2016

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

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

For the fiscal year ended December 31, 2016

OR

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

For the transition period from ______ to______

Commission file number 1-4119

NUCOR CORPORATION

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)	**13-1860817** (I.R.S. Employer Identification No.)
1915 Rexford Road, Charlotte, North Carolina (Address of principal executive offices)	**28211** (Zip Code)

Registrant's telephone number, including area code: (704) 366-7000

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

Title of each class	Name of each exchange on which registered
Common stock, par value $0.40 per share	**New York Stock Exchange**

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

None

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

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

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

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

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

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

Large accelerated filer ☒	Accelerated filer ☐	Non-accelerated filer ☐	Smaller reporting company ☐

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

Aggregate market value of common stock held by non-affiliates was approximately $15.83 billion based upon the closing sales price of the registrant's common stock on the last business day of the registrant's most recently completed second fiscal quarter, July 2, 2016.

318,848,316 shares of the registrant's common stock were outstanding at February 21, 2017.

Documents incorporated by reference include: Portions of the registrant's 2016 Annual Report (Parts I, II and IV), and portions of the registrant's definitive Proxy Statement for its 2017 Annual Meeting of Stockholders (Part III) to be filed within 120 days after the registrant's fiscal year end.

Nucor Corporation
Annual Report on Form 10-K
For the Fiscal Year Ended December 31, 2016

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PART I

Item 1. Business

Overview

Nucor Corporation and its affiliates ("Nucor," the "Company" or "we") manufacture steel and steel products. The Company also produces direct reduced iron ("DRI") for use in the Company's steel mills. Through The David J. Joseph Company and its affiliates ("DJJ"), the Company also processes ferrous and nonferrous metals and brokers ferrous and nonferrous metals, pig iron, hot briquetted iron ("HBI") and DRI. Most of the Company's operating facilities and customers are located in North America, but Nucor does business outside of North America as well. The Company's operations include several international trading companies that buy and sell steel and steel products manufactured by the Company and others.

Nucor is North America's largest recycler, using scrap steel as the primary raw material in producing steel and steel products. In 2016, we recycled approximately 17.6 million tons of scrap steel.

General Development of our Business in Recent Years

Nucor has invested significant capital in recent years to expand our product portfolio to include more value-added steel mill products, improve our cost structure, enhance our operational flexibility and provide additional channels to market for our products. Our investments total almost $6 billion over the last five years, with approximately two-thirds going to capital expenditures and one-third going to acquisitions. We believe that our focus on lowering cost will enable us to execute on our strategy of delivering profitable growth. Shifting our product mix to a greater portion of value-added products and increasing end-user market diversity will make us less susceptible to imports.

The following projects at facilities within our steel mills segment illustrate Nucor's execution on the value-added product expansion and cost improvement aspects of our strategy. At our Hertford County, North Carolina plate mill, a series of expansions, including a heat treat line, a normalizing line and a vacuum tank degasser, were completed in 2013. Those projects have positioned the mill to increase its diversity of product offerings to be less exposed to imports and have allowed us to improve the product mix allocation between our plate mills and sheet mills to improve margins at those facilities. The final components of Nucor's $290 million project at our South Carolina, Nebraska and Tennessee bar mills to expand our special bar quality ("SBQ") and wire rod production capabilities by approximately one million tons were completed in 2015. These SBQ projects are an important component of our strategy because they allow us to produce engineered bar for more demanding applications that are less exposed to imports while maintaining our position as a low-cost commodity bar producer by shifting production to our other bar mills. In 2014, our Berkeley County, South Carolina mill successfully started up its nearly $100 million capital project that allows us to produce wider and thinner high-strength steel grades that can be used in a wide range of end use markets, including metal buildings, rail cars, water heaters, automotive, heavy equipment and motor lamination. Additionally, our Nucor-Yamato Steel Company ("Nucor-Yamato") joint venture has recently completed two major capital projects to broaden its product offerings. Nucor-Yamato completed a $115 million project in late 2014 to add several additional sheet piling sections, which expanded our product offerings to include wider piling sections that are lighter and stronger, covering more area at a lower installed cost. The joint venture also recently began shipping structural steel from its $75 million quench and self-tempering line, which will make that mill the sole North American producer of certain high-strength, low-alloy structural sections. In September 2016, Nucor announced that it will add an additional cold mill at its Nucor Steel Arkansas facility for an estimated $230 million that will expand our ability to produce advanced high-strength, high-strength low-alloy and motor lamination steel products. We expect that the new cold mill complex will be operational in approximately two years.

Nucor's steel mills segment has also grown significantly in recent years through the acquisitions of Gallatin Steel Company ("Gallatin"), a plate mill in Longview, Texas ("Longview") and Independence Tube Corporation

("Independence Tube"), as well as Southland Tube ("Southland") and Republic Conduit ("Republic") in early 2017. Nucor acquired Gallatin in 2014 for a cash purchase price of $779 million. Located on the Ohio River in Ghent, Kentucky, Gallatin has an annual sheet steel production capacity of approximately 1,600,000 tons and provides us with expanded access to the important midwestern United States steel market. Acquired during the third quarter of 2016 for approximately $29 million, Longview is able to produce 125,000 tons annually of higher value-added carbon and alloy plate products that can range from 1 to 12 inches thick and up to 138 inches wide. Nucor completed the acquisition of Independence Tube during the fourth quarter of 2016 for approximately $430 million, and we completed the acquisition of Southland for approximately $130 million in January 2017. From their five facilities in Alabama and Illinois, Independence Tube and Southland are able to produce over 800,000 tons annually of hollow structural section (HSS) tubing used primarily in nonresidential construction markets. Nucor also completed the acquisition of Republic, a steel electrical conduit manufacturer with plants in Georgia and Kentucky, in January 2017 for approximately $335 million. These three pipe and tube businesses provide Nucor with a new line of value-added products to offer our customers, and they provide a value-added channel to market as the businesses are consumers of Nucor's hot-rolled sheet steel.

In addition to growing through capital expansions at existing operations and acquisitions, Nucor also uses joint ventures as a platform for growth. We recently announced the formation of a joint venture with JFE Steel Corporation of Japan in which Nucor would have 50% ownership in a plant that will be built in central Mexico to supply galvanized sheet steel to the growing Mexican automotive market. The plant, which is expected to be operational in 2019, will cost approximately $270 million and will have an annual capacity of 400,000 tons. Nucor's sheet mills will provide approximately half of the hot-rolled steel substrate that will be consumed by the joint venture.

A major emphasis of our cost improvement and operational flexibility plan relates to having more control over both the cost and reliable sourcing of our raw materials. Our 2,500,000 metric tons-per-year DRI facility in St. James Parish, Louisiana began production in December 2013. The combination of our Louisiana facility and our DRI plant in Trinidad with an annual capacity of 2,000,000 metric tons gives us the flexibility to optimize Nucor's overall iron units mix based on current market pricing for scrap and scrap substitutes to provide us with a low cost feedstock for our steel mills.

The DRI production process requires significant volumes of natural gas. On October 1, 2016, Nucor concluded several transactions to preserve its access to a long-term supply of low cost natural gas resources while maintaining capital flexibility. Nucor purchased 49% of Encana Oil & Gas (USA) Inc.'s ("Encana") leasehold interest covering approximately 54,000 acres in the South Piceance Basin, terminated two Carry & Earning ("C&E") drilling agreements, and sold its 50% interest in Hunter Ridge Energy Services LLC ("Hunter Ridge"). In the new arrangement, the determination of whether or not to participate and invest in all future drilling capital investment by one working interest owner is independent of other working interest owners. Nucor retains its interest in all existing producing wells that it currently owns.

Segments

Nucor reports its results in three segments: steel mills, steel products and raw materials. Net sales to external customers, intercompany sales, depreciation expense, amortization expense, earnings before income taxes and noncontrolling interests, assets and capital expenditures by segment for each of the three fiscal years in the three-year period ended December 31, 2016 are set forth in Note 22 of the Notes to Consolidated Financial Statements included in Nucor's 2016 Annual Report, which is incorporated by reference. The steel mills segment is Nucor's largest segment, representing approximately 70% of the Company's sales to external customers in the fiscal year ended December 31, 2016.

Principal Products Produced

In the steel mills segment, Nucor produces and distributes sheet steel (hot-rolled, cold-rolled and galvanized), tubular products, plate steel, structural steel (wide-flange beams, beam blanks, H-piling and sheet piling) and bar steel (blooms, billets, concrete reinforcing bar, merchant bar, wire rod and SBQ). Nucor manufactures steel principally from scrap steel and scrap steel substitutes using electric arc furnaces, continuous casting and automated rolling mills. Nucor's equity method investments in Duferdofin Nucor S.r.l. and NuMit LLC are included in the steel mills segment. Also included in the steel mills segment are our distribution and international trading companies that buy and sell steel and steel products that Nucor and other steel producers have manufactured. In the steel products segment, Nucor produces steel joists and joist girders, steel deck, fabricated concrete reinforcing steel, cold finished steel, steel fasteners, metal building systems, steel grating, and wire and wire mesh. In the raw materials segment, the Company produces DRI; brokers ferrous and nonferrous metals, pig iron, HBI and DRI; supplies ferro-alloys; and processes ferrous and nonferrous scrap metal. The raw materials segment also includes our natural gas drilling operations.

Markets and Marketing

The steel mills segment sells its products primarily to steel service centers, fabricators and manufacturers located throughout the United States, Canada, Mexico and elsewhere in the world. Nucor produces hot-rolled, cold-rolled and galvanized sheet steel to customers' specifications while maintaining inventories to fulfill anticipated orders. We estimate that approximately 60% of our sheet steel sales in 2016 were to contract customers. The balance of our sheet steel sales was made in the spot market at prevailing prices at the time of sale. The proportion of tons sold to contract customers at any given time depends on a variety of factors, including our consideration of current and future market conditions, our strategy to appropriately balance spot and contract tons in a manner to meet our customers' requirements while considering the expected profitability, our desire to sustain a diversified customer base, and our end-use customers' perceptions about future market conditions. These sheet sales contracts permit price adjustments to reflect changes in the current market-based indices and/or raw material costs near the time of shipment. These sheet sales contracts typically have terms ranging from six to twelve months. Steel contract sales outside of our sheet operations are not significant.

Our tubular, plate, structural, reinforcing and merchant bar steel come in standard sizes and grades, which allows us to maintain inventory levels of these products to meet our customers' expected orders. In addition, our bar mill group manufactures hot-rolled SBQ products to exacting specifications primarily servicing the automotive, energy, agricultural, heavy equipment and transportation sectors. Almost all of our tubular, plate, structural, rebar, merchant bar and SBQ steel sales occur in the spot market at prevailing market prices.

In 2016, approximately 86% of the shipments made by our steel mills segment were to external customers. The remaining 14% of the steel mills segment's shipments went to our tubular product maker, our piling distributor and our downstream joist, deck, rebar fabrication, fastener, metal buildings and cold finish operations. One of Nucor's strategies for growth is expanding the channels by which our steel mills' products can reach end-user customers. We have a goal of increasing our volume sold to internal customers to 20%.

In the steel products segment, we sell steel joists and joist girders, and steel deck to general contractors and fabricators located throughout the United States and Canada. We make these products to the customers' specifications and do not maintain inventories of these finished steel products. The majority of these contracts are firm, fixed-price contracts that are in most cases competitively bid against other suppliers. Longer-term supply contracts may or may not permit us to adjust our prices to reflect changes in prevailing raw materials costs. We sell and install fabricated reinforcing products primarily on a construction contract bid basis. These products are used by contractors in constructing highways, bridges, reservoirs, utilities, hospitals, schools, airports, stadiums and high-rise buildings. We manufacture cold finished steel, steel fasteners, steel grating, wire and wire mesh in standard sizes and maintain inventories of these products to fulfill anticipated orders. We sell cold finished steel and steel fasteners primarily to distributors and manufacturers located throughout the United States and Canada.

We market products from the steel mills and steel products segments mainly through in-house sales forces. We also utilize our internal distribution and trading companies to market our products abroad. The markets for these products are largely tied to capital and durable goods spending and are affected by changes in general economic conditions.

In the raw materials segment, we process ferrous and nonferrous scrap metal for use in our steel mills and for sale to various domestic and international external customers. We also broker ferrous and nonferrous metals and scrap substitutes, supply ferro-alloys, and provide transportation, material handling and other services to users of scrap metals. Our primary external customers for ferrous scrap are electric arc furnace steel mills and foundries that use ferrous scrap as a raw material in their manufacturing process. External customers purchasing nonferrous scrap metal include aluminum can producers, secondary aluminum smelters, steel mills and other processors and consumers of various nonferrous metals. We market scrap metal products and related services to our external customers through in-house sales forces. In 2016, approximately 10% of the ferrous and nonferrous metals and scrap substitutes tons we processed were sold to external customers. We used the balance in our steel mills.

Also within the raw materials segment are our DRI plants in Trinidad and Louisiana that produce iron inputs exclusively for use in the Nucor mills, as well as our natural gas production operations. All natural gas produced by the drilling operations is and will be sold to outside parties.

Competition

We compete in a variety of steel and metal markets, including markets for finished steel products, unfinished steel products and raw materials. These markets are highly competitive with many domestic and foreign firms participating, and, as a result of this highly competitive environment, we find that we primarily compete on price and service.

Our electric arc furnace steel mills face many different forms of competition, including integrated steel producers (who use iron ore converted into liquid form in a blast furnace as their basic raw material instead of scrap steel), other electric arc furnace steel mills, foreign imports and alternative materials. Large integrated steel producers have the ability to manufacture a wide variety of products but face significantly higher energy costs and are often burdened with higher capital and fixed operating costs. Electric arc furnace steel mill producers such as Nucor are sensitive to increases in scrap prices but tend to have lower capital and fixed operating costs compared with integrated steel producers.

