



2019
Form 10K

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, DC 20549

FORM 10-K

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
FOR THE FISCAL YEAR ENDED DECEMBER 31, 2019

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

Commission File Number 1-2958



HUBBELL INCORPORATED

(Exact name of registrant as specified in its charter)

CONNECTICUT	06-0397030
<i>(State or other jurisdiction of incorporation or organization)</i>	<i>(I.R.S. Employer Identification No.)</i>
40 Waterview Drive, Shelton, CT	06484
<i>(Address of principal executive offices)</i>	<i>(Zip Code)</i>
(475) 882-4000	
<i>(Registrant's telephone number, including area code)</i>	

SECURITIES REGISTERED PURSUANT TO SECTION 12(b) OF THE ACT:		
Title of each Class	Trading Symbol(s)	Name of Exchange on which Registered
Common Stock — par value \$0.01 per share	HUBB	New York Stock Exchange

SECURITIES REGISTERED PURSUANT TO SECTION 12(g) OF THE ACT:
NONE

Indicate by check mark	YES	NO
• if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• if the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such report), and (2) has been subject to such filing requirements for the past 90 days.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• 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 (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of “large accelerated filer,” “accelerated filer,” “smaller reporting company” and “emerging growth company” in Rule 12b-2 of the Exchange Act. (Check one): Large accelerated filer <input checked="" type="checkbox"/> Accelerated filer <input type="checkbox"/> Non-accelerated filer <input type="checkbox"/> Smaller reporting company <input type="checkbox"/> Emerging growth company <input type="checkbox"/> (Do not check if a smaller reporting 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 standard provided pursuant to Section 13(a) of the Exchange Act.		<input type="checkbox"/>
• whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The approximate aggregate market value of the voting stock held by non-affiliates of the registrant as of June 30, 2019 was \$7,036,079,255*. The number of shares outstanding of Hubbell Common Stock as of February 12, 2020 is 54,434,310.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the definitive proxy statement for the annual meeting of shareholders scheduled to be held on May 5, 2020, to be filed with the Securities and Exchange Commission (the “SEC”), are incorporated by reference in answer to Part III of this Form 10-K.

* Calculated by excluding all shares held by Executive Officers and Directors of registrant without conceding that all such persons or entities are “affiliates” of registrant for purpose of the Federal Securities Laws.

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PART I

Item 1 Business

Hubbell Incorporated (herein referred to as “Hubbell”, the “Company”, the “registrant”, “we”, “our” or “us”, which references shall include its divisions and subsidiaries as the context may require) was founded as a proprietorship in 1888, and was incorporated in Connecticut in 1905. Hubbell is primarily engaged in the design, manufacture and sale of quality electrical and electronic products for a broad range of non-residential and residential construction, industrial and utility applications. Products are either sourced complete, manufactured or assembled by subsidiaries in the United States, Canada, Puerto Rico, Mexico, the People’s Republic of China (“China”), the United Kingdom (“UK”), Brazil, Australia, Spain and Ireland. Hubbell also participates in joint ventures in Taiwan, Hong Kong and the Philippines, and maintains offices in Singapore, Italy, China, India, Mexico, South Korea, Chile, and countries in the Middle East.

Electrical Segment

The Electrical segment (57% of consolidated revenues in 2019, 59% in 2018 and 69% in 2017) comprises businesses that sell stock and custom products including standard and special application wiring device products, rough-in electrical products, connector and grounding products, lighting fixtures and controls, components and assemblies for the natural gas distribution market, as well as other electrical equipment.

Electrical segment products are typically used in and around industrial, commercial and institutional facilities by electrical contractors, maintenance personnel, electricians, utilities, and telecommunications companies. In addition, certain of our businesses design and manufacture industrial controls and communication systems used in the non-residential and industrial markets. Many of these products are designed such that they can also be used in harsh and hazardous locations where a potential for fire and explosion exists due to the presence of flammable gasses and vapors. Harsh and hazardous products are primarily used in the oil and gas (onshore and offshore) and mining industries. We also offer

The Company’s reporting segments consist of the Electrical and the Power segments, as described below. See also Item 7. Management’s Discussion and Analysis – “Executive Overview of the Business”, and “Results of Operations” as well as Note 20 – Industry Segments and Geographic Area Information in the Notes to Consolidated Financial Statements.

The Company’s annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and all amendments to those reports are made available free of charge through the Investor Relations section of the Company’s website at <http://www.hubbell.com> as soon as practicable after such material is electronically filed with, or furnished to, the SEC. The information contained on the Company’s website 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.

a variety of lighting fixtures, wiring devices and electrical products that have residential and utility applications, including residential products with Internet-of-Things (“IoT”) enabled technologies.

These products are primarily sold through electrical and industrial distributors, home centers, retail and hardware outlets, lighting showrooms and residential product oriented internet sites. Special application products are primarily sold through wholesale distributors to contractors, industrial customers and original equipment manufacturers (“OEMs”).

Hubbell maintains a sales and marketing organization to assist potential users with the application of certain products to their specific requirements, as well as to assist architects, engineers, industrial designers, OEMs and electrical contractors in the design of electrical systems to meet the specific requirements of industrial, non-residential and residential users. Hubbell is also represented by independent manufacturers’ sales agents for many of its product offerings.

The Electrical segment, manufactures and sells thousands of wiring and electrical products, lighting fixtures and controls for indoor and outdoor applications as well as specialty lighting and communications products. The segment also includes businesses that manufacture main-to-meter gas distribution products. The products within the segment have applications in the non-residential, residential, industrial, and energy-related (oil and gas) markets. Fast growing trends

within the industry are the adoption of light emitting diode (“LED”) technology as the light source, as well as products with embedded IoT technologies. The Company has a broad array of LED-luminaire products within its portfolio and the majority of new product development efforts are oriented towards expanding those offerings. Within the Electrical segment, products include items such as:

Commercial and Industrial

- Wiring devices & accessories
- Switches & dimmers
- Ground fault devices
- Junction boxes, plugs & receptacles
- Steel & plastic enclosures
- Pin & sleeve devices
- Cable reels
- Datacom connectivity & enclosures
- Electrical motor controls

Lighting

- Canopy lights
- Emergency lighting/exit signs
- Floodlights & poles
- LED components
- Recessed, surface mounted & track fixtures
- Parking lot/parking garage fixtures
- Bollards
- Bath/vanity fixtures & fans
- Chandeliers & sconces
- Athletic & recreational field fixtures
- Decorative landscape fixtures
- Fluorescent fixtures
- Ceiling fans
- Site & area lighting
- Occupancy, dimming & daylight harvesting sensors

Construction and Energy

- Mechanical connectors
- Mechanical grounding devices
- Compression connectors
- Safety equipment
- Gas connectors and assemblies
- Installation tooling
- Specialty lighting
- Specialty communications equipment
- Mining communication & controls
- Cable glands & fittings

These products are sold under various brands and/or trademarks, including:

Commercial and Industrial

- Hubbell®
- Kellems®
- Bryant®
- Bell®
- TayMac®
- Wiegmann®
- Raco®
- Hipotronics®
- iDevices®
- Gleason Reel®
- Powerohm™
- ACME Electric®
- EC&M Design®

Lighting

- Kim Lighting®
- Sportsliter
- Security Lighting™
- Beacon Products™
- Columbia Lighting®
- Progress Lighting Design®
- Spaulding Lighting™
- Alera Lighting®
- Hubbell® Outdoor Lighting™
- Kurt Versen®
- Prescolite®
- Architectural Area Lighting™
- Litecontrol™
- Dual-Lite®

Construction and Energy

- Burndy®
- CMC®
- Austdac™
- Killark®
- Hawke™
- AEC™
- GAI-Tronics®
- Chalmit™
- Gas Breaker®
- Vantage Technology®
- R.W. Lyall™
- Continental®

Power Segment

The Power segment (43% of consolidated revenues in 2019, 41% in 2018 and 31% in 2017) consists of operations that design, manufacture and sell transmission and distribution components primarily for the electrical utilities industry. The water utility, telecommunications utility, civil construction and transportation industries are also served. Products are sold

directly to utilities, and through distributors, as well as to contractors and construction and engineering firms. The 2018 acquisition of Meter Readings Holding Group, LLC (“Aclara Technologies” or “Aclara”) expanded the Power portfolio to include endpoint metering devices and sensors, advanced metering infrastructure communications, and software and

installation services sold to electrical, water, and gas utilities. While Hubbell believes its sales in this area are not materially dependent upon any customer or group of customers, a

substantial decrease in purchases by electrical utilities would affect this segment.

Hubbell's Power segment manufactures and sells a wide variety of electrical distribution, transmission, substation and telecommunications products. These products and services include items such as:

• Arresters	• Utility asset protection equipment	• Grounding & bonding equipment
• Cutouts & fuse links	• Bushings	• Programmable reclosers
• Pole line hardware	• Insulators	• Sectionalizers
• Helical anchors & foundations	• Cable terminations & accessories	• Lineman tools, hoses & gloves
• Overhead, pad mounted & capacitor switches	• Formed wire products	• Polymer concrete & fiberglass enclosures and equipment pads
• Advanced metering infrastructure	• Splices, taps & connectors	• Meter installation services
	• Meters and edge devices	

These products are sold under the following brands and/or trademarks:

• Aclara®	• Chance®	• Anderson®	• PenCell®
• Fargo®	• Hubbell®	• Polycast®	• Opti-loop Design®
• Quazite®	• Quadri*sil®	• Trinetics®	• Reuel™
• Electro Composites™	• USCO™	• CDR™	• RFL Design®
• Hot Box®	• PCORE®	• Delmar™	• Turner Electric®
• EMC™	• Longbow™	• Ohio Brass®	• Meramec®
• Reliaguard®	• Greenjacket®		

Information Applicable to All General Categories

International Operations

The Company has several operations located outside of the United States. These operations manufacture, assemble and/or procure and market Hubbell products and services for both the Electrical and Power segments.

See Note 20 — Industry Segments and Geographic Area Information in the Notes to Consolidated Financial Statements and Item 1A. Risk Factors relating to manufacturing in and sourcing from foreign countries.

Customers

The Company did not have any customers whose annual consolidated purchases exceeded 10 percent of our total net sales in 2019, 2018 and 2017.

Raw Materials

Raw materials used in the manufacture of Hubbell products primarily include steel, aluminum, brass, copper, bronze, zinc, nickel, plastics, phenolics, elastomers and petrochemicals. Hubbell also purchases certain electrical and electronic components, including solenoids, lighting ballasts, printed circuit boards, integrated circuit chips and cord sets, from a number of suppliers. Hubbell is not materially dependent upon

any one supplier for raw materials used in the manufacture of its products and equipment and, at the present time, raw materials and components essential to its operation are in adequate supply. However, some of these principal raw materials are sourced from a limited number of suppliers. See also Item 7A. Quantitative and Qualitative Disclosures about Market Risk.

Patents

Hubbell has approximately 2,400 active United States and foreign patents covering a portion of its products, which expire at various times. While Hubbell deems these patents to be of value, it does not consider its business to be dependent upon patent protection. Hubbell also licenses products under patents owned by others, as necessary, and grants licenses under certain of its patents.

Working Capital

Inventory, accounts receivable and accounts payable levels, payment terms and, where applicable, return policies are in accordance with the general practices of the electrical products industry and standard business procedures. See also Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Backlog

Substantially all of the backlog existing at December 31, 2019 in the Electrical segment is expected to be shipped to customers in 2020. In the Power segment, the backlog existing at December 31, 2019 includes backlog expected to be shipped during 2020, along with \$395 million of backlog of contracts that span multiple years, primarily related to long-term contracts of the Aclara business to deliver and install meters and grid monitoring sensor technology. The backlog of orders believed to be firm at December 31, 2019 was approximately \$1,037.0 million compared to \$1,250.8 at December 31, 2018. Although this backlog is important, the majority of Hubbell's revenues result from sales of inventoried products or products that have short periods of manufacture.

Competition

Hubbell experiences substantial competition in all categories of its business, but does not compete with the same companies in all of its product categories. The number and size of competitors vary considerably depending on the product line. Hubbell cannot specify with precision the number of competitors in each product category or their relative market position. However, some of its competitors are larger companies with substantial financial and other resources. Hubbell considers product performance, reliability, quality and technological innovation as important factors relevant to all areas of its business, and considers its reputation as a manufacturer of quality products to be an important factor in its business. In addition, product price, service levels and other factors can affect Hubbell's ability to compete.

Environment

The Company is subject to various federal, state and local government requirements relating to the protection of employee health and safety and the environment. The Company believes that, as a general matter, its policies, practices and procedures are properly designed to prevent unreasonable risk of environmental damage and personal injury to its employees and its customers' employees and that the handling, manufacture, use and disposal of hazardous or toxic substances are in accordance with environmental laws and regulations.

Like other companies engaged in similar businesses, the Company has incurred or acquired through business combinations, remedial response and voluntary cleanup costs for site contamination, and is a party to product liability and other lawsuits and claims associated with environmental matters, including past production of product containing toxic substances. Additional lawsuits, claims and costs involving environmental matters are likely to continue to arise in the future. However, considering past experience and reserves, the Company does not anticipate that these matters will have a material adverse affect on earnings, capital expenditures, financial condition or competitive position. See also Item 1A. Risk Factors and Note 15 — Commitments and Contingencies in the Notes to Consolidated Financial Statements.

Employees

As of December 31, 2019, Hubbell had approximately 18,800 salaried and hourly employees of which approximately 10,300 of these employees, or 53%, are located in the United States. Approximately 2,500 of these U.S. employees are represented by 12 labor unions. Hubbell considers its labor relations to be satisfactory.

Information about our Executive Officers

Name ⁽¹⁾	Age	Present Position	Business Experience
David G. Nord	62	Chairman of the Board and Chief Executive Officer	Present position since June 6, 2019; previously, Chairman of the Board, President and Chief Executive Officer May 2014 to June 6, 2019; President and Chief Executive Officer January 2013 to May 2014; President and Chief Operating Officer from June 2012 to January 2013, and Senior Vice President and Chief Financial Officer from September 2005 to June 2012. Previously, various positions, including Vice President, Controller, of United Technologies and its subsidiaries, 2000-2005.
William R. Sperry	57	Executive Vice President, Chief Financial Officer and Treasurer	Present position since June 6, 2019; previously, Senior Vice President and Chief Financial Officer June 6, 2012 to June 6, 2019; Vice President, Corporate Strategy and Development August 15, 2008 to June 6, 2012; previously, Managing Director, Lehman Brothers August 2006 to April 2008, various positions, including Managing Director, of J.P. Morgan and its predecessor institutions, 1994-2006.

Name ⁽¹⁾	Age	Present Position	Business Experience
Gerben W. Bakker	55	President and Chief Operating Officer	Present position since June 6, 2019; previously, Group President, Power Systems February 1, 2014 to June 6, 2019; previously, Division Vice President, Hubbell Power Systems, Inc. (“HPS”) August 2009 - February 1, 2014; President, HPS Brazil June 2005 - July 2009; Vice President, Sourcing, HPS March 2004 - May 2005.
Joseph A. Capozzoli	45	Vice President, Controller	Present position since April 22, 2013; previously, Assistant Corporate Controller of Stanley Black & Decker, Inc. (“Stanley”) April 2011 to April 2013; Global Operations Controller at Stanley 2010-2011; Director of Cost Accounting at Stanley, 2006-2010.
Allan J. Connolly	52	Group President, Power Systems	Present position since July 1, 2019; previously, President, Aclara February 2018 to June 28, 2019; President and Chief Executive Officer of Aclara May 2014 to February 2018; Chief Operating Officer of Culligan International July 2012 to January 2014; Executive Vice President of Operations, Engineering and N.A. Industrial of Culligan International November 2006 to July 2012; Vice President of Research, Development & Engineering of Culligan International April 2006 to November 2006; General Manager Technology, GE Power & Water March 2003 to April 2006.
James M. Farrell	52	Acting Group President, Lighting	Present position since October 2019; previously, Vice President of Finance, Hubbell Lighting, Inc. June 2015 to October 2019; Vice President, Strategic Planning and Investor Relations April 2012 to May 2015; Director of Financial Planning & Analysis June 2004 to May 2008.
Katherine A. Lane	42	Vice President, General Counsel and Secretary	Present position since June 6, 2019; previously Vice President, Acting General Counsel and Secretary March 2019 to June 6, 2019; Vice President, Associate General Counsel June 2017 to March 2019; Vice President, Legal, Hubbell Commercial & Industrial September 2015 to June 2017; Senior Counsel, Hubbell Electrical Systems May 2014 to September 2015; Corporate General Attorney August 2010 to May 2014. Previously, various positions in private practice in law firms based in Massachusetts and Connecticut.
Stephen M. Mais	55	Senior Vice President, Human Resources	Present position since May 3, 2016; previously Vice President, Human Resources, August 2005 - May 2016; Director, Staffing and Capability, Pepsi Bottling Group (“Pepsi”) 2001-2005; Director, Human Resources Southeastern U.S., Pepsi 1997-2001.
Rodd R. Ruland	62	Group President, Construction and Energy	Present position since June 1, 2015; previously, President, BURNDY LLC, Hubbell Canada (HCLP) & Hubbell de Mexico (HdM) 2012-2015; President, BURNDY LLC 2009-2012; Corporate Vice President & General Manager, Electrical Power Interconnect Division, FCI (BURNDY) 2003-2009, Director, Business Development 2001-2003; various positions in Sales & Marketing, Business Development, and General Management and TycoElectronics/AMP Incorporated 1979-2000.
Darrin S. Wegman	52	Group President, Commercial and Industrial	Present position since June 1, 2015; previously, Vice President, General Manager, Wiring Device and Industrial Electrical business, 2013-2015; Vice President, Controller, Hubbell Incorporated, 2008-2013; Vice President and Controller, Hubbell Industrial Technology, 2002-2008; Controller, GAI-Tronics Corporation, 2000-2002.

(1) As of February 14, 2020, there are no family relationships among any of the above-named executive officers and any of our directors. For information related to our Board of Directors, refer to Item 10. Directors, Executive Officers and Corporate Governance.

Item 1A Risk Factors

Our business, operating results, financial condition, and cash flows may be affected by a number of factors including, but not limited to those set forth below. Any one of these factors could cause our actual results to vary materially from recent results or future anticipated results. See also Item 7. Management’s Discussion and Analysis — “Executive Overview of the Business” and “Results of Operations”.

Global economic uncertainty could adversely affect us

During periods of prolonged slow growth, or a downturn in conditions in the worldwide or domestic economies, we could experience reduced orders, payment delays, supply chain disruptions or other factors caused by economic challenges faced by our customers, prospective customers and suppliers. Depending upon their severity and duration, these conditions could have an adverse impact on our results of operations, financial condition and cash flows.

We operate in markets that are subject to competitive pressures that could affect selling prices or demand for our products

We compete on the basis of product performance, quality, service and/or price. Competitors’ behavior related to these areas could potentially have significant impacts on our financial results. Our competitive strategy is to design and manufacture high quality products at the lowest possible cost. Our strategy is to also increase selling prices to offset rising costs of raw materials and components. Competitive pricing pressures may not allow us to offset some or all of our increased costs through pricing actions. Alternatively, if raw material and component costs decline, the Company may not be able to maintain current pricing levels. Competition could also affect future selling prices or demand for our products which could have an adverse impact on our results of operations, financial condition and cash flows.

Our inability to effectively develop and introduce new products could adversely affect our ability to compete

New product introductions and enhancement of existing products and services are key to the Company’s competitive strategy. The success of new product introductions is dependent on a number of factors, including, but not limited to, timely and successful development of new products, including software development, market acceptance of these products and the Company’s ability to manage the risks associated with these introductions. These risks include development and production capabilities, management of inventory levels to support anticipated demand, the risk that new products may have quality defects in the early stages of introduction, and obsolescence risk of existing products. The Company cannot predict with certainty the ultimate impact new product introductions could have on our results of operations, financial condition or cash flows.

We may not be able to successfully implement initiatives, including our restructuring activities that improve productivity and streamline operations to control or reduce costs

Achieving our long-term profitability goals depends significantly on our ability to control or reduce our operating costs. Because many of our costs are affected by factors completely, or substantially outside our control, we generally must seek to control or reduce costs through productivity initiatives. If we are not able to identify and implement initiatives that control or reduce costs and increase operating efficiency, or if the cost savings initiatives we have implemented to date do not generate expected cost savings, our financial results could be adversely affected. Our efforts to control or reduce costs may include restructuring activities involving workforce reductions, facility consolidations and other cost reduction initiatives. If we do not successfully manage our current restructuring activities, or any other restructuring activities that we may undertake in the future, expected efficiencies and benefits may be delayed or not realized, and our operations and business could be disrupted.

We engage in acquisitions and strategic investments and may encounter difficulty in obtaining appropriate acquisitions and in integrating these businesses

Part of the Company’s growth strategy involves acquisitions. We have pursued and will continue to seek acquisitions and other strategic investments to complement and expand our existing businesses. The rate and extent to which acquisitions become available may affect our growth rate. The success of these transactions will depend on our ability to integrate these businesses into our operations and realize the planned synergies. We may encounter difficulties in integrating acquisitions into our operations and in managing strategic investments and foreign acquisitions and joint ventures may also present additional risk related to the integration of operations across different cultures and languages. Failure to effectively complete or manage acquisitions may adversely affect our existing businesses as well as our results of operations, financial condition and cash flows.

We may fail to realize all of the anticipated benefits of the Aclara acquisition or those benefits may take longer to realize than expected

The full benefits of the Aclara acquisition, including the anticipated sales or growth opportunities, may not be realized as expected or may not be achieved within the anticipated time frame, or at all. Failure to achieve the anticipated benefits of the Aclara acquisition could adversely affect our results of operations or cash flows and decrease or delay the expected accretive effect of the Aclara acquisition.

We have outstanding indebtedness; our indebtedness has increased as a result of the Aclara acquisition, and will further increase if we incur additional indebtedness in the future and do not retire existing indebtedness

We have outstanding indebtedness and other financial obligations and significant unused borrowing capacity. The amount of cash required to service our indebtedness following completion of the Aclara acquisition, and thus the demands on our cash resources, is greater than the amount of cash required to service our indebtedness prior to the Aclara acquisition. Our increased indebtedness level and related debt service obligations could have negative consequences, including (i) requiring us to dedicate significant cash flow from operations to the payment of principal and interest on our indebtedness, which would reduce the funds we have available for other purposes, (ii) reducing our flexibility in planning for or reacting to changes in our business and market conditions and (iii) exposing us to interest rate risk since a portion of our debt obligations are at variable rates.

We may incur significantly more indebtedness in the future. If we add new indebtedness and do not retire existing indebtedness, the risks described above could increase.

We manufacture and source products and materials from various countries throughout the world. A disruption in the availability, price or quality of these products or materials could adversely affect our operating results

Our business is subject to risks associated with global manufacturing and sourcing. We use a variety of raw materials in the production of our products including steel, aluminum, brass, copper, bronze, zinc, nickel, plastics, phenolics, elastomers and petrochemicals. We also purchase certain electrical and electronic components, including solenoids, lighting ballasts, printed circuit boards, integrated circuit chips and cord sets from a number of suppliers. Significant shortages in the availability of these materials or significant price increases could increase our operating costs and adversely impact the competitive positions of our products, which could adversely impact our results of operations. See also Risk Factor, “Significant developments from the recent and potential changes in U.S. trade policies could have a material adverse effect on us.”

We rely on materials, components and finished goods that are sourced from or manufactured in foreign countries including Mexico, China, and other international countries. Political instability in any country where we do business could have an adverse impact on our results of operations.

We rely on our suppliers to produce high quality materials, components and finished goods according to our specifications, including timely delivery. Although we have quality control procedures in place, there is a risk that products may not meet our specifications which could adversely affect our ability to ship quality products to our customers on a timely basis and, could adversely affect our results of operations.

We are subject to risks surrounding our information technology systems failures, network disruptions, breaches in data security and compliance with data privacy laws or regulations

We are highly dependent on various software and information technology systems to record and process operational, human resources and financial transactions. The proper functioning of Hubbell’s information technology systems is critical to the successful operation of our business. Although our information technology systems are protected with robust backup and security systems, these systems are still susceptible to cyber threats, malware, phishing attacks, break-ins and similar events, breaches of physical security or tampering and manipulation of these systems by employees or unauthorized third parties. Information security risks also exist with respect to the use of portable electronic devices, such as smartphones and laptops, which are particularly vulnerable to loss and theft. Hubbell may also be subject to disruptions of any of our systems and our vendor’s systems arising from events that are wholly or partially beyond our control, such as natural disasters, acts of terrorism, cyber-attacks, computer viruses, and electrical/telecommunications outages or failures. All of these risks are also applicable where Hubbell relies on outside vendors to provide services, which may operate in an on-line, or “cloud,” environment. A failure of our information technology systems could adversely affect our ability to process orders, maintain proper levels of inventory, collect accounts receivable and pay expenses; all of which could have an adverse effect on our results of operations, financial condition and cash flows. In addition, security breaches could result in unauthorized disclosure of confidential information that may result in financial or reputational damage to the Company, as well as expose the Company to litigation and regulatory enforcement actions.

Hubbell also provides customers with solutions that include software components that allow for the control and/or the communication of data from those solutions to Hubbell or customer systems. In addition to the risks noted above, there are other risks associated with these solutions. For example, control and/or data from these solutions may be integral to a customer’s operations. A failure of our technology to operate as designed or as a result of cyber threats could impact those operations, including by loss or destruction of data. Likewise, a customer’s failure to properly configure its own network are outside of the Company’s control and could result in a failure in functionality or security of our technology.

Hubbell is also subject to an increasing number of evolving data privacy and security laws and regulations that impose requirements on the Company and our technology prior to certain use or transfer, storing, processing, disclosure, and protection of data and prior to sale or use of certain technologies. Failure to comply with such laws and regulations could result in the imposition of fines, penalties and other costs. For example, the European Union’s implementation of the General Data Protection Regulation in 2018, the European Union’s pending ePrivacy Regulation, and California’s implementation of its Consumer Privacy Act of 2018 and Connected Device Privacy Act of 2018 all could disrupt our ability to sell products and solutions or use and transfer data because such activities may not be in compliance with applicable law in certain jurisdictions.

We have continued to work on improving our utilization of our enterprise resource planning system, expanding standardization of business processes and performing implementations at our remaining businesses. We expect to incur additional costs related to future implementations, process reengineering efforts as well as enhancements and upgrades to the system. These system modifications and implementations could result in operating inefficiencies which could adversely impact our operating results and/or our ability to perform necessary business transactions.

System failures, ineffective system implementation or disruptions, failure to comply with data privacy and security laws or regulations, IT system risk arising from the Company's acquisition activity or the compromise of security with respect to internal or external systems or portable electronic devices could damage the Company's systems or infrastructure, subject us to liability claims, or regulatory fines, penalties, or intervention, harm our reputation, interrupt our operations, disrupt customer operations, and adversely affect the Company's internal control over financial reporting, business, financial condition, results of operations, or cash flows.

Future tax law changes could increase our prospective tax expense. In addition, tax payments may ultimately differ from amounts currently recorded by the Company

We are subject to income taxes as well as non-income based taxes, in both the United States and numerous foreign jurisdictions. The determination of the Company's worldwide provision for income taxes and other tax liabilities requires judgment and is based on diverse legislative and regulatory structures that exist in the various jurisdictions where the company operates. Although management believes its estimates are reasonable, the ultimate tax outcome may differ from the amounts recorded in its financial statements and may adversely affect the Company's financial results for the period when such determination is made. We are subject to ongoing tax audits in various jurisdictions. Tax authorities may disagree with certain positions we have taken and assess additional taxes. We regularly assess the likely outcomes of these audits in order to determine the appropriateness of our tax provisions. However, there can be no assurance that we will accurately predict the outcomes of these audits, and the future outcomes of these audits could adversely affect our results of operations, financial condition and cash flows.

Tax legislation may materially adversely affect our financial condition, results of operations and cash flows

On December 22, 2017 Public Law 115-97 "An Act to Provide Reconciliation Pursuant to Titles II and V of the Concurrent Resolution on the Budget for Fiscal Year 2018" was enacted. This law is commonly referred to as the Tax Cuts and Job Act of 2017 ("TCJA"). The TCJA significantly changed the U.S. Internal Revenue Code, including taxation of U.S. corporations, by, among other things, reducing the U.S. federal corporate income tax rate, limiting the availability of previously claimed deductions, taxing certain activities and

transactions not previously subject to U.S. tax and imposing a mandatory deemed repatriation tax on certain undistributed earnings and profits of U.S.-owned foreign corporations. Throughout 2018 and 2019, the U.S. Treasury and the Internal Revenue Service ("IRS") issued numerous and complex proposed and final regulations, and related guidance on various aspects of the TCJA. However, many of the provisions of TCJA remain unclear and subject to interpretation. The legislation also remains subject to potential amendments and technical corrections, any of which could lessen or increase certain impacts of the legislation. Further, state taxing authorities continue to evaluate the impact of TCJA and enact legislation and issue guidance on the state impacts of TCJA. See Note 13 — Income Taxes in the Notes to Consolidated Financial Statements for additional information.

Notwithstanding the reduction in the corporate income tax rate, the overall impact of the legislation remains uncertain and our business and financial condition could be adversely affected.

In addition, foreign jurisdictions may also enact tax legislation that could alter the manner in which corporations are subject to tax in their jurisdictions that could significantly affect our ongoing operations. Aspects of U.S. tax reform could also lead foreign jurisdictions to respond by enacting additional tax legislation that is unfavorable to us.

Significant developments from the recent and potential changes in U.S. trade policies could have a material adverse effect on us

The U.S. government has announced and, in some cases, implemented a new approach to trade policy, including renegotiating, or potentially terminating, certain existing bilateral or multi-lateral trade agreements, such as the North American Free Trade Agreement ("NAFTA") or its anticipated successor agreement, the U.S.-Mexico-Canada Agreement, which is still subject to formal ratification by the United States and Canada, and proposed trade agreements, like the Trans-Pacific Partnership ("TPP"), from which the United States has formally withdrawn, as well as implementing the imposition of additional tariffs on certain foreign goods, including finished products and raw materials such as steel and aluminum. Changes in the U.S. trade policy, U.S. social, political, regulatory and economic conditions or in laws and policies governing foreign trade, manufacturing, development and investment in the territories and countries where we currently manufacture and sell products, and any resulting negative sentiments towards the United States as a result of such changes, could have an adverse effect on our business.

We rely on materials, components and finished goods, such as steel and aluminum, that are sourced from or manufactured in foreign countries, including China and Mexico. Import tariffs and potential import tariffs have resulted or may result in increased prices for these imported goods and materials and, in some cases, may result or have resulted in price increases for domestically sourced goods and materials. Changes in U.S. trade policy have resulted and could result in additional reactions from U.S. trading partners, including adopting responsive trade policies making it more difficult or costly for us to export our products or import goods and materials from those countries. These measures could also result in

increased costs for goods imported into the U.S. or may cause us to adjust our worldwide supply chain. Either of these could require us to increase prices to our customers which may reduce demand, or, if we are unable to increase prices, result in lowering our margin on products sold.

Various countries, and regions, including, without limitation, China, Mexico, Canada and Europe, have announced plans or intentions to impose or have imposed tariffs on a wide range of U.S. products in retaliation for new U.S. tariffs. These actions could, in turn, result in additional tariffs being adopted by the U.S. These conditions and future actions could have a significant adverse affect on world trade and the world economy. To the extent that trade tariffs and other restrictions imposed by the United States increase the price of, or limit the amount of, raw materials and finished goods imported into the United States, the costs of our raw materials may be adversely affected and the demand from our customers for products and services may be diminished, which could adversely affect our revenues and profitability.

We cannot predict future trade policy or the terms of any renegotiated trade agreements and their impacts on our business. The adoption and expansion of trade restrictions, the occurrence of a trade war, or other governmental action related to tariffs or trade agreements or policies has the potential to adversely impact demand for our products, our costs, our customers, our suppliers, and the U.S. economy, which in turn could adversely impact our business, financial condition and results of operations.

Our success depends on attracting and retaining qualified personnel

Our ability to sustain and grow our business requires us to hire, retain and develop a highly skilled and diverse management team and workforce. Failure to ensure that we have the depth and breadth of personnel with the necessary skill set and experience, or the loss of key employees, could impede our ability to deliver our growth objectives and execute our strategy.

The uncertainty surrounding the implementation and effect of Brexit and related negative developments in the European Union could adversely affect our business, financial condition and results of operations

In 2016, the United Kingdom voted to leave the European Union (“EU”) (commonly referred to as “Brexit”). As a result of the referendum, a complex and uncertain process of negotiation has taken place which to date has not resulted in a definitive agreement to establish the future terms of the UK’s relationship with the EU or other countries. Notwithstanding, the UK exited the EU on January 31, 2020 under a transitional arrangement scheduled to remain in place until the end of 2020. The transitional arrangement is intended primarily to maintain the status quo with respect to UK-EU trade and adherence to EU rules while a definitive exit agreement is negotiated. We conduct business in both the UK and EU and shipments from our UK subsidiaries represented 3%

of our total net sales in both 2019 and 2018. The long-term nature of the UK’s relationship with the EU is unclear and there is considerable uncertainty when, or if, any withdrawal agreement or long-term relationship strategy, including trade deals, will be agreed to and implemented by the UK and the EU. Brexit could adversely affect European or worldwide political, regulatory, economic or market conditions and could contribute to instability in political institutions and regulatory agencies. Brexit could also have the effect of disrupting the free movement of goods, services, and people between the UK, the EU and elsewhere. There can be no assurance that any or all of these events, or others that we cannot anticipate at this time, will not have a material adverse effect on our business, financial condition and results of operations.

Deterioration in the credit quality of our customers could have a material adverse effect on our operating results and financial condition

We have an extensive customer base of distributors, wholesalers, electric utilities, OEMs, electrical contractors, telecommunications companies and retail and hardware outlets. We are not dependent on a single customer, however, our top ten customers account for approximately 41% of our net sales. Deterioration in the credit quality of several major customers could adversely affect our results of operations, financial condition and cash flows.

Inability to access capital markets or failure to maintain our credit ratings may adversely affect our business

Our ability to invest in our business and make strategic acquisitions may require access to the capital markets. If general economic and capital market conditions deteriorate significantly, it could impact our ability to access capital. Failure to maintain our credit ratings could also impact our ability to access credit markets and could increase our cost of borrowing. While we have not encountered significant financing difficulties recently, the capital and credit markets could deteriorate. Market conditions could make it more difficult for us to access capital to finance our investments and acquisitions. This could adversely affect our results of operations, financial condition and cash flows.

If the underlying investments of our defined benefit plans do not perform as expected, we may have to make additional contributions to these plans

We sponsor certain pension and other postretirement defined benefit plans. The performance of the financial markets and interest rates impact these plan expenses and funding obligations. Significant changes in market interest rates, investment losses on plan assets and reductions in discount rates may increase our funding obligations and could adversely impact our results of operations, cash flows, and financial condition. Furthermore, there can be no assurance that the value of the defined benefit plan assets will be sufficient to meet future funding requirements.

