principal amounts (and stated interest) of the Loans and L/C Obligations owing to, each Lender pursuant to the terms hereof from time to time (hereinafter referred to as the "Register"). The entries in the Register shall be conclusive absent manifest error, and Borrower, Administrative Agent and the Lenders shall treat each Person whose name is recorded in the Register pursuant to the terms hereof as a Lender hereunder for all purposes of this Agreement. The Register shall be available for inspection by Borrower and any Lender, at any reasonable

time and from time to time upon reasonable prior notice.

(d) Participations. Any Lender may at any time, without the consent of, or notice to, the Borrower or the Administrative Agent, sell participations to any Person (other than a natural Person, or a holding company, investment vehicle or trust for, or owned and operated for the primary benefit of a natural Person, a Defaulting Lender or the Borrower or any of the Borrower's Affiliates or Subsidiaries) (hereinafter each a "Participant") in all or a portion of such Lender's rights and/or obligations under this Agreement (including all or a portion of its Commitment and/or the Loans (including such Lender's participations in L/C Obligations) owing to it); provided that (i) such Lender's obligations under this Agreement shall remain unchanged, (ii) such Lender shall remain solely responsible to the other parties hereto for the performance of such obligations and (iii) the Borrower, the Administrative Agent, the Lenders and the L/C Issuer shall continue to deal solely and directly with such Lender in connection with such Lender's rights and obligations under this Agreement. For the avoidance of doubt, each Lender shall be responsible for the indemnity under Section 10.04(c) without regard to the existence of any participations.

Any agreement or instrument pursuant to which a Lender sells such a participation shall provide that such Lender shall retain the sole right to enforce this Agreement and to approve any amendment, modification or waiver of any provision of this Agreement; provided that such agreement or instrument may provide that such Lender will not, without the consent of the Participant, agree to any amendment, waiver or other modification described in the first proviso to Section 10.01 that affects such Participant. The Borrower agrees that each Participant shall be entitled to the benefits of Sections 3.01, 3.04 and 3.05 (subject to the requirements and limitations therein, including the requirements under Section 3.01(e) (it being understood that the documentation required under Section 3.01(e) shall be delivered to the Lender who sells the participation)) to the same extent as if it were a Lender and had acquired its interest by assignment pursuant to subsection (b) of this Section; provided that such Participant (A) agrees to be subject to the provisions of Sections 3.06 and 10.13 as if it were an assignee under subsection (b) of this Section and (B) shall not be entitled to receive any greater payment under Sections 3.01 or 3.04, with respect to any participation, than the Lender from whom it acquired the applicable participation would have been entitled to receive, except to the extent such entitlement to receive a greater payment results from a Change in Law that occurs after the Participant acquired the applicable participation. Each Lender that sells a participation agrees, at the Borrower's request and expense, to use reasonable efforts to cooperate with the Borrower to effectuate the provisions of Section 3.06 with respect to any Participant. To the extent permitted by law, each Participant also shall be entitled to the benefits of Section 10.08 as though it were a Lender; provided that such Participant agrees to be subject to Section 2.12 as though it were a Lender. Each Lender that sells a participation shall, acting solely for this purpose as a non-fiduciary agent of the Borrower, maintain a register on which it enters the name and address of each Participant and the principal amounts (and stated interest) of each Participant's interest in the Loans or other obligations under the Loan Documents (hereinafter referred to as the "Participant Register"); provided that no Lender shall have any obligation to disclose all or any portion of the Participant Register (including the identity of any Participant or any information relating to a Participant's interest in any commitments, loans, letters of credit or its other obligations under any Loan Document) to any Person except to the extent that such disclosure is necessary to establish that such commitment, loan, letter of credit or other obligation is in registered form under Section 5f.103-1(c) of the United States Treasury Regulations. The entries in the Participant Register shall be conclusive absent manifest error, and such Lender shall treat each Person whose name is recorded in the Participant Register as the owner of such participation for all purposes of this Agreement notwithstanding any notice to the contrary. For the avoidance of doubt, the Administrative Agent (in its capacity as Administrative Agent) shall have no responsibility for maintaining a Participant Register.

(e) Certain Pledges. Any Lender may at any time pledge or assign a security interest in all or any portion of its rights under this Agreement (including under its Note, if any) to secure obligations of such Lender, including any pledge or assignment to secure obligations to a Federal Reserve Bank; provided that no such pledge or assignment shall release such Lender from any of its obligations hereunder or substitute any such pledgee or assignee for such Lender as a party hereto.

(f) Resignation as L/C Issuer. Notwithstanding anything to the contrary contained herein, if at any time Bank of America assigns all of its Commitment and Loans pursuant to subsection (b) above, Bank of America may, upon thirty (30) days' notice to Borrower and the Lenders, resign as L/C Issuer, in the event of any such resignation as L/C Issuer, Borrower shall be entitled to appoint from among Lenders a successor L/C Issuer hereunder; provided, however, that no failure by Borrower to appoint any such successor shall affect the resignation of Bank of America as L/C Issuer. If Bank of America resigns as L/C Issuer, it shall retain all the rights, powers, privileges and duties of the

L/C Issuer hereunder with respect to all Letters of Credit outstanding as of the effective date of its resignation as L/C Issuer and all L/C Obligations with respect thereto (including the right to require the Lenders to make Base Rate Loans or fund risk participations in Unreimbursed Amounts pursuant to Section 2.03(c)). Upon the appointment of a successor L/C Issuer, (i) such successor shall succeed to and become vested with all of the rights, powers, privileges and duties of the retiring L/C Issuer, as the case may be, and (ii) the successor L/C Issuer shall issue letters of credit in substitution for the Letters of Credit, if any, outstanding at the time of such succession or make other arrangements satisfactory to Bank of America to effectively assume the obligations of Bank of America with respect to such Letters of Credit.