Excess global steelmaking capacity, particularly in non-market economies, continues to be a significant challenge for Nucor and the entire U.S. steel industry. With the U.S. economy performing better than most other economies around the world and a strong U.S. dollar, the U.S. steel market is the destination of choice for global steel producers. Steel imports were down 15% in 2016 compared to 2015. Finished imports last year captured 26% market share. The effects of successful trade cases involving flat-rolled products were an important step in returning fair trade to the U.S. flat-rolled steel market, but challenges still remain in several product areas.

Competition from foreign steel and steel product producers presents unique challenges for us. Imported steel and steel products often benefit from government subsidies, either directly or indirectly through government-owned enterprises or government-owned or controlled financial institutions. China, which accounts for almost half of the steel produced annually in the world, is the prime example of how some foreign governments impact the global steel market. Nucor believes that Chinese producers, many of which are government-owned in whole or in part, benefit from their government's manipulation of foreign currency exchange rates and from the receipt of government subsidies, which allow them to sell their products below cost. Other foreign governments utilize similar tactics to artificially lower their steel production costs. These distorting trade practices are widely recognized as being unfair and have been challenged successfully as violating world trade rules. In 2016, the U.S. steel industry received positive determinations in trade cases involving three flat-rolled products—corrosion-resistant, cold-rolled and hot-rolled steel. The U.S. Department of Commerce recently announced preliminary duty determinations in investigations addressing cut-to-length plate from twelve countries. The U.S. Department of Commerce also announced the initiation of antidumping duty investigations of imports of steel concrete reinforcing bar from Japan, Taiwan, and Turkey, and a countervailing duty (CVD) investigation of steel concrete reinforcing bar imports from Turkey. We expect the plate and rebar cases to conclude in 2017.

Efforts by foreign companies to evade duties by routing products through third-party countries is also a challenge. Artificially-priced imports and duty evasion schemes make it very difficult for Nucor to maintain sales prices and profit levels. As a result, Nucor joined three other steelmakers in filing a petition alleging China is circumventing coated steel sheet duties by shipping product through Vietnam.

The U.S. government announced it will continue to treat China as a non-market economy, despite China's insistence that it should be recognized as a market economy under its Protocol of Accession to the World Trade Organization ("Protocol"). China was a government-run, non-market economy in 2001 when it entered its Protocol, and China remains a government-run, non-market economy today. The main objective of the Protocol was to encourage, and in some cases to require, China to make market-based economic reforms. However, over the past 15 years, China has failed to take the required steps to establish that it is a market economy under U.S. law. Therefore, the United States had no reason to change its treatment of China as a non-market economy when one of the relevant provisions of the Protocol expired in December 2016. By treating China as a non-market economy in antidumping cases, the U.S. Department of Commerce can assume that Chinese prices and costs are distorted, and may use other methodologies to calculate antidumping duties. This often results in appropriately higher duties against Chinese products in order to offset its unfair trade practices. China has filed a challenge to the U.S. decision with the World Trade Organization.

Aggressive trade practices, left unchallenged, seriously undermine the ability of Nucor and other domestic producers to compete on price. Competition from countries with subsidized production costs has significantly contributed to the exodus of manufacturing jobs from the United States. When such an exodus occurs, the U.S. economy is weakened and Nucor's customer base is diminished. Rigorous trade law enforcement is critical to our ability to maintain our competitive position against foreign producers that engage in unlawful trade practices. Nucor has been active in calling on policymakers to enforce global trade agreements.

We also experience competition from other materials. Depending on our customers' end use of our products, there are sometimes other materials, such as concrete, aluminum, plastics, composites and wood that compete with our steel products. When the price of steel relative to other raw materials rises, these alternatives become more attractive to our customers.

Competition in our scrap and raw materials business is also vigorous. The scrap metals market consists of many firms and is highly fragmented. Firms typically compete on price and geographic proximity to the sources of scrap metal.

Backlog

In the steel mills segment, Nucor's backlog of orders was approximately $1.52 billion and $1.17 billion at December 31, 2016 and 2015, respectively. Order backlog for the steel mills segment includes only orders from external customers and excludes orders from our downstream businesses. Nucor's backlog of orders in the steel products segment was approximately $1.40 billion and $1.35 billion at December 31, 2016 and 2015, respectively. The majority of these orders will be filled within one year. Order backlog within our raw materials segment is not significant because the majority of the raw materials that segment produces are used internally.

Sources and Availability of Raw Materials

For the past decade, Nucor has focused on securing access to low-cost raw material inputs as they are the Company's largest expense. Nucor's broad, balanced supply chain is an important strength which allows us to reduce the cost of our steelmaking operations, create a shorter supply chain and have greater optionality over our metallics inputs. Our investment in DRI production facilities and scrap yards, as well as our access to international raw materials markets, provides Nucor with significant flexibility in optimizing our raw materials costs. Additionally, having a significant portion of our raw materials supply under our control minimizes risk associated with the global sourcing of raw materials, particularly since a good deal of scrap substitutes comes from regions of the world that have historically experienced greater political turmoil. Continued successful implementation of our raw material strategy, including key investments in DRI production, coupled with the scrap brokerage and processing services performed by our team at DJJ, give us greater control over our metallic inputs and thus help us mitigate the risk of significant price fluctuations in input costs.

The primary raw materials for our steel mills segment are ferrous scrap and scrap substitutes such as pig iron, DRI and HBI. On average, it takes approximately 1.1 tons of scrap and scrap substitutes to produce a ton of steel. DJJ operates six regional scrap companies within the United States that have the combined annual scrap processing capability of over five million tons. DJJ acquires ferrous scrap from numerous sources including manufacturers of products made from steel, industrial plants, scrap dealers, peddlers, auto wreckers and demolition firms. We purchase pig iron as needed from a variety of sources and operate DRI plants in Trinidad and Louisiana with respective capacities of 2,000,000 and 2,500,000 metric tons annually. The primary raw material for our DRI facilities is iron ore, which we purchase from various international suppliers.

In October 2016, Nucor concluded several transactions to improve its access to a long-term supply of natural gas. Nucor purchased 49% of Encana's leasehold interest covering approximately 54,000 acres in the South Piceance Basin. Further, Nucor and Encana also terminated the two C&E drilling agreements entered into in 2010 and 2012, and Nucor sold its 50% equity interest in Hunter Ridge to Encana. Hunter Ridge is a gas gathering and water service provider formed by Nucor and Encana in 2012 to support the joint well development in the North Piceance Basin. In the new arrangement, the determination of whether or not to participate and invest in all future drilling capital investment by one working interest owner is independent of the other working interest owners. As such, Nucor has full discretion on its participation in all future drilling capital investments. By canceling the C&E drilling agreements, Nucor has eliminated all future carry capital and all contingent liabilities associated with those contracts, which should result in lower unit cost for any future drilling. Nucor retains all existing producing wells it currently owns. To support Nucor's operating wells and potential future well developments on the 54,000 acres, Nucor has entered into long-term agreements directly with existing third party gathering and processing service providers.

The primary raw material for our steel products segment is steel produced by Nucor's steel mills.

DJJ generally purchases ferrous and nonferrous scrap for sale to external customers from the same variety of sources it purchases ferrous scrap for use as a raw material in Nucor's steel mills. DJJ does not purchase a significant amount of scrap metal from a single source or from a limited number of major sources. The availability and price of ferrous scrap and other metallic inputs such as iron ore are affected by changes in the global supply and demand for steel and steel products.

Energy Consumption and Costs

Our steel mills are large consumers of electricity and natural gas. Our DRI facilities in Trinidad and Louisiana are also large consumers of natural gas. Consequently, we use a variety of strategies to manage our exposure to price risk of natural gas, including cash flow hedges and our natural gas drilling operations.

Historically, manufacturers in the United States have benefited from relatively stable and competitive energy costs that have allowed them to compete on an equal footing in the increasingly global marketplace. The availability and prices of electricity and natural gas are influenced today, however, by many factors including changes in supply and demand, advances in drilling technology and, increasingly, changes in public policy relating to energy production and use. Because energy is such a significant cost for Nucor, we strive continually to make our operations in all three of our business segments more energy efficient. We also closely monitor developments in public policy relating to energy production and consumption. When appropriate, we work to shape those developments in ways that we believe will allow us to continue to be a competitive producer of steel and steel products in an increasingly competitive global marketplace.

Environmental Laws and Regulations

Our business operations are subject to numerous federal, state and local laws and regulations intended to protect the environment. The principal federal environmental laws include the Clean Air Act that regulates air emissions; the Clean Water Act ("CWA") that regulates water discharges; the Resource Conservation and Recovery Act ("RCRA") that addresses solid and hazardous waste treatment, storage and disposal; and the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA") that governs releases of, and remediation of, sites contaminated by hazardous substances. Our operations are also subject to state laws and regulations that are patterned on these and other federal laws.

We believe that we are in substantial compliance with the provisions of all federal and state environmental laws and regulations applicable to our business operations.

The U.S. Environmental Protection Agency ("USEPA") issued a final rule regarding the Clean Power Plan ("CPP"). While the CPP is directed at electric generating units, as opposed to steelmaking operations, Nucor expects indirect impact through increased electric costs. There are ongoing legal challenges to the CPP which will likely delay any potential adverse impacts to Nucor. Additionally, the current administration has given strong signals that their intention is to repeal this regulation. If this regulation moves forward, we expect the impacts will be spread over a significant timeframe, mitigating these impacts on Nucor's operations.

Nucor uses electric arc furnaces ("EAF") to recycle scrap metal into new steel products. These EAFs use electricity as their primary source of energy. As the new administration revisits any number of recently implemented environmental regulations, such as greenhouse gas ("GHG") regulations, air toxics rules, and emissions standards imposed on coal-fired electric utilities, it is reasonable to assume that any cost implications would be delayed until those reviews are complete.

The CWA regulates water discharges and withdrawals. Nucor maintains discharge and withdrawal permits as appropriate at its facilities under the national pollutant discharge elimination system program of the CWA and conducts its operations in compliance with those permits. Nucor also maintains permits from local governments for the discharge of water into publicly owned treatment works where available.

RCRA establishes standards for the management of solid and hazardous wastes. RCRA also addresses the environmental impact of contamination from waste disposal activities and from recycling of and storage of most wastes. While Nucor believes it is in substantial compliance with these regulations, past waste disposal activities that were legal when conducted but now may pose a contamination threat are periodically discovered. These activities and off-site properties that USEPA has determined are contaminated, for which Nucor may be potentially responsible at some level, are quickly evaluated and corrected. While Nucor has conducted and is in the final stages of completing some cleanups under RCRA, these liabilities either are identified already and being resolved or have been fully resolved.

Because Nucor long ago implemented environmental practices that have resulted in the responsible disposal of waste materials, Nucor is also not presently considered a major contributor to any major cleanups under CERCLA for which Nucor has been named a potentially responsible party. Nucor continually evaluates these types of potential liabilities and, if appropriate, maintains reserves sufficient to remediate the identified liabilities. Under RCRA, private citizens may also bring an action against the operator of a regulated facility for potential damages and payment of cleanup costs. Nucor is confident that its system of internal evaluation and due diligence has sufficiently identified these types of potential liabilities so that compliance with these regulations will not have a material adverse effect on our results of operations, cash flows or financial condition beyond that already reflected in the reserves established for them.

The primary raw material of Nucor's steelmaking operations is scrap metal. The process of recycling scrap metal brings with it many contaminants such as paint, zinc, chrome and other metals that produce air emissions which are captured in specialized emission control equipment. This filtrant (EAF dust) is classified as a listed hazardous waste under the RCRA. Because these contaminants contain valuable metals, this filtrant is recycled to recover those metals. Nucor sends all but a small fraction of the EAF dust it produces to recycling facilities that recover the zinc, lead, chrome and other valuable metals from this dust. By recycling this material, Nucor is not only acting in a sustainable, responsible manner but is also substantially limiting its potential for future liability under both CERCLA and RCRA.

Nucor operates an aggressive and sustainable environmental program that incorporates the concept of individual employee as well as management responsibility for environmental performance. All of Nucor's steelmaking operations are ISO 14001 certified. Achieving ISO 14001 certification means that each of Nucor's steel mills has put an environmental management system in place with measurable targets and objectives, such as reducing the use of oil and grease and minimizing electricity use, and has implemented site-wide recycling programs. Many of our facilities have incorporated energy efficiency targets to reduce both cost and environmental impacts into their environmental management systems. These environmental management systems help facilitate compliance with our environmental commitment, which is every Nucor teammate's responsibility. Nucor's environmental program maintains a high level of ongoing training, commitment, outreach and visibility.

Capital expenditures at our facilities that are associated with environmental regulation compliance for 2017 and 2018 are estimated to be less than $100 million per year.

Employees

Nucor has a simple, streamlined organizational structure to allow our employees to make quick decisions and to innovate. Our organization is highly decentralized, with most day-to-day operating decisions made by our division general managers and their staff. We have slightly more than 100 employees in our executive office. The vast majority of Nucor's approximately 23,900 employees as of December 31, 2016 are not represented by labor unions.

Available Information

Nucor's annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and any amendments to these reports, are available on our website at www.nucor.com, as soon as reasonably practicable after Nucor files these reports electronically with, or furnishes them to, the Securities and Exchange Commission ("SEC"). Except as otherwise stated in these reports, the information contained on our website or available by hyperlink from our website is not incorporated into this report or other documents we file with, or furnish to, the SEC.

Item 1A. Risk Factors

Many of the factors that affect our business and operations involve risk and uncertainty. The factors described below are some of the risks that could materially negatively affect our business, financial condition and results of operations.