Volatility in currency exchange rates may adversely affect our financial condition, results of operations and cash flows

Our international operations accounted for approximately 9% of our net sales in 2019. We are exposed to the effects (both positive and negative) that fluctuating exchange rates have on translating the financial statements of our international operations, most of which are denominated in local currencies, into the U.S. dollar. Fluctuations in exchange rates may affect product demand and reported profits in our international operations. In addition, currency fluctuations may affect the prices we pay suppliers for materials used in our products. As a result, fluctuating exchange rates may adversely impact our results of operations and cash flows.

Our reputation and our ability to conduct business may be impaired by improper conduct by any of our employees, agents or business partners

We cannot provide absolute assurance that our internal controls and compliance systems will always protect us from acts committed by our employees, agents or business partners that would violate U.S. and/or non-U.S. laws, including the laws governing payments to government officials, bribery, fraud, anti-kickback and false claims rules, competition, export and import compliance, money laundering and data privacy. In particular, the U.S. Foreign Corrupt Practices Act, the U.K. Bribery Act, and similar anti-bribery laws in other jurisdictions generally prohibit companies and their intermediaries from making improper payments to government officials for the purpose of obtaining or retaining business, and we operate in parts of the world that have experienced governmental corruption to some degree. Despite meaningful measures that we undertake to facilitate lawful conduct, which include training and internal control policies, these measures may not always prevent reckless or criminal acts by our employees or agents. Any such improper actions could damage our reputation and subject us to civil or criminal investigation in the United States and in other jurisdictions, could lead to substantial civil and criminal, monetary and non-monetary penalties and could cause us to incur significant legal and investigative fees.

We could incur significant and/or unexpected costs in our efforts to successfully avoid, manage, defend and litigate intellectual property matters

The Company relies on certain patents, trademarks, copyrights, trade secrets and other intellectual property of which the Company cannot be certain that others have not and will not infringe upon. Although management believes that the loss or expiration of any single intellectual property right would not have a material impact on its operating results, intellectual property litigation could be costly and time consuming and the Company could incur significant legal expenses pursuing these claims against others.

From time to time, we receive notices from third parties alleging intellectual property infringement. Any dispute or litigation involving intellectual property could be costly and

time-consuming due to the complexity and the uncertainty of intellectual property litigation. Our intellectual property portfolio may not be useful in asserting a counterclaim, or negotiating a license, in response to a claim of infringement or misappropriation. In addition, as a result of such claims, the Company may lose its rights to utilize critical technology or may be required to pay substantial damages or license fees with respect to the infringed rights or be required to redesign our products at a substantial cost, any of which could negatively impact our operating results. Even if we successfully defend against claims of infringement, we may incur significant costs that could adversely affect our results of operations, financial condition and cash flow. See Item 3 “Legal Proceedings” for a discussion of our legal proceedings.

We may be required to recognize impairment charges for our goodwill and other intangible assets

As of December 31, 2019, the net carrying value of our goodwill and other intangible assets totaled approximately \$2.6 billion. As required by generally accepted accounting principles, we periodically assess these assets to determine if they are impaired. Impairment of intangible assets may be triggered by developments both within and outside the Company’s control. Deteriorating economic conditions, technological changes, disruptions to our business, inability to effectively integrate acquired businesses, unexpected significant changes or planned changes in use of the assets, intensified competition, divestitures, market capitalization declines and other factors may impair our goodwill and other intangible assets. Any charges relating to such impairments could adversely affect our results of operations in the periods an impairment is recognized.

Our business and results of operations may be materially adversely effected by compliance with import and export laws

We must comply with various laws and regulations relating to the import and export of products, services and technology from the U.S. and other countries having jurisdiction over our operations, which may affect our transactions with certain customers, business partners and other persons. In certain circumstances, export control and economic sanctions regulations may prohibit the export of certain products, services and technologies and in other circumstances, we may be required to obtain an export license before exporting a controlled item. The length of time required by the licensing processes can vary, potentially delaying the shipment of products or performance of services and the recognition of the corresponding revenue. In addition, failure to comply with any of these regulations could result in civil and criminal, monetary and non-monetary penalties, disruptions to our business, limitations on our ability to import and export products and services and damage to our reputation. Moreover, any changes in export control or sanctions regulations may further restrict the export of our products or services, and the possibility of such changes requires constant monitoring to ensure we remain compliant. Any restrictions on the export of our products or product lines could have a material adverse effect on our competitive position, results of operations, cash flows or financial condition.

We are subject to litigation and environmental regulations that may adversely impact our operating results

We are a party to a number of legal proceedings and claims, including those involving product liability, intellectual property and environmental matters, which could be significant. It is not possible to predict with certainty the outcome of every claim and lawsuit. In the future, we could incur judgments or enter into settlements of lawsuits and claims that could have a materially adverse effect on our results of operations, cash flows, and financial condition. In addition, while we maintain insurance coverage with respect to certain claims, such insurance may not provide adequate coverage against such claims. We establish reserves based on our assessment of contingencies, including contingencies related to legal claims asserted against us. Subsequent developments in legal proceedings may affect our assessment and estimates of the loss contingency recorded as a reserve and require us to make additional payments, which could have a materially adverse effect on our results of operations, financial condition and cash flow.

We are also subject to various laws and regulations relating to environmental protection and the discharge of materials into the environment, and we could incur substantial costs as a result of the noncompliance with or liability for clean up or other costs or damages under environmental laws. In addition, we could be affected by future laws or regulations, including those imposed in response to climate change concerns. Compliance with any future laws and regulations could result in a materially adverse effect on our business and financial results. See Item 3 “Legal Proceedings” for a discussion of our legal proceedings.

Regulations related to conflict-free minerals may cause us to incur additional expenses and may create challenges with our customers

The Dodd-Frank Wall Street Reform and Consumer Protection Act contains provisions to improve transparency and accountability regarding the use of “conflict” minerals mined from the Democratic Republic of Congo and adjoining countries (“DRC”). The SEC has established annual disclosure and reporting requirements for those companies who use “conflict” minerals sourced from the DRC in their products. These new requirements could limit the pool of suppliers who can provide conflict-free minerals and as a result, we cannot ensure that we will be able to obtain these conflict-free minerals at competitive prices. Compliance with these new requirements may also increase our costs. In addition, we may face challenges with our customers if we are unable to sufficiently verify the origins of the minerals used in our products.

We face the potential harms of natural disasters, terrorism, acts of war, international conflicts or other disruptions to our operations

Natural disasters, the economic uncertainty resulting from the spread of global epidemics, acts or threats of war or terrorism, international conflicts, and the actions taken by the United States and other governments in response to such events could cause damage to or disrupt our business operations, our suppliers or our customers, and could create political or economic instability, any of which could have an adverse effect on our business. Although it is not possible to predict such events or their consequences, these events could decrease demand for our products, make it difficult or impossible for us to deliver products, or disrupt our supply chain.

Uncertainty about the future of the London Interbank Offer Rate (“LIBOR”) may adversely affect our business and financial results

Our 2018 Credit Facility and Term Loan Agreement use LIBOR as a reference rate, such that the interest due pursuant to such loans may be calculated using LIBOR plus an applicable margin (determined by reference to a ratings based grid) or the alternate base rate. In July 2017, the UK’s Financial Conduct Authority, which regulates LIBOR, announced its intent to phase out LIBOR by the end of 2021. It is not possible to predict the effect of this announcement, including whether LIBOR will continue in place, and if so what changes will be made to it, what alternative reference rates may replace LIBOR in use going forward, and how LIBOR will be determined for purposes of loans, securities and derivative instruments currently referencing it if it ceases to exist. If the method for calculation of LIBOR changes, if LIBOR is no longer available or if lenders have increased costs due to changes in LIBOR, we may suffer from potential increases in interest rates on our floating rate debt. Further, we may need to renegotiate our 2018 Credit Facility or Term Loan Agreement to replace LIBOR with the new standard that is established. These uncertainties or their resolution also could negatively impact our funding costs, loan and other asset values, asset-liability management strategies, and other aspects of our business and financial results.

Item 1B Unresolved Staff Comments

None.

Item 2 Properties

As of December 31, 2019, Hubbell's global headquarters are located in leased office space in Shelton, Connecticut. Other principal administrative offices are in Columbia, South Carolina, Greenville, South Carolina and Manchester, New Hampshire. Hubbell's manufacturing and warehousing

facilities, classified by reporting segment, are located in the following countries. The Company believes its manufacturing and warehousing facilities are adequate to carry on its business activities.

Segment	Location	Number of Facilities		Total Approximate Floor Area in Square Feet	
		Warehouses	Manufacturing	Owned	Leased
Electrical segment	United States	8	20	2,378,000	1,873,000
	Australia	—	1	—	24,000
	Canada	1	2	179,000	3,000
	Mexico	1	4	829,000	174,000
	China	—	1	—	350,000
	Puerto Rico	—	1	162,000	—
	Singapore	1	—	—	12,000
	United Kingdom	2	3	134,000	58,000
Power segment ⁽¹⁾	United States	4	12	3,205,000	203,000
	Brazil	—	1	188,000	—
	Canada	—	2	84,000	—
	Mexico	1	1	167,000	181,000
	China	—	2	—	199,000
	Philippines	—	1	—	19,000
	Spain	—	1	—	11,000
TOTAL		18	52	7,326,000	3,107,000

(1) The Power segment shares an owned manufacturing building in Mexico with the Electrical segment. The building is included in the Electrical segment facility count.

Item 3 Legal Proceedings

The Company is subject to various legal proceedings arising in the normal course of its business. These proceedings include claims for damages arising out of use of the Company's products, intellectual property, workers' compensation and environmental matters. The Company is self-insured up to specified limits for certain types of claims, including product liability and workers' compensation, and is fully self-insured for certain other types of claims, including environmental and intellectual property matters. The Company recognizes a liability for any contingency that in management's judgment is probable of occurrence and can be reasonably estimated. We continually reassess the likelihood of adverse judgments

and outcomes in these matters, as well as estimated ranges of possible losses based upon an analysis of each matter which includes consideration of outside legal counsel and, if applicable, other experts. Based on our experience, current information and applicable law, we do not believe that these proceedings and claims will have a material adverse effect on our business, financial condition and results of operations. Information required by this item is incorporated herein by reference to the section captioned "Notes to Consolidated Financial Statements, Note 15 — Commitments and Contingencies" of this Form 10-K.

Item 4 Mine Safety Disclosures

Not applicable.

PART II

Item 5 Market for the Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

The information required by Item 5 with respect to securities authorized for issuance under equity compensation plans is incorporated herein by reference to Part III, Item 12 of this Form 10-K.

The Company’s Common Stock trades on the New York Stock Exchange under the symbol, “HUBB”.

The number of common shareholders of record on December 31, 2019 was 1,578.

Our dividends are declared at the discretion of our Board of Directors. In October 2019, the Company’s Board of Directors approved an increase in the common stock dividend rate from \$0.84 to \$0.91 per share per quarter. The increased quarterly dividend payment commenced with the December 16, 2019 payment made to the shareholders of record on November 29, 2019.

Purchases of Equity Securities

On October 20, 2017, the Board of Directors approved a stock repurchase program (the “October 2017 program”) that authorized the repurchase of up to \$400 million of Common Stock and expires on October 20, 2020. The Company repurchased \$35.0 million and \$40.0 million of shares of Common Stock, in 2019 and 2018, respectively. As a result, our remaining share repurchase authorization under the October 2017 program is \$325.0 million. Subject to numerous factors, including market conditions and alternative

uses of cash, we may conduct discretionary repurchases through open market or privately negotiated transactions, which may include repurchases under plans complying with Rules 10b5-1 and 10b-18 under the Securities Exchange Act of 1934, as amended.

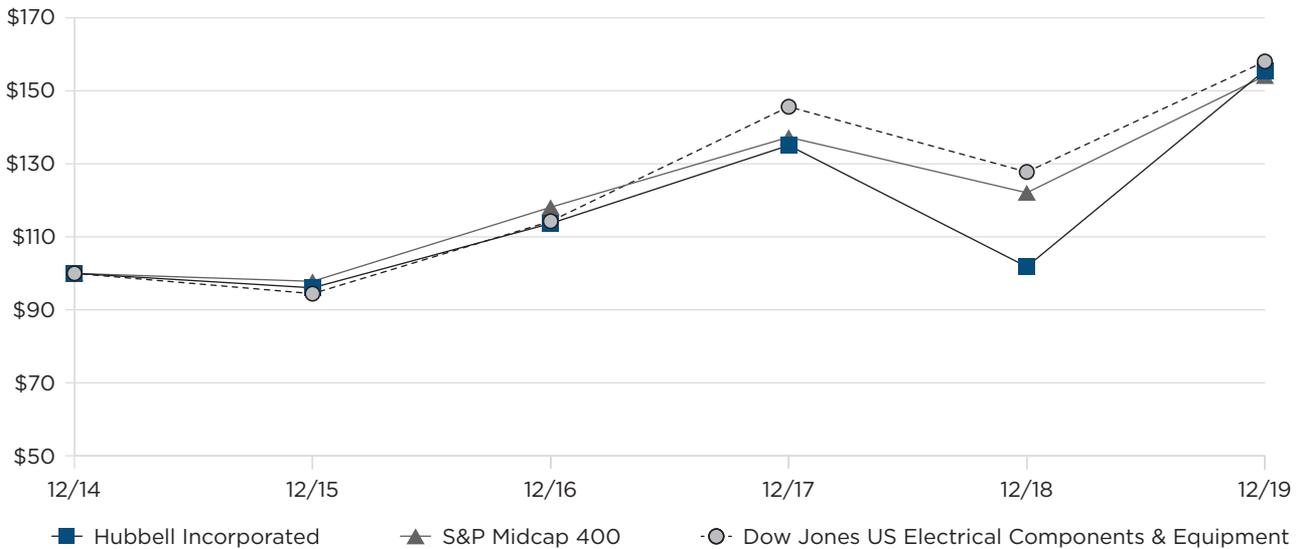
There were no share repurchases during the quarter ended December 31, 2019.

Corporate Performance Graph

The following graph compares the total return to shareholders on the Company's common stock during the five years ended December 31, 2019, with a cumulative total return on the (i) Standard & Poor's MidCap 400 ("S&P MidCap 400") and (ii) the Dow Jones U.S. Electrical Components & Equipment Index ("DJUSEC"). The Company is a member of the S&P MidCap 400. As of December 31, 2019, the DJUSEC

reflects a group of fourteen company stocks in the electrical components and equipment market segment, and serves as the Company's peer group for purposes of this graph. The comparison assumes \$100 was invested on December 31, 2014 in the Company's Common Stock and in each of the foregoing indices and assumes reinvestment of dividends.

COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN*
 Among Hubbell Incorporated, the S&P Midcap 400 Index,
 and the Dow Jones US Electrical Components & Equipment Index



In 2015, the Company completed the reclassification of its dual class of common stock into a single class of Common Stock. The Hubbell Incorporated line above uses the weighted average of Hubbell Class A and Class B shares for the annual period ending December 2014.

*Assumes \$100 invested on 12/31/14 in stock or index, including reinvestment of dividends. Data points are the last day of each fiscal year ending December 31.

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Item 6 Selected Financial Data

The following summary should be read in conjunction with the consolidated financial statements and notes contained herein (dollars and shares in millions, except per share amounts).

OPERATIONS, years ended December 31,	2019	2018	2017	2016	2015
Net sales	\$ 4,591.0	\$ 4,481.7	\$ 3,668.8	\$ 3,505.2	\$ 3,390.4
Gross profit	\$ 1,352.7	\$ 1,300.4	\$ 1,155.1	\$ 1,105.1	\$ 1,091.6
Operating income ⁽⁴⁾	\$ 596.6	\$ 556.9	\$ 518.8	\$ 489.8	\$ 474.1
Adjusted operating income ⁽¹⁾	\$ 668.7	\$ 642.3	\$ 560.4	\$ 522.1	\$ 502.3
Operating income as a % of sales	13.0%	12.4%	14.1%	14.0%	14.0%
Adjusted operating income as a % of sales ⁽¹⁾	14.6%	14.3%	15.3%	14.9%	14.8%
Net income attributable to Hubbell ⁽²⁾	\$ 400.9	\$ 360.2	\$ 243.1	\$ 293.0	\$ 277.3
Adjusted net income attributable to Hubbell ⁽¹⁾	\$ 445.7	\$ 428.0	\$ 333.9	\$ 315.4	\$ 313.7
Net income attributable to Hubbell as a % of net sales	8.7%	8.0%	6.6%	8.4%	8.2%
Adjusted net income attributable to Hubbell as a % of net sales ⁽¹⁾	9.7%	9.5%	9.1%	9.0%	9.3%
Net income attributable to Hubbell as a % of Hubbell shareholders' average equity	21.5%	21.1%	15.1%	17.6%	15.1%
Earnings per share — diluted	\$ 7.31	\$ 6.54	\$ 4.39	\$ 5.24	\$ 4.77
Adjusted earnings per share — diluted ⁽¹⁾	\$ 8.12	\$ 7.77	\$ 6.03	\$ 5.64	\$ 5.39
Cash dividends declared per common share	\$ 3.43	\$ 3.15	\$ 2.87	\$ 2.59	\$ 2.31
Average number of common shares outstanding — diluted	54.7	54.9	55.1	55.7	58.0
Cost of acquisitions, net of cash acquired	\$ 70.8	\$ 1,118.0	\$ 184.1	\$ 173.4	\$ 163.4
FINANCIAL POSITION, AT YEAR-END					
Working capital ⁽³⁾	\$ 729.3	\$ 804.4	\$ 898.0	\$ 961.7	\$ 784.7
Total assets	\$ 4,903.0	\$ 4,872.1	\$ 3,720.6	\$ 3,525.0	\$ 3,208.7
Total debt	\$ 1,571.4	\$ 1,793.2	\$ 1,055.2	\$ 993.7	\$ 644.1
Total Hubbell shareholders' equity	\$ 1,947.1	\$ 1,780.6	\$ 1,634.2	\$ 1,592.8	\$ 1,740.6
NUMBER OF EMPLOYEES, AT YEAR-END	18,800	19,700	17,700	17,400	16,200

(1) The selected non-GAAP measures of adjusted operating income, adjusted operating income as a percent of sales (adjusted operating margin), adjusted net income attributable to Hubbell, adjusted net income attributable to Hubbell as a percent of net sales, and adjusted earnings per share-diluted should be read in conjunction with Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations".

(2) Net income in 2017 includes approximately \$57 million, or \$1.02 per share, impact associated with the TCJA.

(3) Defined as current assets less current liabilities.

(4) Historical amounts have been adjusted to reflect the retrospective effects from the January 1, 2018 adoption of Accounting Standards Update (ASU) No. 2017-07, Compensation Retirement Benefits (Topic): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost.

Item 7 Management's Discussion and Analysis of Financial Condition and Results of Operations

Executive Overview of the Business

The Company is primarily engaged in the design, manufacture and sale of quality electrical and electronic products for a broad range of non-residential and residential construction, industrial and utility applications. Products are either sourced complete, manufactured or assembled by subsidiaries in the United States, Canada, Puerto Rico, China, Mexico, the UK, Brazil, Australia, Spain and Ireland. The Company also participates in joint ventures in Taiwan, Hong Kong and the Philippines, and maintains offices in Singapore, Italy, China, India, Mexico, South Korea, Chile, and countries in the Middle East. The Company employed approximately 18,800 individuals worldwide as of December 31, 2019.

The Company's reporting segments consist of the Electrical segment and the Power segment. Results for 2019, 2018 and 2017 by segment are included under "Segment Results" within this Management's Discussion and Analysis.

The Company's long-term strategy is to serve its customers with reliable and innovative electrical and related infrastructure solutions with desired brands, high-quality service, delivered through a competitive cost structure; to complement organic revenue growth with acquisitions that enhance its product offerings; and to allocate capital effectively to create shareholder value.

Our strategy to complement organic revenue growth with acquisitions focuses on acquiring assets that extend our capabilities, expand our product offerings, and present opportunities to compete in core, adjacent or complementary markets. Our acquisition strategy also provides the opportunity to advance our revenue growth objectives during periods of weakness or inconsistency in our end-markets.

Our strategy to deliver products through a competitive cost structure has resulted in ongoing restructuring and related activities. Our restructuring and related efforts include the consolidation of manufacturing and distribution facilities, and workforce actions, as well as streamlining and consolidating our back-office functions. The primary objectives of our restructuring and related activities are to optimize our manufacturing footprint, cost structure, and effectiveness and efficiency of our workforce.

Productivity improvement also continues to be a key area of focus for the Company and efforts to drive productivity complement our restructuring and related activities to minimize the impact of rising material costs and other cost inflation. Material costs are approximately sixty percent of our cost of goods sold therefore volatility in this area can significantly affect profitability. Our goal is to have pricing and productivity programs that offset material and other inflationary cost increases as well as pay for investments in key growth areas.

Productivity programs affect virtually all functional areas within the Company by reducing or eliminating waste and improving processes. We continue to expand our efforts surrounding global product and component sourcing and supplier cost reduction programs. Value engineering efforts, product transfers and the use of lean process improvement techniques are expected to continue to increase manufacturing efficiency. In addition, we continue to build upon the benefits of our enterprise resource planning system across all functions.

Acquisition of Aclara

On February 2, 2018 the Company acquired Aclara for approximately \$1.1 billion. Aclara is a leading global provider of smart infrastructure solutions for electric, gas, and water utilities, with advanced metering solutions and grid monitoring sensor technology, as well as leading software enabled installation services. The acquisition extends the Power segment's capabilities into smart automation technologies, accelerates ongoing innovation efforts to address utility customer demand for data and integrated solutions, and expands the segment's reach to a broader set of utility customers.

For additional information about the Aclara acquisition, refer to Note 3 — Business Acquisitions and Dispositions in the Notes to the Consolidated Financial Statements.

Results of Operations

Our operations are classified into two reportable segments: Electrical and Power. For a complete description of the Company's segments, see Part I, Item 1 of this Annual Report on Form 10-K. Within these segments, Hubbell serves customers in five primary end markets: non-residential construction, residential construction, industrial, energy-related markets (also referred to as oil and gas markets) and utility markets (also referred to as the electrical transmission and distribution (T&D) market). In order of magnitude of net sales, the Company's served markets are electrical T&D, non-residential construction, industrial, oil and gas, and residential construction.

In 2019 we achieved two percent organic net sales growth on mixed end market trends. Our utility facing markets drove strong growth within our Power segment, resulting in organic net sales increasing by approximately 5.5% as compared to the prior year. End market performance within the Electrical segment was mixed, however, as non-residential and residential markets experienced modest growth, gas distribution markets remained solid, while industrial and oil markets were soft, resulting in a modest decline in organic net sales as compared to the prior year.

Operating margins expanded in both the Electrical and Power segments in 2019, driven by effective cost management and price realization. That expansion included the impact of increased investments in restructuring and related activities in 2019 and the effect of Section 301 tariffs on certain of our businesses (the "Tariffs" referred to in the following discussion of results of operations). In 2019, net income attributable to Hubbell grew by 11 percent compared to the prior year and diluted earnings per share grew by 12 percent. Adjusted net income⁽¹⁾ grew by four percent in 2019 compared to the prior year and adjusted diluted earnings per share⁽¹⁾ grew by five percent in 2019, reflecting our strong operating income performance.

Free cash flow was strong in 2019 at \$497.7 million as compared to \$420.9 million in the prior year⁽²⁾. In 2019 we paid \$186.6 million in shareholder dividends, an increase of eight percent as compared to the prior year, while also reducing our long term debt by \$225.0 million and allocating approximately \$71 million of capital to acquisitions.

SUMMARY OF CONSOLIDATED RESULTS (IN MILLIONS, EXCEPT PER SHARE DATA)

	For the Year Ending December 31,					
	2019	% of Net sales	2018	% of Net sales	2017	% of Net sales
Net sales	\$ 4,591.0		\$ 4,481.7		\$ 3,668.8	
Cost of goods sold	3,238.3	70.5%	3,181.3	71.0%	2,513.7	68.5%
Gross profit	1,352.7	29.5%	1,300.4	29.0%	1,155.1	31.5%
Selling & administrative expenses	756.1	16.5%	743.5	16.6%	636.3	17.3%
Operating income	596.6	13.0%	556.9	12.4%	518.8	14.1%
Net income attributable to Hubbell	400.9	8.7%	360.2	8.0%	243.1	6.6%
Less: Earnings allocated to participating securities	(1.5)		(1.3)		(0.8)	
Adjusted net income available to common shareholders	399.4		358.9		242.3	
Average number of diluted shares outstanding	54.7		54.9		55.1	
EARNINGS PER SHARE - DILUTED	\$ 7.31		\$ 6.54		\$ 4.39	

Adjusted Operating Measures

In the following discussion of results of operations, we refer to "adjusted" operating measures. We believe those adjusted measures, which exclude the impact of certain costs, gains and losses, may provide investors with useful information regarding our underlying performance from period to period and allow investors to understand our results of operations without regard to items we do not consider a component of our core operating performance. Management uses these adjusted measures when assessing the performance of the business.

Effective with results of operations reported in the first quarter of 2019, "adjusted" operating measures exclude amortization of intangible assets associated with all of

our business acquisitions, including inventory step-up amortization associated with those acquisitions. For comparability, all prior period "adjusted" operating measures as well as management's discussion and analysis have been updated to reflect this change in definition.

Adjusted operating measures in 2019 also exclude a gain on the disposition of the Haefely business, an investment loss as well as a 2019 net charge to recognize certain additional liabilities associated with the Company's previously disclosed withdrawal from a multi-employer pension plan. Those items are reported in Total other expense (below Operating income) in the Consolidated Statements of Income. Refer to Note 3 — Business Acquisitions and Dispositions, and

(1) Adjusted net income and adjusted diluted earnings per share are non-GAAP financial measures. See "Adjusted Operating Measures" below for a reconciliation to the comparable GAAP financial measures.

(2) Free cash flow is a non-GAAP financial measure. See "Adjusted Operating Measures" and "Financial Condition, Liquidity and Capital Resources - Cash Flow" below for a reconciliation to the comparable GAAP financial measure.

Note 15 — Commitments and Contingencies in the Notes to Consolidated Financial Statements, for additional information.

Our adjusted operating measures also exclude Aclara transaction costs recognized in 2017 and 2018, income tax effects associated with U.S. tax reform recognized in 2017, and the loss on extinguishment of debt incurred in 2017 from the

redemption of all of our \$300 million outstanding long-term unsecured, unsubordinated notes that were scheduled to mature in 2018. However, the net tax benefit of approximately \$6 million related to adjustments made in connection with the Company's accounting for the effects of TCJA during the measurement period in 2018 has not been reflected as an adjustment to the GAAP measures and is therefore not a reconciling item in the adjusted operating measures below.

The following table reconciles our adjusted financial measures to the directly comparable GAAP financial measure (in millions, except per share amounts):

	For the Year Ended December 31,					
	2019	% of Net sales	2018	% of Net sales	2017	% of Net sales
Gross profit (GAAP measure)	\$ 1,352.7	29.5%	\$ 1,300.4	29.0%	\$ 1,155.1	31.5%
Amortization of acquisition-related intangible assets	24.0		29.5		—	
Adjusted gross profit	\$ 1,376.7	30.0%	\$ 1,329.9	29.7%	\$ 1,155.1	31.5%
S&A expenses (GAAP measure)	\$ 756.1	16.5%	\$ 743.5	16.6%	\$ 636.3	17.3%
Amortization of acquisition-related intangible assets	48.1		46.4		34.9	
Aclara transaction costs	—		9.5		6.7	
Adjusted S&A expenses	\$ 708.0	15.7%	\$ 687.6	15.3%	\$ 594.7	17.3%
Operating income (GAAP measure)	\$ 596.6	13.0%	\$ 556.9	12.4%	\$ 518.8	14.1%
Amortization of acquisition-related intangible assets	72.1		75.9		34.9	
Aclara transaction costs	—		9.5		6.7	
Adjusted operating income	\$ 668.7	14.6%	\$ 642.3	14.3%	\$ 560.4	15.3%
Net income attributable to Hubbell (GAAP measure)	\$ 400.9		\$ 360.2		\$ 243.1	
Amortization of acquisition-related intangible assets, net of tax	53.9		57.5		22.0	
Gain on disposition of business, net of tax	(20.5)		—		—	
Multi-employer pension expense, net of tax	6.4		—		—	
Loss on investment, net of tax	5.0		—		—	
Aclara transaction costs, net of tax	—		10.3		6.0	
Income tax expense associated with U.S. tax reform	—		—		56.5	
Loss on early extinguishment of debt, net of tax	—		—		6.3	
Adjusted net income attributable to Hubbell	\$ 445.7		\$ 428.0		\$ 333.9	
Less: Earnings allocated to participating securities	(1.7)		(1.5)		(1.1)	
Adjusted net income available to common shareholders	\$ 444.0		\$ 426.5		\$ 332.8	
Average number of diluted shares outstanding	54.7		54.9		55.1	
ADJUSTED EARNINGS PER SHARE — DILUTED	\$ 8.12		\$ 7.77		\$ 6.03	

2019 Compared to 2018

Net Sales

Net sales of \$4.6 billion in 2019 increased by two percent compared to 2018 primarily due to higher organic volume and the contribution of an additional month of net sales in 2019 associated with the Aclara acquisition which closed on February 2, 2018. Organic net sales growth contributed approximately two percentage points, including favorable price realization, and acquisitions added approximately one percentage point, partially offset by an approximately one percentage point decline in net sales from the disposal of the Haefely business and foreign exchange.

Cost of Goods Sold

As a percentage of net sales, cost of goods sold decreased by 50 basis points to 70.5% of net sales in 2019 as compared to 71.0% in 2018. The improvement was primarily driven by favorable price realization and savings from our productivity initiatives that outpaced cost increases as well as lower amortization of acquisition-related intangible assets, partially offset by higher restructuring and related costs, and lower net sales unit volume.

Gross Profit

The gross profit margin in 2019 increased by 50 basis points to 29.5% of net sales as compared to 29.0% in 2018. Excluding amortization of acquisition-related intangible assets, the adjusted gross profit margin was 30.0% in 2019 as compared to 29.7% in 2018 and increased primarily due to favorable price realization and savings from our productivity initiatives that outpaced cost increases, partially offset by higher restructuring and related costs, and lower net sales unit volume.

Selling & Administrative Expenses

S&A expense in 2019 was \$756.1 million and increased by \$12.6 million compared to the prior year. S&A expense as a percentage of net sales declined by 10 basis points from 16.6% in 2018 to 16.5% in 2019. Excluding amortization of acquisition-related intangible assets and Aclara transaction costs incurred in 2018, adjusted S&A expense as a percentage of net sales increased by 40 basis points from 15.3% in 2018 to 15.7% in 2019 primarily due to higher restructuring and related costs in 2019 partially offset by volume leverage associated with higher reported net sales dollars.

Operating Income

Operating income increased seven percent in 2019 to \$596.6 million compared to 2018, and operating margin increased by 60 basis points to 13.0%. Excluding amortization of acquisition-related intangible assets and Aclara transaction costs incurred in 2018, adjusted operating income increased approximately four percent in 2019 to \$668.7 million compared to 2018 and adjusted operating margin increased by 30 basis points to 14.6% in 2019. The increase in adjusted operating income and adjusted operating margin is the result of higher gross profit and expanding gross profit margin in 2019, from price realization and productivity in excess of cost increases, partially offset by the effect of lower unit volume, and higher restructuring and related costs.

Total Other Expense

Total other expense decreased by \$13.8 million in 2019 to \$76.1 million compared to the prior year primarily due to the impact of certain discrete non-operating items, including a \$21.7 million gain recognized on the disposal of the Haefely business partially offset by an \$8.5 million net charge associated with the withdrawal from a multi-employer pension plan and subsequent execution of a settlement agreement with regard to the withdrawal obligation, and a \$5.0 million loss on an investment in an available-for-sale debt security. Interest expense, net of investment income, reported within total other expense for 2019 declined by \$4.4 million as compared to the same period of the prior year.

Income Taxes

The effective tax rate was 21.7% in 2019 as compared to 21.6% in 2018. The increase in the effective tax rate is primarily due to the absence of favorable adjustments related to TCJA recorded in 2018, largely offset by the net favorable impact of dispositions, reserve releases related to statute of limitations expiration, and favorable provision to return adjustments recorded in 2019.

Net Income Attributable to Hubbell and Earnings Per Diluted Share

Net income attributable to Hubbell was \$400.9 million in 2019 and increased 11% as compared to 2018. Excluding amortization of acquisition-related intangibles, Aclara transaction costs, and the impact of non-operating items within other expense, as described above, adjusted net income attributable to Hubbell was \$445.7 million in 2019 and increased 4% as compared to 2018. Earnings per diluted share in 2019 increased 12% compared to 2018. Adjusted earnings per diluted share in 2019 increased 5% as compared to 2018 and reflects higher adjusted net income as well as a decline in the average number of diluted shares outstanding of 0.2 million as compared to the prior year.

Segment Results

Electrical Segment

<i>(in millions)</i>	2019	2018
Net sales	\$ 2,625.7	\$ 2,660.6
Operating income (GAAP measure)	\$ 320.1	\$ 320.8
Amortization of acquisition-related intangible assets	23.1	23.9
Adjusted operating income	\$ 343.2	\$ 344.7
Operating margin	12.2%	12.1%
Adjusted operating margin	13.1%	13.0%

Net sales of the Electrical segment in 2019 were \$2.6 billion and decreased 130 basis points as compared to 2018 due to an approximately forty basis point decline in organic net sales growth, as the effect of lower unit volume was slightly greater than sales growth from favorable price realization, a fifty basis point decline in net sales due to the disposal of

the Haefely business and a forty basis point decline from foreign exchange.

Within the Electrical segment, the aggregate net sales of our Commercial and Industrial and Construction and Energy business groups were flat in 2019, as net sales growth from favorable price realization offset the effect of lower unit volume, the disposal of the Haefely business, and foreign exchange. Organic net sales growth of our products serving the natural gas distribution market was solid in 2019, while oil related markets were weak, industrial markets were soft and non-residential markets were mixed. Net sales of our Lighting business group decreased by approximately four percent in 2019 as the effect of lower unit volume outpaced favorable price realization. Within the Lighting business group, net sales of residential lighting products increased by approximately one percentage point and net sales of commercial and industrial lighting products declined by approximately five percentage points compared to 2018.

Operating income of the Electrical segment in 2019 was \$320.1 million and was slightly lower compared to 2018. Operating margin in 2019 increased by 10 basis points to 12.2%. Excluding amortization of acquisition-related intangibles, adjusted operating margin also increased by 10 basis points to 13.1% primarily due to favorable price realization and productivity that were greater than cost increases (including Tariffs), partially offset by the impact of lower unit volume and higher restructuring and related costs. The operating margin decreased slightly in 2019 as compared to the prior year due to the disposal of the Haefely business.

Power Segment

(in millions)	2019	2018
Net sales	\$ 1,965.3	\$ 1,821.1
Operating income	\$ 276.5	\$ 236.1
Amortization of acquisition-related intangible assets	49.0	52.0
Aclara transaction costs	—	9.5
Adjusted operating income	\$ 325.5	\$ 297.6
Operating margin	14.1%	13.0%
Adjusted operating margin	16.6%	16.3%

Net sales in the Power segment in 2019 were \$2.0 billion, an increase of approximately 8% as compared to 2018, due to 5.5% of organic growth and approximately 3% of growth from acquisitions, partially offset by approximately 0.5% from foreign currency translation. Organic net sales growth was primarily driven by the transmission and distribution (T&D) market.