**Treatment of Certain Information; Confidentiality**

(a) Treatment of Certain Information. Each of Administrative Agent, Lenders and the L/C Issuer agrees to maintain the confidentiality of the “Information” (as such term is defined below), except that Information may be disclosed (i) to its Affiliates, its auditors and its Related Parties (it being understood that the Persons to whom such disclosure is made will be informed of the confidential nature of such Information and instructed to keep such Information confidential and that the party disclosing Information to such Person shall remain liable for any direct damages arising out of any such unauthorized disclosure by any such Person), (ii) to the extent required or requested by any regulatory authority, purporting to have jurisdiction over such Person or its Related Parties (including any self-regulatory authority, such as the National Association of Insurance Commissioners), (iii) to the extent required by applicable Laws or regulations or by any subpoena or similar legal process (after prior notice to Borrower to the extent reasonably practicable and not prohibited by applicable Law), (iv) to any other party hereto, (v) in connection with the exercise of any remedies hereunder or under any other Loan Document or any action or proceeding relating to this Agreement or any other Loan Document or the enforcement of rights hereunder or thereunder, (vi) subject to an agreement containing provisions substantially the same as those of this Section 10.07, to (A) any assignee of or Participant in, or any prospective assignee of or Participant in, any of its rights and obligations under this Agreement or (B) any actual or prospective party (or its Related Parties) to any swap, derivative or other transaction under which payments are to be made by reference to the Borrower and its obligations, this Agreement or payments hereunder, (vii) on a confidential basis to (A) any rating agency in connection with rating the Borrower or its Subsidiaries or the credit facilities provided hereunder or (B) the provider of any Platform or other electronic delivery service used by Administrative Agent and/or the L/C Issuer to deliver Borrower Materials or notices to the Lenders or (C) the CUSIP Service Bureau or any similar agency in connection with the issuance and monitoring of CUSIP numbers or other market identifiers with respect to the credit facilities provided hereunder, (viii) with the consent of the Borrower or (ix) to the extent such Information (A) becomes publicly available other than as a result of a breach of this Section or (B) becomes available to the Administrative Agent, any Lender, the L/C Issuer or any of their respective Affiliates on a nonconfidential basis from a source other than the Borrower. For purposes of this Section 10.07, “Information” means all information received from Borrower or any Subsidiary relating to Borrower or any Subsidiary or any of their respective businesses, other than any such information that is available to Administrative Agent, any Lender or the L/C Issuer on a nonconfidential basis prior to disclosure by Borrower or any Subsidiary; provided that, in the case of information received from the Borrower or any Subsidiary after the date hereof, such information is clearly identified at the time of delivery as confidential or such information is confidential by the apparent nature of the submitted information. Any Person required to maintain the confidentiality of Information as provided in this Section 10.07 shall be considered to have complied with its obligation to do so if such Person has exercised reasonable care consistent with industry standards to maintain the confidentiality of such Information as such Person would accord to its own confidential information. In addition, Administrative Agent and the Lenders may disclose the existence of this Agreement and information about this Agreement to market data collectors, similar service providers to the lending industry and service providers to Administrative Agent and the Lenders in connection with the administration of this Agreement, the other Loan Documents and the Commitments.

(b) Non-Public Information. Each of Administrative Agent, the Lenders and the L/C Issuer acknowledges that (i) the Information may include material non-public information concerning Borrower or a Subsidiary, as the case may be, (ii) it has developed compliance procedures regarding the use of material non-public information and (iii) it will handle such material non-public information in accordance with

applicable Law, including United States Federal and state securities Laws.

(c) **Press Releases.** The Loan Parties and their Affiliates agree that they will not in the future issue any press releases or other public disclosure using the name of Administrative Agent or any Lender or their respective Affiliates or referring to this Agreement or any of the Loan Documents without the prior express written consent of Administrative Agent, unless (and only to the extent that) the Loan Parties or such Affiliate is required to do so under law and then, in any event the Loan Parties or such Affiliate will consult with such Person before issuing such press release or other public disclosure. Notwithstanding the foregoing to the contrary, Administrative Agent and Lenders hereby acknowledge and agree that any filing made by a Loan Party with the SEC or any other Governmental Authority, including, without limitation, the filing of the annual, quarterly, and/or other financial statements of Borrower and its Subsidiaries with the SEC, shall not constitute a press release or other public disclosure for purposes of this Section 10.07(c).

(d) **Customary Advertising Material.** The Loan Parties consent to the publication by Administrative Agent or any Lender of customary advertising material relating to the transactions contemplated hereby using the name, product photographs, logo or trademark of the Loan Parties.

#### **Right of Setoff**

. If an Event of Default shall have occurred and be continuing, each Lender, the L/C Issuer and each of their respective Affiliates is hereby authorized at any time and from time to time, to the fullest extent permitted by applicable law, to set off and apply any and all deposits (general or special, time or demand, provisional or final, in whatever currency) at any time held and other obligations (in whatever currency) at any time owing by such Lender, the L/C Issuer or any such Affiliate to or for the credit or the account of Borrower or any other Loan Party against any and all of the obligations of Borrower or such Loan Party now or hereafter existing under this Agreement or any other Loan Document to such Lender or the L/C Issuer or their respective Affiliates, irrespective of whether or not such Lender or the L/C Issuer shall have made any demand under this Agreement or any other Loan Document and although such obligations of Borrower or such Loan Party may be contingent or unmatured, secured or unsecured, or are owed to a branch, office or Affiliate of such Lender or the L/C Issuer different from the branch or office holding such deposit or obligated on such indebtedness; provided that in the event that any Defaulting Lender shall exercise any such right of setoff, (a) all amounts so set off shall be paid over immediately to the Administrative Agent for further application in accordance with the provisions of Section 2.15 and, pending such payment, shall be segregated by such Defaulting Lender from its other funds and deemed held in trust for the benefit of the Administrative Agent, the L/C Issuer and the Lenders, and (b) the Defaulting Lender shall provide promptly to the Administrative Agent a statement describing in reasonable detail the Obligations owing to such Defaulting Lender as to which it exercised such right of setoff. The rights of each Lender, the L/C Issuer and their respective Affiliates under this Section 10.08 are in addition to other rights and remedies (including other rights of setoff) that such Lender, the L/C Issuer or their respective Affiliates may have. Each Lender and the L/C Issuer agrees to notify Borrower and Administrative Agent promptly after any such setoff and application, provided that the failure to give such notice shall not affect the validity of such setoff and application.