Overcapacity in the global steel industry could increase the level of steel imports, which may negatively affect our business, results of operations, financial condition and cash flows.

The current global steelmaking capacity exceeds the current global consumption of steel. During periods of global economic weakness this overcapacity is amplified because of weaker global demand. This excess capacity often results in manufacturers in certain countries exporting significant amounts of steel and steel products at prices that are at or below their costs of production. In some countries the steel industry is subsidized or owned in whole or in part by the government, giving imported steel from those countries certain cost advantages. These imports, which are also affected by demand in the domestic market, international currency conversion rates and domestic and international government actions, can result in downward pressure on steel prices, which could materially adversely affect our business, results of operations, financial condition and cash flows. Overcapacity has also led to greater protectionism as is evident in raw material and finished product border tariffs put in place by China, Brazil and other countries.

According to the American Iron and Steel Institute, global steel overcapacity is estimated at approximately 770 million tons per year, with China's overcapacity being the largest piece at approximately 470 million tons. This overcapacity and the slowdown in demand in China have resulted in a further increase in imports of artificially low-priced steel and steel products to the United States and world steel markets. Steel and steel products which would otherwise have been consumed by the local steel customers could then be displaced into global markets, putting our steel and steel products at a competitive disadvantage. A continuation of this unbalanced growth trend or a significant decrease in China's rate of economic expansion could result in increasing steel exports from China.

Producers in the world steel market could pursue additional export opportunities as a result of the current abundance of ocean freight capacity. Furthermore, the domestic steel market could experience a contraction in exports at the same time as imports grow due to weakening conditions in Europe and policies of foreign governments that result in overvaluing the U.S. dollar against other foreign currencies. Furthermore, the addition of new capacity in the United States could exacerbate the issue of overcapacity domestically as well as globally.

Our industry is cyclical and both recessions and prolonged periods of slow economic growth could have an adverse effect on our business.

Demand for most of our products is cyclical in nature and sensitive to general economic conditions. Our business supports cyclical industries such as the commercial construction, energy, metals service centers, appliance and automotive industries. As a result, downturns in the U.S. economy or any of these industries could materially adversely affect our results of operations, financial condition and cash flows. While the United States has recently experienced modest growth in the general economy and steel demand in this country is stronger than in many parts of the world, the global and domestic steel industries continue to face significant challenges. These challenges are caused by global overcapacity in the steel industry and ongoing uncertainties in other regions of the world. These situations can contribute to weaker end-markets and depressed demand for domestically produced steel and steel products, potentially resulting in extraordinary volatility in our financial results.

The economic outlook for our industry remains uncertain both in the United States and globally. While we believe that the long-term prospects for the steel industry remain bright, we are unable to predict the duration of the current economic conditions that are contributing to reduced demand for domestically produced steel and steel products well below the 2007 pre-recession levels. Future economic downturns or a prolonged slow-growth or stagnant economy could materially adversely affect our business, results of operations, financial condition and cash flows.

Competition from other producers, imports or alternative materials may adversely affect our business.

We face strong competition from other steel producers and imports that compete with our products on price and service. The steel markets are highly competitive and a number of firms, domestic and foreign, participate in the steel and raw materials markets. Depending on a variety of factors, including raw materials cost and availability, energy, technology, labor and capital costs, government control of currency exchange rates and government subsidies of foreign steel producers, our business may be materially adversely affected by competitive forces.

In many applications, steel competes with other materials, such as concrete, aluminum, composites, plastic and wood. Increased use of these materials in substitution for steel products could have a material adverse effect on prices and demand for our steel products.

Since 2011, automobile producers have begun taking steps towards complying with new Corporate Average Fuel Economy mileage requirements for new cars and light trucks that they produce. As automobile producers work to produce vehicles in compliance with these new standards, they may reduce the amount of steel or begin utilizing alternative materials in cars and trucks to improve fuel economy, thereby reducing demand for steel and resulting in further over-supply of steel in North America. Certain automakers have begun to use greater amounts of aluminum and smaller proportions of steel in some models since 2015.

The results of our operations are sensitive to volatility in steel prices and the cost of raw materials, particularly scrap steel.

We rely to an extent on outside vendors to supply us with raw materials, including both scrap and scrap substitutes that are critical to the manufacture of our products. Although we have vertically integrated our business by constructing our DRI facilities in Trinidad and Louisiana and also acquiring DJJ, we still must purchase most of our primary raw material, steel scrap, from numerous other sources located throughout the United States. Although we believe that the supply of scrap and scrap substitutes is adequate to operate our facilities, prices of these critical raw materials are volatile and are influenced by changes in scrap exports in response to changes in the scrap, scrap substitutes and iron ore demands of our global competitors. At any given time, we may be unable to obtain an adequate supply of these critical raw materials with price and other terms acceptable to us. The availability and prices of raw materials may also be negatively affected by new laws and regulations, allocation by suppliers, interruptions in production, accidents or natural disasters, changes in exchange rates, worldwide price fluctuations, and the availability and cost of transportation. Many countries that export steel into our markets restrict the export of scrap, protecting the supply chain of some foreign competitors. This trade practice creates an artificial competitive advantage for foreign producers that could limit our ability to compete in the U.S. market.

If our suppliers increase the prices of our critical raw materials, we may not have alternative sources of supply. In addition, to the extent that we have quoted prices to our customers and accepted customer orders for our products prior to purchasing necessary raw materials, we may be unable to raise the price of our products to cover all or part of the increased cost of the raw materials. Also, if we are unable to obtain adequate and timely deliveries of our required raw materials, we may be unable to timely manufacture sufficient quantities of our products. This could cause us to lose sales, incur additional costs and suffer harm to our reputation.

Changes in the availability and cost of electricity and natural gas are subject to volatile market conditions that could adversely affect our business.

Our steel mills are large consumers of electricity and natural gas. In addition, our DRI facilities are also large consumers of natural gas. We rely upon third parties for our supply of energy resources consumed in the manufacture of our products. The prices for and availability of electricity and natural gas are subject to volatile market conditions. These market conditions often are affected by weather, political and economic factors beyond our control, and we may be unable to raise the price of our products to cover increased energy costs. Disruptions in the supply of our energy resources could temporarily impair our ability to manufacture our products for our customers. Increases in our energy costs resulting from regulations that are not equally applicable across the entire global steel market could materially adversely affect our business, results of operations, financial condition and cash flows.

Our steelmaking processes, DRI processes, and the manufacturing processes of many of our suppliers, customers and competitors are energy intensive and generate carbon dioxide and other GHGs. The regulation of these GHGs through new regulations or legislation in an onerous form could have a material adverse impact on our results of operations, financial condition and cash flows.

Carbon is an essential raw material in Nucor's production processes. As a carbon steel producer, Nucor could be increasingly affected both directly and indirectly if more stringent GHG regulations are further implemented. Because our operations are subject to most of these new GHG regulations, we are already impacted in the permit modification and reporting processes. Both GHG regulations and recently promulgated National Air Ambient Quality Standards (“NAAQS”), which are more restrictive than previous standards, make it significantly more difficult to obtain new permits and to modify existing permits.

These same regulations have indirectly increased the costs to manufacture our products as they have and continue to increase the cost of energy, primarily electricity, which we use extensively in the steelmaking process. The discovery of new natural gas reserves utilizing the practice of horizontal drilling and hydraulic fracturing is dampening some of this indirect impact, as some utilities switch fuels to natural gas from coal thereby reducing their emissions significantly. However, because some generating facilities when faced with new regulations are idling facilities instead of converting to natural gas, the resulting reduction in capacity can and will create further pressure on electrical energy prices. The USEPA has recently finalized its CPP, but that regulation is currently undergoing judicial review. These are regulations intended to reduce GHGs from electric generating units. The increase in electric costs will vary on a state by state basis but could be substantial across all regions. Although the rule is stayed pending a final court decision, utility companies are making decisions today that will likely increase cost for energy purchasers. To the extent that these regulations cause either directly or indirectly an increase in the cost of energy, they could have an impact on Nucor’s competitive position.

The USEPA continues to press forward with new regulations that control GHG and other NAAQS pollutants. Court challenges regarding many of these regulations have diminished to some extent their impact on various operations. Further court challenges to some of the NAAQS revisions may affect our operations, but the impact is likely to be minimal. Because some foreign steel producers are not subject to these same indirect and direct regulatory burdens and their associated cost increases, our products could be at a further competitive disadvantage. In addition to increased costs of production, we could also incur costs to defend and resolve legal claims and other litigation related to new air and water quality regulations and the alleged impact of our operations on the environment. Currently, there is uncertainty as to the future of these regulations given the change in administration in Washington.

Environmental compliance and remediation could result in substantially increased costs and materially adversely impact our competitive position.

Our operations are subject to numerous federal, state and local laws and regulations relating to protection of the environment, and we accordingly, make provision in our financial statements for the estimated costs of compliance. These laws and regulations are becoming increasingly stringent, resulting in inherent uncertainties in these estimates. The USEPA has recently revised the rules and definitions around recycling and solid wastes. The new rules require states to create new programs and certification processes for the companies that wish to continue recycling materials. Increased administrative and operational costs are likely in the United States to handle steel mill recycled materials such as slag, mill scale, iron dusts, lime and air filtration control dusts. To the extent that competitors, particularly foreign steel producers and manufacturers of competitive products, are not subject to similar regulation and required to incur equivalent costs, our competitive position could be materially adversely impacted. If one of our permits is revoked or if we were to experience significant delays in obtaining a permit modification or a new permit, this could result in operational delays at one or more of our facilities, causing a negative impact on our results of operations and cash flows.

We acquire businesses from time to time and we may encounter difficulties in integrating businesses we acquire.

We plan to continue to seek attractive opportunities to acquire businesses, enter into joint ventures and make other investments that strengthen Nucor. Realizing the anticipated benefits of acquisitions or other transactions will depend on our ability to operate these businesses and integrate them with our operations and to cooperate with our strategic partners. Our business, results of operations, financial condition and cash flows could be materially adversely affected if we are unable to successfully integrate these businesses.

Our operations are subject to business interruptions and casualty losses.

The steelmaking business is subject to numerous inherent risks, particularly unplanned events such as explosions, fires, other accidents, natural disasters such as floods or earthquakes, unplanned critical equipment failures, acts of terrorism, inclement weather and transportation interruptions. While our insurance coverage could offset losses relating to some of those types of events, our results of operations and cash flows could be adversely impacted to the extent any such losses are not covered by our insurance.

We are subject to information technology and cyber security threats which could have an adverse effect on our business.

We utilize various information technology systems to efficiently address business functions ranging from the operation of our production equipment to administrative computation to the storage of data such as intellectual property and proprietary business information. Despite efforts to assure secure and uninterrupted operations, threats from increasingly sophisticated cyber-attacks or system failures could result in materially adverse operational disruptions or security breaches. These risks could result in disclosure or destruction of key proprietary information and reputational damage that could adversely affect our ability to physically produce steel and therefore affect our results of operations.

Our business requires substantial capital investment and maintenance expenditures, and our capital resources may not be adequate to provide for all of our cash requirements.

Our operations are capital intensive. For the five-year period ended December 31, 2016, our total capital expenditures, excluding acquisitions, were approximately $4 billion. Our business also requires substantial expenditures for routine maintenance. Although we expect requirements for our business needs, including the funding of capital expenditures, debt service for financings and any contingencies, will be financed by internally generated funds or from borrowings under our $1.5 billion unsecured revolving credit facility, we cannot assure you that this will be the case. Additional acquisitions or unforeseen events could require financing from additional sources.

Risks associated with operating in international markets could adversely affect our business, financial position and results of operations.

Certain of our businesses and investments are located outside of the United States, in Europe and in emerging markets. There are a number of risks inherent in doing business in such markets. These risks include but are not limited to: unfavorable political or economic factors; local labor and social issues; changes in regulatory requirements; fluctuations in foreign currency exchange rates; and complex foreign laws, treaties including tax laws and the United States Foreign Corrupt Practices Act of 1977. These risks could restrict our ability to operate our international businesses profitably and therefore have a negative impact on our financial position and results of operations. In addition, our reported results of operations and financial position could also be negatively affected by exchange rates when the activities and balances of our foreign operations are translated into U.S. dollars for financial reporting purposes.

The accounting treatment of equity method investments, goodwill and other long-lived assets could result in future asset impairments, which would reduce our earnings.

We periodically test our equity method investments, goodwill and other long-lived assets to determine whether their estimated fair value is less than their value recorded on our balance sheet. The results of this testing for potential impairment may be adversely affected by the continuing uncertain market conditions for the steel industry, as well as changes in interest rates and general economic conditions. If we determine that the fair value of any of these assets is less than the value recorded on our balance sheet, and in the case of equity method investments the decline is other than temporary, we would likely incur a non-cash impairment loss that would negatively impact our results of operations.

Tax increases and changes in tax rules could adversely affect our financial results.

The steel industry and our business are sensitive to changes in taxes. As a company based in the United States, Nucor is more exposed to the effects of changes in U.S. tax laws than some of our major competitors. Our provision for income taxes and cash tax liability in the future could be adversely affected by changes in U.S. tax laws. Potential changes that would adversely affect us include, but are not limited to, current proposals for corporate tax reform which would lower tax rates, eliminate many tax deductions (accelerated depreciation, interest expense, and the domestic production activity deduction) and create border adjustments eliminating deduction of inputs from foreign sources.

We are subject to legal proceedings and legal compliance risks.