Operating income in the Power segment increased by 17% to \$276.5 million in 2019 and operating margin in 2019 increased by 110 basis points to 14.1%. Excluding amortization of acquisition-related intangibles and Aclara transaction costs, the adjusted operating margin increased by 30 basis points to 16.6% primarily driven by favorable price realization and productivity which outpaced cost increases (including Tariffs), and a benefit from higher net sales volume, partially offset by one additional month of operating results of the Aclara business in 2019 and higher restructuring and related costs.

2018 Compared to 2017

Net Sales

Net sales of \$4.5 billion in 2018 increased 22.2% percent compared to 2017 due to the contribution of net sales from acquisitions, higher organic volume and favorable price realization. Acquisitions added 17.8% to net sales, primarily from the acquisition of Aclara, while organic volume, including favorable price realization, contributed 4.4%. The effect of foreign exchange was flat compared to the prior year.

Cost of Goods Sold

As a percentage of net sales, cost of goods sold increased by 250 basis points to 71.0% of net sales in 2018 as compared to 68.5% in 2017. The increase was primarily driven by acquisitions, as 2018 includes \$29.5 million of Aclara acquisition-related costs as well as the effect of adding the operating results of Aclara, which carries a relatively higher cost of goods sold as a percentage of net sales (and lower gross margin) as compared to the legacy Hubbell business. The increase also reflects an unfavorable net impact of price and material costs, as rising material costs and the impact of Tariffs outpaced favorable price realization.

Gross Profit

Gross profit margin in 2018 compared to 2017 declined by 250 basis points to 29.0% of net sales, driven by costs of goods sold discussed above. Excluding amortization of acquisition-related intangible assets, the adjusted gross profit margin was 29.7% in 2018 as compared to 31.5% in 2017.

Selling & Administrative Expenses

S&A expense in 2018 was \$743.5 million and increased by \$107.2 million compared to the prior year primarily due to the addition of S&A costs of Aclara, including \$20.8 million of Aclara acquisition-related and transaction costs. S&A expense as a percentage of net sales declined by 70 basis points to 16.6% in 2018. Excluding amortization of acquisition-related intangible assets and Aclara transaction costs, adjusted S&A expense as a percentage of net sales declined by 200 basis points to 15.3% in 2018 primarily due to volume leverage associated with higher net sales.

Operating Income

Operating income increased seven percent in 2018 to \$556.9 million, primarily driven by the operating results of the Aclara business, including acquisition-related and transaction costs. The increase in operating income from higher net sales volume was largely offset by rising material costs and the impact of Tariffs, which together, outpaced favorable price realization.

Operating margin decreased by 170 basis points to 12.4% due to higher amortization of acquisition-related intangible assets and Aclara transaction costs in 2018 as well as the operating results of the Aclara business, which carries a relatively lower gross margin as compared to the legacy Hubbell results. The decrease in operating margin also reflects the impact of material costs, tariffs and price realization noted above, which together were only partially offset by the benefit from higher net sales volume.

Excluding amortization of acquisition-related intangible assets and Aclara transaction costs, adjusted operating income increased 14.6% percent in 2018 to \$642.3 million and adjusted operating margin declined by 100 basis points to 14.3% in 2018.

Total Other Expense

Total other expense in 2018 was \$89.9 million and increased by \$14.2 million compared to the prior year, primarily due to higher interest expense from the issuance of \$450 million of 2028 Notes and placement of the \$500 million Term Loan, each in the first quarter of 2018, to finance the Aclara acquisition, partially offset by the loss on extinguishment of debt recognized in 2017 (which did not repeat in 2018).

Income Taxes

The effective tax rate was 21.6% in 2018 as compared to 43.6% in 2017. The decrease is primarily attributable to the absence of the \$56.5 million provisional income tax expense associated with the TCJA recognized in the 2017 financial statements, the reduction of the federal income tax rate from 35% to 21% and net favorable adjustments to the 2017 provisional income tax expense associated with TCJA recognized in 2018 of approximately \$6 million.

Additional information related to the Company's effective tax rate is included in Note 13 — Income Taxes in the Notes to Consolidated Financial Statements.

Net Income attributable to Hubbell and Earnings Per Diluted Share

Net income attributable to Hubbell was \$360.2 million in 2018 and increased 48% as compared to 2017. The increase reflects a lower effective tax rate, higher operating income and the loss on extinguishment of debt in 2017 (which did not repeat in 2018), offset partially by higher interest expense. Adjusted net income attributable to Hubbell was \$428.0 million in 2018 and increased 28% as compared to 2017. Earnings per diluted share in 2018 increased 49% compared to 2017. Adjusted earnings per diluted share in 2018 increased 29% as compared to 2017.

Segment Results

Electrical Segment

<i>(in millions)</i>	2018	2017
Net sales	\$ 2,660.6	\$ 2,532.8
Operating income	\$ 320.8	\$ 294.0
Amortization of acquisition-related intangible assets	23.9	24.8
Adjusted operating income	\$ 344.7	\$ 318.8
Operating margin	12.1%	11.6%
Adjusted operating margin	13.0%	12.6%

Net sales in the Electrical segment were \$2.7 billion, up five percent in 2018 as compared with 2017 due to approximately five percentage points of net sales growth from higher organic volume, including favorable price

realization for the segment. Acquisitions increased net sales by less than one percentage point and the effect of foreign currency translation was flat.

Within the segment, the aggregate net sales of our Commercial and Industrial and Construction and Energy business groups increased by seven percentage points, due to approximately six percentage points of organic growth, and approximately one percentage point of net sales growth from acquisitions. Organic net sales growth of these businesses was driven primarily by our products serving the energy-related markets as well as the non-residential and residential construction markets. Net sales of our Lighting business group increased approximately two percent in 2018 due to higher organic volume, partially offset by pricing headwinds. Within the Lighting business group, net sales of residential lighting products increased by 12%, driven by strong unit volume growth, while net sales of commercial and industrial lighting products declined by 2% as a result of lower volume and pricing headwinds.

Operating income in the Electrical segment for 2018 was \$320.8 million and increased nine percent compared to 2017. Operating margin in 2018 increased by 50 basis points to 12.1%. The increase in operating margin is primarily due to incremental earnings on higher net sales, as discussed above, and productivity gains in excess of cost increases, partially offset by material cost headwinds (including the impact of Tariffs) that outpaced price realization. Excluding amortization of acquisition-related intangibles, adjusted operating margin increased by 40 basis points to 13.0%.

Power Segment

<i>(in millions)</i>	2018	2017
Net sales	\$ 1,821.1	\$ 1,136.0
Operating income	\$ 236.1	\$ 224.8
Amortization of acquisition-related intangible assets	52.0	10.1
Aclara transaction costs	9.5	6.7
Adjusted operating income	\$ 297.6	\$ 241.6
Operating margin	13.0%	19.8%
Adjusted operating margin	16.3%	21.3%

Net sales in the Power segment were \$1.8 billion, up approximately 60% as compared to 2017, primarily due to the addition of net sales of the Aclara business as well as higher organic volume. Acquisitions contributed 56.6% to net sales growth and higher organic volume contributed 4.1%, including favorable price realization. Organic net sales growth was driven by the transmission and distribution (T&D) and telecommunications markets. Foreign exchange reduced net sales as compared to the prior year by less than one percentage point.

Operating income in the Power segment for 2018 increased by five percent to \$236.1 million as compared to the prior year. Operating margin in 2018 decreased to 13.0% as compared to 19.8% in 2017 and reflects an approximately 2% decline from higher amortization of acquisition-related intangibles and Aclara transaction costs in 2018, as well as approximately 2% attributable to the lower margin operating results of the

Aclara business. The decrease in operating margin also reflects a net headwind from material cost increases (including the impact of Tariffs) that outpaced price realization, and the absence of a one-time benefit in the fourth quarter of 2017.

Excluding amortization of acquisition-related intangibles, adjusted operating margin in 2018 decreased to 16.3% as compared to 21.3% in 2017.

Financial Condition, Liquidity and Capital Resources

Cash Flow

(in millions)	December 31,		
	2019	2018	2017
Net cash provided by (used in):			
Operating activities	\$ 591.6	\$ 517.1	\$ 379.0
Investing activities	(128.9)	(1,201.4)	(245.6)
Financing activities	(471.0)	506.5	(214.3)
Effect of foreign currency exchange rate changes on cash and cash equivalents	1.3	(8.2)	18.3
NET CHANGE IN CASH AND CASH EQUIVALENTS	\$ (7.0)	\$ (186.0)	\$ (62.6)

The following table reconciles our cash flows from operating activities to free cash flows for 2019, 2018 and 2017:

(in millions)	December 31,		
	2019	2018	2017
Net cash provided by operating activities (GAAP measure)	\$ 591.6	\$ 517.1	\$ 379.0
Less: Capital expenditures	(93.9)	(96.2)	(79.7)
Free cash flow	\$ 497.7	\$ 420.9	\$ 299.3
Free cash flow as a percent of net income attributable to Hubbell ⁽¹⁾	124.1%	116.9%	123.1%

(1) Free cash flow as a percent of net income attributable to Hubbell, includes the approximately \$57 million impact of the TCJA in 2017. Free cash flow as a percentage of net income attributable to Hubbell excluding the impact of the TCJA is approximately 100% in 2017.

Free cash flow is a non-GAAP measure that we define as cash flow from operations less capital expenditures. Management believes that free cash flow provides useful information regarding Hubbell's ability to generate cash without reliance on external financing. In addition, management uses free cash flow to evaluate the resources available for investments in the business, strategic acquisitions and further strengthening the balance sheet.

2019 Compared to 2018

Cash provided by operating activities for 2019 increased compared to 2018 primarily due to improvements within working capital. Cash provided by working capital was \$22.2 million in 2019 as compared to cash used for working capital of \$25.6 million in 2018, primarily due to lower accounts receivable and inventories, partially offset by lower accounts payable and other current liabilities.

Cash used for investing activities of \$128.9 million in 2019 decreased compared to cash used of \$1,201.4 million in 2018. This decrease is primarily due to approximately \$70.8 million paid for acquisitions in 2019 compared to \$1.1 billion paid for the acquisition of Aclara in 2018. Additionally, 2019 included \$33.4 million of proceeds from the disposal of a business, as compared to none in 2018, and an \$8.0 million decrease in the proceeds from sales of available-for-sale securities in 2019.

Cash used from financing activities was \$471.0 million in 2019 compared to \$506.5 million of cash provided in 2018. The change in cash flows from financing activities reflects the proceeds of the \$450 million public debt offering in February 2018 and \$500 million Term Loan issued in February 2018 to fund the acquisition of Aclara, compared to zero additional long term debt in 2019. Long-term debt repayments in 2019 were \$56.2 million higher than in 2018 due to a \$200 million discretionary payment in December 2019, partially offset by lower short term debt repayments of \$37.2 million compared to 2018. Dividend payments to shareholders increased \$14.3 million in 2019 compared to 2018.

The favorable effect of foreign currency exchange rates on cash was \$1.3 million in 2019 as compared to an unfavorable effect of \$8.2 million in 2018. The favorable effect in 2019 was primarily related to the U.S. dollar weakening against the Canadian dollar and Mexican peso.

2018 Compared to 2017

Cash provided by operating activities for 2018 increased compared to 2017 primarily due to a higher contribution from net income and the related non-cash adjustments for depreciation and amortization, partially offset by \$26.2 million of additional pension funding in 2018 compared to 2017. Cash used for working capital was \$25.6 million in 2018 compared to \$29.0 million in 2017 primarily due to improved inventory

management in 2018, partially offset by higher accounts receivables and Aclara related items, including cash payments for transaction costs in 2018.

Cash used for investing activities of \$1,201.4 million in 2018 increased compared to cash used of \$245.6 million in 2017. This increase was primarily due to approximately \$1.1 billion paid for the acquisition of Aclara in 2018, \$16.5 million of higher capital expenditures and an \$11.6 million decrease in the proceeds from disposition of assets in 2018, as compared to 2017.

Cash provided from financing activities of \$506.5 million in 2018 increased compared to \$214.3 million of cash used in 2017. The change in cash flows from financing activities reflects the proceeds of the \$450 million public debt offering in February 2018 and \$500 million Term Loan issued in February 2018 to fund the acquisition of Aclara, as well as, lower share repurchases in 2018, partially offset by cash used to reduce short-term borrowings.

The unfavorable effect of foreign currency exchange rates on cash was \$8.2 million in 2018 as compared to a favorable effect of \$18.3 million in 2017. The unfavorable effect in 2018 was primarily related to the U.S. dollar strengthening against the Canadian dollar, Australian dollar and British pound.

Investments in the Business

Investments in our business include cash outlays for the acquisition of businesses as well as expenditures to maintain the operation of our equipment and facilities and invest in restructuring activities.

In the fourth quarter of 2019, the Company acquired all of the issued and outstanding shares of Cantega Technologies Inc., including its wholly owned subsidiary Greenjacket Inc., and all of the issued and outstanding shares of Reliaguard Inc. (collectively "Cantega") for \$36.3 million, net of cash acquired, and the Company also acquired substantially all of the assets of Connector Products, Incorporated ("CPI") for \$28.0 million.

In February 2018, the Company completed the acquisition of Aclara for approximately \$1.1 billion in an all-cash transaction. To fund the Aclara acquisition, on February 2, 2018 the Company borrowed \$500 million under a Term Loan Agreement with a syndicate of lenders, issued \$450 million of unsecured, 3.50% senior notes maturing in 2028, and the remaining purchase price and transaction expenses were funded with commercial paper. Refer to Note 3 — Business Acquisitions and Note 12 — Debt in the Notes to Consolidated Financial Statements for additional information.

We continue to invest in restructuring and related programs to maintain a competitive cost structure, drive operational efficiency and mitigate the impact of rising material costs and administrative cost inflation. We expect our investment in restructuring and related activities in 2020 to continue as we continue to invest in previously initiated actions and initiate further footprint consolidation and other cost reduction initiatives.

In connection with our restructuring and related actions, we have incurred restructuring costs as defined by U.S. GAAP, which are primarily severance and employee benefits, asset impairments, accelerated depreciation, as well as facility closure, contract termination and certain pension costs that are directly related to restructuring actions. We also incurred

restructuring-related costs, which are costs associated with our business transformation initiatives, including the consolidation of back-office functions and streamlining our processes, and certain other costs and gains associated with restructuring actions. We refer to these costs on a combined basis as "restructuring and related costs", which is a non-GAAP measure. We believe this non-GAAP measure provides investors with useful information regarding our underlying performance from period to period.

Restructuring costs are predominantly settled in cash from our operating activities and are generally settled within one year, with the exception of asset impairments, which are non-cash.

The table below presents the restructuring and related costs incurred in 2019, additional expected costs, and the expected completion date of restructuring actions that have been initiated as of December 31, 2019 (in millions):

	Costs Incurred in 2019	Additional Expected Costs	Expected Completion Date
2019 Restructuring Actions	\$ 29.1	\$ 13.1	2021
2018 and Prior Restructuring Actions	2.9	1.7	2020
Restructuring cost (GAAP measure)	\$ 32.0	\$ 14.8	
Restructuring-related costs	5.0	1.5	
Restructuring and related costs (Non-GAAP)	\$ 37.0	\$ 16.3	

During 2019, we invested \$93.9 million in capital expenditures, as we continue to make investments in facilities and equipment to support our on-going focus on productivity.

Stock Repurchase Program

On October 20, 2017, the Board of Directors approved a stock repurchase program (the "October 2017 program") that authorized the repurchase of up to \$400 million of Common Stock and expires on October 20, 2020. The Company repurchased \$35.0 million and \$40.0 million of shares of Common Stock, in 2019 and 2018, respectively, and the remaining share repurchase authorization under the October 2017 program is \$325.0 million as of December 31, 2019. Subject to numerous factors, including market conditions and alternative uses of cash, we may conduct discretionary repurchases through open market or privately negotiated transactions, which may include repurchases under plans complying with Rules 10b5-1 and 10b-18 under the Securities Exchange Act of 1934, as amended.

Debt to Capital

At December 31, 2019 and 2018, the Company had \$1,506.0 million and \$1,737.1 million, respectively, of long-term debt outstanding, net of unamortized discount and the unamortized balance of capitalized debt issuance costs. At December 31, 2019 and 2018 the Company also had \$34.4 million and \$25.0 million, respectively of long-term debt classified as short-term on the Consolidated Balance Sheets, reflecting maturities due within the next 12 months.

Principal amounts of long-term debt at December 31, 2019 consisted of unsecured, senior notes in principal amounts of \$300 million due in 2022, \$400 million due in 2026, \$300 million due in 2027, and \$450 million due in 2028 (collectively, the "Notes") as well as \$106.3 million remaining principal amount of borrowing under a term loan agreement.

The 2028 Notes were issued in February 2018 and bear interest at a fixed rate of 3.50%. Net proceeds from the issuance of the 2028 Notes were \$442.6 million after deducting the discount on the notes and offering expenses paid by the Company.

The 2027 Notes were issued in August 2017 and bear interest at a fixed rate of 3.15%. Net proceeds from the issuance were \$294.6 million after deducting the discount on the notes and offering expenses paid by the Company. In September 2017, the Company applied the net proceeds from the 2027 Notes to redeem all of its \$300 million of long-term, unsecured, unsubordinated notes maturing in 2018 and bearing interest at a fixed rate of 5.95%. In connection with this redemption, the Company recognized a loss on the early extinguishment of the 2018 Notes of \$6.3 million on an after-tax basis.

The Notes are callable at any time at specified prices and are only subject to accelerated payment prior to maturity upon customary events of default under the indentures governing such Notes, or upon a change in control triggering event as defined in such indentures. The Company was in compliance with all covenants (none of which are financial) as of December 31, 2019.

On January 31, 2018, the Company entered into a Term Loan Agreement (the "Term Loan Agreement") with a syndicate of lenders under which the Company borrowed \$500 million on an unsecured basis to partially finance the Aclara acquisition on February 2, 2018.

Pursuant to the contractual loan amortization schedule, \$34.4 million and \$25 million of borrowings under the Term Loan Agreement are classified as short-term within current liabilities on the December 31, 2019 and 2018 Consolidated Balance Sheets.

At December 31, 2019 and 2018, the Company had \$65.4 million and \$56.1 million, respectively, of short-term debt outstanding composed of:

- \$26.0 million of commercial paper borrowings outstanding at December 31, 2019 and 2018.
- \$34.4 million at December 31, 2019 and \$25.0 million at December 31, 2018, respectively, of long-term debt classified as short-term within current liabilities in the Consolidated Balance Sheets, reflecting maturities within the next twelve months relating to our borrowing under the Term Loan Agreement.
- \$5.0 million at December 31, 2019 and \$5.1 million at December 31, 2018, respectively, of borrowings to support our international operations in China.

Net debt, defined as total debt less cash and investments, is a non-GAAP measure that may not be comparable to definitions used by other companies. We consider net debt to be a useful measure of our financial leverage for evaluating the Company's ability to meet its funding needs.

The following table sets forth the reconciliation of net debt at December 31, 2019 and 2018:

(in millions)	December 31,	
	2019	2018
Total Debt	\$ 1,571.4	\$ 1,793.2
Total Hubbell Shareholders' Equity	1,947.1	1,780.6
TOTAL CAPITAL	\$ 3,518.5	\$ 3,573.8
Debt to Total Capital	45%	50%
Cash and Investments	\$ 251.9	\$ 254.5
NET DEBT	\$ 1,319.5	\$ 1,538.7
Net Debt to Total Capital	38%	43%

Liquidity

We measure liquidity on the basis of our ability to meet short-term and long-term operational funding needs, fund additional investments, including acquisitions, and make dividend payments to shareholders. Significant factors affecting the management of liquidity are cash flows from operating activities, capital expenditures, cash dividend payments, stock repurchases, access to bank lines of credit and our ability to attract long-term capital with satisfactory terms.

In 2019, we invested in acquisitions and also returned capital to our shareholders through dividends and share repurchases. These activities were funded primarily with cash flows from operations and proceeds from the disposal of the Haefely business.

- Cash used for the acquisition of businesses in 2019, net of cash acquired was \$70.8 million, including cash settlement of a deferred purchase price obligation related to a previous acquisition. Further discussion of our acquisitions can be found in Note 3 — Business Acquisitions and Dispositions in the Notes to Consolidated Financial Statements.
- In 2019, cash used for share repurchases was \$35.0 million. Dividends paid on our Common Stock in 2019 were \$186.6 million.

We also require cash outlays to fund our operations, capital expenditures, and working capital requirements to accommodate anticipated levels of business activity, as well as our rate of cash dividends and potential future acquisitions. We have contractual obligations for long-term

debt, operating leases, purchase obligations, and certain other long-term liabilities that are summarized in the table of Contractual Obligations as of December 31, 2019. As a result of the TCJA, we also have an obligation to fund, over the next six years, the Company's liability for the transition tax on the 2017 deemed repatriation of foreign earnings.

Our sources of funds and available resources to meet these funding needs are as follows:

- Cash flows from operations and existing cash resources: We held \$182.0 million of cash and cash equivalents at December 31, 2019, of which approximately 12% was held inside the United States and the remainder held internationally. The Company repatriated a portion of its foreign earnings in 2019. The consolidated financial statements reflect the income tax effects of the repatriation of these earnings as well as the income tax effects of certain anticipated future cash repatriations.
 - On January 31, 2018, the Company entered into the Term Loan Agreement and a five-year revolving credit agreement (the "2018 Credit Facility") with a syndicate of lenders that provides a \$750 million committed revolving credit facility and terminated all commitments under the Company's previous credit facility. Commitments under the 2018 Credit Facility may be increased (subject to certain conditions) to an aggregate amount not to exceed \$1.250 billion. The interest rate applicable to borrowings under the 2018 Credit Facility is generally either the adjusted LIBOR plus an applicable margin (determined by a ratings based grid) or the alternate base rate. The single financial covenant in the 2018 Credit Facility requires that total debt not exceed 65% of total capitalization as of the last day of each fiscal quarter of the Company. The 2018 Credit Facility expires in February 2023. As of December 31, 2019 the Company had not drawn against the 2018 Credit Facility.
- Annual commitment fees to support availability under the 2018 Credit Facility are not material. Although not the principal source of liquidity, we believe our 2018 Credit Facility is capable of providing significant financing flexibility at reasonable rates of interest. However, an increase in usage of the 2018 Credit Facility related to growth or a significant deterioration in the results of our operations or cash flows, could cause our borrowing costs to increase and/or our ability to borrow could be restricted. We have not entered into any guarantees that could give rise to material unexpected cash requirements.
- The interest rate applicable to borrowings under the Term Loan Agreement is generally either adjusted LIBOR plus an applicable margin (determined by a ratings based grid) or the alternate base rate. The sole financial covenant in the Term Loan Agreement requires that total debt not exceed 65% of total capitalization as of the last day of each fiscal quarter of the Company.

The principal amount of borrowings under the Term Loan Agreement amortize in equal quarterly installments of 5% per year in year one, 5% per year in year two, 7.5% per year in year three, 10% per year in year four, 10% per year in year five, and any remaining borrowings under the Term Loan Agreement are due and payable in full in February 2023. The Company may also make principal payments in excess of the amortization schedule at its discretion and, during 2018 and 2019, the Company

made \$150 million and \$200 million, respectively, of such principal payments.

- In addition to our commercial paper program and existing revolving credit facility, we also have the ability to obtain additional financing through the issuance of long-term debt. Considering our current credit rating, historical earnings performance, and financial position we believe that we would be able to obtain additional long-term debt financing on attractive terms.
- The Company also maintains other lines of credit that are primarily used to support the issuance of letters of credit. Interest rates and other terms of borrowing under these lines of credit vary from country to country, depending on local market conditions. At December 31, 2019 and 2018, total availability under these lines was \$23.0 million and \$54.8 million, respectively, of which \$15.7 million and \$20.3 million was utilized to support letters of credit and the remaining amount was unused. The annual commitment fees associated with these lines of credit are not material.

Pension Funding Status

We have a number of funded and unfunded non-contributory U.S. and foreign defined benefit pension plans. Benefits under these plans are generally provided based on either years of service and final average pay or a specified dollar amount per year of service. The funded status of our qualified, defined benefit pension plans is dependent upon many factors including future returns on invested pension assets, the level of market interest rates, employee earnings and employee demographics.

In 2019, the Company approved amendments to one of its domestic qualified defined benefit pension plans, which froze service accruals for nearly all active participants within the plan effective January 1, 2020. As a result of the amendment, the Company recognized a \$0.3 million curtailment charge, net of tax.

In 2018, the Company approved amendments to one of its foreign defined benefit pension plans, which closed the plan to future service accruals effective August 31, 2018. As a result of the amendments, in the third quarter of 2018, the Company recognized a curtailment gain of approximately \$4.7 million, net of tax, in accumulated other comprehensive income. In addition, effective August 31, 2018, the amortization of actuarial gains and losses is being recognized over the remaining life expectancy of the participants of this plan, as all participants are considered inactive as a result of the amendment.

In 2018, we completed transactions with a third-party insurer to settle approximately \$28 million of projected benefit obligations of our domestic qualified defined benefit pension plans.

Changes in the value of the defined benefit plan assets and liabilities will affect the amount of pension expense ultimately recognized. Although differences between actuarial assumptions and actual results are no longer deferred for balance sheet purposes, deferral is still permitted for pension expense purposes. Unrecognized gains and losses in excess of an annual calculated minimum amount (the greater of 10% of the projected benefit obligation or 10% of the market value of assets) have been amortized and recognized in net periodic pension cost. Effective January 1, 2020, the amortization of unrecognized gains and losses of all of

the Company's qualified defined benefit pension plans is recognized over the remaining life expectancy of participants, as all participants are considered inactive as a result of plan amendments. During 2019 and 2018, we recorded \$9.6 million and \$10.5 million, respectively, of pension expense related to the amortization of these unrecognized losses.

In 2019, 2018 and 2017, we contributed \$10.4 million, \$27.9 million, and \$1.7 million, respectively, to our qualified

foreign and domestic defined benefit pension plans. These contributions have improved the funded status of those plans. Although not required by ERISA and the Internal Revenue Code, the Company may elect to make a voluntary contribution to its qualified domestic defined benefit pension plan in 2020. The Company expects to contribute approximately \$4.3 million to its foreign plans in 2020. The anticipated level of pension funding in 2020 is not expected to have a significant impact on our overall liquidity.

Assumptions

The following assumptions were used to determine projected pension and other benefit obligations at the measurement date and the net periodic benefit costs for the year:

	Pension Benefits		Other Benefits	
	2019	2018	2019	2018
Weighted-average assumptions used to determine benefit obligations at December 31,				
Discount rate	3.17%	4.24%	3.30%	4.40%
Rate of compensation increase	2.94%	3.25%	4.00%	4.05%
Weighted-average assumptions used to determine net periodic benefit cost for years ended December 31,				
Discount rate	4.24%	3.67%	4.40%	3.70%
Expected return on plan assets	4.75%	4.68%	N/A	N/A
Rate of compensation increase	3.25%	3.24%	4.05%	4.00%

At the end of each year, we estimate the expected long-term rate of return on pension plan assets based on the strategic asset allocation for our plans. In making this determination, we utilize expected rates of return for each asset class based upon current market conditions and expected risk premiums for each asset class. A one percentage point change in the expected long-term rate of return on pension fund assets would have an impact of approximately \$7.4 million on 2020 pretax pension expense. The expected long-term rate of return is applied to the fair market value of pension fund assets to produce the expected return on fund assets that is included in pension expense.

The difference between this expected return and the actual return on plan assets was recognized at December 31, 2019 for balance sheet purposes, but continues to be deferred for expense purposes. The net deferral of past asset gains (losses) ultimately affects future pension expense through the amortization of gains (losses) with an offsetting adjustment to Hubbell shareholders' equity through Accumulated other comprehensive loss.

At the end of each year, we determine the discount rate to be used to calculate the present value of our pension plan liabilities. For our U.S. and Canadian pension plans, this discount rate is determined by matching the expected cash flows associated with our benefit obligations to the expected cash flows of a hypothetical portfolio of high quality, fixed income debt instruments with maturities that closely match the expected funding period of our pension liabilities. As of December 31, 2019, we used a discount rate of 3.30% for our U.S. pension plans compared to a discount rate of 4.40% used in 2018. For our Canadian pension plan, we used a discount rate of 3.00% in 2019, compared to the 3.60% discount rate used in 2018.

For our UK pension plan the discount rate was derived using a full yield curve and uses plan specific cash flows. The derived discount rate is the single discount rate equivalent to discounting these liability cash flows at the term-dependent spot rates of AA corporate bonds. This methodology resulted in a December 31, 2019 discount rate for the UK pension plan of 2.10% as compared to a discount rate of 2.90% used in 2018.

A decrease of one percentage point in the discount rate would lower our 2020 pretax pension expense by approximately \$0.1 million. A discount rate increase of one percentage point would increase our 2020 pretax pension expense by an immaterial amount.

In 2019 we changed the mortality table used to calculate the present value of our pension plan liabilities from the RP-2014 mortality table, with generational projection from 2006 using Scale MP-2018 to the Pri-2012 mortality table, with generational projection from 2012 using Scale MP-2019. That change did not have a material impact to the projected benefit obligation of our U.S. plans upon remeasurement at December 31, 2019. The Pri-2012 mortality table, with generational projection from 2012 using Scale MP-2019 was chosen as the best estimate based on the observed and anticipated experience of the plans after considering alternative tables.

Other Post Employment Benefits ("OPEB")

The Company also has a number of health care and life insurance benefit plans covering eligible employees who reached retirement age while working for the Company. These benefits have been discontinued for substantially all

future retirees. These plans are not funded and, therefore, no assumed rate of return on assets is required. We use a similar methodology to derive the yield curve for our post employment benefit plan obligations that we use for our pension plans. As of December 31, 2019, the Company used a discount rate of 3.30% to determine the projected benefit obligation compared to a discount rate of 4.40% used in 2018.

In accordance with the accounting guidance for retirement benefits, we recorded to Accumulated other comprehensive loss, within Hubbell shareholders' equity, a benefit, net of tax, of approximately \$0.9 million in 2019 and a charge, net of tax, of approximately \$0.3 million in 2018, related to the annual remeasurement of the OPEB plans and the amortization of prior service credits and net actuarial gains.

Off-Balance Sheet Arrangements

Off-balance sheet arrangements are defined as any transaction, agreement or other contractual arrangement to which an entity that is not included in our consolidated results is a party, under which we, whether or not a party to the

arrangement, have, or in the future may have: (1) an obligation under a direct or indirect guarantee or similar arrangement, (2) a retained or contingent interest in assets transferred to an unconsolidated entity or similar arrangement that serves as credit, liquidity or market risk support to such entity for such assets, (3) an obligation or liability, including a contingent obligation or liability, under a contract that would be accounted for as a derivative instrument, except that it is excluded from the scope of FASB ASC Topic 815, or (4) an obligation, including a contingent obligation, arising out of a variable interest in an unconsolidated entity that is held by, and material to, the Company, where such entity provides financing, liquidity, market risk or credit risk support to, or engages in leasing, hedging or research and development services with, the Company.

We do not have any off-balance sheet arrangements as defined above which have or are likely to have a current or future material effect on our financial condition, results of operations, liquidity, capital expenditures, capital resources or cash flows.

Contractual Obligations

A summary of our contractual obligations and commitments at December 31, 2019 is as follows (in millions):

	Payments due by period				
	Total	2020	2021-2022	2023-2024	2025 and thereafter
Debt obligations ^(a)	\$ 1,521.9	\$ —	\$ 371.9	\$ —	\$ 1,150.0
Short-term debt obligations ^(a)	65.4	65.4	—	—	—
Expected interest payments	318.7	52.3	99.5	77.2	89.7
Operating lease obligations	110.6	32.7	40.4	21.6	15.9
Retirement and other benefits ^(b)	195.2	13.9	20.9	16.8	143.6
Purchase obligations	324.7	315.8	8.9	—	—
Obligations under customer incentive programs	49.0	49.0	—	—	—
Income tax payments ^(c)	34.6	5.9	6.2	13.1	9.4
TOTAL	\$ 2,620.1	\$ 535.0	\$ 547.8	\$ 128.7	\$ 1,408.6

(a) Amounts exclude unamortized discount and capitalized debt issuance costs.

(b) Amounts above reflect projected funding related to the Company's non-qualified defined benefit pension and OPEB plans as well as remaining payments under the multi-employer pension settlement agreement described in Note 15 - Commitments & Contingencies. Projected funding obligations of the Company's qualified defined benefit pension plans are excluded from the table as there are significant factors, such as the future market value of plan assets and projected investment return rates, which could cause actual funding requirements to differ materially from projected funding.

(c) Amount above includes future payments associated with the one-time transition tax under the TCJA.

Our purchase obligations include amounts committed under legally enforceable contracts or purchase orders for goods and services with defined terms as to price, quantity, delivery and termination liability. These obligations primarily consist of inventory purchases made in the normal course of business to meet operational requirements and commitments for equipment purchases. As of December 31, 2019, we

have \$41.9 million of uncertain tax positions reflected in our Consolidated Balance Sheet. We are unable to make a reasonable estimate regarding the timing of settlement of these uncertain tax positions and, as a result, they have been excluded from the table. See Note 13 — Income Taxes in the Notes to Consolidated Financial Statements.

Critical Accounting Estimates

Note 1 — Significant Accounting Policies in the Notes to Consolidated Financial Statements describes the significant accounting policies used in the preparation of our financial statements.

Use of Estimates

We are required to make assumptions and estimates and apply judgments in the preparation of our financial statements that affect the reported amounts of assets and liabilities, revenues and expenses and related disclosures. We base our assumptions, estimates and judgments on historical experience, current trends and other factors deemed relevant by management. We continually review these estimates and their underlying assumptions to ensure they are appropriate for the circumstances. Changes in estimates and assumptions used by us could have a material impact on our financial results. We believe that the following estimates are among the most critical in fully understanding and evaluating our reported financial results. These items utilize assumptions and estimates about the effect of future events that are inherently uncertain and are based on our judgment.

Revenue Recognition

The Company recognizes revenue when performance obligations identified under the terms of contracts with its customers are satisfied, which generally occurs, for products, upon the transfer of control in accordance with the contractual terms and conditions of the sale. The majority of the Company's revenue associated with products is recognized at a point in time when the product is shipped to the customer, with a relatively small amount of transactions in the Power segment recognized upon delivery of the product at the contractually specified destination. Revenue from service contracts and post-shipment performance obligations is approximately three percent of total annual consolidated net revenue and those service contracts and post-shipment obligations are primarily within the Power segment. Revenue from service contracts and post-shipment performance obligations is recognized when or as those obligations are satisfied. The Company primarily offers assurance-type standard warranties that do not represent separate performance obligations and on occasion will separately offer and price extended warranties that are separate performance obligations for which the associated revenue is recognized over-time based on the extended warranty period. The Company records amounts billed to customers for reimbursement of shipping and handling costs within revenue. Shipping and handling costs associated with outbound freight after control over a product has transferred to a customer are accounted for as fulfillment costs and are included in cost of goods sold. Sales taxes and other usage-based taxes are excluded from revenue.