#### **Interest Rate Limitation**

. Notwithstanding anything to the contrary contained in any Loan Document, the interest paid or agreed to be paid under the Loan Documents shall not exceed the maximum rate of non-usurious interest permitted by applicable Law (the "Maximum Rate"). If Administrative Agent or any Lender shall receive interest in an amount that exceeds the Maximum Rate, the excess interest shall be applied to the principal of the Loans or, if it exceeds such unpaid principal, refunded to Borrower. In determining whether the interest contracted for, charged, or received by Administrative Agent or a Lender exceeds the Maximum Rate, such Person may, to the extent permitted by applicable Law, (a) characterize any payment that is not principal as an expense, fee, or premium rather than interest, (b) exclude voluntary prepayments and the effects thereof, and (c) amortize, prorate, allocate, and spread in equal or unequal parts the total amount of interest throughout the contemplated term of the Obligations hereunder.

#### **Counterparts; Integration; Effectiveness**

. This Agreement and each of the other Loan Documents may be executed in counterparts (and by different parties hereto in different counterparts), each of which shall constitute an original, but all of which when taken together

shall constitute a single contract. This Agreement, the other Loan Documents, and any separate letter agreements with respect to fees payable to the Administrative Agent or the L/C Issuer, constitute the entire contract among the parties relating to the subject matter hereof and supersede any and all previous agreements and understandings, oral or written, relating to the subject matter hereof. Except as expressly provided in Section 4.01, this Agreement shall become effective when it shall have been executed by Borrower and Administrative Agent and when Administrative Agent shall have received counterparts hereof that, when taken together, bear the signatures of each of the other parties hereto. Delivery of an executed counterpart of a signature page of this Agreement or any other Loan Document, or any certificate delivered thereunder, by fax transmission or e-mail transmission (e.g. "pdf" or "tif") shall be effective as delivery of a manually executed counterpart of this Agreement or such other Loan Document or certificate. Without limiting the foregoing, to the extent a manually executed counterpart is not specifically required to be delivered under the terms of any Loan Document, upon the request of any party, such fax transmission or e-mail transmission shall be promptly followed by such manually executed counterpart.

#### **Survival of Representations and Warranties**

. All representations and warranties made hereunder and in any other Loan Document or other document delivered pursuant hereto or thereto or in connection herewith or therewith shall survive the execution and delivery hereof and thereof. Such representations and warranties have been or will be relied upon by Administrative Agent and each Lender, regardless of any investigation made by Administrative Agent or any Lender or on their behalf and notwithstanding that Administrative Agent or any Lender may have had notice or knowledge of any Default at the time of any Credit Extension, and shall continue in full force and effect as long as any Loan or any other Obligation hereunder shall remain unpaid or unsatisfied or any Letter of Credit shall remain outstanding.

#### **Severability**

. If any provision of this Agreement or the other Loan Documents is held to be illegal, invalid or unenforceable, (a) the legality, validity and enforceability of the remaining provisions of this Agreement and the other Loan Documents shall not be affected or impaired thereby and (b) the parties shall endeavor in good faith negotiations to replace the illegal, invalid or unenforceable provisions with valid provisions the economic effect of which comes as close as possible to that of the illegal, invalid or unenforceable provisions. The invalidity of a provision in a particular jurisdiction shall not invalidate or render unenforceable such provision in any other jurisdiction. Without limiting the foregoing provisions of this Section 10.12, if and to the extent that the enforceability of any provisions in this Agreement relating to Defaulting Lenders shall be limited by Debtor Relief Laws, as determined in good faith by the Administrative Agent or the L/C Issuer, as applicable, then such provisions shall be deemed to be in effect only to the extent not so limited.

. **Replacement of Lenders.** If the Borrower is entitled to replace a Lender pursuant to the provisions of Section 3.06, or if any Lender is a Defaulting Lender or a Non-Consenting Lender, then the Borrower may, at its sole expense and effort, upon notice to such Lender and the Administrative Agent, require such Lender to assign and delegate, without recourse (in accordance with and subject to the restrictions contained in, and consents required by, Section 10.06), all of its interests, rights (other than its existing rights to payments pursuant to Sections 3.01 and 3.04) and obligations under this Agreement and the related Loan Documents to an Eligible Assignee that shall assume such obligations (which assignee may be another Lender, if a Lender accepts such assignment), provided that:

(s) the Borrower shall have paid to the Administrative Agent the assignment fee (if any) specified in Section 10.06(b); provided, however, that no such assignment fee shall be due and owing by the Borrower in connection with the replacement of a Defaulting Lender;

(t) such Lender shall have received payment of an amount equal to the outstanding principal of its Loans and L/C Advances, accrued interest thereon, accrued fees and all other amounts payable to it hereunder and under the other Loan Documents (including any amounts under Section 3.05) from the assignee (to the extent of such outstanding principal and accrued interest and fees) or the Borrower (in the case of all other amounts);

(u) in the case of any such assignment resulting from a claim for compensation under Section 3.04 or payments required to be made pursuant to Section 3.01, such assignment will result in a reduction in such compensation or payments thereafter;

(v) such assignment does not conflict with applicable Laws; and

(w) in the case of an assignment resulting from a Lender becoming a Non-Consenting Lender, the applicable assignee shall have consented to the applicable amendment, waiver or consent.

A Lender shall not be required to make any such assignment or delegation if, prior thereto, as a result of a waiver by such Lender or otherwise, the circumstances entitling the Borrower to require such assignment and delegation cease to apply.