We spend substantial resources ensuring that we comply with domestic and foreign regulations, contractual obligations and other legal standards. Notwithstanding this, we are subject to a variety of legal proceedings and compliance risks in respect of various issues, including regulatory, safety, environmental, employment, transportation, intellectual property, contractual, import/export, international trade and governmental matters that arise in the course of our business and in our industry. For information regarding our current significant legal proceedings, see Item 3. "Legal Proceedings." A negative outcome in an unusual or significant legal proceeding or compliance investigation could adversely affect our financial condition and results of operations. While we believe that we have adopted appropriate risk management and compliance programs, the nature of our operations means that legal and compliance risks will continue to exist and additional legal proceedings and other contingencies, the outcome of which cannot be predicted with certainty, will arise from time to time.

Item 1B. Unresolved Staff Comments

None.

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Item 2. Properties

We own all of our principal operating facilities. These facilities, by segment, are as follows:

Location	Approximate square footage of facilities	Principal products
Steel mills:		
Blytheville, Arkansas	2,560,000	Structural steel, sheet steel
Decatur, Alabama	2,470,000	Sheet steel, tubular steel
Berkeley County, South Carolina	2,300,000	Sheet steel, structural steel
Hickman, Arkansas	2,050,000	Sheet steel
Crawfordsville, Indiana	1,900,000	Sheet steel
Norfolk, Nebraska	1,530,000	Bar steel
Hertford County, North Carolina	1,250,000	Plate steel
Plymouth, Utah	1,200,000	Bar steel
Jewett, Texas	1,080,000	Bar steel
Darlington, South Carolina	980,000	Bar steel
Seattle, Washington	640,000	Bar steel
Ghent, Kentucky	600,000	Sheet steel
Memphis, Tennessee	580,000	Bar steel
Marseilles, Illinois	550,000	Tubular steel
Auburn, New York	520,000	Bar steel
Marion, Ohio	430,000	Bar steel
Kankakee, Illinois	430,000	Bar steel
Longview, Texas	430,000	Plate steel
Jackson, Mississippi	420,000	Bar steel
Tuscaloosa, Alabama	390,000	Plate steel
Kingman, Arizona	380,000	Bar steel
Chicago, Illinois	350,000	Tubular steel
Trinity, Alabama	310,000	Tubular steel
Birmingham, Alabama	290,000	Bar steel
Wallingford, Connecticut	240,000	Bar steel
Steel products:		
Norfolk, Nebraska	1,080,000	Joists, deck, cold finished bar
Brigham City, Utah	730,000	Joists, cold finished bar
Grapeland, Texas	680,000	Joists, deck
St. Joe, Indiana	550,000	Joists, deck
Chemung, New York	550,000	Joists, deck
Florence, South Carolina	540,000	Joists, deck
Fort Payne, Alabama	470,000	Joists, deck
St. Joe, Indiana	460,000	Fasteners

The steel mills segment also includes Skyline, our steel foundation distributor with U.S. manufacturing facilities in eight states and one facility in Canada, the majority of which are owned. Additionally, we have a distribution center in Veracruz, Mexico.

In the steel products segment, we have approximately 70 operating facilities, in addition to the 8 listed above, in 37 states and 28 operating facilities in Canada. Our affiliate, Harris Steel Inc., also operates multiple sales offices in Canada and certain other foreign locations.

In the raw materials segment, DJJ has 67 operating facilities in 15 states along with multiple brokerage offices in the United States and certain other foreign locations. Nucor's raw materials segment also includes our DRI facilities in Point Lisas, Trinidad and St. James Parish, Louisiana. A significant portion of the DRI production process occurs outdoors. The Trinidad site, including leased land, is approximately 1.84 million square feet. The Louisiana site has approximately 174.2 million square feet of owned land with buildings that total approximately 72,000 square feet.

The average utilization rates of all operating facilities in the steel mills, steel products and raw materials segments in 2016 were approximately 80%, 63% and 62% of production capacity, respectively. During the fourth quarter of 2016, we revised our steel mill capacity estimates to reflect the impact of the shift in our product mix in recent years to include a greater diversity and proportion of value-added products which often run more slowly on our mills.

We also own our principal executive office in Charlotte, North Carolina.

Item 3. Legal Proceedings

Since 2008, Nucor has been a defendant, along with other major steel producers, in several related antitrust class-action proceedings filed by Standard Iron Works and other steel purchasers in the United States District Court for the Northern District of Illinois. The majority of these complaints were filed in September and October of 2008, with two additional complaints being filed in July and December of 2010. Two of these complaints were voluntarily dismissed and are no longer pending. The plaintiffs alleged that from April 1, 2005 through December 31, 2007, eight steel manufacturers, including Nucor, engaged in anticompetitive activities with respect to the production and sale of steel. Nucor denies those allegations. The plaintiffs sought monetary and other relief on behalf of themselves and classes of direct and indirect purchasers of steel products from the defendants in the United States between April 1, 2005 and December 31, 2007.

On September 30, 2016, Nucor entered into an agreement to settle the claims of the class of direct purchasers of steel products for the amount of $23.4 million, which was paid during the fourth quarter of 2016. Nucor believes the plaintiffs' claims are without merit and did not admit liability or the validity of the plaintiffs' claims as part of the settlement, but entered into the settlement in order to avoid the burden, expense and distraction of further litigation. The settlement was subject to court approval. On November 3, 2016, the court granted preliminary approval of the settlement. Direct purchasers of steel products were given notice of the settlement and the opportunity to object to the settlement or to opt out as class members. No purchasers timely objected to the settlement, and only two purchasers filed notices of intent to opt out. On February 16, 2017, the Court granted final approval of the settlement. The settlement does not resolve claims asserted by a separate putative class of indirect purchasers of steel products. Nucor and other Defendants have moved to dismiss those indirect purchaser claims. We will continue to vigorously defend against the indirect purchasers' claims and any other claims relating to these allegations. We cannot at this time predict the outcome of the remaining litigation or estimate the range of Nucor's potential exposure (if any) and, consequently, have not recorded any reserves or contingencies related to the class of indirect purchasers.

Nucor is from time to time a party to various other lawsuits, claims and legal proceedings that arise in the ordinary course of business. With respect to all such lawsuits, claims and proceedings, we record reserves when it is probable a liability has been incurred and the amount of loss can be reasonably estimated. We do not believe that any of these proceedings, individually or in the aggregate, would be expected to have a material adverse effect on our results of operations, financial position or cash flows. Nucor maintains liability insurance for certain risks that is subject to certain self-insurance limits.

Item 4. Mine Safety Disclosures

Not applicable.

Executive Officers of the Registrant

James R. Darsey (61), Executive Vice President of Merchant and Rebar Products, was named EVP in September 2010. Prior to that, he served as President of the Vulcraft/Verco Group from 2007 and was elected Vice President of Nucor in 1996. Mr. Darsey began his Nucor career in 1979 as Design Engineer at Vulcraft-Texas, later serving as Engineering Manager at Vulcraft-Utah and Vulcraft-Texas. He then served as General Manager of Vulcraft-Texas and General Manager of Nucor Steel-Texas.

John J. Ferriola (64), has served as Chairman of the Board of Directors of Nucor since January 2014, as Chief Executive Officer since January 2013 and as President since January 2011. Previously, Mr. Ferriola served as President and Chief Operating Officer from January 2011 to December 2012 and, prior to that, as Chief Operating Officer of Steelmaking Operations from 2007 to 2010, Executive Vice President from 2002 to 2007 and Vice President from 1996 to 2001. He has also been a director of Nucor since January 2011. Mr. Ferriola joined Nucor in 1991 as the Manager of Maintenance and Engineering at Nucor Steel-Texas. He later served as General Manager of Vulcraft-Texas, Nucor Steel-Nebraska and Nucor Steel-Indiana.

James D. Frias (60), has been Chief Financial Officer, Treasurer and Executive Vice President since January 2010. Prior to that, Mr. Frias was Vice President of Finance from 2006 to 2009. Mr. Frias joined Nucor in 1991 as Controller of Nucor Building Systems-Indiana. He also served as Controller of Nucor Steel-Indiana and as Corporate Controller. Mr. Frias joined the board of directors of Carlisle Companies Incorporated in February 2015.

Ladd R. Hall (60), Executive Vice President of Flat-Rolled Products, was named EVP in September 2007, having previously served as Vice President of Nucor since 1994. He began his Nucor career in Inside Sales at Nucor Steel-Utah in 1981. He later served as Sales Manager of Vulcraft-Utah, and General Manager of Vulcraft-Texas, Vulcraft-Utah, Nucor Steel-South Carolina and Nucor Steel-Berkeley County.

Raymond S. Napolitan, Jr. (59), was named Executive Vice President of Fabricated Construction Products in June 2013, having previously served as President of Nucor's Vulcraft/Verco group from 2010 to 2013 and President of American Buildings Company from 2007 to 2010. He was elected Vice President of Nucor in 2007. Mr. Napolitan began his Nucor career in 1996 as Engineering Manager of Nucor Building Systems-Indiana, and later served as General Manager of Nucor Building Systems-Texas.

R. Joseph Stratman (60), Chief Digital Officer and Executive Vice President of Raw Materials, was named EVP in September 2007 and CDO in August 2016. He was elected Vice President of Nucor in 1999. Mr. Stratman joined Nucor in 1989 as Controller of Nucor Building Systems-Indiana. He then served as Controller of Nucor-Yamato, General Manager of Nucor Steel-Nebraska and General Manager of Nucor-Yamato.

David A. Sumoski (50), was named Executive Vice President of Engineered Bar Products in September 2014. He had previously served as General Manager of Nucor Steel Marion, Inc. from 2008 to 2012 and as General Manager of Nucor Steel Memphis, Inc. from 2012 to September 2014. Mr. Sumoski was named Vice President of Nucor in 2010. He began his career with Nucor as an electrical supervisor at Nucor Steel-Berkeley in 1995, later serving as Maintenance Manager.

D. Chad Utermark (48), was named Executive Vice President of Beam and Plate Products in May 2014. He had previously served as General Manager of Nucor Steel-Texas from 2008 to 2011 and as General Manager of Nucor-Yamato from 2011 to May 2014. He was named Vice President of Nucor in 2009. Mr. Utermark began his Nucor career as a utility operator at Nucor Steel-Arkansas in 1992, subsequently serving as shift supervisor and Hot Mill Manager at that division as well as Roll Mill Manager at Nucor Steel-Texas.

PART II

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

Nucor has increased its base cash dividend every year since the Company began paying dividends in 1973. Nucor paid a total dividend of $1.50 per share in 2016 compared with $1.49 per share in 2015. In November 2016, the Board of Directors increased the base quarterly cash dividend on Nucor's common stock to $0.3775 per share from $0.375 per share. In February 2017, the Board of Directors also declared Nucor's 176th consecutive quarterly cash dividend of $0.3775 per share payable on May 11, 2017 to stockholders of record on March 31, 2017.

Additional information regarding the market for Nucor's common stock, quarterly market price ranges, the number of stockholders and dividend payments is incorporated by reference to Nucor's 2016 Annual Report, page 86. Additional information regarding securities authorized for issuance under stock-based compensation plans is incorporated by reference to Nucor's 2016 Annual Report, pages 69 through 72.

Item 6. Selected Financial Data

Historical financial information is incorporated by reference to Nucor's 2016 Annual Report, page 47.

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

The information required by this item is incorporated by reference to Nucor's 2016 Annual Report, page 4 (Forward-Looking Statements) and pages 26 through 45.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

In the ordinary course of business, Nucor is exposed to a variety of market risks. We continually monitor these risks and develop strategies to manage them.

Interest Rate Risk—Nucor manages interest rate risk by using a combination of variable-rate and fixed-rate debt. At December 31, 2016, 23% of Nucor's long-term debt was in industrial revenue bonds that have variable interest rates that are adjusted weekly. The remaining 77% of Nucor's long-term debt was at fixed rates. Future changes in interest rates are not expected to significantly impact earnings. Nucor also occasionally makes use of interest rate swaps to manage net exposure to interest rate changes. As of December 31, 2016, there were no such contracts outstanding. Nucor's investment practice is to invest in securities that are highly liquid with short maturities. As a result, we do not expect changes in interest rates to have a significant impact on the value of our investment securities recorded as short-term investments.

Commodity Price Risk—In the ordinary course of business, Nucor is exposed to market risk for price fluctuations of raw materials and energy, principally scrap steel, other ferrous and nonferrous metals, alloys and natural gas. We attempt to negotiate the best prices for our raw materials and energy requirements and to obtain prices for our steel products that match market price movements in response to supply and demand. In periods of strong or stable demand for our products, we are more likely to be able to effectively reduce the normal time lag in passing through higher raw material costs so that we can maintain our gross margins. When demand for our products is weaker, this becomes more challenging. Our DRI facilities in Trinidad and Louisiana provide us with flexibility in managing our input costs. DRI is particularly important for operational flexibility when demand for prime scrap increases due to increased domestic production.

Natural gas produced by Nucor's drilling operations is being sold to third parties to offset our exposure to changes in the price of natural gas consumed by our Louisiana DRI facility and our steel mills in the United States. For the year ended December 31, 2016, the volume of natural gas sold from our drilling operations was approximately 28% of the volume of natural gas purchased for consumption in our domestic steelmaking and DRI facilities.

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Nucor also periodically uses derivative financial instruments to hedge a portion of our exposure to price risk related to natural gas purchases used in the production process and to hedge a portion of our scrap, aluminum and copper purchases and sales. Gains and losses from derivatives designated as hedges are deferred in accumulated other comprehensive income (loss), net of income taxes on the consolidated balance sheets and recognized into earnings in the same period as the underlying physical transaction. At December 31, 2016, accumulated other comprehensive income (loss) included $0.8 million in unrealized net-of-tax gains for the fair value of these derivative instruments. Changes in the fair values of derivatives not designated as hedges are recognized in earnings each period. The following table presents the negative effect on pre-tax earnings of a hypothetical change in the fair value of derivative instruments outstanding at December 31, 2016, due to an assumed 10% and 25% change in the market price of each of the indicated commodities (in thousands):

Commodity Derivative	10% Change	25% Change
Natural gas	$ 5,800	$ 14,510
Aluminum	1,272	2,943
Copper	1,099	3,892

Any resulting changes in fair value would be recorded as adjustments to other comprehensive income (loss), net of income taxes, or recognized in net earnings, as appropriate. These hypothetical losses would be partially offset by the benefit of lower prices paid or higher prices received for the physical commodities.