The Company has certain arrangements that require us to estimate at the time of sale the amounts of variable consideration that should not be recorded as revenue as certain amounts are not expected to be collected from

customers, as well as an estimate of the value of the product to be returned. The Company principally relies on historical experience, specific customer agreements and anticipated future trends to estimate these amounts at the time of shipment and to reduce the transaction price. These arrangements include sales discounts and allowances based on sales volumes, specific programs and special pricing allowances, and returned goods, as are customary in the electrical products industry. Customer returns have historically ranged from 1%-2% of gross sales.

Inventory Valuation

Inventories in the U.S. are primarily valued at the lower of LIFO cost or market, while non-U.S. inventories are valued at the lower of FIFO cost or market. We routinely evaluate the carrying value of our inventories to ensure they are carried at the lower of LIFO or FIFO cost or market value. Such evaluation is based on our judgment and use of estimates, including sales forecasts, gross margins for particular product groupings, planned dispositions of product lines, technological events and overall industry trends. In addition, the evaluation is based on changes in inventory management practices which may influence the timing of exiting products and method of disposing of excess inventory.

Excess inventory is generally identified by comparing future expected inventory usage to actual on-hand quantities. Inventory values are reduced for on-hand inventory in excess of pre-defined usage forecasts. Forecast usage is primarily determined by projecting historical (actual) sales and inventory usage levels forward to future periods. Changes in these estimates may necessitate future adjustments to inventory values.

Customer Credit and Collections

We maintain allowances for doubtful accounts receivable in order to reflect the potential uncollectability of receivables related to purchases of products on open credit. If the financial condition of our customers were to deteriorate, resulting in their inability to make required payments, we may be required to record additional allowances for doubtful accounts.

Accrued Insurance

We retain a significant portion of the risks associated with workers' compensation, medical, automobile and general liability insurance. We estimate self-insurance liabilities using a number of factors, including historical claims experience, demographic factors, severity factors and other actuarial assumptions. The accrued liabilities associated with these programs are based on our estimates of ultimate costs to settle known claims as well as claims incurred but not reported as of the balance sheet date. These assumptions are periodically reviewed with a third-party actuary to determine the adequacy of these self-insurance reserves. Changes in these assumptions may necessitate future adjustments to these self-insurance liabilities.

Employee Benefits Costs and Funding

We sponsor domestic and foreign defined benefit pension, defined contribution and other postretirement plans. Significant assumptions used in the accounting for these employee benefit plans include the discount rate, expected return on the pension fund assets, rate of increase in employee compensation levels and health care cost increase projections. These assumptions are determined based on Company data and appropriate market indicators, and are evaluated each year as of the plans' measurement dates. Further discussion of the assumptions used in 2019 and 2018 are included above under "Pension Funding Status" and in Note 11 — Retirement Benefits in the Notes to Consolidated Financial Statements.

Taxes

We account for income taxes in accordance with the applicable accounting guidance which requires that deferred tax assets and liabilities be recognized using enacted tax rates for the effect of temporary differences between the book and tax basis of recorded assets and liabilities. Additionally, deferred tax assets are required to be reduced by a valuation allowance if it is more-likely-than-not that some portion or all of a deferred tax asset will not be realized. The factors used to assess the likelihood of realization of deferred tax assets are the forecast of future taxable income, available tax planning strategies that could be implemented to realize the net deferred tax assets, and future reversals of deferred tax liabilities. Failure to achieve forecasted taxable income can affect the ultimate realization of net deferred tax assets.

We operate within multiple taxing jurisdictions and are subject to audit in these jurisdictions. The Internal Revenue Service ("IRS") and other tax authorities routinely review our tax returns. These audits can involve complex issues, which may require an extended period of time to resolve. The Company records uncertain tax positions when it has determined that it is more-likely-than-not that a tax position will not be sustained upon examination by taxing authorities based on the technical merits of the position. The Company uses the criteria established in the accounting guidance to determine whether an item meets the definition of more-likely-than-not. The Company's policy is to recognize these uncertain tax positions when the more-likely-than-not threshold is met, when the statute of limitations has expired or upon settlement. In management's opinion, adequate provision has been made for potential adjustments arising from any examinations. See Note 13 — Income Taxes in the Notes to Consolidated Financial Statements.

Contingent Liabilities

We are subject to proceedings, lawsuits, and other claims or uncertainties related to environmental, legal, product and other matters. We routinely assess the likelihood of an adverse judgment or outcome to these matters, as well as the range of potential losses. We record a liability when it is both probable that a liability has been incurred and the amount can be reasonably estimated. A determination of the reserves required, if any, is made after careful analysis, including consultations with outside advisors, where applicable. Where

no amount within a range of estimates is more likely, the minimum is accrued. The required reserves may change in the future due to new developments.

Warranty

The Company offers product warranties that cover defects on most of its products. These warranties primarily apply to products that are properly installed, maintained and used for their intended purpose. The Company accrues estimated warranty costs at the time of sale. Estimated warranty expenses, recorded in cost of goods sold, are based upon historical information such as past experience, product failure rates, or the estimated number of units to be repaired or replaced. Adjustments are made to the product warranty accrual as claims are incurred, additional information becomes known or as historical experience indicates.

Valuation of Long-Lived Assets

Our long-lived assets include land, buildings, equipment, molds and dies, software, goodwill and other intangible assets. Long-lived assets, other than land, goodwill and indefinite-lived intangibles, are depreciated over their estimated useful lives. The assets and liabilities of acquired businesses are recorded under the acquisition method of accounting at their estimated fair values at the dates of acquisition. Goodwill represents purchase price in excess of fair values assigned to the underlying identifiable net assets of acquired businesses. Intangible assets primarily consist of patents, tradenames, developed technology and customer related intangibles.

We review depreciable long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount may not be fully recoverable. If such a change in circumstances occurs, the related estimated future undiscounted cash flows expected to result from the use of the asset group and its eventual disposition is compared to the carrying amount. If the sum of the expected cash flows of the asset group is less than the carrying amount, an impairment charge is recorded. The impairment charge is measured as the amount by which the carrying amount exceeds the fair value of the asset. The fair value of impaired assets is determined using expected cash flow estimates, quoted market prices when available and appraisals as appropriate. We did not record any material impairment charges related to long-lived assets in 2019, 2018, or 2017.

Goodwill and indefinite-lived intangible assets are reviewed annually for impairment unless circumstances dictate the need for more frequent assessment. We perform our goodwill impairment testing as of April 1st of each year unless circumstances dictate the need for more frequent assessments. The accounting guidance provides entities an option of performing a qualitative assessment before performing a quantitative analysis. If the entity determines, on the basis of certain qualitative factors, that it is more-likely-than-not that the goodwill is not impaired, the entity would not need to proceed to the quantitative goodwill impairment testing process as prescribed in the guidance. The Company performed a qualitative assessment for four of its seven reporting units. The Company elected to bypass the qualitative assessment and proceeded directly to the quantitative analysis for its remaining reporting units.

The goodwill impairment test requires judgment, including the identification of reporting units, assigning assets and liabilities to reporting units, and determining the fair value of each reporting unit. Significant judgments required to estimate the fair value of reporting units include estimating future discounted cash flows, determining appropriate discount rates and other assumptions. We use internal discounted cash flow estimates to determine fair value. These cash flow estimates are derived from historical experience and future long-term business plans and include assumptions of future sales growth, gross margin, operating margin, terminal growth rate, and the application of an appropriate discount rate. Changes in these estimates and assumptions could materially affect the determination of fair value and/or goodwill impairment for each reporting unit. As of April 1, 2019, our goodwill testing resulted in fair values for each reporting unit that substantially exceeded the reporting unit's carrying value. We have not recorded any goodwill impairments since the initial adoption of the accounting guidance in 2002.

The identification and measurement of impairment of indefinite-lived intangible assets involves an assessment of qualitative factors to determine whether events or circumstances indicate that it is more-likely-than-not that an indefinite-lived intangible asset is impaired. If it is more-likely-than-not that the asset is impaired, the fair value of the indefinite lived intangibles will be determined using discounted cash flow estimates. If the carrying value of these assets exceeds the estimated fair value, the carrying value will be reduced to the estimated fair value. We did not record any impairments related to indefinite-lived intangible assets in 2019, 2018, or 2017.

Stock-Based Compensation

We determine the grant date fair value of certain stock-based compensation awards using either a lattice model or the Black-Scholes option pricing model. Both of these models require management to make certain assumptions with respect to selected model inputs. These inputs include assumptions for the expected term, stock volatility, dividend yield and risk-free interest rate. Changes in these inputs impact fair value and could impact our stock-based compensation expense in the future. In addition, we are required to estimate the expected forfeiture rate and recognize expense only for those awards expected to meet the service and performance vesting conditions. If our actual forfeiture rate is different from our estimate, adjustments to stock-based compensation expense may be required. See also Note 17 — Stock-Based Compensation in the Notes to Consolidated Financial Statements.

Forward-Looking Statements

Some of the information included in this Management's Discussion and Analysis of Financial Condition and Results of Operations, and elsewhere in this Form 10-K, contain "forward-looking statements" as defined by the Private Securities Litigation Reform Act of 1995. These include statements about our expected capital resources, liquidity, financial performance, pension funding, and results of operations and are based on our reasonable current expectations. In addition, all statements regarding the expected financial

impact of the integration of acquisitions, adoption of updated accounting standards and any expected effects of such adoption, restructuring plans and expected associated costs and benefits, intent to repurchase shares of Common Stock, and change in operating results, anticipated market conditions and productivity initiatives are forward looking. Forward-looking statements may be identified by the use of words, such as "believe", "expect", "anticipate", "intend", "depend", "should", "plan", "estimated", "predict", "could", "may", "subject to", "continues", "growing", "prospective", "forecast", "projected", "purport", "might", "if", "contemplate", "potential", "pending," "target", "goals", "scheduled", "will likely be", and similar words and phrases. Discussions of strategies, plans or intentions often contain forward-looking statements. Important factors, among others, that could cause our actual results and future actions to differ materially from those described in forward-looking statements include, but are not limited to:

- Changes in demand for our products, market conditions, product quality, or product availability adversely affecting sales levels.
- Changes in markets or competition adversely affecting realization of price increases.
- Failure to achieve projected levels of efficiencies, cost savings and cost reduction measures, including those expected as a result of our lean initiative and strategic sourcing plans.
- The expected benefits and the timing of other actions in connection with our Enterprise Resource Planning ("ERP") system.
- The ability to effectively implement ERP systems without disrupting operational and financial processes.
- Availability and costs of raw materials, purchased components, energy and freight.
- Changes in expected or future levels of operating cash flow, indebtedness and capital spending.
- General economic and business conditions in particular industries, markets or geographic regions, as well as inflationary trends.
- Impacts of trade tariffs, import quotas or other trade restrictions or measures taken by the U.S., U.K., and other countries.
- Regulatory issues, changes in tax laws including the TCJA, or changes in geographic profit mix affecting tax rates and availability of tax incentives.
- A major disruption in one or more of our manufacturing or distribution facilities or headquarters, including the impact of plant consolidations and relocations.
- Changes in our relationships with, or the financial condition or performance of, key distributors and other customers, agents or business partners which could adversely affect our results of operations.
- Impact of productivity improvements on lead times, quality and delivery of product.
- Anticipated future contributions and assumptions including changes in interest rates and plan assets with respect to pensions and other retirement benefits.
- Adjustments to product warranty accruals in response to claims incurred, historical experiences and known costs.

- Unexpected costs or charges, certain of which might be outside of our control.
- Changes in strategy, economic conditions or other conditions outside of our control affecting anticipated future global product sourcing levels.
- Ability to carry out future acquisitions and strategic investments in our core businesses as well as the acquisition related costs.
- Ability to successfully execute, manage and integrate key acquisitions and mergers.
- Unanticipated difficulties integrating acquisitions as well as the realization of expected synergies and benefits anticipated when we first enter into a transaction.
- The ability of governments to meet their financial obligations.
- Political unrest in foreign countries.
- The impact of Brexit and other world economic and political issues.
- Natural disasters.
- Failure of information technology systems or security breaches resulting in unauthorized disclosure of confidential information.
- Future revisions to or clarifications of the TCJA.
- Future repurchases of common stock under our common stock repurchase program.
- Changes in accounting principles, interpretations, or estimates.
- The outcome of environmental, legal and tax contingencies or costs compared to amounts provided for such contingencies.
- Adverse changes in foreign currency exchange rates and the potential use of hedging instruments to hedge the exposure to fluctuating rates of foreign currency exchange on inventory purchases.
- Transitioning from LIBOR to a replacement alternative reference rate.
- Other factors described in our Securities and Exchange Commission filings, including the “Business”, “Risk Factors” and “Quantitative and Qualitative Disclosures about Market Risk” sections in this Company’s Annual Report on Form 10-K for the year ended December 31, 2019.

Any such forward-looking statements are not guarantees of future performances and actual results, developments and business decisions may differ from those contemplated by such forward-looking statements. The Company disclaims any duty to update any forward-looking statement, all of which are expressly qualified by the foregoing, other than as required by law.

Item 7A Quantitative and Qualitative Disclosures about Market Risk

In the operation of our business, we have various exposures to areas of risk related to factors within and outside the control of management. Significant areas of risk and our strategies to manage the exposure are discussed below.

In 2019, we manufactured and/or assembled products in the United States, Canada, Puerto Rico, Mexico, China, UK, Brazil, Spain and Australia and sold products in those markets as well as through offices in Singapore, Italy, China, Mexico, and South Korea and countries in the Middle East. In 2019, Hubbell also participated in joint ventures in Taiwan, Hong Kong and the Philippines. Shipments to third party customers from non-U.S. subsidiaries as a percentage of the Company’s total net sales were 9% in 2019, 10% in 2018 and 11% in 2017, with the UK and Canadian operations each representing approximately 29% of 2019 total international net sales. As such, our operating results could be affected by changes in foreign currency exchange rates or weak economic conditions in the foreign markets in which we sell our products. To manage this exposure, we closely monitor the working capital requirements of our international units and may enter into forward foreign exchange contracts. Further discussion of forward exchange contracts can be found in Note 14 — Financial Instruments and Fair Value Measurement in the Notes to Consolidated Financial Statements.

Product purchases representing approximately 19% of our net sales are sourced from unaffiliated suppliers located outside the United States, primarily in China and other Asian countries, Europe and Brazil. Foreign sourcing of products

may result in unexpected fluctuations in product cost or increased risk of business interruption due to lack of product or component availability due to any one of the following:

- Political or economic uncertainty in the source country
- Fluctuations in the rate of exchange between the U.S. dollar and the currencies of the source countries
- Changes in U.S. laws and policies governing foreign trade
- Increased logistical complexity including supply chain interruption or delay, port of departure or entry disruption and overall time to market
- Loss of proprietary information
- Product quality issues outside the control of the Company

We have developed plans that address many of these risks. Such actions include careful selection of products to be outsourced and the suppliers selected; ensuring multiple sources of supply; limiting concentrations of activity by port, broker, freight forwarder, etc.; processes related to quality control; and maintaining control over operations, technologies and manufacturing deemed to provide competitive advantage. Many of our businesses have a dependency on certain basic raw materials needed to produce their products including steel, aluminum, brass, copper, bronze, zinc, nickel, plastics, phenols, elastomers and petrochemicals as well as purchased electrical and electronic components. Our financial results could be affected by the availability and changes in prices of these materials and components.

Certain of these materials are sourced from a limited number of suppliers. These materials are also key source materials for many other companies in our industry and within the universe of industrial manufacturers in general. As such, in periods of rising demand for these materials, we may experience both increased costs and/or limited supply. These conditions can potentially result in our inability to acquire these key materials on a timely basis to produce our products and satisfy our incoming sales orders. Similarly, the cost of these materials can rise suddenly and result in materially higher costs of producing our products. We believe we have adequate primary and secondary sources of supply for each of our key materials and that, in periods of rising prices, we expect to recover a majority of the increased cost in the form of higher selling prices. However, recoveries typically lag the effect of cost increases due to the nature of our markets.

Our financial results are subject to interest rate fluctuations to the extent there is a difference between the amount of our interest-earning assets and the amount of interest-bearing liabilities. The principal objectives of our investment management activities are to preserve capital while earning net investment income that is commensurate with acceptable levels of interest rate, default and liquidity risk taking into account our funding needs. As part of our investment management strategy, we may use derivative financial products such as interest rate hedges and interest rate swaps.

From time to time or when required, we issue commercial paper, which exposes us to changes in interest rates. Our

The following table presents cost and weighted average interest rate information related to financial instruments that are sensitive to changes in interest rates, by maturity at December 31, 2019 (dollars in millions):

	2020	2021	2022	2023	2024	Thereafter	Total	Fair Value 12/31/19
ASSETS								
Available-for-sale investments	\$ 14.2	\$ 5.7	\$ 5.9	\$ 5.0	\$ 6.6	\$ 12.6	\$ 50.0	\$ 50.7
Avg. interest rate	4.77%	4.84%	4.72%	4.72%	4.59%	4.46%		
LIABILITIES								
Senior Notes	\$ —	\$ —	\$ 300.0	\$ —	\$ —	\$ 1,150.0	\$ 1,450.0	\$ 1,486.6
Avg. interest rate	—	—	3.63%	—	—	3.36%		
Term Loan	\$ 34.4	\$ 46.9	\$ 25.0	\$ —	\$ —	\$ —	\$ 106.3	\$ 105.6
Avg. interest rate	2.75%	2.75%	2.75%	—	—	—		

We use derivative financial instruments only if they are matched with a specific asset, liability, or proposed future transaction. We do not speculate or use leverage when trading a financial derivative product.

cash position includes amounts denominated in foreign currencies. We manage our worldwide cash requirements by considering available funds held by our subsidiaries and the cost effectiveness with which these funds can be accessed.

Our long-term debt portfolio is comprised of fixed-rate senior notes and a term loan with an interest rate based on either adjusted LIBOR plus an applicable margin (determined by a ratings based grid) or the alternate base rate. As of December 31, 2019, the long-term debt outstanding related to the fixed-rate senior notes and term loan was \$1,450.0 million and \$106.3 million, respectively. The senior notes are not exposed to interest rate risk as the bonds are at a fixed-rate until maturity.

We continually evaluate risk retention and insurance levels for product liability, property damage and other potential exposures to risk. We devote significant effort to maintaining and improving safety and internal control programs, which are intended to reduce our exposure to certain risks. We determine the level of insurance coverage and the likelihood of a loss and believe that the current levels of risk retention are consistent with those of comparable companies in the industries in which we operate. There can be no assurance that we will not incur losses beyond the limits of our insurance. However, our liquidity, financial position and profitability are not expected to be materially affected by the levels of risk retention that we accept.

Item 8 Financial Statements and Supplementary Data

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All other schedules are omitted because they are not applicable or the required information is shown in the consolidated financial statements or notes thereto.

Reports of Management

Report on Management's Responsibility for Financial Statements

Our management is responsible for the preparation, integrity and fair presentation of our published financial statements. The financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America and include amounts based on informed judgments made by management.

We believe it is critical to provide investors and other users of our financial statements with information that is relevant, objective, understandable and timely, so that they can make informed decisions. As a result, we have established and maintain systems and practices and internal control processes designed to provide reasonable, but not absolute, assurance that transactions are properly executed and recorded and that our policies and procedures are carried out appropriately. Management strives to recruit, train and retain high quality people to ensure that controls are designed, implemented and maintained in a high-quality, reliable manner.

Our independent registered public accounting firm audited our financial statements and the effectiveness of our internal control over financial reporting in accordance with standards

established by the Public Company Accounting Oversight Board (United States). Their report appears on the next page within this Annual Report on Form 10-K.

Our Board of Directors normally meets at least nine times per year to provide oversight, to review corporate strategies and operations, and to assess management's conduct of the business. The Board of Directors also schedules additional meetings on an as needed basis. The Audit Committee of our Board of Directors is composed of at least three individuals all of whom must be "independent" under current New York Stock Exchange listing standards and regulations adopted by the SEC under the federal securities laws. The Audit Committee meets regularly with our internal auditors and independent registered public accounting firm, as well as, management to review, among other matters, accounting, auditing, internal controls and financial reporting issues and practices. Both the internal auditors and independent registered public accounting firm have full, unlimited access to the Audit Committee.

Management's Annual Report on Internal Control over Financial Reporting

Management is responsible for establishing and maintaining adequate systems of internal control over financial reporting as defined by Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934, as amended. Our internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external reporting purposes in accordance with generally accepted accounting principles in the United States of America. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Management has assessed the effectiveness of our internal control over financial reporting as of December 31, 2019.

In making this assessment, management used the criteria set forth in Internal Control-Integrated Framework (2013 framework) issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"). Based on this assessment, management concluded that our internal control over financial reporting was effective at a reasonable assurance level as of December 31, 2019.

The effectiveness of our internal control over financial reporting as of December 31, 2019 has been audited by PricewaterhouseCoopers LLP, our independent registered public accounting firm as stated in their report which is included below within this Annual Report on Form 10-K.

/s/ DAVID G. NORD

David G. Nord

Chairman of the Board and Chief Executive Officer

/s/ WILLIAM R. SPERRY

William R. Sperry

Executive Vice President, Chief Financial Officer and Treasurer

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of Hubbell Incorporated

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheet of Hubbell Incorporated and its subsidiaries (the “Company”) as of December 31, 2019 and 2018, and the related consolidated statements of income, comprehensive income, changes in equity and cash flows for each of the three years in the period ended December 31, 2019, including the related notes and schedule of valuation and qualifying accounts and reserves for each of the three years ended December 31, 2019 appearing under Item 15 (collectively referred to as the “consolidated financial statements”). We also have audited the Company’s internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

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, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2019 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

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 Annual Report on Internal Control over Financial Reporting. Our responsibility is to express opinions on the Company’s consolidated financial statements and 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 (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) 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 (iii) 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.

Critical Audit Matters

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required

to be communicated to the audit committee and that (i) relates to accounts or disclosures that are material to the consolidated financial statements and (ii) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Goodwill Impairment Assessment - Certain Reporting Units Subject to a Quantitative Analysis

As described in Notes 1 and 6 to the consolidated financial statements, the Company's consolidated goodwill balance was \$1,811.8 million as of December 31, 2019. Goodwill represents purchase price in excess of fair values of the underlying net assets of acquired companies. Goodwill is subject to annual impairment testing. Management performs its goodwill impairment testing as of April 1st of each year, unless circumstances dictate the need for more frequent assessments. For three of its reporting units, management has elected to utilize the quantitative goodwill impairment testing process as permitted in the accounting guidance, by comparing the fair value of the Company's reporting units to their carrying values. If the fair value of the reporting unit exceeds its carrying value, no impairment exists. Goodwill impairment testing requires judgment by management, including the identification of reporting units, assigning assets and liabilities to reporting units and determining the fair value of each reporting unit. Management uses internal discounted cash flow estimates to determine fair value. Significant judgments required by management to estimate the fair value of reporting units include estimating future cash flows, determining appropriate discount rates and other assumptions. These cash flow estimates are derived from historical experience and future long-term business plans and include assumptions on future sales growth, gross margin, operating margin, terminal growth rate and the application of an appropriate discount rate.

The principal considerations for our determination that performing procedures relating to the goodwill impairment assessment for certain reporting units subject to a quantitative analysis is a critical audit matter are that there was significant judgment by management when developing

the fair value measurement of the reporting units. This in turn led to a high degree of auditor judgment, subjectivity, and effort in performing procedures and evaluating evidence relating to management's discounted cash flow estimates and significant assumptions, including forecasted sales growth, gross margin, terminal growth rate and discount rate. In addition, the audit effort involved the use of professionals with specialized skill and knowledge to assist in performing these procedures and evaluating the audit evidence obtained from these procedures.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to management's quantitative goodwill impairment assessment, including controls over the determination of the fair value of the Company's reporting units. These procedures also included, among others, testing management's process for developing the fair value estimates; evaluating the appropriateness of the discounted cash flow estimates; testing the completeness, accuracy and relevance of the underlying data used in the discounted cash flow estimates; and evaluating the significant assumptions used by management, including forecasted sales growth, gross margin, terminal growth rate and discount rate. Evaluating management's assumptions related to the forecasted sales growth, gross margin and terminal growth rate involved evaluating whether the assumptions used by management were reasonable considering (i) the current and past performance of the reporting units, (ii) the consistency with industry and third party data, and (iii) whether these assumptions were consistent with evidence obtained in other areas of the audit. Professionals with specialized skill and knowledge were used to assist in the evaluation of the Company's discounted cash flow estimates, including the discount rate.

/s/ PricewaterhouseCoopers LLP

Hartford, Connecticut
February 14, 2020

We have served as the Company's auditor since at least 1961. We have not been able to determine the specific year we began serving as auditor of the Company.

Consolidated Statement of Income

<i>(in millions, except per share amounts)</i>	Year Ended December 31,		
	2019	2018	2017
Net sales	\$ 4,591.0	\$ 4,481.7	\$ 3,668.8
Cost of goods sold	3,238.3	3,181.3	2,513.7
Gross profit	1,352.7	1,300.4	1,155.1
Selling & administrative expenses	756.1	743.5	636.3
Operating income	596.6	556.9	518.8
Gain on disposition of business (Note 3)	21.7	—	—
Multi-employer pension charge (Note 15)	(8.5)	—	—
Interest expense	(69.4)	(72.4)	(44.9)
Investment income	1.5	0.1	0.9
Loss on extinguishment of debt	—	—	(10.1)
Other expense, net	(21.4)	(17.6)	(21.6)
Total other expense	(76.1)	(89.9)	(75.7)
Income before income taxes	520.5	467.0	443.1
Provision for income taxes	113.1	100.9	193.2
Net income	407.4	366.1	249.9
Less: Net income attributable to noncontrolling interest	6.5	5.9	6.8
NET INCOME ATTRIBUTABLE TO HUBBELL	\$ 400.9	\$ 360.2	\$ 243.1
Earnings per share			
Basic	\$ 7.35	\$ 6.57	\$ 4.42
Diluted	\$ 7.31	\$ 6.54	\$ 4.39

See notes to consolidated financial statements.

Consolidated Statement of Comprehensive Income

<i>(in millions)</i>	Year Ended December 31,		
	2019	2018	2017
Net income	\$ 407.4	\$ 366.1	\$ 249.9
Other comprehensive income (loss):			
Currency translation adjustment:			
Foreign currency translation adjustments	3.7	(33.9)	28.9
Reclassification of currency translation gains included in net income	(7.7)	—	—
Defined benefit pension and post-retirement plans, net of taxes of \$5.3, (\$6.3) and (\$1.0)	(14.5)	17.8	4.0
Unrealized gain (loss) on investments, net of taxes of (\$0.2), \$0.4 and (\$0.2)	2.6	(1.4)	0.6
Unrealized gains (losses) on cash flow hedges, net of taxes of \$0.5, (\$0.5) and \$0.4	(1.3)	1.6	(0.8)
Other comprehensive income (loss)	(17.2)	(15.9)	32.7
Comprehensive income	390.2	350.2	282.6
Less: Comprehensive income attributable to noncontrolling interest	6.5	5.9	6.8
COMPREHENSIVE INCOME ATTRIBUTABLE TO HUBBELL	\$ 383.7	\$ 344.3	\$ 275.8

See notes to consolidated financial statements.

Consolidated Balance Sheet

(in millions, except per share amounts)	At December 31,	
	2019	2018
ASSETS		
Current Assets		
Cash and cash equivalents	\$ 182.0	\$ 189.0
Short-term investments	14.2	9.2
Accounts receivable, net	683.0	725.4
Inventories, net	633.0	651.0
Other current assets	62.0	69.1
Total Current Assets	1,574.2	1,643.7
Property, Plant, and Equipment, net	505.2	502.1
Other Assets		
Investments	55.7	56.3
Goodwill	1,811.8	1,784.4
Intangible assets, net	781.5	819.5
Other long-term assets	174.6	66.1
TOTAL ASSETS	\$ 4,903.0	\$ 4,872.1
LIABILITIES AND EQUITY		
Current Liabilities		
Short-term debt and current portion of long-term debt	\$ 65.4	\$ 56.1
Accounts payable	347.7	393.7
Accrued salaries, wages and employee benefits	101.5	101.6
Accrued insurance	68.1	61.3
Other accrued liabilities	262.2	226.6
Total Current Liabilities	844.9	839.3
Long-term Debt	1,506.0	1,737.1
Other Non-Current Liabilities	591.6	496.8
TOTAL LIABILITIES	2,942.5	3,073.2
Commitments and Contingencies (see Note 15)		
Hubbell Shareholders' Equity		
Common stock, par value \$.01		
Common Stock – Authorized 200,000,000 shares, outstanding 54,514,172 and 54,715,188 shares	\$ 0.6	\$ 0.6
Additional paid-in capital	—	1.3
Retained earnings	2,279.4	2,064.4
Accumulated other comprehensive loss	(332.9)	(285.7)
Total Hubbell Shareholders' Equity	1,947.1	1,780.6
Noncontrolling interest	13.4	18.3
TOTAL EQUITY	1,960.5	1,798.9
TOTAL LIABILITIES AND EQUITY	\$ 4,903.0	\$ 4,872.1

See notes to consolidated financial statements.

Consolidated Statement of Cash Flows

(in millions)	Year Ended December 31,		
	2019	2018	2017
Cash Flows from Operating Activities			
Net income	\$ 407.4	\$ 366.1	\$ 249.9
Adjustments to reconcile net income to net cash provided by operating activities, net of acquisitions:			
Depreciation and amortization	151.0	148.4	98.2
Deferred income taxes	6.1	49.0	(14.3)
Stock-based compensation	16.4	24.2	22.3
Gain on disposition of business	(21.7)	—	—
Multi-employer pension charge	8.5	—	—
Loss on extinguishment of debt	—	—	10.1
Gain on sale of assets	(0.4)	(4.0)	(11.6)
Changes in assets and liabilities, net of acquisitions:			
Decrease (increase) in accounts receivable	46.2	(75.4)	3.9
Decrease (increase) in inventories	12.2	34.2	(90.3)
(Decrease) increase in current liabilities	(36.2)	15.6	57.4
Changes in other assets and liabilities, net	0.9	(20.4)	50.7
Contributions to qualified defined benefit pension plans	(10.4)	(27.9)	(1.7)
Other, net	11.6	7.3	4.4
NET CASH PROVIDED BY OPERATING ACTIVITIES	591.6	517.1	379.0
Cash Flows from Investing Activities			
Capital expenditures	(93.9)	(96.2)	(79.7)
Acquisitions, net of cash acquired	(70.8)	(1,118.0)	(184.1)
Proceeds from disposal of business, net of cash	33.4	—	—
Purchases of available-for-sale investments	(14.1)	(16.6)	(20.9)
Proceeds from sales of available-for-sale investments	12.5	20.5	17.4
Proceeds from disposition of assets	3.1	6.8	18.4
Other, net	0.9	2.1	3.3
NET CASH USED IN INVESTING ACTIVITIES	(128.9)	(1,201.4)	(245.6)
Cash Flows from Financing Activities			
Issuance of long-term debt	—	947.5	297.6
Payment of long-term debt	(225.0)	(168.8)	(300.0)
Issuance of short-term debt	0.7	0.8	66.3
Payment of short-term debt	(0.8)	(38.0)	(1.7)
Make whole payment for extinguishment of long-term debt	—	—	(9.9)
Debt issuance cost	—	(7.6)	(3.0)
Payment of dividends	(186.6)	(172.3)	(157.6)
Payment of dividends to noncontrolling interest	(11.3)	(3.9)	(3.5)
Acquisition of common shares	(35.0)	(40.0)	(92.5)
Other	(13.0)	(11.2)	(10.0)
NET CASH PROVIDED (USED) IN FINANCING ACTIVITIES	(471.0)	506.5	(214.3)
Effect of foreign currency exchange rate changes on cash and cash equivalents	1.3	(8.2)	18.3
Increase (Decrease) in cash and cash equivalents	(7.0)	(186.0)	(62.6)
Cash and cash equivalents, beginning of year	189.0	375.0	437.6
Cash and cash equivalents, end of year	\$ 182.0	\$ 189.0	\$ 375.0

See notes to consolidated financial statements.

Consolidated Statement of Changes in Equity

<i>(in millions, except per share amounts)</i>	Common Stock	Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Total Hubbell Shareholders' Equity	Non-controlling interest
BALANCE AT DECEMBER 31, 2016	\$ 0.6	\$ 15.4	\$ 1,879.3	\$ (302.5)	\$ 1,592.8	\$ 10.4
Net income			243.1		243.1	6.8
Other comprehensive (loss) income				32.7	32.7	
Stock-based compensation		22.3			22.3	
Acquisition/surrender of common shares ⁽¹⁾		(27.2)	(72.1)		(99.3)	
Cash dividends declared (\$2.87 per share)			(157.9)		(157.9)	
Dividends to noncontrolling interest						(3.5)
Directors deferred compensation		0.5			0.5	
BALANCE AT DECEMBER 31, 2017	\$ 0.6	\$ 11.0	\$ 1,892.4	\$ (269.8)	\$ 1,634.2	\$ 13.7
Net income			360.2		360.2	5.9
Other comprehensive (loss) income				(15.9)	(15.9)	
Stock-based compensation		24.2			24.2	
ASC 606 adoption to retained earnings			0.6		0.6	
Acquisition/surrender of common shares ⁽¹⁾		(34.5)	(16.0)		(50.5)	
Cash dividends declared (\$3.15 per share)			(172.8)		(172.8)	
Dividends to noncontrolling interest						(3.9)
Aclara noncontrolling interest						2.6
Directors deferred compensation		0.6			0.6	
BALANCE AT DECEMBER 31, 2018	\$ 0.6	\$ 1.3	\$ 2,064.4	\$ (285.7)	\$ 1,780.6	\$ 18.3
Net income			400.9		400.9	6.5
Other comprehensive (loss) income				(17.2)	(17.2)	
Stock-based compensation		16.4			16.4	
Reclassification of stranded tax effects			30.0	(30.0)		
Acquisition/surrender of common shares ⁽¹⁾		(18.3)	(28.9)		(47.2)	
Cash dividends declared (\$3.43 per share)			(187.0)		(187.0)	
Dividends to noncontrolling interest						(11.4)
Directors deferred compensation		0.6			0.6	
BALANCE AT DECEMBER 31, 2019	\$ 0.6	\$ —	\$ 2,279.4	\$ (332.9)	\$ 1,947.1	\$ 13.4

See notes to consolidated financial statements.

(1) For accounting purposes, the Company treats repurchased shares as constructively retired when acquired and accordingly charges the purchase price against Common Stock par value, Additional paid-in capital, to the extent available, and Retained earnings. The change in Retained earnings of \$28.9 million, \$16.0 million and \$72.1 million in 2019, 2018 and 2017, respectively, reflects this accounting treatment.

Notes to Consolidated Financial Statements

NOTE 1 Significant Accounting Policies

Basis of Presentation

The accompanying consolidated financial statements of the Company have been prepared in accordance with accounting principles generally accepted in the United States of America (“GAAP”).