**Governing Law; Jurisdiction; Etc**

(a) **GOVERNING LAW.** This Agreement and the other Loan Documents (EXCEPT, AS TO ANY OTHER LOAN DOCUMENT, AS EXPRESSLY SET FORTH THEREIN) and any claims, controversy, dispute or cause of action (whether in contract or tort or otherwise) based upon, arising out of or relating to this Agreement or any other Loan Document (except, as to any other Loan Document, as expressly set forth therein) and the transactions contemplated hereby and thereby shall be governed by, and construed in accordance with, the law of the State of NEW YORK.

(b) **SUBMISSION TO JURISDICTION.** THE BORROWER AND EACH OTHER LOAN PARTY IRREVOCABLY AND UNCONDITIONALLY agrees that it will not commence any action, litigation or proceeding of any kind or description, whether in law or equity, whether in contract or in tort or otherwise, against the Administrative Agent, any Lender, the l/c Issuer, or any Related Party of the foregoing in any way relating to this Agreement or any other Loan Document or the transactions relating hereto or thereto, in any forum other than THE COURTS OF THE STATE OF NEW YORK SITTING IN NEW YORK COUNTY AND OF THE UNITED STATES DISTRICT COURT OF THE SOUTHERN DISTRICT OF NEW YORK, AND ANY APPELLATE COURT FROM ANY THEREOF, AND EACH OF THE PARTIES HERETO IRREVOCABLY AND UNCONDITIONALLY SUBMITS TO THE JURISDICTION OF SUCH COURTS AND AGREES THAT ALL CLAIMS IN RESPECT OF ANY SUCH ACTION, LITIGATION OR PROCEEDING MAY BE HEARD AND DETERMINED IN SUCH NEW YORK STATE COURT OR, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, IN SUCH FEDERAL COURT. EACH OF THE PARTIES HERETO AGREES THAT A FINAL JUDGMENT IN ANY SUCH ACTION, LITIGATION OR PROCEEDING SHALL BE CONCLUSIVE AND MAY BE ENFORCED IN OTHER JURISDICTIONS BY SUIT ON THE JUDGMENT OR IN ANY OTHER MANNER PROVIDED BY LAW. NOTHING IN THIS AGREEMENT OR IN ANY OTHER LOAN DOCUMENT SHALL AFFECT ANY RIGHT THAT THE ADMINISTRATIVE AGENT, ANY LENDER OR THE L/C ISSUER MAY OTHERWISE HAVE TO BRING ANY ACTION OR PROCEEDING RELATING TO THIS AGREEMENT OR ANY OTHER LOAN DOCUMENT AGAINST THE BORROWER OR ANY OTHER LOAN PARTY OR ITS PROPERTIES IN THE COURTS OF ANY JURISDICTION.

(c) **WAIVER OF VENUE.** BORROWER AND EACH OTHER LOAN PARTY IRREVOCABLY AND UNCONDITIONALLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY OBJECTION THAT IT MAY NOW OR HEREAFTER HAVE TO THE LAYING OF VENUE OF ANY ACTION OR PROCEEDING ARISING OUT OF OR RELATING TO THIS AGREEMENT OR ANY OTHER LOAN DOCUMENT IN ANY COURT REFERRED TO IN SUBSECTION (b) OF THIS SECTION 10.13. EACH OF THE PARTIES HERETO HEREBY IRREVOCABLY AND UNCONDITIONALLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, THE DEFENSE OF AN INCONVENIENT FORUM TO THE MAINTENANCE OF SUCH ACTION OR PROCEEDING IN ANY SUCH COURT.

(d) **SERVICE OF PROCESS.** NOTHING IN THIS AGREEMENT WILL AFFECT THE RIGHT OF ANY PARTY HERETO TO SERVE PROCESS IN ANY MANNER PERMITTED BY APPLICABLE LAW. SERVICE OF PROCESS HEREUNDER SHALL BE MADE UPON EACH PARTY'S REGISTERED AGENT IN ITS STATE OF INCORPORATION AND EACH PARTY HEREBY AUTHORIZES ITS AGENT TO RECEIVE OF SUCH PROCESS.

**Waiver of Jury Trial**

EACH PARTY HERETO HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN ANY LEGAL PROCEEDING DIRECTLY OR INDIRECTLY ARISING OUT OF OR RELATING TO THIS AGREEMENT OR ANY OTHER LOAN DOCUMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY OR THEREBY (WHETHER BASED ON CONTRACT, TORT OR ANY OTHER THEORY). EACH PARTY HERETO (A) CERTIFIES THAT NO REPRESENTATIVE, ADMINISTRATIVE AGENT OR ATTORNEY OF ANY OTHER PERSON HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PERSON WOULD NOT, IN THE EVENT OF LITIGATION, SEEK TO ENFORCE THE FOREGOING WAIVER AND (B)

ACKNOWLEDGES THAT IT AND THE OTHER PARTIES HERETO HAVE BEEN INDUCED TO ENTER INTO THIS AGREEMENT AND THE OTHER LOAN DOCUMENTS BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND CERTIFICATIONS IN THIS SECTION 10.14.