Foreign Currency Risk—Nucor is exposed to foreign currency risk primarily through its operations in Canada, Europe and Trinidad. We periodically use derivative contracts to mitigate the risk of currency fluctuations. Open foreign currency derivative contracts at December 31, 2016 and 2015 were insignificant.

Item 8. Financial Statements and Supplementary Data

The information required by this item is incorporated by reference to Nucor's 2016 Annual Report, pages 48 through 82.

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

None.

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures – As of the end of the period covered by this report, the Company carried out an evaluation, under the supervision and with the participation of the Company's management, including the Company's Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of the Company's disclosure controls and procedures. Based upon that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that the Company's disclosure controls and procedures were effective as of the evaluation date.

Changes in Internal Control Over Financial Reporting – There were no changes in our internal control over financial reporting during the quarter ended December 31, 2016 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Report on Internal Control Over Financial Reporting – Management's report on internal control over financial reporting required by Section 404 of the Sarbanes-Oxley Act of 2002 and the attestation report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, on the effectiveness of Nucor's internal control over financial reporting as of December 31, 2016 are incorporated by reference to Nucor's 2016 Annual Report, pages 48 through 49.

Item 9B. Other Information

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

The information required by this item about Nucor's executive officers is contained in the section captioned *Executive Officers of the Registrant* in Part I of this report. The other information required by this item is incorporated by reference to Nucor's definitive Proxy Statement for the 2017 Annual Meeting of Stockholders ("Proxy Statement") under the headings *Election of Directors; Information Concerning Experience, Qualifications, Attributes and Skills of the Nominees; Section 16(a) Beneficial Ownership Reporting Compliance* and *Corporate Governance and Board of Directors*.

Nucor has adopted a Code of Ethics for Senior Financial Professionals ("Code of Ethics") that applies to the Company's Chief Executive Officer, Chief Financial Officer, Corporate Controller and other senior financial professionals, as well as Corporate Governance Principles for our Board of Directors and charters for our board committees. These documents are publicly available on our website, www.nucor.com. If we make any substantive amendments to the Code of Ethics or grant any waiver, including any implicit waiver, from a provision of the Code of Ethics, we will disclose the nature of such amendment or waiver on our website.

Item 11. Executive Compensation

The information required by this item is incorporated by reference to the Proxy Statement under the headings *Executive Officer Compensation, Director Compensation* and *Report of the Compensation and Executive Development Committee*.

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

The information required by this item is incorporated by reference to the Proxy Statement under the headings *Security Ownership of Management and Certain Beneficial Owners* and *Equity Compensation Plan Information.*

Item 13. Certain Relationships and Related Transactions, and Director Independence

The information required by this item is incorporated by reference to the Proxy Statement under the heading *Corporate Governance and Board of Directors*.

Item 14. Principal Accountant Fees and Services

The information required by this item is incorporated by reference to the Proxy Statement under the heading *Fees Paid to Independent Registered Public Accounting Firm.*

PART IV

Item 15. Exhibits and Financial Statement Schedules

Financial Statements:

The following consolidated financial statements and notes thereto, management's report on internal control over financial reporting and the report of independent registered public accounting firm are incorporated by reference to Nucor's 2016 Annual Report, pages 48 through 82:

- Management's Report on Internal Control Over Financial Reporting
- Report of Independent Registered Public Accounting Firm
- Consolidated Balance Sheets—December 31, 2016 and 2015
- Consolidated Statements of Earnings—Years ended December 31, 2016, 2015 and 2014
- Consolidated Statements of Comprehensive Income – Years ended December 31, 2016, 2015 and 2014
- Consolidated Statements of Stockholders' Equity—Years ended December 31, 2016, 2015 and 2014
- Consolidated Statements of Cash Flows—Years ended December 31, 2016, 2015 and 2014
- Notes to Consolidated Financial Statements

Schedule II is not presented as all applicable information is presented in the consolidated financial statements and notes.

Exhibits:

3	Restated Certificate of Incorporation (incorporated by reference to Exhibit 3.1 to the Current Report on Form 8-K filed September 14, 2010 (File No. 001-04119))
3(i)	Bylaws as amended and restated September 15, 2016 (incorporated by reference to Exhibit 3.1 to the Current Report on Form 8-K filed September 20, 2016 (File No. 001-04119))
4	Indenture, dated as of January 12, 1999, between Nucor Corporation and The Bank of New York Mellon (formerly known as The Bank of New York), as trustee (incorporated by reference to Exhibit 4.1 to the Registration Statement on Form S-4 filed December 13, 2002 (File No. 333-101852))
4(i)	Indenture, dated as of August 19, 2014, between Nucor Corporation and U.S. Bank National Association, as trustee (incorporated by reference to Exhibit 4.3 to the Registration Statement on Form S-3 filed August 20, 2014 (File No. 333-198263))
4(ii)	Third Supplemental Indenture, dated as of December 3, 2007, between Nucor Corporation and The Bank of New York Mellon (formerly known as The Bank of New York), as trustee (incorporated by reference to Exhibit 4.1 to the Current Report on Form 8-K filed December 4, 2007 (File No. 001-04119))
4(iii)	Fourth Supplemental Indenture, dated as of June 2, 2008, between Nucor Corporation and The Bank of New York Mellon (formerly known as The Bank of New York), as trustee (incorporated by reference to Exhibit 4.2 to the Current Report on Form 8-K filed June 3, 2008 (File No. 001-04119))
4(iv)	Fifth Supplemental Indenture, dated as of September 21, 2010, between Nucor Corporation and The Bank of New York Mellon, as trustee (incorporated by reference to Exhibit 4.1 to the Current Report on Form 8-K filed September 21, 2010 (File No. 001-04119))
4(v)	Sixth Supplemental Indenture, dated as of July 29, 2013, between Nucor Corporation and U.S. Bank National Association, as successor trustee (incorporated by reference to Exhibit 4.1 to the Current Report on Form 8-K filed July 29, 2013 (File No. 001-04119))

4(vi)	Seventh Supplemental Indenture, dated as of December 10, 2014, among Nucor Corporation, The Bank of New York Mellon, as prior trustee, and U.S. Bank National Association, as successor trustee (incorporated by reference to Exhibit 4.1 to the Current Report on Form 8-K filed December 11, 2014 (File No. 001-04119))
4(vii)	Form of 5.750% Notes due December 2017 (included in Exhibit 4(ii) above) (incorporated by reference to Exhibit 4.1 to the Current Report on Form 8-K filed December 4, 2007 (File No. 001-04119))
4(viii)	Form of 6.400% Notes due December 2037 (included in Exhibit 4(ii) above) (incorporated by reference to Exhibit 4.1 to the Current Report on Form 8-K filed December 4, 2007 (File No. 001-04119))
4(ix)	Form of 5.850% Notes due June 2018 (included in Exhibit 4(iii) above) (incorporated by reference to Exhibit 4.2 to the Current Report on Form 8-K filed June 3, 2008 (File No. 001-04119))
4(x)	Form of 4.125% Notes due September 2022 (included in Exhibit 4(iv) above) (incorporated by reference to Exhibit 4.1 to the Current Report on Form 8-K filed September 21, 2010 (File No. 001-04119))
4(xi)	Form of 4.000% Notes due August 2023 (included in Exhibit 4(v) above) (incorporated by reference to Exhibit 4.1 to the Current Report on Form 8-K filed July 29, 2013 (File No. 001-04119))
4(xii)	Form of 5.200% Notes due August 2043 (included in Exhibit 4(v) above) (incorporated by reference to Exhibit 4.1 to the Current Report on Form 8-K filed July 29, 2013 (File No. 001-04119))
10	2005 Stock Option and Award Plan (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed May 17, 2005 (File No. 001-04119)) (#)
10(i)	Amendment No. 1 to 2005 Stock Option and Award Plan (incorporated by reference to Exhibit 10.2 to the Quarterly Report on Form 10-Q for the quarter ended September 29, 2007 (File No. 001-04119)) (#)
10(ii)	2010 Stock Option and Award Plan (incorporated by reference to Exhibit 10.1 to the Quarterly Report on Form 10-Q for the quarter ended July 3, 2010 (File No. 001-04119)) (#)
10(iii)	Nucor Corporation 2014 Omnibus Incentive Compensation Plan (incorporated by reference to Appendix A to the Definitive Proxy Statement on Schedule 14A filed March 25, 2014 (File No. 001-04119)) (#)
10(iv)	Form of Restricted Stock Unit Award Agreement – time-vested awards (incorporated by reference to Exhibit 10(iv) to the Annual Report on Form 10-K for the year ended December 31, 2005 (File No. 001-04119)) (#)
10(v)	Form of Restricted Stock Unit Award Agreement – retirement-vested awards (incorporated by reference to Exhibit 10(v) to the Annual Report on Form 10-K for the year ended December 31, 2005 (File No. 001-04119)) (#)
10(vi)	Form of Restricted Stock Unit Award Agreement for Non-Employee Directors (incorporated by reference to Exhibit 10 to the Quarterly Report on Form 10-Q for the quarter ended April 1, 2006 (File No. 001-04119)) (#)
10(vii)	Form of Award Agreement for Annual Stock Option Grants used for awards granted prior to May 8, 2014 (incorporated by reference to Exhibit 10 to the Quarterly Report on Form 10-Q for the quarter ended June 30, 2012 (File No. 001-04119)) (#)
10(viii)	Form of Award Agreement for Annual Stock Option Grants used for awards granted after May 7, 2014 (incorporated by reference to Exhibit 10.1 to the Quarterly Report on Form 10-Q for the quarter ended July 5, 2014 (File No. 001-04119)) (#)

10(ix)	Employment Agreement of John J. Ferriola (incorporated by reference to Exhibit 10(vii) to the Annual Report on Form 10-K for the year ended December 31, 2001 (File No. 001-04119)) (#)
10(x)	Amendment to Employment Agreement of John J. Ferriola (incorporated by reference to Exhibit 10(xix) to the Annual Report on Form 10-K for the year ended December 31, 2007 (File No. 001-04119)) (#)
10(xi)	Employment Agreement of Ladd R. Hall (incorporated by reference to Exhibit 10 to the Quarterly Report on Form 10-Q for the quarter ended September 29, 2007 (File No. 001-04119)) (#)
10(xii)	Employment Agreement of R. Joseph Stratman (incorporated by reference to Exhibit 10.1 to the Quarterly Report on Form 10-Q for the quarter ended September 29, 2007 (File No. 001-04119)) (#)
10(xiii)	Employment Agreement of James D. Frias (incorporated by reference to Exhibit 10(xi) to the Annual Report on Form 10-K for the year ended December 31, 2009 (File No. 001-04119)) (#)
10(xiv)	Employment Agreement of James R. Darsey (incorporated by reference to Exhibit 10(xxii) to the Annual Report on Form 10-K for the year ended December 31, 2010 (File No. 001-04119)) (#)
10(xv)	Employment Agreement of Raymond S. Napolitan, Jr. (incorporated by reference to Exhibit 10.2 to the Quarterly Report on Form 10-Q for the quarter ended June 29, 2013 (File No. 001-04119)) (#)
10(xvi)	Employment Agreement of Chad Utermark (incorporated by reference to Exhibit 10.2 to the Quarterly Report on Form 10-Q for the quarter ended July 5, 2014 (File No. 001-04119)) (#)
10(xvii)	Employment Agreement of David A. Sumoski (incorporated by reference to Exhibit 10.1 to the Quarterly Report on Form 10-Q for the quarter ended October 4, 2014 (File No. 001-04119)) (#)
10(xviii)	Severance Plan for Senior Officers and General Managers, as amended and restated effective February 18, 2009 (incorporated by reference to Exhibit 10.2 to the Quarterly Report on Form 10-Q for the quarter ended April 4, 2009 (File No. 001-04119)) (#)
10(xix)	Senior Officers Annual Incentive Plan, as amended and restated effective January 1, 2013 (incorporated by reference to Appendix A to the Definitive Proxy Statement on Schedule 14A filed March 27, 2013 (File No. 001-04119)) (#)
10(xx)	Senior Officers Long-Term Incentive Plan, as amended and restated effective January 1, 2013 (incorporated by reference to Appendix B to the Definitive Proxy Statement on Schedule 14A filed March 27, 2013 (File No. 001-04119)) (#)
10(xxi)	Termination and Indemnification Agreement and Mutual Waiver and Release dated October 1, 2016 among Nucor Corporation, Nucor Energy Holdings Inc., Encana Oil & Gas (USA) Inc. and Hunter Ridge Energy Services LLC (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed October 4, 2016 (File No. 001-04119))
12*	Computation of Ratio of Earnings to Fixed Charges
13*	2016 Annual Report (portions incorporated by reference)
18*	Letter, dated February 28, 2017, from PricewaterhouseCoopers LLP
21*	Subsidiaries
23*	Consent of Independent Registered Public Accounting Firm
24*	Power of Attorney (included on signature pages)
31*	Certification of Principal Executive Officer Pursuant to Rule 13a-14(a)/15d-14(a), as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

31(i)*	Certification of Principal Financial Officer Pursuant to Rule 13a-14(a)/15d-14(a), as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32**	Certification of Principal Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32(i)**	Certification of Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101*	Financial Statements from the Annual Report on Form 10-K of Nucor Corporation for the year ended December 31, 2016, filed February 28, 2017, formatted in XBRL: (i) the Consolidated Balance Sheets, (ii) the Consolidated Statements of Earnings, (iii) the Consolidated Statements of Comprehensive Income, (iv) the Consolidated Statements of Stockholders' Equity, (v) the Consolidated Statements of Cash Flows and (vi) the Notes to Consolidated Financial Statements.