Principles of Consolidation

The Consolidated Financial Statements include all wholly owned subsidiaries. All significant intercompany balances and transactions have been eliminated. The Company participates in three joint ventures, one of which is accounted for using the equity method, the others have been consolidated in accordance with the consolidation accounting guidance. An analysis is performed to determine which reporting entity, if any, has a controlling financial interest in a variable interest entity (“VIE”) with a primarily qualitative analysis. The qualitative analysis is based on identifying the party that has both the power to direct the activities that most significantly impact the VIE’s economic performance (the “power criterion”) and the obligation to absorb losses from or the right to receive benefits of the VIE that could potentially be significant to the VIE (the “losses/benefit criterion”). The party that meets both these criteria is deemed to have a controlling financial interest. The party with the controlling financial interest is considered to be the primary beneficiary and as a result is required to consolidate the VIE. The Company has a 50% interest in a joint venture in Hong Kong, established as Hubbell Asia Limited (“HAL”). The principal objective of HAL is to manage the operations of its wholly-owned manufacturing company in China. Under the accounting guidance, the Company is the primary beneficiary of HAL and as a result consolidates HAL. This determination is based on the fact that HAL’s sole business purpose is to manufacture product exclusively for the Company (the power criterion) and the Company is financially responsible for ensuring HAL maintains a fixed operating margin (the losses/benefit criterion). The consolidation of HAL is not material to the Company’s consolidated financial statements.

Use of Estimates

The preparation of financial statements in accordance with GAAP requires management to make estimates and assumptions that affect the reported amounts in the Consolidated Financial Statements and accompanying Notes to Consolidated Financial Statements. Actual results could differ from the estimates that are used.

Revenue Recognition

The Company recognizes revenue when performance obligations identified under the terms of contracts with its customers are satisfied, which generally occurs, for products, upon the transfer of control in accordance with the contractual terms and conditions of the sale. The majority

of the Company’s revenue associated with products is recognized at a point in time when the product is shipped to the customer, with a relatively small amount of transactions in the Power segment recognized upon delivery of the product at the contractually specified destination. Revenue from service contracts and post-shipment performance obligations is approximately three percent of total annual consolidated net revenue and those service contracts and post-shipment obligations are primarily within the Power segment. Revenue from service contracts and post-shipment performance obligations is recognized when or as those obligations are satisfied. The Company primarily offers assurance-type standard warranties that do not represent separate performance obligations and on occasion will separately offer and price extended warranties that are separate performance obligations for which the associated revenue is recognized over-time based on the extended warranty period. The Company records amounts billed to customers for reimbursement of shipping and handling costs within revenue. Shipping and handling costs associated with outbound freight after control over a product has transferred to a customer are accounted for as fulfillment costs and are included in cost of goods sold. Sales taxes and other usage-based taxes are excluded from revenue.

Within the Electrical segment, certain businesses require a portion of the transaction price to be paid in advance of transfer of control. Advance payments are not considered a significant financing component as they are received less than one year before the related performance obligations are satisfied. In addition, in the Power segment, certain businesses offer annual maintenance service contracts that require payment at the beginning of the contract period. These payments are treated as a contract liability and are classified in Other accrued liabilities in the Consolidated Balance Sheet. Once control transfers to the customer and the Company meets the revenue recognition criteria, the deferred revenue is recognized in the Consolidated Statement of Income. The deferred revenue relating to the annual maintenance service contracts is recognized in the Consolidated Statement of Income on a straight line basis over the expected term of the contract.

The Company has certain arrangements that require us to estimate at the time of sale the amounts of variable consideration that should not be recorded as revenue as certain amounts are not expected to be collected from customers, as well as an estimate of the value of the product to be returned. The Company principally relies on historical experience, specific customer agreements and anticipated future trends to estimate these amounts at the time of shipment and to reduce the transaction price. These arrangements include sales discounts and allowances based on sales volumes, specific programs and special pricing allowances, and returned goods, as are customary in the electrical products industry. Customer returns have historically ranged from 1%-2% of gross sales.

Shipping and Handling Costs

The Company records shipping and handling costs as part of Cost of goods sold in the Consolidated Statement of Income.

Foreign Currency Translation

The assets and liabilities of international subsidiaries are translated to U.S. dollars at exchange rates in effect at the end of the year, and income and expense items are translated at average exchange rates in effect during the year. The effects of exchange rate fluctuations on the translated amounts of foreign currency assets and liabilities are included as translation adjustments in Accumulated other comprehensive loss within Hubbell shareholders' equity. Gains and losses from foreign currency transactions are included in results of operations.

Cash and Cash Equivalents

The carrying value of cash equivalents approximates fair value. Cash equivalents consist of highly liquid investments with original maturities to the Company of three months or less.

Investments

Investments in debt and equity securities are classified by individual security as available-for-sale, held-to-maturity or trading securities. Our available-for-sale securities, consisting of municipal bonds and the redeemable preferred stock of a privately held company, are carried on the balance sheet at fair value with current period adjustments to carrying value recorded in Accumulated other comprehensive loss within Hubbell shareholders' equity, net of tax. Realized gains and losses are recorded in income in the period of sale. The Company's trading securities are carried on the balance sheet at fair value and consist primarily of debt and equity mutual funds. Gains and losses associated with these trading securities are reflected in the results of operations. The Company did not have any investments classified as held-to-maturity as of December 31, 2019 and 2018.

Accounts Receivable and Allowances

Trade accounts receivable are recorded at the invoiced amount and generally do not bear interest. The allowance for doubtful accounts is based on an estimated amount of probable credit losses in existing accounts receivable. The allowance is calculated based upon a combination of historical write-off experience, fixed percentages applied to aging categories and specific identification based upon a review of past due balances and problem accounts. Account balances are charged off against the allowance when it is determined that internal collection efforts should no longer be pursued. The Company also maintains a reserve for credit memos and cash discounts which are principally calculated based upon historical experience, specific customer agreements, as well as anticipated future trends.

Inventories

Inventories are stated at the lower of cost or market value. Approximately 61% of total net inventory value is determined utilizing the last-in, first-out (LIFO) method of inventory accounting. The cost of foreign inventories and certain

domestic inventories is determined utilizing average cost or first-in, first-out (FIFO) methods of inventory accounting. Reserves for excess and obsolete inventory are provided based on current assessments about future demand compared to on-hand quantities.

Property, Plant, and Equipment

Property, plant, and equipment values are stated at cost less accumulated depreciation. Maintenance and repair expenditures that do not significantly increase the life of an asset are charged to expense when incurred. Property, plant, and equipment placed in service prior to January 1, 1999 are depreciated over their estimated useful lives, principally, using accelerated methods. Assets placed in service subsequent to January 1, 1999 are depreciated over their estimated useful lives, using straight-line methods. Leasehold improvements are amortized over the shorter of their economic lives or the lease term. Gains and losses arising on the disposal of property, plant and equipment are included in Operating income in the Consolidated Statement of Income.

Capitalized Computer Software Costs

Capitalized computer software costs, net of amortization, were \$22.5 million and \$20.2 million at December 31, 2019 and 2018, respectively. This balance is reflected in Other long-term assets in the Consolidated Balance Sheet. Capitalized computer software is for internal use and costs primarily consist of purchased materials, external services and salary costs for personnel dedicated to the projects. Software is amortized on a straight-line basis over appropriate periods, generally between three and five years. The Company recorded amortization expense of \$9.0 million in 2019, \$6.4 million in 2018 and \$5.6 million in 2017 relating to capitalized computer software.

Goodwill and Other Intangible Assets

Goodwill represents purchase price in excess of fair values of the underlying net assets of acquired companies. Indefinite-lived intangible assets and goodwill are subject to annual impairment testing using the specific guidance and criteria described in the accounting guidance. The Company performs its goodwill impairment testing as of April 1st of each year, unless circumstances dictate the need for more frequent assessments. The accounting guidance provides entities an option of performing a qualitative assessment (a "step-zero" test) before performing a quantitative analysis. If the entity determines, on the basis of certain qualitative factors, that it is more-likely-than-not that the goodwill is not impaired, the entity would not need to proceed to quantitative goodwill impairment testing process as prescribed in the guidance. The Company applied the "step-zero" test to four of its seven reporting units. Based on that qualitative assessment, the Company concluded it was more-likely-than-not that the fair value of these reporting units exceeded their carrying value and therefore, further quantitative analysis was not required. For the other three reporting units the Company has elected to utilize the quantitative goodwill impairment testing process as permitted in the accounting guidance, by comparing the fair value of the Company's reporting units to their carrying values. If the fair value of the reporting unit exceeds its carrying value, no impairment exists.

Goodwill impairment testing requires judgment, including the identification of reporting units, assigning assets and liabilities to reporting units and determining the fair value of each reporting unit. Significant judgments required to estimate the fair value of reporting units include estimating future cash flows, determining appropriate discount rates and other assumptions. We use internal discounted cash flow estimates to determine fair value. These cash flow estimates are derived from historical experience and future long-term business plans and include assumptions on future sales growth, gross margin, operating margin, terminal growth rate, and the application of an appropriate discount rate. Changes in these estimates and assumptions could affect the determination of fair value and/or goodwill impairment for each reporting unit. The Company believes that its estimated aggregate fair value of its reporting units is reasonable when compared to the Company's market capitalization on the valuation date.

As of April 1, 2019, the impairment testing resulted in implied fair values for each reporting unit that substantially exceeded the reporting unit's carrying value, including goodwill. The Company did not have any reporting units at risk of failing the quantitative impairment test as the excess of the implied fair value significantly exceeded the carrying value of the reporting units. Additionally, the Company did not have any reporting units with zero or negative carrying amounts. The Company has not recorded any goodwill impairments since the initial adoption of the accounting guidance in 2002.

The Company's intangible assets consist primarily of customer relationships, tradenames, developed technology and patents. Intangible assets with definite lives are amortized over periods generally ranging from 5-30 years. The Company amortizes intangible assets with definite lives using either an accelerated method that reflects the pattern in which economic benefits of the intangible assets are consumed and results in higher amortization in the earlier years of the assets' useful life, or using a straight line method. Approximately 75% of the gross value of definite-lived intangible assets follow an accelerated amortization method. These definite lived intangibles are tested for impairment whenever events or circumstances indicate that the carrying amount of an asset (asset group) may not be recoverable. An impairment loss is recognized when the carrying amount of an asset exceeds the estimated undiscounted cash flows used in determining the fair value of the asset. The Company did not record any material impairments related to its definite lived intangible assets in 2019, 2018 or 2017. The Company also has some tradenames that are considered to be indefinite-lived intangible assets. These indefinite-lived intangible assets are not amortized and are tested for impairment annually, unless circumstances dictate the need for more frequent assessment.

The accounting guidance related to testing indefinite-lived intangible assets for impairment provides entities an option of performing a qualitative assessment before calculating the fair value of the asset. If the entity determines, on the basis of certain qualitative factors, that it is more-likely-than-not that the asset is not impaired, the entity would not need to calculate the fair value of the asset. The Company performed the qualitative assessment which resulted in no impairment in 2019, 2018 and 2017.

Other Long-Lived Assets

The Company reviews depreciable long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount may not be fully recoverable. If such a change in circumstances occurs, the related estimated future undiscounted cash flows expected to result from the use of the asset group and its eventual disposition is compared to the carrying amount. If the sum of the expected cash flows is less than the carrying amount, an impairment charge is recorded. The impairment charge is measured as the amount by which the carrying amount exceeds the fair value of the asset. The fair value of impaired assets is determined using expected cash flow estimates, quoted market prices when available and appraisals as appropriate. The Company did not record any material impairment charges in 2019, 2018 or 2017.

Accrued Insurance

The Company retains a significant portion of the risks associated with workers' compensation, medical, automobile and general liability insurance. The Company estimates self-insurance liabilities using a number of factors, including historical claims experience, demographic factors, and other actuarial assumptions. The accrued liabilities associated with these programs are based on the Company's estimate of the ultimate costs to settle known claims as well as claims incurred but not reported as of the balance sheet date. The Company periodically reviews the assumptions with a third party actuary to determine the adequacy of these self-insurance reserves.

Accrued Warranty

The Company offers product warranties which cover defects on most of its products. These warranties primarily apply to products that are properly installed, maintained and used for their intended purpose. The Company accrues estimated warranty costs at the time of sale. Estimated warranty expenses, recorded in cost of goods sold, are based upon historical information such as past experience, product failure rates, or the estimated number of units to be repaired or replaced. Adjustments are made to the product warranty accrual as claims are incurred, additional information becomes known or as historical experience indicates. In 2018, the Company assumed warranty obligations with an estimated fair value of \$89.4 million in connection with the acquisition of Aclara.

Income Taxes

The Company operates within multiple taxing jurisdictions and is subject to audit in these jurisdictions. The IRS and other tax authorities routinely examine the Company's tax returns. These audits can involve complex issues which may require an extended period of time to resolve. The Company makes adequate provisions for best estimates of exposures on previously filed tax returns. Deferred income taxes are recognized for the tax consequence of differences between financial statement carrying amounts and the tax basis of assets and liabilities by applying the currently enacted statutory tax rates in accordance with the accounting guidance for income taxes. The effect of a

change in statutory tax rates is recognized in the period that includes the enactment date. Additionally, deferred tax assets are required to be reduced by a valuation allowance if it is more-likely-than-not that a portion or all of the deferred tax asset will not be realized. The Company uses factors to assess the likelihood of realization of deferred tax assets such as the forecast of future taxable income and available tax planning that could be implemented to realize the deferred tax assets.

In addition, the accounting guidance prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of the tax position taken or expected to be taken in a tax return. For any amount of benefit to be recognized, it must be determined that it is more-likely-than-not that a tax position will be sustained upon examination by taxing authorities based on the technical merits of the position. The amount of benefit to be recognized is based on the Company's assertion of the most likely outcome resulting from an examination, including resolution of any related appeals or litigation processes. Companies are required to reflect only those tax positions that are more-likely-than-not to be sustained. See Note 13 — Income Taxes for additional information.

Research and Development

Research and development expenditures represent costs to discover and/or apply new knowledge in developing a new product, process, or in bringing about a significant improvement to an existing product or process. Research and development expenses are recorded as a component of Cost of goods sold. Expenses for research and development were approximately 3% of Cost of goods sold in each of 2019, 2018 and in 2017.

Retirement Benefits

The Company maintains various defined benefit pension plans for some of its U.S. and foreign employees. The accounting guidance for retirement benefits requires the Company to recognize the funded status of its defined benefit pension and postretirement plans as an asset or liability in the Consolidated Balance Sheet. Gains or losses, prior service costs or credits, and transition assets or obligations that have not yet been included in net periodic benefit cost as of the end of the year are recognized as components of Accumulated other comprehensive loss, net of tax, within Hubbell shareholders' equity. The Company's policy is to fund pension costs within the ranges prescribed by applicable regulations. In addition to providing defined benefit pension benefits, the Company provides health care and life insurance benefits for some of its active and retired employees. The Company's policy is to fund these benefits through insurance premiums or as actual expenditures are made. See also Note 11 — Retirement Benefits.

Earnings Per Share

Restricted stock granted by the Company is considered a participating security since it contains a non-forfeitable right to dividends. As a result, the earnings per share accounting guidance requires the Company to use the two-class method

for calculating earnings per share. The two-class method is an earnings allocation formula that determines earnings per share for common stock and participating securities. Basic earnings per share is calculated as net income available to common shareholders divided by the weighted average number of shares of common stock outstanding. Earnings per diluted share is calculated as net income available to common shareholders divided by the weighted average number of shares outstanding of common stock plus the incremental shares outstanding assuming the exercise of dilutive stock options, stock appreciation rights and performance shares. See also Note 18 — Earnings Per Share.

Stock-Based Compensation

The Company recognizes the grant-date fair value of all stock-based awards on a straight-line basis over their respective requisite service periods (generally equal to an award's vesting period). A stock-based award is considered vested for expense attribution purposes when the retention of the award is no longer contingent on providing subsequent service. Accordingly, the Company generally recognizes compensation cost immediately for awards granted to retirement-eligible individuals or over the period from the grant date to the date retirement eligibility is achieved, if less than the stated vesting period. The expense is recorded in Cost of goods sold and S&A expense in the Consolidated Statement of Income based on the recipients' respective functions within the organization.

The Company records deferred tax assets for awards that will result in deductions on its tax returns, based upon the amount of compensation cost recognized and the statutory tax rate in the jurisdiction in which it will receive a deduction. See also Note 17 — Stock-Based Compensation.

Derivatives

In order to limit financial risk in the management of its assets, liabilities and debt, the Company may use derivative financial instruments such as foreign currency hedges, interest rate hedges and interest rate swaps. All derivative financial instruments are matched with an existing Company asset, liability or proposed transaction. The Company does not speculate or use leverage when trading a derivative product. Market value gains or losses on the derivative financial instrument are recognized in income when the effects of the related price changes of the underlying asset or liability are recognized in income. See Note 14 — Financial Instruments and Fair Value Measurement for more information regarding our derivative instruments.

Recent Accounting Pronouncements

In February 2016, the Financial Accounting Standards Board ("FASB") issued an Accounting Standards Update (ASU 2016-02) related to the accounting and financial statement presentation for leases. This new guidance requires a lessee to recognize right-of-use ("ROU") assets and lease liabilities on the balance sheet, with an election to exempt leases with a term of 12 months or less. For those leases classified as operating leases, the lessee will recognize a

straight-line lease expense, and for those leases classified as financing leases, the lessee will recognize interest expense and amortize the ROU asset.

The Company adopted the requirements of the new standard as of January 1, 2019 and applied the modified retrospective approach, whereby the cumulative effect of adoption is recognized as of the date of adoption and comparative prior periods are not retrospectively adjusted. As a result, upon adoption, we recognized ROU assets of \$109.3 million and lease liabilities of \$109.3 million associated with our operating leases. The standard had no material impact to retained earnings or on our Consolidated Statements of Income or Consolidated Statements of Cash Flows.

We determine if an arrangement is a lease at inception. Operating leases are included as ROU assets within other long-term assets, other accrued liabilities, and other non-current liabilities in our Consolidated Balance Sheets. Finance leases are included in property, plant, and equipment, net, other accrued liabilities, and other non-current liabilities. The Company's finance leases are immaterial.

ROU assets represent our right to use an underlying asset for the lease term and lease liabilities represent our obligation to make lease payments arising from the lease. ROU assets and liabilities are recognized at the lease commencement date based on the present value of lease payments over the lease term. As most of our leases do not provide an implicit rate, we use our incremental borrowing rate based on the information available at the commencement date in determining the present value of lease payments. We use an implicit rate when readily determinable. For leases existing as of January 1, 2019, we have elected to use the remaining lease term as of the adoption date in determining the incremental borrowing rate. Our determination of the lease term may include options to extend or terminate the lease when it is reasonably certain that we will exercise that option.

We have lease agreements with lease and non-lease components, which are generally accounted for separately. Additionally, for our vehicle leases, we apply a portfolio approach regarding the assumed lease term.

We have elected the package of practical expedients permitted under the transition guidance within the new standard, which among other things, allows us to carryforward the historical lease classification. We also elected a practical expedient to determine the reasonably certain lease term.

In June 2016, the FASB issued an Accounting Standards Update (ASU 2016-13), "Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments", which amends the impairment model by requiring entities to use a forward-looking approach based on expected losses rather than incurred losses to estimate credit losses on certain types of financial instruments, including trade receivables. This may result in the earlier recognition of allowances for losses. ASU 2016-13 is effective for periods beginning after December 15, 2019, with early adoption permitted. The standard requires that any impact of adoption is to be recognized as a cumulative-effect adjustment to

retained earnings as of the beginning of the first reporting period in which the guidance is effective. The Company does not expect the adoption will have a material impact on results of operations.

In January 2017, the FASB issued an Accounting Standards Update (ASU 2017-04) "Intangibles-Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment." ASU 2017-04 eliminates step two of the goodwill impairment test and specifies that goodwill impairment should be measured by comparing the fair value of a reporting unit with its carrying amount. Additionally, the amount of goodwill allocated to each reporting unit with a zero or negative carrying amount of net assets should be disclosed. ASU 2017-04 is effective for periods beginning after December 15, 2018. The Company adopted the standard during the first quarter of 2019, with no material impact to the consolidated financial statements.

In February 2018, the FASB issued an Accounting Standards Update (ASU 2018-02) providing guidance on reclassifying certain tax effects in Accumulated Other Comprehensive Income ("AOCI") following the enactment of the TCJA and a reduction of the corporate income tax rate from 35% to 21%. Specifically, the guidance permits a reclassification to retained earnings of the stranded tax effects in AOCI resulting from a revaluation of deferred taxes to the lower tax rate. The guidance is effective for fiscal years beginning after December 15, 2018 including interim periods within those annual periods. The stranded tax effects relate primarily to pension and other employee benefit plans and absent the ASU, the Company's policy is to release stranded tax effects upon plan termination. The Company elected to reclassify these stranded tax effects in the first quarter of 2019, with the effect of decreasing AOCI and increasing retained earnings by approximately \$30.0 million.

In August 2018, the FASB issued an Accounting Standards Update (ASU 2018-15) "Intangibles-Goodwill and Other-Internal-Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract", which clarifies the accounting for implementation costs in cloud computing arrangements. ASU 2018-15 is effective in the first quarter of fiscal 2020, and early adoption is permitted. The Company does not expect the adoption will have a material impact on results of operations.

In December 2019, the FASB issued an Accounting Standards Update (ASU 2019-12) "Simplifying the Accounting for Income Taxes", which simplifies the accounting for income taxes, eliminates certain exceptions within ASC 740, Income Taxes, and clarifies certain aspects of the current guidance to promote consistency among reporting entities. ASU 2019-12 is effective for fiscal years beginning after December 15, 2020. Most amendments within the standard are required to be applied on a prospective basis, while certain amendments must be applied on a retrospective or modified retrospective basis. The Company is currently assessing the impact of adopting this standard on its financial statements.

NOTE 2 Revenue

Approximately two-thirds of the Company's net sales are to distributors who then sell directly into the residential, non-residential, industrial, electrical transmission and distribution, and oil and gas end markets. Within the Power segment, our businesses sell to distributors, with the majority of sales to the utility end markets. Our businesses within the Power segment also sell directly into transmission and distribution utility markets.

The following table presents disaggregated revenue by business group (in millions) for the twelve months ended December 31, 2019, 2018 and 2017:

	Twelve Months Ended December 31,		
	2019	2018	2017
Net sales			
Hubbell Commercial and Industrial	\$ 902.1	\$ 910.8	\$ 864.5
Hubbell Construction and Energy	808.7	799.7	732.6
Hubbell Lighting	914.9	950.1	935.7
Hubbell Power Systems	1,965.3	1,821.1	1,136.0
TOTAL NET SALES	\$ 4,591.0	\$ 4,481.7	\$ 3,668.8

The following table presents disaggregated third-party net sales by geographic location (in millions) for the twelve months ended December 31, 2019, 2018 and 2017 (on a geographic basis, the Company defines "international" in the following table as businesses based outside of the United States and its possessions):

	Twelve Months Ended December 31, 2019			Twelve Months Ended December 31, 2018			Twelve Months Ended December 31, 2017		
	Electrical	Power	Total	Electrical	Power	Total	Electrical	Power	Total
Net sales									
United States	\$ 2,358.2	\$ 1,832.3	\$ 4,190.5	\$ 2,365.4	\$ 1,675.2	\$ 4,040.6	\$ 2,229.3	\$ 1,051.6	\$ 3,280.9
International	267.5	133.0	400.5	295.2	145.9	441.1	303.5	84.4	387.9
TOTAL NET SALES	\$ 2,625.7	\$ 1,965.3	\$ 4,591.0	\$ 2,660.6	\$ 1,821.1	\$ 4,481.7	\$ 2,532.8	\$ 1,136.0	\$ 3,668.8

Contract Balances

Our contract liabilities consist of advance payments for products as well as deferred revenue on service obligations and extended warranties. The current portion of deferred revenue is included in Other accrued liabilities and the non-current portion of deferred revenue is included in Other non-current liabilities in the Consolidated Balance Sheet.

Contract liabilities were \$31.0 million as of December 31, 2019 compared to \$27.7 million as of December 31, 2018. The \$3.3 million increase in our contract liabilities balance was primarily due to a \$22.4 million net increase in current year deferrals primarily due to timing of advance payments on certain orders, partially offset by the recognition of \$14.3 million in revenue related to amounts that were recorded in contract liabilities at January 1, 2019 and a \$4.8 million decline in contract liabilities relating to the disposition of the Haefely business. The Company has an immaterial amount of contract assets relating to performance obligations satisfied prior to payment that is recorded in Other long-term assets in the Consolidated Balance Sheet. Impairment losses recognized on our receivables and contract assets

were immaterial in the twelve months ended December 31, 2019. See Note 1 – Basis of Presentation and Note 3 – Business Acquisitions and Dispositions in the Notes to Consolidated Financial Statements for additional information.

Unsatisfied Performance Obligations

The Company has elected the practical expedient to disclose only the value of unsatisfied performance obligations for contracts with an original expected length greater than one year. Prior to the acquisition of Aclara, the majority of Hubbell's revenues resulted from sales of inventoried products with short periods of manufacture and delivery and thus are excluded from this disclosure. As of December 31, 2019, the Company had approximately \$395 million of unsatisfied performance obligations for contracts with an original expected length of greater than one year, primarily relating to long-term contracts of the Aclara business (within the Power segment) to deliver and install meters, metering communications and grid monitoring sensor technology. The Company expects that a majority of the unsatisfied performance obligations will be completed and recognized over the next 3 years.

NOTE 3 Business Acquisitions and Dispositions

2019 Acquisitions

In the fourth quarter of 2019, the Company acquired all of the issued and outstanding shares of Cantega Technologies Inc., including its wholly owned subsidiary Greenjacket Inc., and all of the issued and outstanding shares of Reliaguard Inc. (collectively "Cantega") for \$36.3 million, net of cash acquired. Cantega is a provider of innovative asset protection solutions and services for electrical utilities that complements the Company's existing power systems business. Cantega is reported in the Power segment. We have recognized intangible assets of \$20.4 million and goodwill of \$14.2 million as a result of this acquisition. The \$20.4 million of intangible assets consists primarily of customer relationships and technology and will be amortized over a weighted average period of approximately 12 years using an accelerated method that reflects the pattern in which economic benefits of the intangible assets are consumed and results in higher amortization in the earlier years of the assets' useful life. The goodwill is not deductible for tax purposes.

In the fourth quarter of 2019, the Company also acquired substantially all the assets of Connector Products, Incorporated ("CPI") for \$28.0 million. CPI is a manufacturer of electrical connectors and accessories for power utilities and mass transit systems. CPI is reported in the Electrical segment. We have recognized intangible assets of \$12.8 million and goodwill of \$10.5 million as a result of this acquisition. The \$12.8 million of intangible assets consists primarily of customer relationships and a tradename and will be amortized over a weighted average period of approximately 18 years using an accelerated method that reflects the pattern in which economic benefits of the intangible assets are consumed and results in higher amortization in the earlier years of the assets' useful life. All of the goodwill is expected to be deductible for tax purposes.

In 2019 the Company also completed a \$5.0 million asset acquisition, and recognized \$4.7 million of goodwill as a result. All of the goodwill is expected to be deductible for tax purposes.

These business acquisitions have been accounted for as business combinations and have resulted in the recognition of goodwill. The goodwill relates to a number of factors implied in the purchase price, including the future earnings and cash flow potential of the businesses as well as the complementary strategic fit and resulting synergies they bring to the Company's existing operations.

Preliminary Allocation of Consideration Transferred to Net Assets Acquired

The following table presents the preliminary determination of the fair value of identifiable assets acquired and liabilities assumed from the Company's 2019 acquisitions. The final determination of the fair value of certain assets and liabilities will be completed within the one year measurement period as required by the FASB ASC Topic 805, "Business Combinations." As the Company finalizes the fair value of

assets acquired and liabilities assumed, additional purchase price adjustments may be recorded during the measurement period. Fair value estimates are based on a complex series of judgments about future events and uncertainties and rely heavily on estimates and assumptions. The judgments used to determine the estimated fair value assigned to each class of assets acquired and liabilities assumed, as well as asset lives, can materially impact the Company's results of operations. The finalization of the purchase accounting assessment may result in a change in the valuation of assets acquired and liabilities assumed and may have a material impact on the Company's results of operations and financial position.

The following table summarizes the preliminary fair values of the assets acquired and liabilities assumed at the date of acquisition related to all transactions (in millions):

Tangible assets acquired	\$	21.7
Intangible assets		33.2
Goodwill		29.4
Net deferred taxes		(5.7)
Other liabilities assumed		(9.3)
TOTAL ESTIMATE OF CONSIDERATION TRANSFERRED, NET OF CASH ACQUIRED	\$	69.3

The Consolidated Financial Statements include the results of operations of the acquired businesses from their respective dates of acquisition. Net sales and earnings related to these acquisitions for the year ended December 31, 2019 were not significant to the consolidated results. Pro forma information related to these acquisitions has not been included because the impact to the Company's consolidated results of operations was not material.

Cash used for the acquisition of businesses, net of cash acquired as reported in the Consolidated Statement of Cash Flows for the year ended December 31, 2019 is \$70.8 million and includes approximately \$1.5 million of deferred purchase price relating to an acquisition completed in a previous year.

2018 Acquisition

On February 2, 2018, the Company completed the acquisition of Aclara for approximately \$1.1 billion. Aclara is a leading global provider of smart infrastructure solutions for electric, gas, and water utilities, with advanced metering solutions and grid monitoring sensor technology, as well as leading software enabled installation services. The acquisition was structured as a merger in which Aclara became a wholly owned indirect subsidiary of the Company. Aclara's businesses have been added to the Power segment. The acquisition extends the Power segment's capabilities into smart automation technologies, accelerates ongoing innovation efforts to address utility customer demand for data and integrated solutions, and expands the segment's reach to a broader set of utility customers.

The Company financed the acquisition and related transactions with net proceeds from borrowings under an unsecured term loan facility in an aggregate principal amount of \$500 million, the issuance of 3.50% Senior Notes due 2028 in an aggregate principal amount of \$450 million and commercial paper borrowings.

Allocation of Consideration Transferred to Net Assets Acquired

The following table presents the determination of the fair value of identifiable assets acquired and liabilities assumed from the Company's acquisition of Aclara. Fair value estimates are based on a complex series of judgments about future events and uncertainties and rely heavily on estimates and assumptions. The judgments used to determine the estimated fair value assigned to each class of assets acquired and liabilities assumed, as well as asset lives, can materially impact the Company's results of operations.

The following are the assets acquired and the liabilities assumed by the Company in the Aclara acquisition, reconciled to the acquisition consideration (in millions):

Accounts receivable	\$	118.1
Inventories		73.5
Other current assets		8.5
Property, plant and equipment		30.9
Intangible assets		434.0
Accounts payable		(51.8)
Other accrued liabilities		(93.3)
Deferred tax liabilities, net		(42.1)
Other non-current liabilities		(67.7)
Noncontrolling interest		(2.5)
Goodwill		708.7
TOTAL ESTIMATE OF CONSIDERATION TRANSFERRED, NET OF CASH ACQUIRED	\$	1,116.3

Cash used for the acquisition of businesses, net of cash acquired as reported in the Consolidated Statement of Cash Flows for the twelve months ended December 31, 2018 is \$1,118.0 million and includes approximately \$1.7 million of deferred purchase price and net working capital settlements relating to acquisitions completed in previous years.

In connection with the Aclara transaction, the Company recorded goodwill of \$708.7 million, which is attributable primarily to expected synergies, expanded market opportunities, and other expected benefits that the Company believes will result from combining its operations with the operations of Aclara. For tax purposes, \$159.9 million of the Aclara historical goodwill is deductible. The incremental goodwill created as a result of the acquisition is not deductible for tax purposes. Goodwill has been allocated to the Power segment.

The purchase price allocation to identifiable intangible assets acquired is as follows (in millions, except useful life amounts):

	Estimated Fair Value	Weighted Average Estimated Useful Life
Patents, tradenames and trademarks	\$ 55.0	20.0
Customer relationships	194.0	18.0
Developed technology	185.0	13.0
TOTAL	\$ 434.0	

Customer relationships and developed technology intangible assets acquired are amortized using an accelerated method that reflects the pattern in which economic benefits of the intangible assets are consumed and results in higher amortization in the earlier years of the asset's useful life.

For the year ended December 31, 2018 and 2017, the Company recorded transaction costs of \$12.8 million and \$7.1 million, respectively, relating to the acquisition of Aclara. These costs were recorded in the respective financial statement line items as follows (in millions):

	Twelve Months Ended December 31,	
	2018	2017
Selling & administrative expense	\$ 9.5	\$ 6.7
Interest expense	3.3	0.4
TOTAL ACLARA TRANSACTION COSTS	\$ 12.8	\$ 7.1

Supplemental Pro-Forma Data

Aclara's results of operations have been included in the Company's financial statements for the period subsequent to the completion of the acquisition on February 2, 2018. Aclara contributed sales of approximately \$611.1 million and operating income of approximately \$29.6 million, before any transaction costs described below, for the period from the completion of the acquisition through December 31, 2018.

The following unaudited supplemental pro-forma information presents consolidated results as if the acquisition had been completed on January 1, 2017. The unaudited supplemental pro-forma financial information does not reflect the actual performance of Aclara in the periods presented and does not reflect the potential realization of cost savings relating to the integration of the two companies. Further, the pro-forma data should not be considered indicative of the results that would have occurred if the acquisition and related financing had been consummated on January 1, 2017, nor are they indicative of future results. Per share amounts in 2018 reflect the reduction in the U.S. federal corporate income tax rate from 35% to 21%.

<i>(in millions, except per share amounts)</i>	Twelve Months Ended December 31,	
	2018	2017
Net sales	\$ 4,531.2	\$ 4,180.9
Net income attributable to Hubbell	\$ 376.4	\$ 209.8
Earnings Per Share:		
Basic	\$ 6.86	\$ 3.82
Diluted	\$ 6.83	\$ 3.81

Dispositions

In August 2019, the Company completed the sale of Haefely Test, AG (“Haefely”) for \$38.1 million. Haefely designs and manufactures high voltage test equipment and is based in Basel, Switzerland. The Haefely business was previously included within the Electrical segment. Upon disposition, the Haefely business had tangible assets of \$32.3 million (primarily composed of cash, accounts receivable, inventories,

and property, plant and equipment), goodwill of \$3.1 million, total liabilities of \$12.2 million (primarily composed of accounts payable, accrued expenses, and cash received in advance from customers) and a \$7.7 million balance of cumulative currency translation adjustments recognized within Accumulated other comprehensive income. As a result of the sale of Haefely, we recognized a pre-tax gain of \$21.7 million that is included in Total other expense in the Consolidated Statement of Income.