**No Advisory or Fiduciary Responsibility**

. In connection with all aspects of each transaction contemplated hereby (including in connection with any amendment, waiver or other modification hereof or of any other Loan Document), the Borrower and each other Loan Party acknowledges and agrees, and acknowledges its Affiliates' understanding, that: (a) (i) the arranging and other services regarding this Agreement provided by Administrative Agent and any Affiliate thereof, the Arranger and the Lenders are arm's-length commercial transactions between the Borrower, each other Loan Party and their respective Affiliates, on the one hand, and Administrative Agent and, as applicable, its Affiliates (including the Arranger) and the Lenders and their Affiliates (collectively, solely for this Section, the "**Lenders**"), on the other hand, (ii) each of the Borrower and the other Loan Parties has consulted its own legal, accounting, regulatory and tax advisors to the extent it has deemed appropriate, and (iii) the Borrower and each other Loan Party is capable of evaluating, and understands and accepts, the terms, risks and conditions of the transactions contemplated hereby and by the other Loan Documents; (b) (i) the Administrative Agent and its Affiliates (including the Arranger) and each Lender each is and has been acting solely as a principal and, except as expressly agreed in writing by the relevant parties, has not been, is not, and will not be acting as an advisor, agent or fiduciary for the Borrower, any other Loan Party or any of their respective Affiliates, or any other Person and (ii) neither the Administrative Agent, any of its Affiliates (including the Arranger) nor any Lender has any obligation to the Borrower, any other Loan Party or any of their respective Affiliates with respect to the transactions contemplated hereby except those obligations expressly set forth herein and in the other Loan Documents; and (c) the Administrative Agent and its Affiliates (including the Arranger) and the Lenders may be engaged in a broad range of transactions that involve interests that differ from those of the Borrower, the other Loan Parties and their respective Affiliates, and neither the Administrative Agent, any of its Affiliates (including the Arranger) nor any Lender has any obligation to disclose any of such interests to the Borrower, any other Loan Party or any of their respective Affiliates. To the fullest extent permitted by law, each of the Borrower and each other Loan Party hereby waives and releases any claims that it may have against the Administrative Agent, any of its Affiliates (including the Arranger) or any Lender with respect to any breach or alleged breach of agency or fiduciary duty in connection with any aspect of any transactions contemplated hereby.

. **Electronic Execution**. The words "delivery," "execute," "execution," "signed," "signature," and words of like import in any Loan Document or any other document executed in connection herewith shall be deemed to include electronic signatures, the electronic matching of assignment terms and contract formations on electronic platforms approved by Administrative Agent, or the keeping of records in electronic form, each of which shall be of the same legal effect, validity or enforceability as a manually executed signature, physical delivery thereof or the use of a paper-based recordkeeping system, as the case may be, to the extent and as provided for in any applicable Law, including the Federal Electronic Signatures in Global and National Commerce Act, the New York State Electronic Signatures and Records Act, or any other similar state laws based on the Uniform Electronic Transactions Act; ***provided that notwithstanding anything contained herein to the contrary Administrative Agent is under no obligation to agree to accept electronic signatures in any form or in any format unless expressly agreed to by Administrative Agent pursuant to procedures approved by it; provided further without limiting the foregoing, upon the request of Administrative Agent, any electronic signature shall be promptly followed by such manually executed counterpart.***

**USA PATRIOT Act Notice**

. Each Lender that is subject to the "Act" (as such term is hereinafter defined) and Administrative Agent (for itself and not on behalf of any Lender) hereby notifies Borrower and the other Loan Parties that pursuant to the requirements of the USA PATRIOT Act (Title III of Pub. L. 107-56 (signed into law October 26, 2001)) (as amended or modified, the "**Act**"), it is required to obtain, verify and record information that identifies each Loan Party, which information includes the name and address of each Loan Party and other information that will allow such Lender or Administrative Agent, as applicable, to identify each Loan Party in accordance with the Act. The Borrower and the other Loan Parties agree to, promptly following a request by Administrative Agent or any Lender, provide all such other documentation and information that Administrative Agent or such Lender requests in order to comply with its ongoing obligations under applicable "know your customer" and anti-money laundering rules and regulations, including

the Act.

### **Time of the Essence**

. Time is of the essence of the Loan Documents.

. **Judgment Currency.** If, for the purposes of obtaining judgment in any court, it is necessary to convert a sum due hereunder or any other Loan Document in one currency into another currency, the rate of exchange used shall be that at which in accordance with normal and customary banking procedures the Administrative Agent could purchase the first currency with such other currency on the Business Day preceding that on which final judgment is given. The obligation of the Borrower in respect of any such sum due from it to the Administrative Agent or any Lender hereunder or under the other Loan Documents shall, notwithstanding any judgment in a currency (hereinafter referred to as the “Judgment Currency”) other than that in which such sum is denominated in accordance with the applicable provisions of this Agreement (hereinafter referred to as the “Agreement Currency”), be discharged only to the extent that on the Business Day following receipt by the Administrative Agent or such Lender, as the case may be, of any sum adjudged to be so due in the Judgment Currency, the Administrative Agent or such Lender, as the case may be, may in accordance with normal banking procedures purchase the Agreement Currency with the Judgment Currency. If the amount of the Agreement Currency so purchased is less than the sum originally due to the Administrative Agent or any Lender from the Borrower in the Agreement Currency, the Borrower hereby covenants and agrees, as a separate obligation and notwithstanding any such judgment, to indemnify the Administrative Agent or such Lender, as the case may be, against such loss. If the amount of the Agreement Currency so purchased is greater than the sum originally due to the Administrative Agent or any Lender in such currency, the Administrative Agent or such Lender, as the case may be, agrees to return the amount of any excess to the Borrower (or to any other Person who may be entitled thereto under applicable law).

### **Keepwell**

. Each Loan Party that is a Qualified ECP Guarantor at the time the Guaranty by any Specified Loan Party, becomes effective with respect to any Swap Obligation, hereby jointly and severally, absolutely, unconditionally and irrevocably undertakes to provide such funds or other support to each Specified Loan Party with respect to such Swap Obligation as may be needed by such Specified Loan Party from time to time to honor all of its obligations under its Guaranty in respect of such Swap Obligation (but, in each case, only up to the maximum amount of such liability that can be hereby incurred without rendering such Qualified ECP Guarantor’s obligations and undertakings under this Section 10.21 voidable under applicable law relating to fraudulent conveyance or fraudulent transfer, and not for any greater amount). The obligations and undertakings of each Qualified ECP Guarantor under this Section 10.21 shall remain in full force and effect until the Obligations have been indefeasibly paid and performed in full. Each Qualified ECP Guarantor intends this Section 10.21 to constitute, and this Section 10.21 shall be deemed to constitute, a guarantee of the obligations of, and a “keepwell, support, or other agreement” for the benefit of, each Specified Loan Party for all purposes of the Commodity Exchange Act.