* Filed herewith.

** Furnished (and not filed) herewith pursuant to Item 601(b)(32)(ii) of Regulation S-K.

(#) Indicates a management contract or compensatory plan or arrangement.

Item 16. Form 10-K Summary

None.

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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.

NUCOR CORPORATION

By: /S/ JOHN J. FERRIOLA

John J. Ferriola
Chairman, Chief Executive Officer and President

Dated: February 28, 2017

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints James D. Frias and A. Rae Eagle, or either of them, his or her attorney-in-fact, with full power of substitution and resubstitution for such person in any and all capacities, to sign any amendments to this report and to file the same, with exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that either of said attorney-in-fact, or substitute or substitutes, may do or cause to be done by virtue hereof.

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

/S/ JOHN J. FERRIOLA
John J. Ferriola
Chairman, Chief Executive Officer and President
(Principal Executive Officer)

/S/ JAMES D. FRIAS
James D. Frias
Chief Financial Officer, Treasurer and Executive Vice President
(Principal Financial Officer)

/S/ MICHAEL D. KELLER
Michael D. Keller
Vice President and Corporate Controller
(Principal Accounting Officer)

/S/ PATRICK J. DEMPSEY
Patrick J. Dempsey
Director

/S/ GREGORY J. HAYES
Gregory J. Hayes
Director

/S/ VICTORIA F. HAYNES
Victoria F. Haynes
Director

/S/ BERNARD L. KASRIEL
Bernard L. Kasriel
Director

/S/ CHRISTOPHER J. KEARNEY
Christopher J. Kearney
Director

/S/ LAURETTE T. KOELLNER
Laurette T. Koellner
Director

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/S/ RAYMOND J. MILCHOVICH

Raymond J. Milchovich
Director

/S/ JOHN H. WALKER

John H. Walker
Lead Director

Dated: February 28, 2017

NUCOR CORPORATION
List of Exhibits to Form 10-K—December 31, 2016

Exhibit No.	Description of Exhibit
12	Computation of Ratio of Earnings to Fixed Charges
13	2016 Annual Report (portions incorporated by reference)
18	Letter, dated February 28, 2017, from PricewaterhouseCoopers LLP
21	Subsidiaries
23	Consent of Independent Registered Public Accounting Firm
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31	Certification of Principal Executive Officer Pursuant to Rule 13a-14(a)/15d-14(a), as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
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Exhibit 12
Nucor Corporation
2016 Form 10-K

Computation of Ratio of Earnings to Fixed Charges

	Year ended December 31,				
	2012*	2013*	2014*	2015*	2016*
	(In thousands, except ratios)				
Earnings					
Earnings before income taxes and noncontrolling interests	$647,004	$808,568	$1,147,288	$ 241,866	$1,298,659
Plus: (earnings)/losses from equity investments	13,323	(9,297)	(13,505)	(5,329)	(38,757)
Plus: fixed charges (includes interest expense and amortization of bond issuance costs and settled swaps and estimated interest on rent expense)	179,169	164,128	178,240	178,941	186,437
Plus: amortization of capitalized interest	2,550	3,064	4,166	4,062	3,715
Plus: distributed income of equity investees	9,946	8,708	53,738	15,132	40,602
Less: interest capitalized	(4,715)	(10,913)	(2,946)	(311)	(3,940)
Less: pre-tax earnings in noncontrolling interests in subsidiaries that have not incurred fixed charges	(83,207)	(94,330)	(99,227)	(112,306)	(104,145)
Total earnings before fixed charges	$814,070	$869,928	$1,267,754	$ 322,055	$1,382,571
Fixed charges					
Interest cost and amortization of bond issuance and settled swaps	$178,218	$162,899	$ 177,088	$ 177,855	$ 185,119
Estimated interest on rent expense	951	1,229	1,152	1,086	1,318
Total fixed charges	$179,169	$164,128	$ 178,240	$ 178,941	$ 186,437
Ratio of earnings to fixed charges	4.54	5.30	7.11	1.80	7.42

* *In the fourth quarter of 2016, Nucor changed its accounting method for valuing certain inventories from the last-in, first-out (LIFO) inventory valuation method. All periods presented in the above table reflect this change in accounting principle.*

FINANCIAL HIGHLIGHTS

(dollar and share amounts in thousands, except per share data)

	2016	2015	% CHANGE
FOR THE YEAR*			
Net sales	$16,208,122	$16,439,276	-1%
Earnings:			
Earnings before income taxes and noncontrolling interests	1,298,659	241,866	437%
Provision for income taxes	398,243	48,836	715%
Net earnings	900,416	193,030	366%
Earnings attributable to noncontrolling interests	104,145	112,306	-7%
Net earnings attributable to Nucor stockholders	796,271	80,724	886%
Per share:			
Basic	2.48	0.25	892%
Diluted	2.48	0.25	892%
Dividends declared per share	1.5025	1.4925	1%
Percentage of net earnings to net sales	4.9%	0.5%	
Return on average stockholders' equity	10.4%	1.0%	
Capital expenditures	617,677	364,768	69%
Depreciation	613,192	625,757	-2%
Acquisitions (net of cash acquired)	474,788	19,089	*not meaningful*
Sales per employee	690	690	—
AT YEAR END			
Working capital	$4,116,427	$4,469,232	-8%
Property, plant and equipment, net	5,078,650	4,891,153	4%
Long-term debt (including current maturities)	4,339,141	4,337,145	—
Total Nucor stockholders' equity	7,879,865	7,477,816	5%
Per share	24.72	23.52	5%
Shares outstanding	318,737	317,962	—
Employees	23,900	23,700	1%

* *In the fourth quarter of 2016, Nucor changed its accounting method for valuing certain inventories from the last-in, first-out (LIFO) inventory valuation method. All periods presented in the above table reflect this change in accounting principle. See Note 2 to the Consolidated Financial Statements for more information related to the change in accounting principle.*

FORWARD-LOOKING STATEMENTS Certain statements made in this annual report are forward-looking statements that involve risks and uncertainties. The words "believe," "expect," "project," "will," "should," "could" and similar expressions are intended to identify those forward-looking statements. These forward-looking statements reflect the Company's best judgment based on current information, and although we base these statements on circumstances that we believe to be reasonable when made, there can be no assurance that future events will not affect the accuracy of such forward-looking information. As such, the forward-looking statements are not guarantees of future performance, and actual results may vary materially from the projected results and expectations discussed in this report. Factors that might cause the Company's actual results to differ materially from those anticipated in forward-looking statements include, but are not limited to: (1) competitive pressure on sales and pricing, including pressure from imports and substitute materials; (2) U.S. and foreign trade policies affecting steel imports or exports; (3) the sensitivity of the results of our operations to prevailing steel prices and changes in the supply and cost of raw materials, including pig iron, iron ore and scrap steel; (4) availability and cost of electricity and natural gas which could negatively affect our cost of steel production or could result in a delay or cancelation of existing or future drilling within our natural gas drilling programs; (5) critical equipment failures and business interruptions; (6) market demand for steel products, which, in the case of many of our products, is driven by the level of nonresidential construction activity in the U.S.; (7) impairment in the recorded value of inventory, equity investments, fixed assets, goodwill or other long-lived assets; (8) uncertainties surrounding the global economy, including the severe economic downturn in construction markets and excess world capacity for steel production; (9) fluctuations in currency conversion rates; (10) significant changes in laws or government regulations affecting environmental compliance, including legislation and regulations that result in greater regulation of greenhouse gas emissions that could increase our energy costs and our capital expenditures and operating costs or cause one or more of our permits to be revoked or make it more difficult to obtain permit modifications; (11) the cyclical nature of the steel industry; (12) capital investments and their impact on our performance; and (13) our safety performance.

OVERVIEW

STEEL INDUSTRY CONDITIONS

In spite of lackluster global economic and steel industry conditions, the economy in the United States continues to experience modest growth, and steel demand in this country is stronger than in many parts of the world. After several years of growth in nonresidential construction markets (the sector to which we are most closely tied and the largest end market for steel in the United States), demand stalled in 2015, and that trend continued in 2016. The domestic automotive market, which is the second largest end market for steel in the United States, had a second consecutive record year, with 17.6 million vehicles sold. With an improved labor market and low gasoline prices, we expect continued strength in vehicle sales in 2017. A steep drop in oil prices in 2015 had a significant negative impact on demand for energy-related steel, which is the third largest end market for steel in the United States. This low price environment remained throughout 2016, and we are only recently starting to see oil prices rise due to lower inventories and production from OPEC nations. Long-term, we believe that the domestic economy can benefit from globally competitive energy prices.

Although Nucor's earnings increased in 2016, they were impacted significantly by continued extremely high levels of steel imports. Our industry remains greatly constrained by the impact of global overcapacity. Weak economic conditions in Europe, slow growth in China and a strong U.S. dollar relative to other foreign currencies continue to make the U.S. markets a prime target for foreign steel imports. While the steel industry has historically been characterized by periods of overcapacity and intense competition for sales among producers, we are currently experiencing an era of global overcapacity that is unprecedented. Despite ongoing domestic and global steel industry consolidation, the extraordinary increase in China's steel production in the last decade, together with the excess capacity from other countries that have state-owned enterprises (SOEs) or export-focused steel industries, have exacerbated this overcapacity issue domestically as well as globally. According to the American Iron and Steel Institute, global steel overcapacity is estimated at approximately 770 million tons per year, with China's overcapacity being the largest piece at approximately 470 million tons. Chinese overcapacity alone is estimated to be four times greater than the entire U.S. annual demand for steel. China is the world's largest producer and exporter of steel, accounting for approximately 50% of the steel produced globally. We believe Chinese producers, many of which are government-owned in whole or in part, continue to benefit from their government's manipulation of foreign currency exchange rates and from the receipt of government subsidies, which allow them to sell steel into our markets at artificially low prices.

Imported steel and steel products continue to present unique challenges for us because foreign producers often benefit from government subsidies, either directly through SOEs or indirectly through government-owned or controlled financial institutions. Foreign imports of finished and semi-finished steel were down approximately 15% in 2016 compared to 2015, but they still remain excessive with finished steel imports alone capturing 26% of the market despite significant unused cost-competitive domestic capacity. The surge comes from numerous countries and cuts across all product lines. Our products that experience the greatest amount of imports include: semi-finished steel, reinforcing bar, plate and hot-rolled, cold-rolled and galvanized sheet steel. Countries that contribute most significantly to the import total include South Korea, Turkey, Japan and China.

China is not only selling steel at artificially low prices into our domestic market but also across the globe. When it does so, steel products that would otherwise have been consumed by the local steel customers in other countries are displaced into global markets, compounding the issue. Nucor has joined three other domestic steelmakers in filing a petition alleging China is circumventing previously levied duties by shipping products through third-party countries. Also, in a more indirect manner, but still significant, is the import of fabricated steel products, such as oil country tubular goods, wind towers and other construction components that were produced in China.

The steel industry has always been cyclical in nature, but North American producers of steel and steel products have been facing, and are continuing to face, very challenging global market conditions. The average industry capacity utilization rate increased to approximately 73% in 2016 as compared to 71% in 2015. These rates compare unfavorably to capacity utilization rates that reached as high as 87% in 2007. Although domestic demand for steel and steel products is expected to remain healthy in 2017, we believe it is unlikely that average capacity utilization rates will increase significantly unless the U.S. government and world trade organizations continue to address global overcapacity and unfair trade practices. The average utilization rates of all operating facilities in our steel mills, steel products and raw materials segments were approximately 80%, 63% and 62%, respectively, in 2016, compared with 73%, 63% and 56%, respectively, in 2015. In spite of challenging market conditions, all of our product groups in the steel mills segment realized improved performance in 2016 over the prior year.

Macro-level uncertainties in world markets should continue to weigh on global and domestic growth in 2017. We believe our net sales and financial results will continue to be adversely affected by these general global economic factors as well as the global steel production overcapacity issue.

OUR CHALLENGES AND RISKS

Sales of many of our products are largely dependent upon capital spending in the nonresidential construction markets in the United States, including in the industrial and commercial sectors, as well as capital spending on infrastructure that is publicly funded, such as bridges, schools, prisons and hospitals. Unlike recoveries from past recessions, the recovery from the recession of 2008-2009 has not yet included a strong recovery in the severely depressed nonresidential construction market. While we have experienced a continued slightly positive trajectory in capital spending on nonresidential construction projects since 2009, we do not expect to see strong growth in our net sales until we see a more sustained increase in spending on these types of construction projects. Congress did pass a five-year surface transportation funding bill at the end of 2015, providing $305 billion for highway and public transportation projects. We are also encouraged by the new administration's recent commentary on initiatives that should spur greater economic growth, including increased infrastructure spending, the rolling back of excessive regulations and encouraging domestic energy production.

The continued flow of artificially cheap exports by some of our major foreign competitors into the United States and elsewhere reduces our net sales and adversely impacts our financial results. Unfair trade practices have been challenged successfully as violating world trade rules. In 2016, the U.S. steel industry received positive determinations in trade cases involving three flat-rolled products – corrosion-resistant, cold-rolled and hot-rolled steel. In addition, the U.S. Department of Commerce announced preliminary duty determinations in investigations addressing cut-to-length plate from twelve countries. The U.S. Department of Commerce also announced the initiation of antidumping duty investigations of imports of steel concrete reinforcing bar from Japan, Taiwan and Turkey, and a countervailing duty (CVD) investigation of steel concrete reinforcing bar imports from Turkey. We expect the plate and rebar cases to conclude in 2017.