NOTE 4 Receivables and Allowances

Receivables consist of the following components at December 31, (in millions):

	2019	2018
Trade accounts receivable	\$ 696.8	\$ 739.1
Non-trade receivables	29.9	26.2
Accounts receivable, gross	726.7	765.3
Allowance for credit memos, returns and cash discounts	(36.0)	(35.1)
Allowance for doubtful accounts	(7.7)	(4.8)
Total allowances	(43.7)	(39.9)
ACCOUNTS RECEIVABLE, NET	\$ 683.0	\$ 725.4

NOTE 5 Inventories

Inventories are classified as follows at December 31, (in millions):

	2019	2018
Raw material	\$ 217.4	\$ 220.2
Work-in-process	101.8	110.3
Finished goods	403.6	402.3
	722.8	732.8
Excess of FIFO over LIFO cost basis	(89.8)	(81.8)
INVENTORIES, NET	\$ 633.0	\$ 651.0

NOTE 6 Goodwill and Other Intangible Assets

Changes in the carrying amounts of goodwill for the years ended December 31, 2019 and 2018, by segment, were as follows (in millions):

	Segment		Total
	Electrical	Power	
BALANCE AT DECEMBER 31, 2017	\$ 717.6	\$ 371.4	\$ 1,089.0
Current year acquisitions	—	708.7	708.7
Foreign currency translation and prior year acquisitions	(3.5)	(9.8)	(13.3)
BALANCE AT DECEMBER 31, 2018	\$ 714.1	\$ 1,070.3	\$ 1,784.4
Current year acquisitions ⁽¹⁾	15.2	14.2	29.4
Dispositions ⁽¹⁾	(3.1)	—	(3.1)
Foreign currency translation	1.5	(0.4)	1.1
BALANCE AT DECEMBER 31, 2019	\$ 727.7	\$ 1,084.1	\$ 1,811.8

(1) Refer to Note 3 - Business Acquisitions and Dispositions for additional information.

In 2019, the Company completed multiple acquisitions. These acquisitions have been accounted for as business combinations and have resulted in the recognition of \$29.4 million of goodwill. The Company has not recorded any material goodwill impairments since the initial adoption of the related accounting guidance in 2002.

Identifiable intangible assets are recorded in Intangible assets, net in the Consolidated Balance Sheet. Identifiable intangible assets are comprised of the following (in millions):

	December 31, 2019		December 31, 2018	
	Gross Amount	Accumulated Amortization	Gross Amount	Accumulated Amortization
Definite-lived:				
Patents, tradenames and trademarks	\$ 202.7	\$ (65.0)	\$ 204.4	\$ (58.6)
Customer relationships, developed technology and other	861.0	(270.8)	833.0	(212.6)
TOTAL DEFINITE-LIVED INTANGIBLES	1,063.7	(335.8)	1,037.4	(271.2)
Indefinite-lived:				
Tradenames and other	53.6	—	53.3	—
TOTAL INTANGIBLE ASSETS	\$ 1,117.3	\$ (335.8)	\$ 1,090.7	\$ (271.2)

Amortization expense associated with these definite-lived intangible assets was \$72.0 million, \$68.9 million and \$34.9 million in 2019, 2018 and 2017, respectively. Amortization expense associated with these intangible assets is expected to be \$74.3 million in 2020, \$72.3 million in 2021, \$67.2 million in 2022, \$62.4 million in 2023 and \$57.0 million in 2024. The Company amortizes intangible assets with definite

lives using either an accelerated method that reflects the pattern in which economic benefits of the intangible assets are consumed and results in higher amortization in the earlier years of the assets useful life, or using a straight line method. Approximately 75% of the gross value of definite-lived intangible assets follow an accelerated amortization method.

NOTE 7 Investments

At December 31, 2019 and December 31, 2018, the Company held investments classified as available-for-sale and investments classified as trading securities. Investments classified as available-for-sale consisted of municipal bonds with an amortized cost basis of \$50.0 million as of December 31, 2019. In the third quarter of 2019, the Company

disposed of an available-for-sale investment in a privately-held company that was previously classified in Level 3 of the fair value hierarchy. Investments classified as trading securities were composed primarily of debt and equity mutual funds and are stated at fair market value based on current quotes.

The following table sets forth selected data with respect to the Company's investments at December 31, (in millions):

	2019					2018				
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Carrying Value	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Carrying Value
Available-for-sale securities	\$ 50.0	\$ 0.8	\$ (0.1)	\$ 50.7	\$ 50.7	\$ 54.0	\$ 1.1	\$ (3.9)	\$ 51.2	\$ 51.2
Trading securities	12.0	7.2	—	19.2	19.2	10.1	4.2	—	14.3	14.3
TOTAL INVESTMENTS	\$ 62.0	\$ 8.0	\$ (0.1)	\$ 69.9	\$ 69.9	\$ 64.1	\$ 5.3	\$ (3.9)	\$ 65.5	\$ 65.5

Contractual maturities of our investments in available-for-sale securities at December 31, 2019 were as follows (in millions):

	Amortized Cost	Fair Value
Available-for-sale securities		
Due within 1 year	\$ 14.2	\$ 14.2
After 1 year but within 5 years	23.1	23.6
After 5 years but within 10 years	4.9	5.1
Due after 10 years	7.8	7.8
TOTAL	\$ 50.0	\$ 50.7

The total unrealized gain/(loss) recognized in the year relating to available-for-sale securities, net of tax, was \$2.6 million and \$(1.4) million at December 31, 2019 and 2018, respectively. These net unrealized gains/(losses) are included in Accumulated other comprehensive loss, net of tax. Net unrealized gains relating to trading securities have been reflected in the results of operations. The Company uses the specific identification method when identifying the cost basis used to calculate the gain or loss on these securities. Gains and losses for both available-for-sale and trading securities were not material in 2019, 2018 and 2017.

NOTE 8 Property, Plant, and Equipment

Property, plant, and equipment, carried at cost, is summarized as follows at December 31, (in millions):

	2019	2018
Land	\$ 37.7	\$ 42.2
Buildings and improvements	285.3	277.3
Machinery, tools, and equipment	896.0	863.5
Construction-in-progress	35.3	46.2
Gross property, plant, and equipment	1,254.3	1,229.2
Less accumulated depreciation	(749.1)	(727.1)
PROPERTY, PLANT, AND EQUIPMENT, NET	\$ 505.2	\$ 502.1

Depreciable lives on buildings range between 20-45 years. Depreciable lives on machinery, tools, and equipment range between 3-15 years. The Company recorded depreciation expense of \$70.0 million, \$66.1 million and \$57.5 million for 2019, 2018 and 2017, respectively.

NOTE 9 Other Accrued Liabilities

Other accrued liabilities consist of the following at December 31, (in millions):

	2019	2018
Customer program incentives	\$ 49.0	\$ 52.4
Accrued income taxes	6.0	3.4
Contract liabilities - deferred revenue	31.0	27.7
Customer refund liability	19.0	15.3
Accrued warranties ⁽¹⁾	24.0	33.5
Current operating lease liabilities ⁽²⁾	29.6	—
Other	103.6	94.3
TOTAL	\$ 262.2	\$ 226.6

(1) Refer to Note 21 - Guarantees for additional information regarding warranties.

(2) Current operating lease liabilities are related to the adoption of ASU 2016-02. Refer to Note 1 - Basis of Presentation, in the Notes to Consolidated Financial Statements for additional information.

NOTE 10 Other Non-Current Liabilities

Other non-current liabilities consists of the following at December 31, (in millions):

	2019	2018
Pensions	\$ 198.5	\$ 177.0
Other post-employment benefits	21.5	23.7
Deferred tax liabilities	126.8	120.0
Accrued warranties long-term ⁽¹⁾	58.1	59.2
Non-current operating lease liabilities ⁽²⁾	71.7	—
Other	115.0	116.9
TOTAL	\$ 591.6	\$ 496.8

(1) Refer to Note 21 – Guarantees for additional information regarding warranties.

(2) Non-current operating lease liabilities are related to the adoption of ASU 2016-02. Refer to Note 1 – Basis of Presentation, in the Notes to Consolidated Financial Statements for additional information.

NOTE 11 Retirement Benefits

The Company has funded and unfunded non-contributory U.S. and foreign defined benefit pension plans. Benefits under these plans are generally provided based on either years of service and final average pay or a specified dollar amount per year of service. The U.S. defined benefit pension plan has been closed to new participants since 2004, while the Canadian and UK defined benefit pension plans have been closed to new entrants since 2006 and 2007, respectively. These U.S., Canadian and UK employees are eligible instead for defined contribution plans.

The Company also has a number of health care and life insurance benefit plans covering eligible employees who reached retirement age while working for the Company. These benefits have been discontinued for substantially all future retirees. The Company anticipates future cost-sharing charges for its discontinued plans that are consistent with past practices. The Company uses a December 31 measurement date for all of its plans.

In 2019, the Company approved amendments to the one of its domestic qualified defined benefit pension plans, which froze service accruals for nearly all active participants within the plan effective January 1, 2020. As a result of the amendment, the Company recognized a \$0.3 million curtailment charge, net of tax. Effective January 1, 2020, the amortization

of unrecognized gains and losses of all of the Company's qualified defined benefit pension plans is recognized over the remaining life expectancy of participants, as nearly all participants are considered inactive as a result of plan amendments.

In the third quarter of 2018, the Company approved amendments to one of its foreign defined benefit pension plans, which closed the plan to future service accruals effective August 31, 2018. As a result of the amendments, in the third quarter of 2018, the Company recognized a curtailment gain of approximately \$4.7 million, net of tax, in Accumulated other comprehensive income. In addition, effective August 31, 2018, the amortization of actuarial gains and losses is being recognized over the remaining life expectancy of the participants of this plan, as all participants are considered inactive as a result of the amendment.

In 2018, we completed transactions with a third-party insurer to settle approximately \$28 million of projected benefit obligation of our domestic qualified defined benefit pension plans.

The Company's U.S. defined benefit pension plans were approximately 88% of the \$938.7 million total pension benefit obligations at December 31, 2019.

The following table sets forth the reconciliation of beginning and ending balances of the benefit obligations and the plan assets for the Company's defined benefit pension and other benefit plans at December 31, (in millions):

	Pension Benefits		Other Benefits	
	2019	2018	2019	2018
Change in benefit obligation				
Benefit obligation at beginning of year	\$ 844.3	\$ 956.1	\$ 26.1	\$ 27.0
Acquisitions	—	1.3	—	—
Service cost	2.2	3.8	0.1	0.1
Interest cost	34.6	34.3	1.1	1.0
Plan participants' contributions	0.4	0.4	—	—
Amendments	—	3.6	—	—
Actuarial loss/(gain)	107.0	(72.4)	(2.0)	(0.5)
Curtailement gain	—	(5.7)	—	—
Currency impact	3.6	(5.7)	—	—
Other	0.1	(0.5)	—	—
Benefits paid	(53.5)	(70.9)	(1.5)	(1.5)
Benefit obligation at end of year	\$ 938.7	\$ 844.3	\$ 23.8	\$ 26.1
Change in plan assets				
Fair value of plan assets at beginning of year	\$ 670.1	\$ 738.8	\$ —	\$ —
Acquisitions	—	1.2	—	—
Actual return on plan assets	106.2	(27.5)	—	—
Employer contributions	16.4	34.0	1.5	1.5
Plan participants' contributions	0.4	0.4	—	—
Currency impact	3.8	(5.9)	—	—
Benefits paid	(53.5)	(70.9)	(1.5)	(1.5)
Fair value of plan assets at end of year	\$ 743.4	\$ 670.1	\$ —	\$ —
FUNDED STATUS	\$ (195.3)	\$ (174.2)	\$ (23.8)	\$ (26.1)
Amounts recognized in the consolidated balance sheet consist of:				
Prepaid pensions (included in Other long-term assets)	\$ 8.6	\$ 8.0	\$ —	\$ —
Accrued benefit liability (short-term and long-term)	(203.9)	(182.2)	(23.8)	(26.1)
NET AMOUNT RECOGNIZED IN THE CONSOLIDATED BALANCE SHEET	\$ (195.3)	\$ (174.2)	\$ (23.8)	\$ (26.1)
Amounts recognized in Accumulated other comprehensive loss (income) consist of:				
Net actuarial loss	\$ 263.4	\$ 240.8	\$ 0.3	\$ 2.4
Prior service cost (credit)	3.6	4.1	(0.4)	(1.3)
NET AMOUNT RECOGNIZED IN ACCUMULATED OTHER COMPREHENSIVE LOSS	\$ 267.0	\$ 244.9	\$ (0.1)	\$ 1.1

The accumulated benefit obligation for all defined benefit pension plans was \$933.5 million and \$835.6 million at December 31, 2019 and 2018, respectively. Information with respect to plans with accumulated benefit obligations in excess of plan assets is as follows, (in millions):

	2019	2018
Projected benefit obligation	\$ 823.8	\$ 744.0
Accumulated benefit obligation	\$ 819.0	\$ 735.4
Fair value of plan assets	\$ 620.0	\$ 561.7

The following table sets forth the components of pension and other benefit costs for the years ended December 31, (in millions):

	Pension Benefits			Other Benefits		
	2019	2018	2017	2019	2018	2017
Components of net periodic benefit cost:						
Service cost	\$ 2.2	\$ 3.8	\$ 5.9	\$ 0.1	\$ 0.1	\$ 0.1
Interest cost	34.6	34.3	37.2	1.1	1.0	1.0
Expected return on plan assets	(30.7)	(33.5)	(34.1)	—	—	—
Amortization of prior service cost (credit)	0.2	0.1	0.1	(0.9)	(0.8)	(1.0)
Amortization of actuarial losses (gains)	9.6	10.5	11.4	0.1	—	—
Curtailement and settlement losses	0.3	—	0.4	—	—	—
Net periodic benefit cost	\$ 16.2	\$ 15.2	\$ 20.9	\$ 0.4	\$ 0.3	\$ 0.1
Changes recognized in other comprehensive loss (income), before tax:						
Current year net actuarial loss (gain)	\$ 31.5	\$ (15.8)	\$ 4.2	\$ (2.0)	\$ (0.4)	\$ 1.4
Current year prior service credit	—	2.0	0.3	—	—	—
Amortization of prior service (cost) credit	(0.2)	(0.1)	(0.1)	0.9	1.0	1.0
Amortization of net actuarial (losses) gains	(9.6)	(10.5)	(11.4)	(0.1)	(0.2)	—
Currency impact	0.7	(1.3)	3.5	—	—	—
Other adjustments	(0.3)	—	(0.4)	—	—	—
Total recognized in other comprehensive loss	22.1	(25.7)	(3.9)	(1.2)	0.4	2.4
TOTAL RECOGNIZED IN NET PERIODIC PENSION COST AND OTHER COMPREHENSIVE LOSS	\$ 38.3	\$ (10.5)	\$ 17.0	\$ (0.8)	\$ 0.7	\$ 2.5

The Company also maintains five primary defined contribution pension plans. The total cost of the Company's defined contribution plans was \$23.4 million in 2019, \$22.5 million in 2018 and \$19.8 million in 2017, excluding the employer match for the 401(k) plan. This cost is not included in the above net periodic benefit cost for the defined benefit pension plans.

In 2018 and 2019 the Company participated in one multi-employer defined benefit pension plan. The Company participated in another multi-employer pension plan that it withdrew from in 2017. The Company's total contributions while participating in these plans was \$0.2 million in 2019, \$0.2 million in 2018, and \$0.4 million in 2017.

The risks of participating in multi-employer plans are different from single-employer plans in that assets contributed are pooled and may be used to provide benefits to employees of other participating employers. If a participating employer stops contributing to the plan, the unfunded obligations of the plan may have to be assumed by the remaining participant employers. If we choose to stop participating in a multi-employer plan we may be required to pay those plans a withdrawal liability based on the unfunded status of the plan.

In 2016, the Company recorded a charge of \$12.5 million in Cost of goods sold representing the estimated withdrawal liability from a multi-employer plan from which it subsequently withdrew in 2017. In March 2019, the remaining employer in that multi-employer pension plan filed for protection under Chapter 11 of the United States Bankruptcy Code and was proceeding towards liquidation as of June 2019. It was therefore deemed probable that the Company would be subject to mass withdrawal liability under the terms customary to multi-employer plans. Further, the trustees of the pension fund announced the termination of the multi-employer pension plan and declared the amounts attributed to the other employer uncollectable. In December 2019, the Company entered into a settlement agreement with the multi-employer pension plan. As a result, the Company recognized an additional \$8.5 million net charge in 2019 to settle the mass withdrawal obligation and a \$10.0 million cash payment in the fourth quarter of 2019, with remaining cash payments of \$6.0 million and \$5.0 million due in 2020 and 2021, respectively.

Assumptions

The following assumptions were used to determine the projected benefit obligations at the measurement date and the net periodic benefit cost for the year:

	Pension Benefits			Other Benefits		
	2019	2018	2017	2019	2018	2017
Weighted-average assumptions used to determine benefit obligations at December 31,						
Discount rate	3.17%	4.24%	3.67%	3.30%	4.40%	3.70%
Rate of compensation increase	2.94%	3.25%	3.24%	4.00%	4.05%	4.00%
Weighted-average assumptions used to determine net periodic benefit cost for years ended December 31,						
Discount rate	4.24%	3.67%	4.12%	4.40%	3.70%	4.10%
Expected return on plan assets	4.75%	4.68%	4.94%	N/A	N/A	N/A
Rate of compensation increase	3.25%	3.24%	3.55%	4.05%	4.00%	3.93%

At the end of each year, the Company determines the appropriate expected return on assets for each plan based upon its strategic asset allocation (see discussion below). In making this determination, the Company utilizes expected returns for each asset class based upon current market conditions and expected risk premiums for each asset class.

The Company also determines the discount rate to be used to calculate the present value of pension plan liabilities at the end of each year. The discount rate for the Company's U.S. and Canadian pension plans is determined by matching the expected cash flows associated with its benefit obligations to the expected cash flows of a hypothetical portfolio of high quality, fixed income debt instruments with maturities that closely match the expected funding period of its pension liabilities. As of December 31, 2019, the Company used a discount rate of 3.30% for its U.S. pension plans compared to a discount rate of 4.40% used in 2018. For its Canadian pension plan, the Company used a discount rate of 3.00% as of December 31, 2019 compared to the 3.60% discount rate used in 2018.

For its UK pension plan the discount rate was derived using a full yield curve and uses plan specific cash flows. The

The assumed health care cost trend rates used to determine the projected postretirement benefit obligation are as follows:

	Other Benefits		
	2019	2018	2017
Assumed health care cost trend rates at December 31,			
Health care cost trend assumed for next year	6.6%	6.8%	7.0%
Rate to which the cost trend is assumed to decline	5.0%	5.0%	5.0%
Year that the rate reaches the ultimate trend rate	2028	2028	2028

derived discount rate is the single discount rate equivalent to discounting these liability cash flows at the term-dependent spot rate of AA corporate bonds. This methodology resulted in a December 31, 2019 discount rate for the UK pension plan of 2.10% as compared to a discount rate of 2.90% used in 2018.

In 2019 we changed the mortality table used to calculate the present value of our pension plan liabilities from the RP-2014 mortality table, with generational projection from 2006 using Scale MP-2018 to the Pri-2012 mortality table, with generational projection from 2012 using Scale MP-2019. That change did not have a material impact to the projected benefit obligation of our U.S. plans upon remeasurement at December 31, 2019. The Pri-2012 mortality table, with generational projection from 2012 using Scale MP-2019 was chosen as the best estimate based on the observed and anticipated experience of the plans after considering alternative tables.

The rate of compensation increase assumption reflects the Company's actual experience and best estimate of future increases.

Plan Assets

The Company's combined targeted 2020 weighted average asset allocation for domestic and foreign pension plans and the actual weighted average asset allocation for domestic and foreign pension plans at December 31, 2019 and 2018 by asset category are as follows:

Asset Category	Percentage of Plan Assets		
	Target	Actual	
	2020	2019	2018
Equity securities	22%	25%	19%
Debt securities & Cash	76%	73%	67%
Alternative Investments	2%	2%	14%
TOTAL	100%	100%	100%

At the end of each year, the Company estimates the expected long-term rate of return on pension plan assets based on the strategic asset allocation for its plans. In making this determination, the Company utilizes expected rates of return for each asset class based upon current market conditions and expected risk premiums for each asset class. The Company has written investment policies and asset allocation guidelines for its domestic and foreign pension plans. In establishing these policies, the Company has considered that its various pension plans are a major retirement vehicle for most plan participants and has acted to discharge its fiduciary responsibilities with regard to the plans solely in the interest of such participants and their beneficiaries. The goal underlying the establishment of the investment policies is to provide that pension assets shall be invested in a prudent manner and so that, together with the expected contributions to the plans, the funds will be sufficient to meet the obligations of the plans as they become due.

To achieve this result, the Company conducts a periodic strategic asset allocation study to form a basis for the allocation of pension assets between various asset categories. Specific policy benchmark percentages are assigned to each asset category with minimum and maximum ranges established for each. The assets are then tactically managed within these ranges. Derivative investments include futures contracts used by the plan to adjust the level of its investments within an asset allocation category. The actual and target percentages reported in the preceding table reflect the economic exposure to each asset category, including the impact of derivative positions. All futures contracts are 100% supported by cash or cash equivalent investments. At no time may derivatives be utilized to leverage the asset portfolio. At December 31, 2019 and 2018, there were no holdings of Company stock in pension plan assets.

The Company's other post-employment benefits are unfunded; therefore, no asset information is reported.

The fair value of the Company's pension plan assets at December 31, 2019 and 2018, by asset category are as follows (in millions):

Asset Category	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Quoted Prices in Active Market for Similar Asset (Level 2)	Significant Unobservable Inputs (Level 3)	Investments Priced Using Net Asset Value
Cash and cash equivalents	\$ 16.6	\$ 16.6	\$ —	\$ —	\$ —
Equity securities:					
Equity Mutual Funds	31.6	31.6	—	—	—
Common Pooled Equity Funds ^(b)	144.0	—	144.0	—	—
Fixed Income Securities:					
U.S. Treasuries	64.5	—	64.5	—	—
State and Local Municipal Bonds	9.4	—	9.4	—	—
Sovereign Debt	7.6	—	7.6	—	—
Corporate Bonds ^(c)	122.9	0.1	122.8	—	—
Fixed Income Mutual Funds	54.2	54.2	—	—	—
Common Pooled Fixed Income Funds ^(d)	252.3	—	252.3	—	—
Alternative Investment Funds ^(e)	18.1	—	0.9	—	17.2
Common Pooled Funds ^(f)	22.2	0.5	21.7	—	—
BALANCE AT DECEMBER 31, 2019	\$ 743.4	\$ 103.0	\$ 623.2	\$ —	\$ 17.2

Asset Category	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Quoted Prices in Active Market for Similar Asset (Level 2)	Significant Unobservable Inputs (Level 3)	Investments Priced Using Net Asset Value
Cash and cash equivalents	\$ 47.0	\$ 47.0	\$ —	\$ —	\$ —
Equity securities:					
U.S. Large-cap ^(g)	8.2	8.2	—	—	—
U.S. Mid-cap and Small-cap Growth ^(h)	3.1	3.1	—	—	—
International Large-cap	8.6	8.6	—	—	—
Emerging Markets ^(a)	13.3	8.1	5.2	—	—
Common Pooled Equity Funds ^(b)	12.7	—	12.7	—	—
Fixed Income Securities:					
U.S. Treasuries	378.0	—	378.0	—	—
Corporate Bonds ^(c)	0.3	0.3	—	—	—
Asset Backed Securities and Other	22.8	—	22.8	—	—
Common Pooled Fixed Income Funds ^(d)	61.8	—	57.6	—	4.2
Derivatives:					
Assets ⁽ⁱ⁾	8.2	8.0	0.2	—	—
(Liabilities) ⁽ⁱ⁾	(7.9)	(6.9)	(1.0)	—	—
Alternative Investment Funds ^(e)	96.8	11.6	3.3	—	81.9
Common Pooled Funds ^(f)	17.7	0.9	16.8	—	—
BALANCE AT DECEMBER 31, 2018	\$ 670.6	\$ 88.9	\$ 495.6	\$ —	\$ 86.1

(a) Includes open ended emerging markets mutual funds.

(b) Investments in Common Pooled Equity Funds, including funds and fund products investing in various equity securities.

(c) Includes primarily investment grade bonds from diverse industries.

(d) Investments in Common Pooled Fixed Income Funds, including funds and fund products investing in various fixed income investments.

(e) Includes investments in hedge funds, including fund of funds products and open end mutual funds.

(f) Investments in Common Pooled Funds, consisting of equities and fixed income securities.

(g) Includes an actively managed portfolio of large-cap U.S. stocks.

(h) Includes an investment in a small cap open ended mutual fund.

(i) Includes primarily U.S. and foreign equity futures as well as foreign fixed income futures and positions in U.S. Treasury futures to adjust the duration of the portfolio.

Investments priced using Net Asset Value (“NAV”) within Alternative Investment Funds in the preceding tables consist of fund of fund products. These products invest in a number of investment funds managed by a diversified group of third-party investment managers who employ a variety of alternative investment strategies, including relative value, security selection, distressed value, global macro, specialized credit and directional strategies. The objective of these funds is to achieve the desired capital appreciation with lower volatility than either traditional equity or fixed income securities.

Contributions

The Company made \$10.4 million of contributions to its qualified defined benefit pension plans in 2019, including \$10.0 million of U.S. voluntary contributions that were not required under the Pension Protection Act of 2006. Further, as stated earlier within this Note 11, the Company entered into a settlement agreement with a multi-employer pension plan in December of 2019 and, pursuant to that agreement, made a \$10.0 million cash payment in the fourth quarter of 2019, with remaining scheduled cash payments of \$6.0 million and \$5.0 million due in 2020 and 2021, respectively. The Company expects to contribute approximately \$4.3 million to its foreign plans in 2020.

Estimated Future Benefit Payments

The following domestic and foreign benefit payments, which reflect future service, as appropriate, are expected to be paid as follows, (in millions):

	Pension Benefits	Other Benefits
2020	\$ 53.9	\$ 2.2
2021	\$ 53.2	\$ 2.1
2022	\$ 54.8	\$ 2.0
2023	\$ 55.3	\$ 1.9
2024	\$ 55.2	\$ 1.8
2025-2028	\$ 270.3	\$ 7.5

NOTE 12 Debt

The following table sets forth the Company's long-term debt at December 31, (in millions):

	Maturity	2019	2018
Senior notes at 3.625%	2022	\$ 298.8	\$ 298.3
Senior notes at 3.35%	2026	395.7	395.1
Senior notes at 3.15%	2027	295.9	295.4
Senior notes at 3.50%	2028	444.0	443.3
Term loan, net of current portion of \$34.4 and \$25 million, respectively	2023	71.6	305.0
TOTAL LONG-TERM DEBT^(a)		\$ 1,506.0	\$ 1,737.1

(a) Long-term debt is presented net of debt issuance costs and unamortized discounts.

In February 2018, the Company completed a public offering of \$450 million of senior, unsecured, notes maturing in February 2028 and bearing interest at a fixed rate of 3.50% (the "2028 Notes"). Net proceeds from the issuance of the 2028 Notes were \$442.6 million after deducting the discount on such notes and offering expenses paid by the Company. The 2028 Notes are callable at any time at specified prices and are only subject to accelerated payment prior to maturity upon customary events of a default under the indenture governing the 2028 Notes, as modified by the supplemental indenture creating such notes, or upon a change in control triggering event as defined in such indenture.

In January 2018, the Company entered into the Term Loan Agreement. The Term Loan Agreement provided the Company, with the ability to borrow, in a single borrowing on the Aclara acquisition date, up to \$500 million on an unsecured basis to partially finance the Aclara acquisition (the "Term Loan"). On February 2, 2018, the Company borrowed \$500 million under the Term Loan Agreement. The interest rate applicable to borrowings under the Term Loan Agreement is generally either adjusted LIBOR plus an applicable margin (determined by a ratings based grid) or the alternate base rate. The principal amount of borrowings under the Term Loan Agreement amortize in equal quarterly installments of 5% per year in year one, 5% per year in year two, 7.5% per year in year three, 10% per year in year four, 10% per year in year five, and any remaining borrowings

under the Term Loan Agreement are due and payable in full in February 2023. The Company may also make principal payments in excess of the amortization schedule at its discretion. Proceeds of the 2028 Notes and Term Loan were used to fund the Aclara acquisition.

In December 2019, the Company made discretionary payments of \$200 million against the outstanding principal amount of the Term Loan. The sole financial covenant in the Term Loan Agreement requires that total debt not exceed 65% of total capitalization as of the last day of each fiscal quarter of the Company. The Company was in compliance with this covenant as of December 31, 2019 and 2018.

In January 2018, the Company entered into the 2018 Credit Facility with a syndicate of lenders that provides a \$750 million committed revolving credit facility. In connection with the acquisition of Aclara, the Company terminated all commitments under the Company's previous 2015 credit facility. Commitments under the 2018 Credit Facility may be increased to an aggregate amount not to exceed \$1.250 billion. The interest rate applicable to borrowings under the 2018 Credit Facility is generally either adjusted LIBOR plus an applicable margin (determined by a ratings based grid) or the alternate base rate. The 2018 Credit Facility expires in February 2023. The sole financial covenant in the 2018 Credit Facility requires that total debt not exceed 65% of total capitalization as of the last day of each fiscal quarter of the Company. The Company was in compliance with this covenant as of December 31, 2019. As of December 31, 2019, the Company has not drawn against the 2018 Credit Facility.

In August 2017, the Company completed a public debt offering of \$300 million of long-term unsecured, unsubordinated notes maturing in August 2027 and bearing interest at a fixed rate of 3.15% (the "2027 Notes"). Net proceeds from the issuance were \$294.6 million after deducting the discount on the notes and offering expenses paid by the Company.

In September 2017, the Company applied the net proceeds from the 2027 Notes to redeem all of its \$300 million outstanding long-term, unsecured, unsubordinated notes maturing in 2018 and bearing interest at a fixed rate of 5.95% (the "2018 Notes"). In connection with this redemption, the Company recognized a loss on the early extinguishment of the 2018 Notes of \$10.1 million on a before-tax basis.

In March 2016, the Company completed a public debt offering of \$400 million of long-term unsecured, unsubordinated notes maturing in March 2026 and bearing interest at a fixed rate of 3.35% (the “2026 Notes”). Net proceeds from the issuance were \$393.4 million after deducting the discount on the notes and offering expenses paid by the Company.

In November 2010, the Company completed a public debt offering for \$300 million of long-term unsecured, unsubordinated notes maturing in November 2022 (“2022 Notes”) and bearing interest at a fixed rate of 3.625%. Prior to the issuance of the 2022 Notes, the Company entered into a forward interest rate lock which resulted in a \$1.6 million loss. This amount was recorded in Accumulated other comprehensive loss, net of tax, and is being amortized over the life of the 2022 Notes.

The 2022 Notes, 2026 Notes, 2027 Notes and 2028 Notes, are all fixed rate indebtedness, are callable at any time with a make whole premium and are only subject to accelerated payment prior to maturity in the event of a default (including as a result of the Company’s failure to meet certain non-financial covenants) under the indenture governing the notes, as modified by the supplemental indentures creating such notes, or upon a change in control triggering event as defined in such indenture. The Company was in compliance with all non- financial covenants as of December 31, 2019.

At December 31, 2019 and 2018, the Company had \$65.4 million and \$56.1 million, respectively, of short-term debt outstanding composed of:

- \$26.0 million of commercial paper borrowings outstanding at December 31, 2019 and 2018.

- \$34.4 million at December 31, 2019 and \$25.0 million at December 31, 2018, respectively, of long-term debt classified as short-term within current liabilities in the Consolidated Balance Sheets, reflecting maturities within the next twelve months relating to our borrowing under the Term Loan.
- \$5.0 million at December 31, 2019 and \$5.1 million at December 31, 2018, respectively, of borrowings to support our international operations in China.

Other information related to short-term debt at December 31, is summarized below:

	2019	2018
Interest rate on short-term debt:		
At year end	2.59%	3.21%

The Company also maintains other lines of credit that are primarily used to support the issuance of letters of credit. Interest rates and other terms of borrowing under these lines of credit vary from country to country, depending on local market conditions. At December 31, 2019 and 2018 these lines totaled \$23.0 million and \$54.8 million, respectively, of which \$15.7 million and \$20.3 million was utilized to support letters of credit and the remaining amount was unused. The annual commitment fees associated with these lines of credit are not material.

Interest and fees paid related to total indebtedness was \$62.8 million, \$59.5 million and \$47.9 million in 2019, 2018 and 2017, respectively. The \$47.9 million paid in 2017 includes \$9.9 million related to the make whole payment for the extinguishment of the 2018 Notes.

NOTE 13 Income Taxes

The following table sets forth selected data with respect to the Company’s income tax provisions for the years ended December 31, (in millions):

	2019	2018	2017
Income before income taxes:			
United States	\$ 406.7	\$ 360.8	\$ 354.7
International	113.8	106.2	88.4
TOTAL INCOME BEFORE INCOME TAXES	\$ 520.5	\$ 467.0	\$ 443.1
Provision for income taxes — current:			
Federal	\$ 65.0	\$ 12.3	\$ 164.1
State	16.6	21.8	15.3
International	25.4	17.8	28.1
Total provision — current	107.0	51.9	207.5
Provision for income taxes — deferred:			
Federal	8.6	35.0	(10.4)
State	0.5	9.4	(0.9)
International	(3.0)	4.6	(3.0)
Total provision — deferred	6.1	49.0	(14.3)
TOTAL PROVISION FOR INCOME TAXES	\$ 113.1	\$ 100.9	\$ 193.2

As a result of the enactment of TCJA on December 22, 2017, the Company recognized a provisional estimate of \$56.5 million in the fourth quarter of 2017 to account for specific income tax effects of the TCJA for which a reasonable estimate could be determined. During 2018, the Company

completed its analysis of the specific income tax effects of TCJA and recognized a net tax benefit of approximately \$6 million from adjustments to the prior provisional estimates and to record amounts related to items for which a prior provisional estimate had not been made.

Deferred tax assets and liabilities result from differences in the basis of assets and liabilities for tax and financial statement purposes. The components of the deferred tax assets/(liabilities) at December 31, were as follows (in millions):

	2019	2018
Deferred tax assets:		
Inventories	\$ 10.1	\$ 6.2
Right-of-use assets	24.8	—
Income tax credits	26.9	24.5
Accrued liabilities	37.8	35.9
Pension	53.4	49.6
Post retirement and post employment benefits	6.0	6.6
Stock-based compensation	9.7	13.1
Loss Carryforwards	21.3	22.2
Miscellaneous other	11.9	8.8
Gross deferred tax assets	201.9	166.9
Valuation allowance	(29.0)	(21.8)
Total deferred tax assets, net of valuation allowance	172.9	145.1
Deferred tax liabilities:		
Liability on undistributed foreign earnings	(8.6)	(10.9)
Goodwill and Intangibles	(212.3)	(206.4)
Lease liabilities	(24.2)	—
Property, plant, and equipment	(48.4)	(41.4)
Total deferred tax liabilities	(293.5)	(258.7)
TOTAL NET DEFERRED TAX LIABILITY	\$ (120.6)	\$ (113.6)
Deferred taxes are reflected in the Consolidated Balance Sheet as follows:		
Non-current tax assets (included in Other long-term assets)	6.2	6.4
Non-current tax liabilities (included in Other Non-Current Liabilities)	(126.8)	(120.0)
TOTAL NET DEFERRED TAX LIABILITY	\$ (120.6)	\$ (113.6)

As of December 31, 2019, the Company had a total of \$26.9 million of U.S. federal, state (net of federal benefit) and foreign tax credit carryforwards, available to offset future income taxes. As of December 31, 2019, \$15.5 million of the tax credits may be carried forward indefinitely while the remaining \$11.4 million will begin to expire at various times in 2020 through 2036. As of December 31, 2019, the Company had recorded tax benefits totaling \$20.1 million for U.S. federal, state and foreign net operating loss carryforwards (“NOLs”). As of December 31, 2019, \$7.4 million of NOLs may be carried forward indefinitely while the remaining \$12.7 million will begin to expire at various times in 2021 through 2038. The tax benefit related to a portion of these NOLs has been adjusted to reflect an “ownership change” pursuant to Internal Revenue Code Section 382, which imposes an annual limitation on the utilization of pre-acquisition operating losses. The Company has recorded a

net valuation allowance of \$29.0 million for the portion of the foreign tax and state tax credit carryforwards, capital loss carryforwards and foreign NOLs that the Company anticipates will expire prior to utilization.