### **Subordination**

. Each Loan Party (hereinafter referred to as a “Subordinating Loan Party”) hereby subordinates the payment of all obligations and indebtedness of any other Loan Party owing to it, whether now existing or hereafter arising, including but not limited to any obligation of any such other Loan Party to the Subordinating Loan Party as subrogee of the Secured Parties or resulting from such Subordinating Loan Party’s performance under the Guaranty, to the indefeasible payment in full in cash of all Obligations. If the Secured Parties so request, any such obligation or indebtedness of any such other Loan Party to the Subordinating Loan Party shall be enforced and performance received by the Subordinating Loan Party as trustee for the Secured Parties and the proceeds thereof shall be paid over to the Secured Parties on account of the Obligations, but without reducing or affecting in any manner the liability of the Subordinating Loan Party under this Agreement. Without limitation of the foregoing, so long as no Default has occurred and is continuing, the Loan Parties may make and receive payments with respect to intercompany Indebtedness; provided, that in the event that any Loan Party receives any payment of any intercompany Indebtedness at a time when such payment is prohibited by this Section, such payment shall be held by such Loan Party, in trust for the benefit of, and shall be paid forthwith over and delivered, upon written request, to Administrative Agent.

### **Acknowledgement and Consent to Bail-In of EEA Financial Institutions**

. Solely to the extent any Lender or L/C Issuer that is an EEA Financial Institution is a party to this Agreement and notwithstanding anything to the contrary in any Loan Document or in any other agreement, arrangement or understanding among any such parties, each party hereto acknowledges that any liability of any Lender or L/C Issuer that is an EEA Financial Institution arising under any Loan Document, to the extent such liability is unsecured, may be subject to the write-down and conversion powers of an EEA Resolution Authority and agrees and consents to, and acknowledges and agrees to be bound by:

(a) the application of any Write-Down and Conversion Powers by an EEA Resolution Authority to any such liabilities arising hereunder which may be payable to it by any Lender or L/C Issuer that is an EEA Financial Institution; and

(b) the effects of any Bail-In Action on any such liability, including, if applicable:

(i) a reduction in full or in part or cancellation of any such liability;

(ii) a conversion of all, or a portion of, such liability into shares or other instruments of ownership in such EEA Financial Institution, its parent undertaking, or a bridge institution that may be issued to it or otherwise conferred on it, and that such shares or other instruments of ownership will be accepted by it in lieu of any rights with respect to any such liability under this Agreement or any other Loan Document; or

(iii) the variation of the terms of such liability in connection with the exercise of the write-down and conversion powers of any EEA Resolution Authority.

**[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]**

Signature Page to Fourth Amended and Restated Credit Agreement

Signature Page to Amended and Restated Credit Agreement

**IN WITNESS WHEREOF:** the parties hereto have caused this Agreement to be duly executed as of the date first above written.

**MISTRAS GROUP, INC.**, as Borrower

By: \_\_\_\_\_

Jonathan Wolk

Executive Vice President, Chief Financial Officer and Treasurer

**BANK OF AMERICA, N.A.**, as Administrative Agent

By: \_\_\_\_\_

Name:

Title:

**BANK OF AMERICA, N.A.**, as a Lender and as the L/C Issuer

By: \_\_\_\_\_

William P. Warren

Senior Vice President

**JPMORGAN CHASE BANK, N.A.**, as a Lender

By: \_\_\_\_\_  
Name:  
Title:

**KEYBANK NATIONAL ASSOCIATION**, as a Lender

By: \_\_\_\_\_  
Name:  
Title:

**WELLS FARGO BANK, NATIONAL ASSOCIATION**, as a Lender

By: \_\_\_\_\_  
Name:  
Title:

Signature Page to Fourth Amended and Restated Credit Agreement

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**SCHEDULE 2.01**

**ATTACHED TO AND MADE A PART OF THAT CERTAIN FOURTH AMENDED AND RESTATED CREDIT AGREEMENT BY AND AMONG, AMONGST OTHERS, MISTRAS GROUP, INC., AS BORROWER, AND BANK OF AMERICA, N.A., AS ADMINISTRATIVE AGENT, DATED DECEMBER \_\_\_\_, 2017**

**COMMITMENTS  
AND APPLICABLE PERCENTAGES**

<b>Lender</b>	<b>Commitment</b>	<b>L/C Sublimit</b>	<b>Applicable Percentage</b>
Bank of America, N.A.	\$90,000,000.00	\$ _____	_____ %
JPMorgan Chase Bank, N.A.	\$60,000,000.00	\$ _____	_____ %
KeyBank, National Association	\$50,000,000.00	\$ _____	_____ %
Wells Fargo Bank, National Association	\$50,000,000.00	\$ _____	_____ %
<b>Total</b>	<b>\$250,000,000.00</b>	<b>\$10,000,000.00</b>	<b>100.0000000000%</b>

**EXHIBIT "A"**

**ATTACHED TO AND MADE A PART OF THAT CERTAIN FOURTH AMENDED AND RESTATED CREDIT AGREEMENT BY AND AMONG, AMONGST OTHERS, MISTRAS GROUP, INC., AS BORROWER, AND BANK OF AMERICA, N.A., AS ADMINISTRATIVE AGENT, DATED DECEMBER \_\_\_\_\_, 2017**

**FORM OF COMMITTED LOAN NOTICE**

Date: \_\_\_\_\_, \_\_\_\_\_

To: Bank of America, N.A., as Administrative Agent

Ladies and Gentlemen:

Reference is made to that certain Fourth Amended and Restated Credit Agreement, dated December \_\_\_\_\_, 2017 (as amended, restated, extended, supplemented or otherwise modified in writing from time to time, the "Agreement"; the terms defined therein being used herein as therein defined), among Mistras Group, Inc., a Delaware corporation (the "Borrower"), the Lenders from time to time party thereto, and Bank of America, N.A., as Administrative Agent and L/C Issuer.