Efforts by foreign companies to evade duties by routing products through third-party countries is also a challenge. Artificially-priced imports and duty evasion schemes make it very difficult for Nucor to maintain sales prices and profit levels. As a result, Nucor joined three other steelmakers in filing a petition alleging China is circumventing coated steel sheet duties by shipping product through Vietnam. We continue to believe that assertive enforcement of world trade rules must be one of the highest priorities of the United States government.

Another important trade issue in 2017 is China's continued treatment as a non-market economy in trade disputes. China was a government-run, non-market economy in 2001 when it entered its Protocol of Accession to the World Trade Organization (Protocol), and China remains a government-run, non-market economy today. The main objective of the Protocol was to encourage, and in some cases to require, China to make market-based economic reforms. China has argued that its accession agreement with the World Trade Organization requires it be treated as a market economy after 15 years, a milestone it surpassed in December 2016. However, over this period, China has failed to take the required steps to establish that it is a market economy under U.S. law. Therefore, we agree with the U.S. Department of Commerce's decision to continue treating China as a non-market economy and we encourage other countries to support this position. By treating China as a non-market economy in antidumping cases, the U.S. Department of Commerce can assume that Chinese prices and costs are distorted, and it can use other methodologies to calculate antidumping duties. This treatment often results in appropriately higher duties against Chinese products, in order to offset its unfair trade practices.

A major uncertainty we continue to face in our business is the price of our principal raw material, ferrous scrap, which is volatile and often increases or decreases rapidly in response to changes in domestic demand, unanticipated events that affect the flow of scrap into scrap yards and changes in foreign demand for scrap. In periods of rapidly increasing raw material prices in the industry, which are often associated with periods of strong or rapidly improving steel market conditions, being able to increase our prices for the products we sell quickly enough to offset increases in the prices we pay for ferrous scrap is challenging but critical to maintaining our profitability. We attempt to mitigate the scrap price risk by managing scrap inventory levels at the steel mills to match the anticipated demand over the next several weeks. Certain scrap substitutes, including pig iron, have longer lead times for delivery than scrap, which can make this inventory management strategy difficult to achieve. Continued successful implementation of our raw material strategy, including key investments in Direct Reduced Iron (DRI) production coupled with the scrap brokerage and processing services performed by our team at the David J. Joseph Company (DJJ), gives us greater control over our metallic inputs and thus also helps us to mitigate this risk.

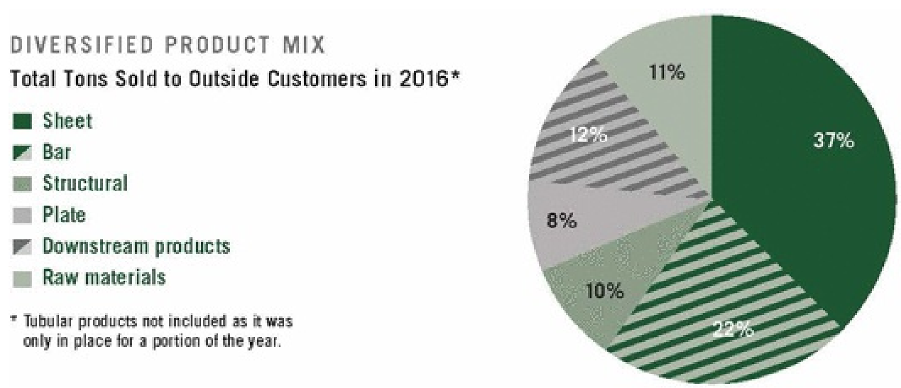
During periods of stronger or improving steel market conditions, we are more likely to be able to pass through to our customers, relatively quickly, the increased costs of ferrous scrap and scrap substitutes and to protect our gross margins from significant erosion. During weaker or rapidly deteriorating steel market conditions, including the global steel market environment of the past several years, weak steel demand, low industry utilization rates and the impact of imports create an even more intensified competitive environment. All of those factors, to some degree, impact pricing, which increases the likelihood that Nucor will experience lower gross margins.

Although the majority of our steel sales are to spot market customers who place their orders each month based on their business needs and our pricing competitiveness compared to both domestic and global producers and trading companies, we also sell contract tons, primarily in our sheet operations. Approximately 60% of our sheet sales were to contract customers in 2016 (60% and 50% in 2015 and 2014, respectively), with the balance in the spot market at the prevailing prices at the time of sale. Steel contract sales outside of our sheet operations are not significant. The amount of tons sold to contract customers depends on the overall market conditions at the time, how the end-use customers see the market moving forward and the strategy that Nucor management believes is appropriate to the upcoming period. Nucor management considerations include maintaining an appropriate balance of spot and contract tons based on market projections and appropriately supporting our diversified customer base. The percentage of tons that is placed under contract also depends on the overall market dynamics and customer negotiations. In years of strengthening demand, we typically see an increase in the percentage of sheet sales sold under contract as our customers have an expectation that transaction prices will rapidly rise and available capacity will quickly be sold out. To mitigate this risk, customers prefer to enter into contracts in order to obtain committed volumes of supply from the mills. Our contracts include a method of adjusting prices on a periodic basis to reflect changes in the market pricing for steel and/or scrap. Market indices for steel generally trend with scrap pricing changes, but during periods of steel market weakness, the more intensified competitive steel market environment can cause the sales price indices to result in reduced gross margins and profitability. Furthermore, since the selling price adjustments are not immediate, there will always be a timing difference between changes in the prices we pay for raw materials and the adjustments we make to our contract selling prices. Generally, in periods of increasing scrap prices, we experience a short-term margin contraction on contract tons. Conversely, in periods of decreasing scrap prices, we typically experience a short-term margin expansion. Contract sales typically have terms ranging from six to twelve months.

Another significant uncertainty we face is the cost of energy. The availability and prices of electricity and natural gas are influenced today by many factors, including changes in supply and demand, advances in drilling technology and, increasingly, by changes in public policy relating to energy production and use. Proposed regulation of greenhouse gas emissions from new and refurbished power plants could increase our cost of electricity in future years, particularly if they are adopted in a form that requires deep reductions in greenhouse gas emissions. Adopting these regulations in an onerous form could lead to foreign producers that are not affected by them gaining a competitive advantage over us. We are monitoring these regulatory developments closely and will seek to educate public policy makers during the adoption process about their potential impact on our business and the U.S. manufacturing base.

OUR STRENGTHS AND OPPORTUNITIES

We are North America's most diversified steel producer. As a result, our short-term performance is not tied to any one market. Since 2012, we have made investments of more than $6 billion on projects that are not only diversifying our product offerings but also the markets that we serve. These acquisitions and investments will grow our long-term earnings power by increasing our channels to market, expanding our product portfolio into higher value-added offerings that are less vulnerable to imports, improving our cost structure and further building upon our market leadership positions. The pie chart below shows the diversity of our product mix by total tons sold to outside customers in 2016.



Given the strategic emphasis in recent years of shifting our product mix to include a greater proportion of value-added steel mill products, we performed an analysis to understand the impact on our steel mills' capacities in the fourth quarter of 2016. As a result of the analysis, we estimate Nucor's total steelmaking annual capacity to be approximately 26.7 million tons. The estimate is a 7% decrease from our previous estimate of just under 29 million tons.

Nucor's raw material supply chain is another important strength. Our investment in DRI production facilities and scrap brokerage and processing businesses provides Nucor with significant flexibility in optimizing our raw materials costs. Additionally, having a significant portion of our raw materials supply under our control minimizes risk associated with the global sourcing of raw materials, particularly since a considerable portion of scrap substitutes comes from regions of the world that have historically experienced greater political turmoil.

Our highly variable, low cost structure, combined with our financial strength and liquidity, has allowed us to successfully navigate cyclical, severely depressed steel industry market conditions in the past. In such times, our incentive-based pay system reduces our payroll costs, both hourly and salary, which helps to offset lower selling prices. Our pay-for-performance system that is closely tied to our levels of production also allows us to keep our workforce intact and to continue operating our facilities when some of our competitors with greater fixed costs are forced to shut down some of their facilities. Because we use electric arc furnaces to produce our steel, we can easily vary our production levels to match short-term changes in demand, unlike our blast furnace-based integrated competitors. We believe these strengths also provide us further opportunities to gain market share during such times.

EVALUATING OUR OPERATING PERFORMANCE

We report our results of operations in three segments: steel mills, steel products and raw materials. Most of the steel we produce in our mills is sold to outside customers, but a significant percentage is used internally by some of the facilities in our steel products segment.

We begin measuring our performance by comparing our net sales, both in total and by individual segment, during a reporting period with our net sales in the corresponding period in the prior year. In doing so, we focus on changes in and the reasons for such changes in the two key variables that have the greatest influence on our net sales: average sales price per ton during the period and total tons shipped to outside customers.

We also focus on both dollar and percentage changes in gross margins, which are key drivers of our profitability, and the reasons for such changes. There are many factors from period to period that can affect our gross margins. One consistent area of focus for us is changes in "metal margins," which is the difference between the selling price of steel and the cost of scrap and scrap substitutes. Increases or decreases in the cost of scrap and scrap substitutes that are not offset by changes in the selling price of steel can quickly compress or expand our margins and reduce our profitability.

Because energy is a key input to our manufacturing processes, material changes in energy costs per ton can significantly affect our gross margins as well. Lower energy costs per ton increase our gross margins. Generally, our energy costs per ton are lower when the average utilization rates of all operating facilities in our steel mills segment are higher.

Changes in marketing, administrative and other expenses, particularly profit sharing costs, can have a material effect on our results of operations for a reporting period as well. Profit sharing costs vary significantly from period to period as they are based upon changes in our pre-tax earnings and are a reflection of our pay-for-performance system that is closely tied to our levels of production.

EVALUATING OUR FINANCIAL CONDITION

We evaluate our financial condition each reporting period by focusing primarily on the amounts of and reasons for changes in cash provided by operating activities, our current ratio, the turnover rate of our accounts receivable and inventories, the amount and reasons for changes in cash used in or provided by investing activities and financing activities and our cash and cash equivalents and short-term investments position at period end. Our conservative financial practices have served us well in the past and are serving us well today. As a result, our financial position remains strong despite the negative effects on our business of global overcapacity and the continued weakness in the global economy.

2016 CHANGE IN ACCOUNTING PRINCIPLE

In the fourth quarter of 2016, we changed our accounting method for valuing inventories held by the parent company and Nucor-Yamato Steel Company to the first-in, first-out (FIFO) method of accounting from the last-in, first-out (LIFO) method. All inventories held by other subsidiaries of the parent company were previously and continue to be valued using the FIFO method. The effects of the change in accounting principle from LIFO to FIFO have been retrospectively applied to all periods presented in all sections of this Annual Report to Stockholders, including Management's Discussion and Analysis. See Note 2 to our Consolidated Financial Statements for more information related to the change in accounting principle.

COMPARISON OF 2016 TO 2015

RESULTS OF OPERATIONS

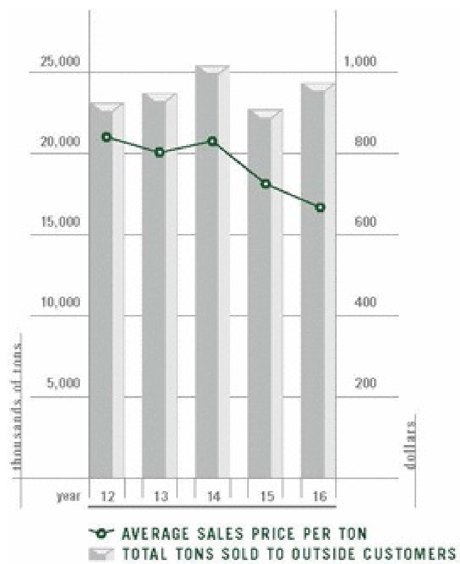
NET SALES

Net sales to external customers by segment for 2016 and 2015 were as follows:

(in thousands)

Year Ended December 31,	2016	2015	% Change
Steel mills	$ 11,312,048	$11,084,331	2%
Steel products	3,687,448	3,966,895	-7%
Raw materials	1,208,626	1,388,050	-13%
Total net sales to external customers	$ 16,208,122	$16,439,276	-1%

Net sales for 2016 decreased 1% from the prior year. Average sales price per ton decreased 8% from $725 in 2015 to $667 in 2016. Total tons shipped to outside customers increased 7% from 22.7 million tons in 2015 to 24.3 million tons in 2016.



In the steel mills segment, production and sales tons were as follows:

(in thousands)

Year Ended December 31,	2016	2015	% Change
Steel production	21,282	19,294	10%
Outside steel shipments	18,846	17,006	11%
Inside steel shipments	3,095	2,854	8%
Total steel shipments	21,941	19,860	10%

Net sales for the steel mills segment increased 2% in 2016 from the prior year primarily due to an 11% increase in total tons shipped to outside customers, which was partially offset by an 8% decrease in the average sales price per ton from $651 in 2015 to $601 in 2016.

Our sheet, bar, plate and structural products all experienced lower average selling prices in 2016 as compared to 2015. Overall steel market conditions remained challenging in 2016; however, volumes increased in 2016 compared to 2015 for all product groups within the steel mills segment, most notably in sheet. The improved volumes outweighed the decreased selling prices to result in increased sales for the steel mills segment in all but the first quarter of 2016, which had the lowest average sales price per ton of any quarter in 2015 and 2016, when compared to the respective prior year quarter. Service center inventory levels in 2016 continued the downward trend that was experienced in 2015. Energy, agricultural and heavy equipment markets were weak in both 2015 and 2016, while the automotive market was strong in both years. A positive factor impacting the steel mills segment in 2016 was decreased imports; however, imports remain at very high levels and accounted for an estimated 26% of the finished steel market in 2016.