During 2019, the Company repatriated certain of its foreign earnings. As of December 31, 2019, the Company also anticipates repatriating certain of its foreign earnings in the future. The accompanying financial statements reflect the income tax expense associated with actual and anticipated remittances related to certain of our outside basis differences. The Company has not provided for the income tax effects of distributing the remaining approximately \$250 million of undistributed foreign earnings as those amounts are either permanently reinvested or intended to be reinvested in our international operations. It is not practicable to estimate the tax cost associated with a remittance of such earnings.

Cash payments of income taxes were \$91.9 million, \$106.3 million and \$130.8 million in 2019, 2018, and 2017, respectively.

The Company operates within multiple taxing jurisdictions and is subject to audit in these jurisdictions. The IRS and other tax authorities routinely audit the Company's tax returns. These audits can involve complex issues which may require an extended period of time to resolve. The Company is not currently under U.S. federal examination for any open tax year. With few exceptions, the Company is no longer subject to state, local, or income tax examinations by tax authorities for years prior to 2015.

The following tax years, by major jurisdiction, are still subject to examination by taxing authorities:

Jurisdiction	Open Years
United States	2016-2019
UK	2018-2019
Puerto Rico	2015-2019
Canada	2015-2019

A reconciliation of the beginning and ending amount of unrecognized tax benefits is as follows (in millions):

	2019	2018	2017
Unrecognized tax benefits at beginning of year	\$ 38.9	\$ 29.5	\$ 20.2
Additions based on tax positions relating to the current year	7.0	3.8	13.6
Reductions based on expiration of statute of limitations	(5.2)	(1.7)	(1.4)
Additions to tax positions relating to previous years	1.6	7.4	1.0
Settlements	(0.4)	(0.1)	(3.9)
TOTAL UNRECOGNIZED TAX BENEFITS	\$ 41.9	\$ 38.9	\$ 29.5

Included in the balance at December 31, 2019 are approximately \$33.4 million of tax positions which, if in the future are determined to be recognizable, would affect the annual effective income tax rate. Additionally, there are \$5.2 million of tax positions for which the ultimate deductibility is highly certain but for which there is uncertainty as to the timing of such deductibility. Because of the impact of deferred tax accounting, other than interest and penalties, the disallowance of the shorter deductibility period would not affect the annual effective tax rate but would accelerate the payment of cash to the applicable taxing authority to an earlier period. It is reasonably possible that in the next twelve months, because of changes in facts and circumstances, the unrecognized tax benefits may increase or decrease.

The Company estimates a possible decrease of approximately \$5.0 million to \$7.0 million within the next twelve months due to the expiration of the statute of limitations.

The Company's policy is to record interest and penalties associated with the underpayment of income taxes within Provision for income taxes in the Consolidated Statement of Income. The Company recognized expense, before federal tax impact, related to interest and penalties of approximately \$0.1 million in 2019, \$1.8 million in 2018 and \$0.5 million in 2017. The Company had \$7.1 million and \$7.0 million accrued for the payment of interest and penalties as of December 31, 2019 and December 31, 2018, respectively.

The consolidated effective income tax rate varied from the United States federal statutory income tax rate for the years ended December 31, as follows:

	2019	2018	2017
Federal statutory income tax rate	21.0%	21.0%	35.0%
State income taxes, net of federal benefit	2.8	4.5	1.2
Foreign income taxes	(0.7)	(1.1)	(3.1)
Federal R&D Credit	(1.2)	(1.0)	(1.0)
TCJA and related	—	(1.3)	12.8
Other, net	(0.2)	(0.5)	(1.3)
CONSOLIDATED EFFECTIVE INCOME TAX RATE	21.7%	21.6%	43.6%

The foreign income tax benefit shown is primarily due to lower statutory rates in foreign jurisdictions compared to the Federal statutory income tax rate. The TCJA and related benefit in 2018 is primarily related to net favorable adjustments to the TCJA provisional estimate recorded in 2017.

NOTE 14 Financial Instruments and Fair Value Measurement

Financial Instruments

Concentrations of Credit Risk: Financial instruments which potentially subject the Company to significant concentrations of credit risk consist of trade receivables, cash equivalents and investments. The Company grants credit terms in the normal course of business to its customers. Due to the diversity of its product lines, the Company has an extensive customer base including electrical distributors and wholesalers, electric utilities, equipment manufacturers, electrical contractors, telecommunication companies and retail and hardware outlets. No single customer accounted for more than 10% of total sales in any year during the three years ended December 31, 2019. However, the Company's top ten customers account for approximately 41% of its net sales. As part of its ongoing procedures, the Company monitors the credit worthiness of its customers. Bad debt write-offs have historically been minimal. The Company places its cash and cash equivalents with financial institutions and limits the amount of exposure in any one institution.

Fair Value: The carrying amounts reported in the Consolidated Balance Sheet for cash and cash equivalents, short-term investments, receivables, bank borrowings, accounts payable and accruals approximate their fair values given the immediate or short-term nature of these items. See also Note 7 — Investments.

The following tables show, by level within the fair value hierarchy, the Company's financial assets and liabilities that are accounted for at fair value on a recurring basis at December 31, 2019 and 2018 (in millions):

Asset (Liability)	Quoted Prices in Active Markets for Identical Assets (Level 1)	Quoted Prices in Active Markets for Similar Assets (Level 2)	Unobservable inputs for which little or no market data exists (Level 3)	Total
Money market funds ^(a)	\$ 27.5	\$ —	\$ —	\$ 27.5
Available for sale investments	—	50.7	—	50.7
Trading securities	19.2	—	—	19.2
Deferred compensation plan liabilities	(19.2)	—	—	(19.2)
Derivatives:				
Forward exchange contracts-Assets ^(b)	—	—	—	—
Forward exchange contracts-(Liabilities) ^(c)	—	(0.3)	—	(0.3)
BALANCE AT DECEMBER 31, 2019	\$ 27.5	\$ 50.4	\$ —	\$ 77.9

Fair value measurements

At December 31, 2019 and 2018 the Company had \$69.9 million and \$65.5 million respectively, of investments carried on the balance sheet at fair value. Fair value is defined as the amount that would be received for selling an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The FASB fair value measurement guidance established a fair value hierarchy that prioritizes the inputs used to measure fair value. Refer to Note 7 — Investments for more information about these investments.

The three broad levels of the fair value hierarchy are as follows:

- Level 1** - Quoted prices (unadjusted) in active markets for identical assets or liabilities
- Level 2** - Quoted prices for similar assets and liabilities in active markets or inputs that are observable for the asset or liability, either directly or indirectly
- Level 3** - Unobservable inputs for which little or no market data exists, therefore requiring a company to develop its own assumptions

Asset (Liability)	Quoted Prices in Active Markets for Identical Assets (Level 1)	Quoted Prices in Active Markets for Similar Assets (Level 2)	Unobservable inputs for which little or no market data exists (Level 3)	Total
Money market funds ^(a)	\$ 15.1	\$ —	\$ —	\$ 15.1
Time Deposits ^(a)	—	20.9	—	20.9
Available-for-sale investments	—	48.9	2.3	51.2
Trading securities	14.3	—	—	14.3
Deferred compensation plan liabilities	(14.3)	—	—	(14.3)
Derivatives:				
Forward exchange contracts-Assets ^(b)	—	1.6	—	1.6
Forward exchange contracts-(Liabilities) ^(c)	—	—	—	—
BALANCE AT DECEMBER 31, 2018	\$ 15.1	\$ 71.4	\$ 2.3	\$ 88.8

(a) Money market funds and time deposits are included in Cash and cash equivalents in the Consolidated Balance Sheet.

(b) Forward exchange contracts-Assets are reflected in Other current assets in the Consolidated Balance Sheet.

(c) Forward exchange contracts-(Liabilities) are reflected in Other accrued liabilities in the Consolidated Balance Sheet.

The methods and assumptions used to estimate the Level 2 fair values were as follows:

Forward exchange contracts — The fair value of forward exchange contracts were based on quoted forward foreign exchange prices at the reporting date.

Municipal bonds — The fair value of available-for-sale investments in municipal bonds is based on observable market-based inputs, other than quoted prices in active markets for identical assets.

Available-for-sale redeemable preferred stock classified in Level 3 — The fair value of the available-for-sale investment in redeemable preferred stock is valued based on a discounted cash flow model, using significant unobservable inputs, including assumptions regarding expected cash flows and discount rates.

As of December 31, 2018, the Company had one financial asset that was classified in Level 3 of the fair value hierarchy. In the third quarter of 2019, the Company disposed of an available-for-sale investment that was previously classified in Level 3 of the fair value hierarchy.

Deferred compensation plan

The Company offers certain employees the opportunity to participate in non-qualified deferred compensation plans. A participant's deferrals are invested in a variety of participant-directed debt and equity mutual funds that are classified as trading securities. During 2019 and 2018, the Company purchased \$3.2 million and \$2.7 million, respectively, of trading securities related to these deferred compensation plans. As a result of participant distributions, the Company

sold \$1.3 million and \$1.5 million of these trading securities in 2019 and 2018 respectively. The unrealized gains and losses associated with these trading securities are directly offset by the changes in the fair value of the underlying deferred compensation plan obligation.

Derivatives

In order to limit financial risk in the management of its assets, liabilities and debt, the Company may use derivative financial instruments such as foreign currency hedges, commodity hedges, interest rate hedges and interest rate swaps. All derivative financial instruments are matched with an existing Company asset, liability or proposed transaction. Market value gains or losses on the derivative financial instrument are recognized in income when the effects of the related price changes of the underlying asset or liability are recognized in income.

Forward exchange contracts

In 2019 and 2018, the Company entered into a series of forward exchange contracts to purchase U.S. dollars in order to hedge its exposure to fluctuating rates of exchange on anticipated inventory purchases and forecasted sales by its subsidiaries who transact business in Canadian dollars. As of December 31, 2019, the Company had 36 individual forward exchange contracts for notional amounts which range from \$0.5 million to \$1.6 million each, which have various expiration dates through December 2020. These contracts have been designated as cash flow hedges in accordance with the accounting guidance for derivatives.

The following table summarizes the results of cash flow hedging relationships for years ended December 31, (in millions):

Derivative Instrument	Derivative Gain/(Loss) Recognized in Accumulated Other Comprehensive Loss, net of tax		Location of Gain/ (Loss) when reclassified (Effective Portion)	Gain/(Loss) Reclassified into Earnings (Effective Portion), net of tax	
	2019	2018		2019	2018
Forward exchange contract	\$ (0.8)	\$ 1.9	Net sales	\$ 0.2	\$ 0.1
			Cost of goods sold	\$ 0.3	\$ 0.2

There was no material hedge ineffectiveness with respect to the forward exchange cash flow hedges during 2019, 2018 and 2017.

Long-term Debt

The total carrying value of long-term debt including the \$34.4 million current portion of the Term Loan as of December 31, 2019 was \$1,540.4 million, net of unamortized discount and debt issuance costs. As of December 31, 2019

the total carrying value of long-term debt was 1,506.0 million, net of unamortized discount and debt issuance costs. As of December 31, 2019 and 2018, the estimated fair value of the long-term debt was \$1,592.2 million and \$1,688.1 million, respectively, based on quoted market prices. The Company's long-term debt falls within level 2 of the fair value hierarchy.

NOTE 15 Commitments and Contingencies

Legal and Environmental

The Company is subject to various legal proceedings arising in the normal course of its business. These proceedings include claims for damages arising out of use of the Company's products, intellectual property, workers' compensation and environmental matters. The Company is self-insured up to specified limits for certain types of claims, including product liability and workers' compensation, and is fully self-insured for certain other types of claims, including environmental and intellectual property matters. The Company recognizes a liability for any contingency that in management's judgment is probable of occurrence and can be reasonably estimated. We continually reassess the likelihood of adverse judgments and outcomes in these matters, as well as estimated ranges of possible losses based upon an analysis of each matter which includes advice of outside legal counsel and, if applicable, other experts.

As previously reported, in the fourth quarter of 2016, the Company recorded a charge of \$12.5 million in Cost of goods sold representing the estimated withdrawal liability from the multi-employer plans from which it subsequently withdrew in 2017. In March 2019, the remaining employer in that multi- employer pension plan filed for protection under Chapter 11 of the United States Bankruptcy Code and was proceeding towards liquidation as of June 2019. As a result of the other employer's withdrawal from the pension plan and the plan's termination, under the terms customary to multi-employer pension plans, it was probable that the Company would be subject to mass withdrawal liability. In December 2019, the Company entered into a settlement

agreement with the multi- employer pension plan. As a result, the Company recognized an additional \$8.5 million net charge in 2019 to settle the mass withdrawal obligation and a \$10.0 million cash payment in the fourth quarter of 2019, with remaining cash payments of \$6.0 million and \$5.0 million due in 2020 and 2021, respectively.

The Company is subject to environmental laws and regulations which may require that it investigate and remediate the effects of potential contamination associated with past and present operations as well as those acquired through business combinations. Environmental liabilities are recorded when remedial efforts are probable and the costs can be reasonably estimated. The Company continues to monitor these environmental matters and revalues its liabilities as necessary. Total environmental liabilities were \$8.0 million and \$8.5 million as of December 31, 2019 and 2018, respectively.

The Company accounts for conditional asset retirement and environmental obligations in accordance with the applicable accounting guidance. The accounting guidance defines "conditional asset retirement obligation" as a legal obligation to perform an asset retirement activity in which the timing and/or method of settlement are conditional on a future event that may or may not be within the control of the Company. Accordingly, an entity is required to recognize a liability for the fair value of a conditional asset retirement obligation if the fair value of the liability can be reasonably estimated. Asset retirement obligations were not material as of December 31, 2019 and 2018.

NOTE 16 Capital Stock

Activity in the Company's common shares outstanding is set forth below for the three years ended December 31, 2019 (in thousands):

	Common Stock
OUTSTANDING AT DECEMBER 31, 2016	55,532
Exercise of stock options/stock appreciation rights	53
Director compensation arrangements, net	10
Restricted/performance shares activity, net of forfeitures	89
Acquisition/surrender of shares	(802)
OUTSTANDING AT DECEMBER 31, 2017	54,882
Exercise of stock appreciation rights	66
Director compensation arrangements, net	11
Restricted/performance shares activity, net of forfeitures	165
Acquisition/surrender of shares	(409)
OUTSTANDING AT DECEMBER 31, 2018	54,715
Exercise of stock appreciation rights	84
Director compensation arrangements, net	10
Restricted/performance shares activity, net of forfeitures	39
Acquisition/surrender of shares	(334)
OUTSTANDING AT DECEMBER 31, 2019	54,514

For accounting purposes, the Company treats repurchased shares as constructively retired when acquired and accordingly charges the purchase price against Common Stock par value, Additional paid-in capital and Retained earnings to the extent required. Shares may be repurchased through the Company's stock repurchase program, acquired by the Company from

employees or surrendered to the Company by employees in settlement of their minimum tax liability on vesting of restricted shares and performance shares under the Hubbell Incorporated 2005 Incentive Award Plan as amended and restated, (the "Award Plan").

Shares of the Company's common stock were reserved at December 31, 2019 as follows (in thousands):

	Common Stock
Future grant of stock-based compensation	2,333
Shares reserved under other equity compensation plans	152
TOTAL	2,485

NOTE 17 Stock-Based Compensation

As of December 31, 2019, the Company had various stock-based awards outstanding which were issued to executives and other key employees. The Company recognizes the grant-date fair value of all stock-based awards to employees over their respective requisite service periods (generally equal to an award's vesting period), net of estimated forfeitures. A stock-based award is considered vested for expense attribution purposes when the employee's retention of the award is no longer contingent on providing subsequent service. For those awards that vest immediately upon retirement eligibility, the Company recognizes compensation cost immediately for retirement-eligible individuals or over the period from the grant date to the date retirement eligibility is achieved, if less than the stated vesting period.

The Company's long-term incentive program for awarding stock-based compensation includes a combination of restricted stock, stock appreciation rights ("SARs"), and performance shares of the Company's Common Stock pursuant to the Award Plan. Under the Award Plan, the Company may authorize up to 9.7 million shares of Common Stock to settle awards of restricted stock, performance shares, or SARs. The Company issues new shares to settle stock-based awards. In 2019, the Company's grant of stock-based awards, primarily issued in connection with promotions during 2019, included restricted stock and SARs.

Stock-based compensation expense recognized by the Company was \$16.4 million in 2019, \$24.2 million in 2018 and \$22.3 million in 2017, and was lower in 2019 as the Company

shifted the timing of its annual grant from the fourth quarter of 2019 to the first quarter of 2020. The total income tax benefit recognized was \$2.2 million in 2019, \$5.3 million in 2018, and \$5.4 million in 2017. The net tax windfall recorded as a result of exercise or vesting (depending on the type of award) was \$3.3 million, \$2.4 million, and \$2.5 million in 2019, 2018 and 2017, respectively. As of December 31, 2019, there was \$14.2 million, pretax, of total unrecognized compensation cost related to non-vested share-based compensation arrangements. This cost is expected to be primarily recognized through 2021.

Stock-based compensation expense is recorded in S&A expense as well as Cost of goods sold. Of the total 2019 expense, \$15.4 million was recorded to S&A expense and \$1.0 million was recorded to Cost of goods sold. In 2018 and 2017, \$23.4 million and \$21.1 million, respectively, was recorded to S&A expense and \$0.8 million and \$1.2 million, respectively, was recorded to Cost of goods sold. Stock-based compensation costs capitalized to inventory was \$0.2 million in 2019, \$0.2 million in 2018 and \$0.3 million in 2017.

Each of the compensation arrangements is discussed below.

Restricted Stock

The Company issues various types of restricted stock awards all of which are considered outstanding at the time of grant, as the award holders are entitled to dividends and voting rights. Unvested restricted stock awards are considered participating securities when computing earnings per share. Restricted stock grants are not transferable and are subject to forfeiture in the event of the recipient's termination of employment prior to vesting.

Restricted Stock Issued to Employees — Service Condition

Restricted stock awards that vest based upon a service condition are expensed on a straight-line basis over the requisite service period. These awards generally vest in three

The following table summarizes the assumptions used in estimating the fair value of the outstanding PBRS:

Grant Date	Stock Price on Measurement Date	Expected Volatility	Risk Free Interest Rate	Expected Term	Weighted Avg. Grant Date Fair Value
2017	\$ 127.51	24.7 %	1.9 %	3 Years	\$ 119.88

Restricted Stock Issued to Non-employee Directors

In 2019, 2018 and 2017, each non-employee director received a restricted stock grant. These grants are made on the date of the annual meeting of shareholders and vest at the following year's annual meeting of shareholders, or upon certain other

equal installments on each of the first three anniversaries of the grant date, however in December 2018 and July 2019 the company granted a certain number of these awards that vest on the third year anniversary of the grant date. The fair value of these awards is measured by the average of the high and low trading prices of the Company's common stock on the most recent trading day immediately preceding the grant date ("measurement date").

Restricted Stock Issued to Employees — Market Condition

The Company granted certain restricted stock awards that vest subject to the achievement of a market-based condition (referred to a performance based restricted stock, or PBRS). These awards were granted to certain employees in 2016 and 2017. No PBRS awards were granted in 2018 or 2019. PBRS awards are expensed on a straight-line basis over the requisite service period which starts on the date of the grant and ends upon the completion of the performance period. Expense is recognized irrespective of the market condition being achieved.

PBRS awards will be earned if the Company's relative TSR performance over a three year period is equal to or exceeds the 20th percentile as compared to the TSR of other companies in the S&P Capital Goods 900 Index, and service through the requisite service period or the retirement-eligibility date. If this market-based condition is achieved, the awards will vest at 100% of the number of awards granted. If the market-based condition is not achieved the awards will not vest. The fair value of these awards was determined based upon a lattice model.

The three year performance period for awards granted in 2016 ended on December 31, 2019. The performance condition was met and approximately 19,500 shares vested and were approved by the Compensation Committee in February 2020. The fair value of the shares at vesting was approximately \$2.9 million.

events. The grant is subject to forfeiture if the director's service terminates prior to the date of the next regularly scheduled annual meeting of shareholders. During 2019, 2018 and 2017, the Company granted 8,216 shares, 9,376 shares, and 8,480 shares, respectively, to non-employee directors.

Activity related to both employee and non-employee restricted stock for the year ended December 31, 2019 is as follows (in thousands, except per share amounts):

	Shares	Weighted Average Grant Date Fair Value/Share
RESTRICTED STOCK AT DECEMBER 31, 2018	284	\$ 108.40
Shares granted	18	127.89
Shares vested	(84)	105.70
Shares forfeited	(20)	110.71
RESTRICTED STOCK AT DECEMBER 31, 2019	198	\$ 110.89

The weighted average fair value per share of restricted stock granted in 2019, 2018 and 2017 was \$127.89, \$108.74 and \$123.39, respectively. The total fair value of restricted stock vested in 2019, 2018 and 2017 was \$8.9 million, \$8.6 million and \$6.6 million, respectively.

Stock Appreciation Rights

SARs grant the holder the right to receive, once vested, the value in shares of the Company's Common Stock equal to the positive difference between the grant price, as determined

using the mean of the high and low trading prices of the Company's Common Stock on the measurement date, and the fair market value of the Company's Common Stock on the date of exercise. This amount is payable in shares of the Company's Common Stock. SARs vest and become exercisable in three equal installments during the first three years following the grant date and expire ten years from the grant date.

Activity related to SARs for the year ended December 31, 2019 is as follows (in thousands, except per share amounts):

	Number of Rights	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term	Aggregate Intrinsic Value
OUTSTANDING AT DECEMBER 31, 2018	2,111	\$ 107.01		
Granted	40	129.28		
Exercised	(474)	94.72		
Forfeited	(93)	115.63		
Canceled	(12)	128.32		
OUTSTANDING AT DECEMBER 31, 2019	1,572	\$ 110.66	6.8 Years	\$ 58,410
EXERCISABLE AT DECEMBER 31, 2019	1,198	\$ 109.01	6.2 Years	\$ 46,497

The aggregated intrinsic value of SARs exercised during 2019, 2018 and 2017 was \$17.8 million, \$14.1 million and \$10.1 million, respectively.

The fair value of each SAR award was measured using the Black-Scholes option pricing model.

The following table summarizes the weighted-average assumptions used in estimating the fair value of the SARs granted during the years 2019, 2018 and 2017:

Grant Date	Expected Dividend Yield	Expected Volatility	Risk Free Interest Rate	Expected Term	Weighted Avg. Grant Date Fair Value of 1 SAR
2019	2.7%	22.7%	1.8%	5.5 Years	\$ 21.25
2018	2.9%	21.7%	2.8%	5.5 Years	\$ 18.23
2017	2.6%	18.0%	2.2%	5.5 Years	\$ 17.45

The expected dividend yield was calculated by dividing the Company's expected annual dividend by the average stock price for the past three months. Expected volatilities are based on historical volatilities of the Company's stock for a period consistent with the expected term. The expected term

of SARs granted was based upon historical exercise behavior of stock options and SARs. The risk-free interest rate is based on the U.S. Treasury yield curve in effect at the time of grant for the expected term of the award.

Performance Shares

Performance shares represent the right to receive a share of the Company's Common Stock subject to the achievement of certain market or performance conditions established by the Company's Compensation Committee and measured over a three year period. Partial vesting in these awards may occur after separation from the Company for retirement eligible employees. Shares are not vested until approved by the Company's Compensation Committee.

Performance Shares — Performance and Market Conditions

In December 2018, the Company granted 60,008 shares that will vest subject to a performance condition and service requirement. The number of shares vested is then modified by a market condition as described below.

Thirty-four percent of shares granted will vest based on Hubbell's compounded annual growth rate of net sales as compared to that of the companies that comprise the

S&P Capital Goods 900 index. Thirty-three percent of shares granted will vest based on achieved operating margin performance as compared to internal targets, and thirty-three percent of shares granted will vest based on achieved trade working capital as a percent of net sales as compared to internal targets. Each of these performance conditions is measured over the same three-year performance period. The cumulative result of these performance conditions can result in a number of shares earned in the range of 0% - 200% of the target number of shares granted. That cumulative performance achieved is then further modified based on the Company's three year TSR relative to the companies that constitute the S&P Capital Goods 900 index, to potentially increase or reduce the shares earned by 20%.

The fair value of the award was determined based upon a lattice model. The Company expenses these awards on a straight-line basis over the requisite service period and including an assessment of the performance achieved to date. The weighted average fair value per share was \$98.80 for the awards granted in 2018.

Grant Date	Shares Outstanding at 12/31/2019	Fair Value	Performance Period	Payout Range
2018	51,062	\$ 98.80	Jan 2019-Dec 2021	0-200% +/- 20%

Performance Shares — Market Condition

In December 2017, the Company granted 24,675 performance shares that will vest subject to a market condition and service through the performance period. The market condition associated with the awards is the Company's TSR compared to the TSR generated by the companies of a reference index over a performance period of three years. Performance at target will result in vesting and a number of shares earned equal to 100% of shares granted. Performance below or above target can result in a number of shares earned in the range of 0%-200% of shares granted. Expense is recognized irrespective of the market condition being achieved.

In February 2020, approximately 17,000 shares vested related to the December 2016 performance award grant and were approved by the Compensation Committee. The performance period associated with this award was from January 1, 2017 through December 31, 2019 and was based upon the Company's TSR compared to the TSR generated by the other companies that comprise the S&P Capital Goods 900 index. The number of shares vested in February 2020 was based upon achieving 72% of the market based criteria and the fair value of the awards at vesting was approximately \$2.5 million.

The fair value of the performance share awards with a market condition for the fiscal year 2017 was determined based upon a lattice model.

The following table summarizes the related assumptions used to determine the fair values of the performance share awards with a market condition granted during 2017:

Grant Date	Stock Price on Measurement Date	Dividend Yield	Expected Volatility	Risk Free Interest Rate	Expected Term	Weighted Avg. Grant Date Fair Value
2017	\$ 127.51	2.4%	24.7%	1.9%	3 Years	\$ 142.89

Expected volatilities are based on historical volatilities of the Company's stock over a three year period. The risk free interest rate is based on the U.S. Treasury yield curve in effect at the time of the grant for the expected term of the award.

Performance Shares — Performance Condition

In December 2017 the Company granted 24,675 performance shares that are subject to a performance condition and service requirement during the performance period of three

years. The performance condition associated with the awards is based on the Company's relative sales growth compared to the relative sales growth of the companies of a reference index, further adjusted by the Company achieving a target net income margin, each measured over the same three year performance period. Performance at target will result in vesting and a number of shares earned equal to 100% of shares granted. Performance below or above target can result in a number of shares earned in the range of 0%-250% of shares granted.

In May 2019, the Company paid out 47,693 shares related to the December 2015 performance award grant. The performance period associated with this award was from January 1, 2016 through December 31, 2018 and was based upon the Company's net sales growth compared to the net sales growth by the other companies that comprise the S&P Capital Goods 900 Index. The number of shares vested in May 2019 was based upon achieving 160% of the market-based criteria and the fair value of the awards at vesting was \$6.2 million.

The fair value of the award is measured based upon the average of the high and low trading prices of the Company's common stock on the measurement date reduced by the present value of dividends expected to be paid during the requisite service period. The Company expenses these awards on a straight-line basis over the requisite service period, including an assessment of the performance achieved to date.

The following table summarizes the attributes of the performance shares granted in 2016 and 2017 and outstanding at December 31, 2019:

Grant Date	Shares Outstanding at 12/31/2019	Fair Value	Performance Period	Payout Range
2017	19,389	\$ 118.55	Jan 2018-Dec 2020	0-250%
2016	23,276	\$ 105.48	Jan 2017-Dec 2019	0-250%

NOTE 18 Earnings Per Share

The Company computes earnings per share using the two-class method, which is an earnings allocation formula that determines earnings per share for common stock and participating securities. Restricted stock granted by the Company is considered a participating security since it contains a non-forfeitable right to dividends.

The following table sets forth the computation of earnings per share for the three years ended December 31 (in millions, except per share amounts):

	2019	2018	2017
Numerator:			
Net income attributable to Hubbell	\$ 400.9	\$ 360.2	\$ 243.1
Less: Earnings allocated to participating securities	(1.5)	(1.3)	(0.8)
Net income available to common shareholders	\$ 399.4	\$ 358.9	\$ 242.3
Denominator:			
Average number of common shares outstanding	54.4	54.6	54.8
Potential dilutive shares	0.3	0.3	0.3
Average number of diluted shares outstanding	54.7	54.9	55.1
Earnings per share:			
Basic	\$ 7.35	\$ 6.57	\$ 4.42
Diluted	\$ 7.31	\$ 6.54	\$ 4.39

The Company did not have any significant anti-dilutive securities in 2019, 2018 or 2017.

NOTE 19 Accumulated Other Comprehensive Loss

A summary of the changes in Accumulated other comprehensive loss (net of tax) for the three years ended December 31, 2019 is provided below (in millions):

(Debit) credit	Cash Flow Hedge (Loss) Gain	Unrealized Gain (Loss) on Available- for-Sale Securities	Pension and Post Retirement Benefit Plan Adjustment	Cumulative Translation Adjustment	Total
BALANCE AT DECEMBER 31, 2016	\$ —	\$ (1.2)	\$ (180.5)	\$ (120.8)	\$ (302.5)
Other comprehensive income (loss) before Reclassifications	(1.7)	0.6	(3.4)	28.9	24.4
Amounts reclassified from accumulated other comprehensive loss	0.9	—	7.4	—	8.3
Current period other comprehensive income (loss)	(0.8)	0.6	4.0	28.9	32.7
BALANCE AT DECEMBER 31, 2017	\$ (0.8)	\$ (0.6)	\$ (176.5)	\$ (91.9)	\$ (269.8)
Other comprehensive income (loss) before Reclassifications	1.9	(1.4)	10.4	(33.9)	(23.0)
Amounts reclassified from accumulated other comprehensive loss	(0.3)	—	7.4	—	7.1
Current period other comprehensive income (loss)	1.6	(1.4)	17.8	(33.9)	(15.9)
BALANCE AT DECEMBER 31, 2018	\$ 0.8	\$ (2.0)	\$ (158.7)	\$ (125.8)	\$ (285.7)
Other comprehensive income (loss) before Reclassifications	(0.8)	0.8	(21.5)	3.7	(17.8)
Amounts reclassified from accumulated other comprehensive loss	(0.5)	1.8	7.0	(7.7)	0.6
Current period other comprehensive income (loss)	(1.3)	2.6	(14.5)	(4.0)	(17.2)
Reclassification of stranded tax effects	—	—	(30.0)	—	(30.0)
BALANCE AT DECEMBER 31, 2019	\$ (0.5)	\$ 0.6	\$ (203.2)	\$ (129.8)	\$ (332.9)

A summary of the gain (loss) reclassifications out of Accumulated other comprehensive loss for the two years ended December 31 is provided below (in millions):

Details about Accumulated Other Comprehensive Loss Components	2019	2018	Location of Gain (Loss) Reclassified into Income
Cash flow hedges gain (loss):			
Forward exchange contracts	\$ 0.3	\$ 0.1	Net Sales
	0.4	0.3	Cost of goods sold
	0.7	0.4	Total before tax
	(0.2)	(0.1)	Tax (expense) benefit
	\$ 0.5	\$ 0.3	Gain (loss) net of tax
Amortization of defined benefit pension and post retirement benefit items:			
Prior-service costs	\$ 0.7 ^(a)	\$ 0.9 ^(a)	
Actuarial gains/(losses)	(9.7) ^(a)	(10.7) ^(a)	
Settlement and curtailment losses	(0.3) ^(a)	— ^(a)	
	(9.3)	(9.8)	Total before tax
	2.3	2.4	Tax benefit (expense)
	\$ (7.0)	\$ (7.4)	(Loss) gain net of tax
Reclassification of gains (losses) on available-for-sale securities			
	\$ (1.8)	\$ —	Other expense, net
	—	—	Tax benefit (expense)
	\$ (1.8)	\$ —	(Loss) gain net of tax
Reclassification of currency translation gain			
	\$ 7.7	\$ —	Gain on disposition of business (Note 3)
	—	—	Tax benefit (expense)
	\$ 7.7	\$ —	Gain (loss) net of tax
Gains (losses) reclassified into earnings	\$ (0.6)	\$ (7.1)	(Loss) gain net of tax

(a) These accumulated other comprehensive loss components are included in the computation of net periodic pension cost (see Note 11 – Retirement Benefits for additional details).

NOTE 20 Industry Segments and Geographic Area Information

Nature of Operations

Hubbell designs, manufactures and sells quality electrical and electronic products for a broad range of non-residential and residential construction, industrial and utility applications. Products are either sourced complete, manufactured or assembled by subsidiaries in the United States, Canada, Puerto Rico, China, Mexico, the UK, Brazil, Australia, Spain and Ireland. Hubbell also participates in joint ventures in Taiwan, Hong Kong, and the Philippines and maintains offices in Singapore, Italy, China, India, Mexico, South Korea, Chile and countries in the Middle East. Each of the above references to manufacturing locations, joint venture participation, and office locations relate to the three year period ending December 31, 2019.

The Company's reporting segments consist of the Electrical segment and the Power segment, as described below.

The Electrical segment comprises businesses that sell stock and custom products including standard and special application wiring device products, rough-in electrical products, connector and grounding products, lighting fixtures and controls, components and assemblies for the natural gas distribution market and other electrical equipment. The products are typically used in and around industrial, commercial and institutional facilities by electrical contractors, maintenance personnel, electricians, utilities, and telecommunications companies. In addition, certain of our businesses design and manufacture industrial controls and communication systems used in the non-residential and industrial markets. Many of these products are designed such that they can also be used in harsh and hazardous locations where a potential for fire and explosion exists due to the presence of flammable gasses and vapors. Harsh and hazardous products are primarily used in the oil and gas (onshore and offshore) and mining industries. There are also a variety of lighting fixtures, wiring devices and electrical products that have residential and utility applications, including residential products with Internet-of-Things ("IoT") enabled technologies. These products are primarily sold through electrical and industrial distributors, home centers, retail and hardware outlets, lighting showrooms and residential product oriented internet sites. Special application

products are primarily sold through wholesale distributors to contractors, industrial customers and OEMs. High voltage products are also sold direct to customers through our sales engineers. The Electrical segment comprises three business groups, which have been aggregated as they have similar economic characteristics, customers and distribution channels, among other factors.