The undersigned hereby requests (select one):

- \_\_\_\_\_ Borrowing of Committed Loans
- \_\_\_\_\_ Conversion or continuation of Committed Loans

1. On \_\_\_\_\_ (a Business Day).
2. In the amount of \$ \_\_\_\_\_
3. Comprised of \_\_\_\_\_  
[Type of Loan requested]
4. In the following currency: \_\_\_\_\_
5. For Eurocurrency Rate Loans: with an Interest Period of \_\_\_\_\_ months.

The Committed Borrowing requested herein complies with the provisions of Section 2.02 of the

**MISTRAS GROUP, INC.**

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

**EXHIBIT "B"**

**ATTACHED TO AND MADE A PART OF THAT CERTAIN FOURTH AMENDED AND RESTATED CREDIT AGREEMENT BY AND AMONG, AMONGST OTHERS, MISTRAS GROUP, INC., AS BORROWER, AND BANK OF AMERICA, N.A., AS ADMINISTRATIVE AGENT, DATED DECEMBER \_\_\_\_\_, 2017**

**FORM OF Revolving Credit Loan Note**

US\$ \_\_\_\_\_ December \_\_\_\_\_, 2017

**FOR VALUE RECEIVED**, the undersigned ("Borrower"), hereby promises to pay to \_\_\_\_\_ or registered assigns ("Lender"), in accordance with the provisions of the "Agreement" (as such term is hereinafter defined), the principal amount of each Committed Loan from time to time made by the Lender to Borrower under that certain Fourth Amended and Restated Credit Agreement, dated December \_\_\_\_\_, 2017 (as amended, restated, extended, supplemented or otherwise modified in writing from time to time, the "Agreement"; the terms defined therein being used herein as therein defined), among Borrower, the Lenders from time to time party thereto, and Bank of America, N.A., as Administrative Agent and L/C Issuer.

Borrower promises to pay interest on the unpaid principal amount of each Committed Loan from the date of such Loans until such principal amount is paid in full, at such interest rates and at such times as provided in the Agreement. All payments of principal and interest shall be made to the Administrative Agent for the account of the Lender in the currency in which such Committed Loan was denominated and in Same Day Funds at the Administrative Agent's Office for such currency. If any amount is not paid in full when due hereunder, such unpaid amount shall bear interest, to be paid upon demand, from the due date thereof until the date of actual payment (and before as well as after judgment) computed at the per annum rate set forth in the Agreement.

This Revolving Credit Loan Note (as it may be from time to time amended, modified, extended, renewed, substituted, and/or supplemented, this "Note") is one of the Notes referred to in the Agreement, is entitled to the benefits thereof and may be prepaid in whole or in part subject to the terms and conditions provided therein. This Note is also entitled to the benefits of the Guaranty and is secured by the Collateral. Upon the occurrence and continuation of one or more of the Events of Default specified in the Agreement, all amounts then remaining unpaid on this Note shall become, or may be declared to be, immediately due and payable all as provided in the Agreement. Committed Loans made by the Lender shall be evidenced by one or more loan accounts or records maintained by the Lender in the ordinary course of business. The Lender may also attach schedules to this Note and endorse thereon the date, amount, currency and maturity of its Loans and payments with respect thereto.

This Note is given in full substitution for and in full replacement of that certain [ \_\_\_\_\_ ] Revolving Credit Loan Note # \_\_\_\_\_ dated \_\_\_\_\_, 2011, executed by Borrower, as maker, and delivered to Lender, as payee, in the maximum principal amount of up to \$ \_\_\_\_\_ (hereinafter referred to as the "Original Note"). The execution and delivery of this Note does not evidence a refinancing,









Mistras Group, Inc. **Exhibit 10.19**  
Compensation Plan for Non-Employee Directors  
Effective February 28, 2017

- Participants: Members of the Board of Directors who are not employees of the Company.  
\$60,000 per year, payable quarterly at the beginning of each quarter. Because of the transition from a May 31 fiscal year to a calendar year, January and February 2017 were paid in December 2016. Accordingly, in early April 2017, directors will receive four months of retainer (\$20,000) to compensate for March through June 2017. Thereafter, the payments will resume the regular quarterly amount of \$15,000.
- Annual Retainer: This amount will be paid in cash.  
Committee Chairs shall receive the following annual fees set, paid quarterly in cash with the annual retainer:
- Committee Chair Fees: Audit Committee: \$10,000  
Compensation Committee: \$7,500
- To account for the transition period, the payment in early April will consist of 4 months of fees, to compensate for March through June 2017. Thereafter, the normal quarterly payments will resume.
- \$75,000 of Company common stock, to be granted under the Company's 2016 Long-Term Incentive Plan. The award will be granted in two equal installments; the first after the release of the earnings for the fourth quarter of fiscal of the prior fiscal year (March) and the second after the release of earnings for the 2<sup>nd</sup> quarter results (August).
- Directors were paid an equity award in January 2017 for the period of December 2016 to May 2017. Accordingly, in August 2017, directors will be issued seven months of stock retainer, worth \$43,750, to compensate for the period of June 2017 to December 2017. In March 2018, the semi-annual grants will resume being 50% of the annual award.
- Annual Equity Awards: For the semiannual equity grants, the price per share of equity awards will be based the average of the high and the low trading prices during the first three trading days of the Company's permitted insider trading period following the release of earnings.
- Pricing of Equity Awards:

The following is a list of subsidiaries of the registrant. The list omits some subsidiaries which, in the aggregate, would not constitute a significant subsidiary.

<u>Name</u>	<u>Other Names under which Subsidiary Does Business</u>	<u>Jurisdiction of Organization</u>
Aetos Group, Inc.		Delaware
Carmagen Engineering International, Inc.		New Jersey
CISMIS Springfield Corp.		Delaware
Conam Inspection and Engineering Services, Inc.		Delaware
Conam Inspection Services Inc.		Delaware
GMA Aeronautica S.L.U.		Germany
GMA Engineering GmbH		Germany
GMA Holding B.V.		The Netherlands
GMA Werkstoffprüfung GmbH		Germany
Mistras Arizona Inspection Services Inc.		Delaware
Mistras Canada, Inc.		Canada
Mistras GMA Holdings GmbH		Germany
Mistras Group B.V.		The Netherlands
Mistras Group GmbH		Germany
Mistras Group Limited		United Kingdom
Mistras Group SAS		France
Mistras Group Hellas A.B.E.E.		Greece
Mistras International Holdings Inc.		Delaware
Mistras Quebec Holdings Inc.		Canada
Mistras Services Inc.		Canada
MWC Management Inc.		Canada
NDT do Brasil Ltd.		Brazil
Physical Acoustics Corporation		Delaware
Physical Acoustics India Private Ltd.		India
Physical Acoustics South America Ltda.		Brazil
Quality Services Laboratories, Inc.		Delaware
QSL NDT Inc.		Delaware
QSL NDT Quebec Inc.		Canada
R.A.C. Group Inc.		Canada
Rope Access Calgary, Inc.		Canada
The Nacher Corporation		Louisiana
ThermTech Services, Inc.		Florida

**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

The Board of Directors  
Mistras Group, Inc.:

We consent to the incorporation by reference in the registration statements (Nos. 333-164688 and 333-217047) on Form S-8 of Mistras Group, Inc. and subsidiaries of our report dated March 14, 2018, with respect to the consolidated balance sheets of Mistras Group, Inc. and subsidiaries as of December 31, 2017 and 2016, and the related consolidated statements of (loss) income, comprehensive income (loss), equity, and cash flows for the year ended December 31, 2017, the seven month transition period ended December 31, 2016, and each of the years in the two-year period ended May 31, 2016, and the related notes (collectively, the “consolidated financial statements”), and the effectiveness of internal control over financial reporting as of December 31, 2017, which report appears in the December 31, 2017 Annual Report on Form 10-K of Mistras Group, Inc.

Our report includes an explanatory paragraph indicating that management excluded from its assessment of the effectiveness of the Company’s internal control over financial reporting as of December 31, 2017, internal control over financial reporting associated with three entities acquired during 2017, associated with total assets of 4.0% and total revenues of 2.6% included in the consolidated financial statements of the Company as of and for the year ended December 31, 2017. Our audit of internal control over financial reporting of the Company also excluded an evaluation of the internal control over financial reporting of these entities.

/s/ KPMG LLP  
Short Hills, New Jersey  
March 14, 2018

**CERTIFICATION PURSUANT TO RULE 13A-14(a) OR 15D-14(a) OF THE SECURITIES  
EXCHANGE ACT OF 1934, AS ADOPTED PURSUANT TO SECTION 302 OF THE  
SARBANES-OXLEY ACT OF 2002**

I, Dennis Bertolotti, certify that:

1. I have reviewed this Annual Report on Form 10-K of Mistras Group, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - a. designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b. designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c. evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d. disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):
  - a. all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b. any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

March 14, 2018

By: /s/ DENNIS BERTOLOTTI

Dennis Bertolotti

President, Chief Executive Officer and Director  
(Principal Executive Officer)

**CERTIFICATION PURSUANT TO RULE 13A-14(a) OR 15D-14(a) OF THE SECURITIES  
EXCHANGE ACT OF 1934, AS ADOPTED PURSUANT TO SECTION 302 OF THE  
SARBANES-OXLEY ACT OF 2002**

I, Edward J. Prajzner, certify that:

1. I have reviewed this Annual Report on Form 10-K of Mistras Group, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - a. designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b. designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c. evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d. disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):
  - a. all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b. any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

March 14, 2018

By: /s/ EDWARD J. PRAJZNER

Edward J. Prajzner

Senior Vice President, Chief Financial Officer and Treasurer  
(Principal Financial and Accounting Officer)

**CERTIFICATION BY PRINCIPAL EXECUTIVE OFFICER  
PURSUANT TO 18 U.S.C. SECTION 1350,  
AS ADOPTED PURSUANT TO SECTION 906  
OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report on Form 10-K of Mistras Group, Inc. (the Company) for the year ended December 31, 2017, I, Dennis Bertolotti, President and Chief Executive Officer, hereby certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, to the best of my knowledge and belief, that:

(1) such Annual Report on Form 10-K for the year ended December 31, 2017, fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(2) the information contained in such Annual Report on Form 10-K for the year ended December 31, 2017, fairly presents, in all material respects, the financial condition and results of operations of the Company.

The foregoing certification is being furnished solely to accompany such Annual Report on Form 10-K for the year ended December 31, 2017, pursuant to 18 U.S.C. § 1350, and is not being filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and is not to be incorporated by reference into any filing of the Company, whether made before or after the date hereof, regardless of any general incorporation language in such filing.

Date: March 14, 2018

/s/ DENNIS BERLOTTI

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Dennis Bertolotti

President, Chief Executive Officer and Director  
(Principal Executive Officer)

**CERTIFICATION BY PRINCIPAL EXECUTIVE OFFICER  
PURSUANT TO 18 U.S.C. SECTION 1350,  
AS ADOPTED PURSUANT TO SECTION 906  
OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the accompanying Annual Report on Form 10-K of Mistras Group, Inc. (the Company) for the year ended December 31, 2017, I, Edward J. Prajzner, Principal Financial and Accounting Officer, hereby certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, to the best of my knowledge and belief, that:

(1) such Annual Report on Form 10-K for the year ended December 31, 2017, fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(2) the information contained in such Annual Report on Form 10-K for the year ended December 31, 2017, fairly presents, in all material respects, the financial condition and results of operations of the Company.

The foregoing certification is being furnished solely to accompany such Annual Report on Form 10-K for the year ended December 31, 2017, pursuant to 18 U.S.C. § 1350, and is not being filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and is not to be incorporated by reference into any filing of the Company, whether made before or after the date hereof, regardless of any general incorporation language in such filing.

Date: March 14, 2018

/s/ EDWARD J. PRAJZNER

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Edward J. Prajzner

Senior Vice President, Chief Financial Officer, and Treasurer  
(Principal Financial and Accounting Officer)