The Power segment consists of operations that design and manufacture various distribution, transmission, substation and telecommunications products primarily used by the electrical utility industry. In addition, certain of these products are used in the civil construction, water utility, and transportation industries. Products are sold to distributors and directly to users such as utilities, telecommunication companies, pipeline and mining operations, industrial firms, construction and engineering firms. The 2018 acquisition of Aclara expanded offerings, to include advanced metering infrastructure, meter and edge devices, software and infrastructure services, which are primarily sold to the electrical, water, and gas utility industries.

Financial Information

Financial information by industry segment, product class and geographic area for each of the three years ended December 31, 2019, 2018 and 2017 is summarized below (in millions). When reading the data the following items should be noted:

- Net sales comprise sales to unaffiliated customers — inter-segment and inter-area sales are not significant.
- Segment operating income consists of net sales less operating expenses, including total corporate expenses, which are generally allocated to each segment on the basis of the segment's percentage of consolidated net sales. Interest expense and investment income and other expense, net have not been allocated to segments as these items are centrally managed by the Company.
- General corporate assets not allocated to segments are principally cash, prepaid pensions, investments and deferred taxes. These assets have not been allocated as they are centrally managed by the Company.

INDUSTRY SEGMENT DATA

	2019	2018	2017
Net Sales:			
Electrical	\$ 2,625.7	\$ 2,660.6	\$ 2,532.8
Power	1,965.3	1,821.1	1,136.0
TOTAL NET SALES	\$ 4,591.0	\$ 4,481.7	\$ 3,668.8
Operating Income:			
Electrical	\$ 320.1	\$ 320.8	\$ 294.0
Power	276.5	236.1	224.8
Operating Income	\$ 596.6	\$ 556.9	\$ 518.8
Gain on disposition of business (Note 3)	21.7	—	—
Multi-employer pension charge (Note 15)	(8.5)	—	—
Interest expense	(69.4)	(72.4)	(44.9)
Loss on extinguishment of debt	—	—	(10.1)
Investment income and other expense, net	(19.9)	(17.5)	(20.7)
INCOME BEFORE INCOME TAXES	\$ 520.5	\$ 467.0	\$ 443.1
Assets:			
Electrical	\$ 2,197.8	\$ 2,228.5	\$ 2,344.7
Power	2,401.3	2,395.8	1,102.2
General Corporate	303.9	247.8	273.7
TOTAL ASSETS	\$ 4,903.0	\$ 4,872.1	\$ 3,720.6
Capital Expenditures:			
Electrical	\$ 45.8	\$ 53.0	\$ 48.0
Power	45.4	36.8	29.0
General Corporate	2.7	6.4	2.7
TOTAL CAPITAL EXPENDITURES	\$ 93.9	\$ 96.2	\$ 79.7
Depreciation and Amortization:			
Electrical	\$ 65.0	\$ 61.4	\$ 64.7
Power	86.0	87.0	33.5
TOTAL DEPRECIATION AND AMORTIZATION	\$ 151.0	\$ 148.4	\$ 98.2

GEOGRAPHIC AREA DATA

	2019	2018	2017
Net Sales:			
United States	\$ 4,190.5	\$ 4,040.6	\$ 3,280.9
International	400.5	441.1	387.9
TOTAL NET SALES	\$ 4,591.0	\$ 4,481.7	\$ 3,668.8
Operating Income:			
United States	\$ 529.7	\$ 478.0	\$ 435.8
International	66.9	78.9	83.0
TOTAL OPERATING INCOME	\$ 596.6	\$ 556.9	\$ 518.8
Long-lived Assets:			
United States	\$ 2,950.4	\$ 2,972.4	\$ 1,877.4
International	372.2	245.0	232.8
TOTAL LONG-LIVED ASSETS	\$ 3,322.6	\$ 3,217.4	\$ 2,110.2

On a geographic basis, the Company defines “international” as operations based outside of the United States and its possessions. As a percentage of total net sales, shipments from foreign operations directly to third parties were 9% in 2019, 10% in 2018 and 11% in 2017, with the UK and Canadian operations representing approximately 29%, and 29% respectively, of 2019 total international net sales.

Long-lived assets, excluding deferred tax assets, of international subsidiaries were 11% of the consolidated total in 2019, 8% in 2018 and 11% in 2017, with the UK, Spain, and Canada operations representing approximately 31%, 21%, and 16%, respectively, of the 2019 international total. Export sales from United States operations were \$262.7 million in 2019, \$261.9 million in 2018 and \$217.2 million in 2017.

NOTE 21 Guarantees

The Company records a liability equal to the fair value of guarantees in the Consolidated Balance Sheet in accordance with the accounting guidance for guarantees. When it is probable that a liability has been incurred and the amount can be reasonably estimated, the Company accrues for costs associated with guarantees. The most likely costs to be incurred are accrued based on an evaluation of currently available facts and, where no amount within a range of estimates is more likely, the minimum is accrued.

As of December 31, 2019, the fair value and maximum potential payment related to the Company’s guarantees were not material.

The Company offers product warranties which cover defects on most of its products. These warranties primarily apply to products that are properly installed, maintained and used for their intended purpose. The Company accrues estimated warranty costs at the time of sale. Estimated warranty expenses, recorded in cost of goods sold, are based upon historical information such as past experience, product failure rates, or the estimated number of units to be repaired or replaced. Adjustments are made to the product warranty accrual as claims are incurred, additional information becomes known or as historical experience indicates.

Changes in the accrual for product warranties in 2019 are set forth below (in millions):

BALANCE AT DECEMBER 31, 2017	\$ 14.0
Provision	12.0
Expenditures/other	(22.7)
Acquisitions ^(a)	89.4
BALANCE AT DECEMBER 31, 2018	\$ 92.7
Provision	15.8
Expenditures/other	(26.4)
BALANCE AT DECEMBER 31, 2019^(b)	\$ 82.1

(a) Relates to the Aclara acquisition. Refer to Note 3 – Business Acquisitions for additional information.

(b) Refer to Note 9 – Other Accrued Liabilities and Note 10 – Other Non-Current Liabilities for a breakout of short-term and long-term warranties.

NOTE 22 Restructuring Costs

During 2019, we incurred costs for restructuring actions initiated in 2019 as well as costs relating to restructuring actions initiated in the prior year. Our restructuring actions are associated with cost reduction efforts that include the consolidation of manufacturing and distribution facilities, as well as, workforce reductions and the sale or exit of business units we determine to be non-strategic. Restructuring

costs are primarily severance and employee benefits, asset impairments, as well as facility closure, contract termination and certain pension costs that are directly related to restructuring actions. These costs are predominantly settled in cash from our operating activities and are generally settled within one year, with the exception of asset impairments, which are non-cash.

Pre-tax restructuring costs incurred in each of our segments and the location of the costs in the Consolidated Statement of Income for the years ended December 31, 2019, 2018 and 2017 are as follows (in millions):

	Twelve Months Ended December 31, 2019			Twelve Months Ended December 31, 2018			Twelve Months Ended December 31, 2017		
	Electrical	Power	Total	Electrical	Power	Total	Electrical	Power	Total
Restructuring costs									
Cost of goods sold	\$ 12.5	\$ 9.8	\$ 22.3	\$ 4.9	\$ 3.3	\$ 8.2	\$ 11.5	\$ 2.2	\$ 13.7
S&A expense	8.0	1.7	9.7	3.4	0.4	3.8	5.4	1.2	6.6
TOTAL RESTRUCTURING COSTS	\$ 20.5	\$ 11.5	\$ 32.0	\$ 8.3	\$ 3.7	\$ 12.0	\$ 16.9	\$ 3.4	\$ 20.3

The following table summarizes the accrued liabilities for our restructuring actions (in millions):

	Beginning Accrued Restructuring Balance 1/1/19	Pre-tax Restructuring Costs	Utilization and Foreign Exchange	Ending Accrued Restructuring Balance 12/31/19
2019 Restructuring Actions				
Severance	\$ —	\$ 16.6	\$ (8.3)	\$ 8.3
Asset write-downs	—	4.8	(4.8)	—
Facility closure and other costs	—	7.7	(7.6)	0.1
TOTAL 2019 RESTRUCTURING ACTIONS	\$ —	\$ 29.1	\$ (20.7)	\$ 8.4
2018 and Prior Restructuring Actions				
Severance	\$ 7.7	\$ 0.3	\$ (5.0)	\$ 3.0
Asset write-downs	—	0.3	(0.3)	—
Facility closure and other costs	13.3	2.3	(9.6)	6.0
TOTAL 2018 AND PRIOR RESTRUCTURING ACTIONS	\$ 21.0	\$ 2.9	\$ (14.9)	\$ 9.0
TOTAL RESTRUCTURING ACTIONS	\$ 21.0	\$ 32.0	\$ (35.6)	\$ 17.4

The actual and expected pre-tax costs for our restructuring actions are as follows (in millions):

	Expected Costs	Costs incurred in 2017	Costs incurred in 2018	Costs incurred in 2019	Remaining costs at 12/31/19
2019 Restructuring Actions					
Electrical Segment	\$ 21.2	\$ —	\$ —	\$ 18.3	\$ 2.9
Power Segment	21.0	—	—	10.8	10.2
TOTAL 2019 RESTRUCTURING ACTIONS	\$ 42.2	\$ —	\$ —	\$ 29.1	\$ 13.1
2018 Restructuring Actions					
Electrical Segment	\$ 12.5	\$ —	\$ 8.6	\$ 2.2	\$ 1.7
Power Segment	4.8	—	4.1	0.7	—
TOTAL 2018 RESTRUCTURING ACTIONS	\$ 17.3	\$ —	\$ 12.7	\$ 2.9	\$ 1.7
2017 and Prior Restructuring Actions					
Electrical Segment	\$ 16.6	\$ 16.9	\$ (0.3)	\$ —	\$ —
Power Segment	3.0	3.4	(0.4)	—	—
TOTAL 2017 AND PRIOR RESTRUCTURING ACTIONS	\$ 19.6	\$ 20.3	\$ (0.7)	\$ —	\$ —
TOTAL RESTRUCTURING ACTIONS	\$ 79.1	\$ 20.3	\$ 12.0	\$ 32.0	\$ 14.8

NOTE 23 Leases

Our operating leases primarily consist of office space, certain manufacturing facilities, and vehicles. Our finance leases are not material. The term of these leases is generally 10 years or less, in some cases, with options to extend the term for up to 5 years, or options to terminate after one year without penalty. In general, our vehicle lease payments contain a monthly base rent payment which is adjusted based on changes to the LIBOR rate over the lease term. Certain other lease agreements contain variable payments related to a consumer price index or similar metric. Any change in payment amounts as a result of a change in a rate or index are considered variable lease payments and recognized as profit or loss when incurred.

Rent expense for operating leases in the Consolidated Statements of Income for the twelve months ended December 31, 2019 was \$39.1 million. Cash paid for operating leases during the year ended December 31, 2019 was \$36.4 million reported as cash outflows from operating activities in the Consolidated Statements of Cash Flows. Right-of-use (“ROU”) assets obtained in exchange for lease obligations during the year ended December 31, 2019 was \$22.1 million.

Amounts recognized for operating leases in the Consolidated Balance Sheets is as follows (in millions):

	December 31, 2019
Operating lease right-of-use assets	\$ 96.8
TOTAL ASSETS	\$ 96.8
Other accrued liabilities	\$ 29.6
Other non-current liabilities	71.7
TOTAL LIABILITIES	\$ 101.3

The weighted average remaining lease term as of December 31, 2019 for operating leases was 4 years. The weighted average discount rate used to measure the ROU asset and lease liability for operating leases was 3.5% as of December 31, 2019.

Future maturities of our operating lease liabilities as of December 31, 2019 are as follows (in millions):

	2020	2021	2022	2023	2024	Thereafter	Total Payments	Imputed Interest	Total
Operating Leases	32.7	24.6	15.8	13.2	8.4	15.9	110.6	(9.3)	\$ 101.3

Total rental expense under operating leases was \$44.8 million in 2018 and \$30.5 million in 2017. The minimum annual rentals on non-cancelable, long-term, operating leases in effect at December 31, 2018 was \$23.5 million in 2019, \$21.0 million in 2020, \$16.5 million in 2021, \$13.2 million in 2022, \$10.5 million in 2023 and \$26.5 million thereafter.

NOTE 24 Quarterly Financial Data (Unaudited)

The table below sets forth summarized quarterly consolidated financial data for the years ended December 31, 2019 and 2018 (in millions, except per share amounts):

	Reported First Quarter	Reported Second Quarter	Reported Third Quarter	Fourth Quarter
2019				
Net sales	\$ 1,087.3	\$ 1,196.4	\$ 1,204.0	\$ 1,103.3
Cost of goods sold	\$ 780.0	\$ 839.0	\$ 842.0	\$ 777.3
Gross profit	\$ 307.3	\$ 357.4	\$ 362.0	\$ 326.0
Selling & administrative expenses	\$ 186.4	\$ 190.5	\$ 189.1	\$ 190.1
Net income	\$ 73.8	\$ 97.9	\$ 132.6	\$ 103.1
Net Income attributable to Hubbell	\$ 72.3	\$ 96.0	\$ 130.7	\$ 101.9
Earnings per share — Basic	\$ 1.32	\$ 1.76	\$ 2.40	\$ 1.87
Earnings per share — Diluted	\$ 1.32	\$ 1.75	\$ 2.38	\$ 1.85

	Reported First Quarter	Reported Second Quarter	Reported Third Quarter	Fourth Quarter
2018				
Net sales	\$ 991.2	\$ 1,166.7	\$ 1,179.7	\$ 1,144.1
Cost of goods sold	\$ 708.3	\$ 818.8	\$ 830.7	\$ 823.5
Gross profit	\$ 282.9	\$ 347.9	\$ 349.0	\$ 320.6
Selling & administrative expenses	\$ 183.3	\$ 191.0	\$ 185.2	\$ 184.0
Net income	\$ 59.8	\$ 102.4	\$ 114.7	\$ 89.2
Net Income attributable to Hubbell	\$ 58.3	\$ 100.3	\$ 113.6	\$ 88.0
Earnings per share — Basic	\$ 1.06	\$ 1.83	\$ 2.07	\$ 1.61
Earnings per share — Diluted	\$ 1.05	\$ 1.82	\$ 2.06	\$ 1.60

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

Not applicable.

Item 9A Controls and Procedures

The Company maintains disclosure controls and procedures that are designed to ensure that information required to be disclosed in Exchange Act reports is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to management, including the Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure. Management necessarily applied its judgment in assessing the costs and benefits of such controls and procedures which, by their nature, can provide only reasonable assurance that the controls and procedures will meet their objectives.

The Company carried out an evaluation, under the supervision and with the participation of management, including the Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of

the Company's disclosure controls and procedures as defined in Exchange Act Rules 13a-15(e) and 15d-15(e), as of the end of the period covered by this report on Form 10-K. Based upon that evaluation, each of the Chief Executive Officer and Chief Financial Officer concluded that the Company's disclosure controls and procedures are effective at a reasonable assurance level. Management's annual report on internal control over financial reporting and the independent registered public accounting firm's audit report on the effectiveness of our internal control over financial reporting as of December 31, 2019 are included in Item 8 of this Annual Report on Form 10-K.

There has been no change in the Company's internal control over financial reporting that occurred during the fiscal year ended December 31, 2019 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

Item 9B Other Information

Not applicable.

PART III

Item 10 Directors, Executive Officers and Corporate Governance⁽¹⁾

Item 11 Executive Compensation⁽²⁾

Item 12 Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

Equity Compensation Plan Information

The following table provides information as of December 31, 2019 with respect to the Company's common stock that may be issued under the Company's equity compensation plans (in thousands, except per share amounts):

Plan Category	A	B	C
	Number of Securities to be Issued upon Exercise of Outstanding Options, Warrants and Rights	Weighted Average Exercise Price of Outstanding Options, Warrants and Rights	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column A)
Equity Compensation Plans Approved by Shareholders ^(a)	1,833 ^{(c)(e)}	\$ 110.66 ^(f)	2,333 ^(c)
Equity Compensation Plans Not Requiring Shareholder Approval ^(b)	72 ^{(c)(d)}	—	152 ^(c)
TOTAL	1,905	\$ 110.66	2,485

(a) The Company's (1) Stock Option Plan for Key Employees and (2) 2005 Incentive Award Plan as amended and restated.

(b) The Company's Deferred Compensation Plan for Directors as amended and restated.

(c) Hubbell Common Stock.

(d) Represents amount of shares currently deferred under this plan. These shares are not included in the total weighted average exercise price included in column B.

(e) Includes 210,000 performance share awards assuming a maximum payout target. The Company does not anticipate that the maximum payout target will be achieved for all of these awards.

(f) Weighted average exercise price excludes performance share awards included in column A.

The remaining information required by this item is incorporated by reference to the subheading "Voting Rights and Security Ownership of Certain Beneficial Owners and Management" of the definitive proxy statement for the Company's annual meeting of shareholders scheduled to be held on May 5, 2020.

(1) Certain of the information required by this item regarding executive officers is included under the subheading "Executive Officers of the Registrant" at the end of Part I of this Form 10-K and the remaining required information is incorporated by reference from our definitive proxy statement to be filed in connection with the Company's annual meeting of shareholders scheduled to be held on May 5, 2020.

(2) The information required by this item is incorporated by reference from our definitive proxy statement to be filed in connection with the Company's annual meeting of shareholders scheduled to be held on May 5, 2020.

Item 13 Certain Relationships and Related Transactions and Director Independence⁽³⁾

Item 14 Principal Accountant Fees and Services⁽⁴⁾

⁽³⁾ The information required by this item is incorporated by reference from our definitive proxy statement to be filed in connection with the Company's annual meeting of shareholders scheduled to be held on May 5, 2020.

⁽⁴⁾ The information required by this item is incorporated by reference from our definitive proxy statement to be filed in connection with the Company's annual meeting of shareholders scheduled to be held on May 5, 2020.

PART IV

Item 15 Exhibits and Financial Statement Schedule

1. Financial Statements and Schedule

Financial statements and schedule listed in the Index to Financial Statements and Schedule are filed as part of this Annual Report on Form 10-K.

2. Exhibits

Number	Description	Incorporated by Reference				Filed/ Furnished Herewith
		Form	File No.	Exhibit	Filing Date	
2.1 ^{††}	Agreement and Plan of Merger, dated as of December 22, 2017, by and among Meter Readings Holding Group, LLC, Hubbell Power Systems, Inc., Yellow Merger Sub, Inc., Sun Meter Readings, LP, as representative for the members and optionholders, and, for the limited purposes set forth therein, Hubbell Incorporated.	8-K	001-02958	2.1	12/26/2017	
3.1	Amended and Restated Certificate of Incorporation, as amended and restated as of December 23, 2015	8-A12B	001-02958	3.1	12/23/2015	
3.2	Amended and Restated By-Laws of Hubbell Incorporated, as amended on May 7, 2013	8-K	001-02958	3.1	5/10/2013	
4.1	Senior Indenture, dated as of September 15, 1995, between Hubbell Incorporated and The Bank of New York Mellon Trust Company, N.A. (formerly known as The Bank of New York Trust Company, N.A. (successor as trustee to JPMorgan Chase Bank N.A. (formerly known as JPMorgan Chase Bank, formerly known as The Chase Manhattan Bank, formerly known as Chemical Bank))), as trustee	S-4	333-90754	4a	6/18/2002	
4.2	First Supplemental Indenture, dated as of June 2, 2008, between Hubbell Incorporated and The Bank of New York Mellon Trust Company, N.A. (formerly known as The Bank of New York Trust Company, N.A. (successor as trustee to JPMorgan Chase Bank N.A. (formerly known as JPMorgan Chase Bank, formerly known as The Chase Manhattan Bank, formerly known as Chemical Bank))), as trustee, including the form of 5.95% Senior Notes due 2018	8-K	001-02958	4.2	6/2/2008	
4.3	Second Supplemental Indenture, dated as of November 17, 2010, between Hubbell Incorporated and The Bank of New York Mellon Trust Company, N.A. (formerly known as The Bank of New York Trust Company, N.A. (successor as trustee to JPMorgan Chase Bank N.A. (formerly known as JPMorgan Chase Bank, formerly known as The Chase Manhattan Bank, formerly known as Chemical Bank))), as trustee, including the form of 3.625% Senior Notes due 2022	8-K	001-02958	4.2	11/17/2010	
4.4	Third Supplemental Indenture, dated as of March 1, 2016, between Hubbell Incorporated and The Bank of New York Mellon Trust Company, N.A. (formerly known as The Bank of New York Trust Company, N.A. (successor as trustee to JPMorgan Chase Bank, N.A. (formerly known as JPMorgan Chase Bank, formerly known as The Chase Manhattan Bank, formerly known as Chemical Bank))), as trustee	8-K	001-02958	4.2	3/1/2016	

Number	Description	Incorporated by Reference				Filed/ Furnished Herewith
		Form	File No.	Exhibit	Filing Date	
4.5	Form of 3.350% Senior Notes due 2026	8-K	001-02958	4.3	3/1/2016	
4.6	Fourth Supplemental Indenture, dated as of August 3, 2017, between Hubbell Incorporated and The Bank of New York Mellon Trust Company, N.A. (formerly known as The Bank of New York Trust Company, N.A. (successor as trustee to JPMorgan Chase Bank, N.A. (formerly known as JPMorgan Chase Bank, formerly known as The Chase Manhattan Bank, formerly known as Chemical Bank))), as trustee.	8-K	001-02958	4.2	8/3/2017	
4.7	Form of 3.150% Senior Notes due 2027	8-K	001-02958	4.3	8/3/2017	
4.8	Fifth Supplemental Indenture, dated as of February 2, 2018, between Hubbell Incorporated and The Bank of New York Mellon Trust Company, N.A. (formerly known as The Bank of New York Trust Company, N.A. (successor as trustee to JPMorgan Chase Bank, N.A. (formerly known as JPMorgan Chase Bank, formerly known as The Chase Manhattan Bank, formerly known as Chemical Bank))), as trustee.	8-K	001-02958	4.2	2/2/2018	
4.9	Form of 3.500% Senior Notes due 2028	8-K	001-02958	4.3	2/2/2018	
4.10	Description of Registered Securities					*
10.1 [†]	Hubbell Incorporated Amended and Restated Supplemental Executive Retirement Plan, as amended and restated effective January 1, 2005	10-Q	001-02958	10a	10/26/2007	
10.1(a) [†]	Amendment, dated February 15, 2008, to Hubbell Incorporated Amended and Restated Supplemental Executive Retirement Plan, as amended and restated effective January 1, 2005	10-K	001-02958	10.nn	2/25/2008	
10.1(b) [†]	Amendment, dated December 28, 2010, to Hubbell Incorporated Amended and Restated Supplemental Executive Retirement Plan, as amended and restated effective January 1, 2005	10-K	001-02958	10a(1)	2/16/2011	
10.1(c) [†]	Third Amendment, dated December 29, 2016, to Hubbell Incorporated Amended and Restated Supplemental Executive Retirement Plan, as amended and restated effective January 1, 2005	10-K	001-02958	10.1(c)	2/16/2017	
10.2 [†]	Hubbell Incorporated Retirement Plan for Directors, as amended and restated effective January 1, 2005	10-Q	001-02958	10i	10/26/2007	
10.3 [†]	Hubbell Incorporated Deferred Compensation Plan for Directors, as amended and restated effective December 23, 2015	S-8POS	333-206898	4.4	12/24/2015	
10.4 [†]	Hubbell Incorporated Executive Deferred Compensation Plan, as amended and restated effective January 1, 2016	10-K	001-02958	10.5	2/18/2016	
10.4(a) [†]	Amendment 1, dated December 4, 2019, to Hubbell Incorporated Executive Deferred Compensation Plan, as amended and restated effective January 1, 2016					*
10.5 [†]	Hubbell Incorporated Amended and Restated Top Hat Restoration Plan, as amended and restated effective January 1, 2005	10-Q	001-02958	10w	10/26/2007	
10.5(a) [†]	Amendment, dated December 28, 2010, to Hubbell Incorporated Amended and Restated Top Hat Restoration Plan, as amended and restated effective January 1, 2005	10-K	001-02958	10w(1)	2/16/2011	
10.5(b) [†]	Second Amendment, dated January 17, 2017, to Hubbell Incorporated Amended and Restated Top Hat Restoration Plan, as amended and restated effective January 1, 2005	10-K	001-02958	10.5(b)	2/16/2017	
10.5(c) [†]	Third Amendment, dated December 4, 2019, to Hubbell Incorporated Amended and Restated Top Hat Restoration Plan, as amended and restated effective January 1, 2005					*
10.6 [†]	Hubbell Incorporated Incentive Compensation Plan, adopted effective January 1, 2002	10-K	001-02958	10z	3/20/2002	

Number	Description	Incorporated by Reference				Filed/ Furnished Herewith
		Form	File No.	Exhibit	Filing Date	
10.6(a) [†]	First Amendment, dated December 4, 2019, to Hubbell Incorporated Incentive Compensation Plan, adopted effective January 1, 2002					*
10.7 [†]	Hubbell Incorporated 2005 Incentive Award Plan, as amended and restated effective December 4, 2019					*
10.8 [†]	Form of Restricted Stock Award Agreement for Directors under the Hubbell Incorporated 2005 Incentive Award Plan, as amended and restated	10-Q	001-02958	10.8	7/19/2013	
10.9 [†]	Form of Stock Appreciation Rights Award Agreement under the Hubbell Incorporated 2005 Incentive Award Plan, as amended and restated	10-K	001-02958	10.10	2/16/2017	
10.10 [†]	Form of Performance Share Award Agreement under the Hubbell Incorporated 2005 Incentive Award Plan, as amended and restated	10-K	001-02958	10.11	2/16/2017	
10.11 [†]	Form of Performance Based Restricted Stock Award Agreement under the Hubbell Incorporated 2005 Incentive Award Plan, as amended and restated	10-K	001-02958	10.12	2/16/2017	
10.12 [†]	Form of Restricted Stock Award Agreement under the Hubbell Incorporated 2005 Incentive Award Plan, as amended and restated	10-K	001-02958	10.13	2/16/2017	
10.12(b) [†]	Second Amendment, dated December 4, 2019, to Hubbell Incorporated Defined Contribution Restoration Plan, as amended and restated effective December 8, 2015					*
10.13 [†]	Hubbell Incorporated Defined Contribution Restoration Plan, as amended and restated effective December 8, 2015	10-K	001-02958	10.16	2/18/2016	
10.13(a) [†]	First Amendment, dated January 17, 2017 and effective as of January 1, 2017, to Hubbell Incorporated Defined Contribution Restoration Plan, as amended and restated effective December 8, 2015	10-K	001-02958	10.14(a)	2/16/2017	
10.14 [†]	Hubbell Incorporated Policy for Providing Severance Payments to Senior Employees, as amended and restated effective December 4, 2019.					*
10.15 [†]	Grantor Trust for Senior Management Plans Trust Agreement between Hubbell Incorporated and The Bank of New York, as trustee, as amended and restated effective December 8, 2015	10-K	001-02958	10.18	2/18/2016	
10.16 [†]	Grantor Trust for Non-Employee Director Plans Trust Agreement between Hubbell Incorporated and The Bank of New York, as amended and restated effective December 8, 2015	10-K	001-02958	10.19	2/18/2016	
10.17 [†]	Trust Agreement by and between Hubbell Incorporated and MG Trust Company d/b/a Matrix Trust Company, as Trustee, as amended and restated effective November 6, 2015	10-K	001-02958	10.20	2/18/2016	
10.18 [†]	Change in Control Severance Agreement, dated as of December 31, 2010, between Hubbell Incorporated and David G. Nord	8-K	001-02958	10.2	1/5/2011	
10.18(a) [†]	Amendment, dated as of January 1, 2013, to Change in Control Severance Agreement between Hubbell Incorporated and David G. Nord	8-K	001-02958	10.1	12/6/2012	
10.19 [†]	Letter Agreement, dated August 24, 2005, between Hubbell Incorporated and David G. Nord	8-K	001-02958	99.1	9/6/2005	
10.20 [†]	Change in Control Severance Agreement, dated as of December 31, 2010, between Hubbell Incorporated and William R. Sperry	8-K	001-02958	10.1	9/17/2012	
10.20(a) [†]	Amendment, dated September 11, 2012, to Change in Control Severance Agreement between Hubbell Incorporated and William R. Sperry	8-K	001-02958	10.2	9/17/2012	

Number	Description	Incorporated by Reference				Filed/ Furnished Herewith
		Form	File No.	Exhibit	Filing Date	
10.21 [†]	Change in Control Severance Agreement, dated as of January 24, 2014, between Hubbell Incorporated and Gerben Bakker	10-K	001-02958	10.36	2/18/2014	
10.22 [†]	Employment Agreement, dated as of December 22, 2017, between Hubbell Power Systems, Inc. and Allan J. Connolly					*
10.22(a) [†]	1 st Amendment, dated July 1, 2019, to Employment Agreement dated as of December 22, 2017 between Hubbell Power Systems, Inc and Allan J. Connolly					*
10.23 [†]	Change in Control Severance Agreement, dated as of July 1, 2019, between Hubbell Incorporated and Katherine A. Lane					*
10.24	Term Loan Agreement, dated as of January 31, 2018, among Hubbell Incorporated, the Lenders party hereto and JP Morgan Chase Bank, N.A., as Administrative Agent.	8-K	001-02958	99.1	1/31/2018	
10.25	Credit Agreement dated as of January 31, 2018, among Hubbell Incorporated, Hubbell Power Holdings S.à r.l., Harvey Hubbell Holdings S.à r.l., the Lenders party hereto, the Issuing Banks party hereto and JP Morgan Chase Bank, N.A., as Administrative Agent.	8-K	001-02958	99.2	1/31/2018	
10.26	First Amendment, dated as of January 10, 2018, by and among Hubbell Incorporated, Hubbell Power Holdings S.à r.l., and Harvey Hubbell Holdings S.à r.l., the lenders party thereto, and JP Morgan Chase Bank, N.A., as Administrative Agent.	8-K	001-02958	10.1	1/11/2018	
21.1	List of subsidiaries					*
23.1	Consent of PricewaterhouseCoopers LLP					*
31.1	Certification of Chief Executive Officer pursuant to Exchange Act Rule 13a-14(a)/15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002					*
31.2	Certification of Chief Financial Officer pursuant to Exchange Act Rule 13a-14(a)/15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002					*
32.1	Certification of Chief Executive Officer Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002					**
32.2	Certification of Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002					**
101.INS	Inline XBRL Instance Document - The instance document does not appear in the interactive data file because its XBRL tags are embedded within the inline XBRL document					
101.SCH	Inline XBRL Taxonomy Extension Schema Document					*
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document					*
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document					*
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document					*
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document					*
104	The cover page of this Annual Report on Form 10-K for the year end December 31, 2019, formatted in Inline XBRL (included within the Exhibit 101 attachments)					*

[†] A management contract or compensatory plan or arrangement required to be filed as an exhibit pursuant to Item 15(a)(3) of Form 10-K.

^{††} Schedules and exhibits have been omitted pursuant to Item 601(b)(2) of Regulation S-K. The Company agrees to furnish supplemental copies of such omitted schedules and exhibits to the Securities and Exchange Commission upon request.

* Filed herewith.

** Furnished herewith.

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.

HUBBELL INCORPORATED

By /s/ JOSEPH A. CAPOZZOLI

Joseph A. Capozzoli
Vice President, Controller

By /s/ WILLIAM R. SPERRY

William R. Sperry
Executive Vice President, Chief Financial
Officer and Treasurer

Date: February 14, 2020

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.⁽¹⁾

	Title	Date
By <u>/s/ D. G. NORD</u> D. G. Nord	Chairman of the Board and Chief Executive Officer	2/14/2020
By <u>/s/ W. R. SPERRY</u> W. R. Sperry	Executive Vice President, Chief Financial Officer and Treasurer	2/14/2020
By <u>/s/ J. A. CAPOZZOLI</u> J. A. Capozzoli	Vice President, Controller (Principal Accounting Officer)	2/14/2020
By <u>/s/ C. M. CARDOSO</u> C. M. Cardoso	Director	2/14/2020
By <u>/s/ A. J. GUZZI</u> A. J. Guzzi	Director	2/14/2020
By <u>/s/ N. J. KEATING</u> N. J. Keating	Director	2/14/2020
By <u>/s/ B. C. LIND</u> B. C. Lind	Director	2/14/2020
By <u>/s/ J. F. MALLOY</u> J. F. Malloy	Director	2/14/2020
By <u>/s/ J. F. MARKS</u> J. F. Marks	Director	2/14/2020
By <u>/s/ J. G. RUSSELL</u> J. G. Russell	Director	2/14/2020
By <u>/s/ S. R. SHAWLEY</u> S. R. Shawley	Director	2/14/2020

(1) As of February 14, 2020.

Valuation and Qualifying Accounts and Reserves for the Years Ended December 31, 2017, 2018 and 2019

Reserves deducted in the balance sheet from the assets to which they apply (in millions):

	Balance at Beginning of Year	Additions / (Reversals) Charged to Costs and Expenses	Deductions	Acquisitions	Balance at End of Year
Allowances for doubtful accounts receivable:					
Year 2017	\$ 4.7	\$ 1.5	\$ (3.5)	\$ 1.9	\$ 4.6
Year 2018	\$ 4.6	\$ —	\$ (1.4)	\$ 1.6	\$ 4.8
Year 2019	\$ 4.8	\$ 3.4	\$ (0.5)	\$ —	\$ 7.7
Allowance for credit memos, returns and cash discounts:					
Year 2017	\$ 45.9	\$ 260.8	\$ (256.3)	\$ 0.1	\$ 50.5
Year 2018	\$ 50.5	\$ 278.0	\$ (293.5)	\$ 0.1	\$ 35.1
Year 2019	\$ 35.1	\$ 299.1	\$ (298.2)	\$ —	\$ 36.0
Valuation allowance on deferred tax assets:					
Year 2017	\$ 22.6	\$ (3.2)	\$ —	\$ —	\$ 19.4
Year 2018	\$ 19.4	\$ 0.7	\$ —	\$ 1.7	\$ 21.8
Year 2019	\$ 21.8	\$ 7.2	\$ —	\$ —	\$ 29.0

EXHIBIT 31.1

I, David G. Nord, certify that:

1. I have reviewed this annual report on Form 10-K of Hubbell Incorporated (the “registrant”);
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 the 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.

/s/ DAVID G. NORD

David G. Nord

Chairman of the Board and Chief Executive Officer

Date: February 14, 2020

EXHIBIT 31.2

I, William R. Sperry, certify that:

1. I have reviewed this annual report on Form 10-K of Hubbell Incorporated (the “registrant”);
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 the 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.

/s/ WILLIAM R. SPERRY

William R. Sperry

Executive Vice President, Chief Financial Officer and Treasurer

Date: February 14, 2020

EXHIBIT 32.1 Certification 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 of Hubbell Incorporated (the “Company”) on Form 10-K for the period ended December 31, 2019 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, David G. Nord, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ DAVID G. NORD

David G. Nord

Chairman of the Board and Chief Executive Officer

February 14, 2020

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

EXHIBIT 32.2 Certification 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 of Hubbell Incorporated (the “Company”) on Form 10-K for the period ended December 31, 2019 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, William R. Sperry, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ WILLIAM R. SPERRY

William R. Sperry

Executive Vice President, Chief Financial Officer and Treasurer

February 14, 2020

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

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