The results of recent trade cases are having a positive impact as steel imports were down approximately 15% in 2016 compared to 2015. In mid-2016, affirmative final determinations were announced in three flat-rolled antidumping duty and countervailing duty cases involving corrosion-resistant, cold-rolled and hot-rolled steel products. These final determinations are an important step in returning fair trade to the U.S. flat-rolled steel market. In addition, the cut-to-length plate cases filed against twelve countries continue to progress through the trade case process. Affirmative final determinations have been announced on dumped steel from Brazil, South Africa and Turkey, and in January 2017, the U.S. Department of Commerce announced its final determinations against China for illegally subsidizing and dumping plate. We expect all plate cases to conclude in the coming months. The U.S. Department of Commerce also announced the initiation of antidumping duty investigations of imports of steel concrete reinforcing bar from Japan, Taiwan and Turkey, and a countervailing duty investigation of rebar imports from Turkey. We expect the rebar cases to conclude in 2017.

Outside sales tonnage data for the steel products segment was as follows:

(in thousands)

Year Ended December 31,	2016	2015	% Change
Joist sales	445	427	4%
Deck sales	442	401	10%
Cold finished sales	426	449	-5%
Fabricated concrete reinforcing steel sales	1,115	1,190	-6%

Net sales for the steel products segment decreased 7% from 2015 primarily due to a 3% decrease in tons sold to outside customers and a 6% decrease in the average sales price per ton from $1,374 in 2015 to $1,298 in 2016. Sales during 2016 followed the typical seasonal pattern that was also experienced in 2015. Total sales and volumes were lowest in the first quarter as winter weather conditions had their greatest impact on nonresidential construction markets. Conditions improved in the second quarter and remained relatively steady throughout the remainder of the year with a slight decline during the fourth quarter as winter weather conditions returned. Nonresidential construction markets remained generally flat during 2016 as full year nonresidential construction starts decreased in 2016 compared to 2015.

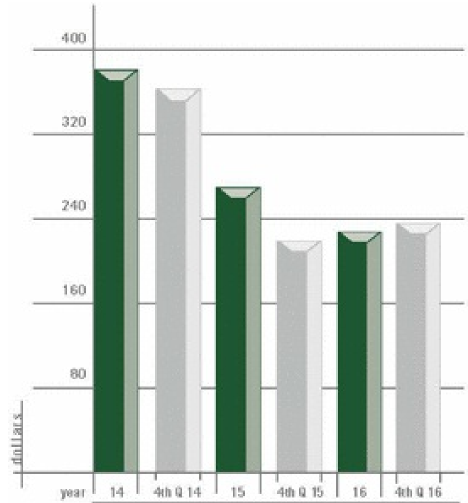
Net sales for the raw materials segment decreased 13% in 2016 from 2015 primarily due to decreased volumes and lower average selling prices in DJJ's brokerage operations as well as decreased volumes in DJJ's scrap processing operations. Approximately 89% of outside sales in the raw materials segment in 2016 were from DJJ's brokerage operations and approximately 8% of outside sales were from DJJ's scrap processing operations (88% and 8%, respectively, in 2015).

GROSS MARGIN

In 2016, Nucor recorded gross margins of $2.03 billion (12%) compared to $1.11 billion (7%) in 2015. Gross margins in 2016 benefitted from a 7% increase in tons shipped to outside customers and lower raw materials costs compared to 2015. The following factors also impacted gross margins:

- In the steel mills segment, the average scrap and scrap substitute cost per ton used decreased 16% from $270 in 2015 to $228 in 2016 and sales tons to outside customers increased 11%. These two factors combined to result in improved total metal margin dollars in 2016 as compared to 2015. Metal margin is the difference between the selling price of steel and the cost of scrap and scrap substitutes. The decline in average sales price contributed to the slight decline in metal margin per ton, but metal margin per ton as a percentage of average sales price per ton increased in 2016 as compared to 2015. The primary driver of the improved steel mill total metal margin dollars was the sheet mills' 13% improvement in tons sold to outside customers in 2016 as compared to 2015. Metal margins per ton and total metal margin dollars in the fourth quarter of 2016 increased from the fourth quarter of 2015 due to higher average selling prices and increased volumes.

Scrap prices are driven by the global supply and demand for scrap and other iron-based raw materials used to make steel. Scrap prices were volatile throughout 2016 as the average cost of scrap and scrap substitutes used increased through the third quarter before decreasing during the fourth quarter of 2016. Despite the fourth quarter decrease from the third quarter, the average cost of scrap and scrap substitute used in the fourth quarter of 2016 increased 22% compared to the first quarter of 2016. As we begin 2017, we expect to see the scrap price increases in December and January tempered by some decline and leveling as the quarter progresses.



AVERAGE SCRAP AND SCRAP SUBSTITUTE COST PER TON USED

- Steel mill energy costs decreased approximately $4 per ton in 2016 compared with 2015 due to improved productivity and lower electricity and natural gas unit costs. Due to the efficiency of Nucor's steel mills, energy costs were approximately 6% of the sales dollar in 2016 and 2015.
- As noted previously and elsewhere in our financial statements, we have continued to diversify into more value-added products which inherently have lower mill capacities. In the fourth quarter of 2016, we performed an analysis of the impact that the shift to value-added products had on steel mill capacity. As part of this analysis, we also revisited the impact that the shift in product mix had on our inventory costing. Based on this analysis, we changed our updated normal capacity determination and the related full absorption costing. The impact of the change in estimate resulted in a net pre-tax benefit of $77.6 million, $83.0 million of which affected gross margin, being recorded in the fourth quarter of 2016.
- Gross margins in the steel products segment for 2016 decreased compared to 2015 primarily due to decreased performance in our joist, deck, building systems and cold finish operations. Our combined joist and deck operations experienced the largest decrease in gross margins in 2016 as compared to 2015 due to higher steel input costs and lower average selling prices per ton. Gross margins in the steel products segment benefitted from the improved performance of our rebar fabrication businesses in 2016 as compared to 2015.
- Gross margins related to DJJ's scrap processing operations improved significantly during 2016 compared to 2015 due to significant and sustainable improvements in its cost structure, reducing both fixed and variable costs.
- Gross margins in the raw materials segment in 2016 were adversely impacted by the performance of our DRI businesses. Although margins improved notably for the full year 2016 as compared to 2015, the DRI operations remained at a loss position. The depressed level of pricing for alternative raw materials in 2016 had an adverse impact on the pricing and margins of our DRI facilities. We believe there is a positive impact on our steel mills' overall iron unit costs, including scrap and pig iron costs, when Nucor Steel Louisiana is producing high-quality DRI.

  Gross margins for our DRI businesses were higher in 2016 than in 2015, particularly at Nucor Steel Louisiana. Our Louisiana DRI facility was not in operation for much of the first quarter of 2015 as repairs related to an equipment failure that occurred in 2014 were completed. Following the resumption of operations, gross margins were negatively impacted by working through higher-cost iron ore inventory that could not be used as the necessary repairs caused by the equipment failure were being made. In the fourth quarter of 2015, following a planned maintenance outage, Nucor Steel Louisiana did not initially resume operations due to market conditions. The Louisiana DRI facility resumed operations in late January 2016.

MARKETING, ADMINISTRATIVE AND OTHER EXPENSES

A major component of marketing, administrative and other expenses is profit sharing and other incentive compensation costs. These costs, which are based upon and fluctuate with Nucor's financial performance, increased from 2015 to 2016 due to increased profitability in 2016. In 2016, profit sharing costs consisted of $129.0 million of contributions, including the Company's matching contribution, made to the Company's Profit Sharing and Retirement Savings Plan for qualified employees ($60.5 million in 2015). Other bonus costs also fluctuate based on Nucor's achievement of certain financial performance goals, including comparisons of Nucor's financial performance to peers in the steel industry and other companies. Stock-based compensation included in marketing, administrative and other expenses increased by 26% to $26.9 million in 2016 compared with $21.3 million in 2015 and includes costs associated with vesting of stock awards granted in prior years.

Marketing, administrative and other expenses increased in the fourth quarter of 2016 as compared to the fourth quarter of 2015 due to increased profit sharing and other incentive compensation costs as a result of increased earnings.

In the third quarter of 2016, there were charges related to legal settlements of $33.7 million included in marketing, administrative and other expenses. Also included in marketing, administrative and other expenses in the third quarter of 2016 was a net benefit of $11.1 million related to fair value adjustments to assets in the corporate/eliminations segment, the majority of which related to the acquisition of the remaining ownership interest in a joint venture.

EQUITY IN EARNINGS OF UNCONSOLIDATED AFFILIATES

Equity method investment earnings were $38.8 million in 2016 and $5.3 million in 2015. The increase in equity method investment earnings from 2015 to 2016 is primarily due to increased earnings at NuMit LLC (NuMit) and, to a lesser extent, a decrease in losses at Duferdofin Nucor S.r.l. (Duferdofin Nucor).

IMPAIRMENTS AND LOSSES ON ASSETS

In 2015, Nucor recorded $244.8 million in charges for impairments and losses on assets (none in 2016). During the fourth quarter of 2015, Nucor assessed its equity investment in Duferdofin Nucor for impairment due to unfavorable operating performance and deterioration in financial projections caused by increased global overcapacity in 2015. After completing its assessment, Nucor determined that the carrying amount exceeded its estimated fair value and was other than temporary. Nucor recorded a $153.0 million impairment charge against the Company's investment in Duferdofin Nucor (see Note 9 to the Consolidated Financial Statements). The $153.0 million impairment charge was included in the steel mills segment.

Also during the fourth quarter of 2015, Nucor determined that certain assets, the majority of which were engineering and equipment related to a blast furnace project at our St. James Parish, Louisiana site, would not be utilized, resulting in an $84.1 million impairment charge (see Note 7 to the Consolidated Financial Statements). This charge was included in the raw materials segment.

INTEREST EXPENSE (INCOME)

Net interest expense is detailed below:

(in thousands)

Year Ended December 31,	2016	2015
Interest expense	$181,179	$177,543
Interest income	(11,935)	(4,012)
Interest expense, net	$169,244	$173,531

Gross interest expense increased in 2016 compared to 2015 primarily due to higher average interest rates on our variable rate debt. Gross interest income increased in 2016 due to increased average investment levels and higher average interest rates on investments.

EARNINGS BEFORE INCOME TAXES AND NONCONTROLLING INTERESTS

Earnings before income taxes and noncontrolling interests by segment for 2016 and 2015 were as follows:

(in thousands)

Year Ended December 31,	2016	2015
Steel mills	$ 1,724,168	$ 629,256
Steel products	249,970	276,048
Raw materials	(95,121)	(283,938)
Corporate/eliminations	(580,358)	(379,500)
Earnings before income taxes and noncontrolling interests	$ 1,298,659	$ 241,866

Earnings before income taxes and noncontrolling interests in the steel mills segment for 2016 increased significantly from 2015 primarily due to improved total metal margin dollars resulting from increased sales volume and decreased input costs. The higher sales and production volumes in 2016 improved our energy and other production costs per ton as compared to 2015. The primary driver of the improvement in the steel mills segment was our sheet mills, benefitting from the factors previously discussed. The improved results of our NuMit and Duferdofin Nucor equity method joint ventures also contributed to the increase in earnings in 2016 as compared to 2015. A positive factor benefitting the steel mills segment in 2016 was decreased imports; however, imports remain at very high levels and accounted for an estimated 26% of the finished steel market in 2016. During 2015, the $153.0 million impairment charge related to Duferdofin Nucor significantly impacted the steel mills segment, causing the segment to report a loss before income taxes and noncontrolling interests in the fourth quarter of 2015. Overall operating rates at our steel mills for the full year 2016 increased to 80% as compared to 73% for the full year 2015.

In the steel products segment, earnings before income taxes and noncontrolling interests decreased slightly in 2016 compared to 2015. The performance of our joist, deck, buildings systems and cold finish operations during 2016 declined compared to 2015, while the performance of our rebar fabrication businesses had strong year-over-year improvement despite a generally flat nonresidential construction market. Backlog tons for our joist, deck, building systems and rebar fabrication businesses were higher at the end of 2016 than at the end of 2015 as market demand seems to be improving.

Earnings before income taxes and noncontrolling interests in the raw materials segment for 2016 improved significantly from 2015, with the most significant driver being the improved performance of our DRI operations, particularly at Nucor Steel Louisiana. In 2015, Nucor Steel Louisiana's performance was affected by the challenging conditions previously discussed. During 2016, the facility was able to run throughout the year and benefitted from improved pricing that led to a profitable third quarter of 2016. Also contributing to the increased performance of the raw materials segment was the significant improvement in profitability of DJJ's scrap processing operations in 2016. Earnings before income taxes and noncontrolling interests for the raw materials segment in 2015 were negatively impacted by the $84.1 million impairment charge on assets related to a blast furnace project that will not be utilized in the future.

NONCONTROLLING INTERESTS

Noncontrolling interests represent the income attributable to the minority interest partners of Nucor's joint ventures, primarily Nucor-Yamato Steel Company (NYS), of which Nucor owns 51%. The 7% decrease in earnings attributable to noncontrolling interests from 2016 to 2015 was primarily due to decreased metal margins as a result of lower selling prices, partially offset by increased volumes. Under the NYS limited partnership agreement, the minimum amount of cash to be distributed each year to the partners is the amount needed by each partner to pay applicable U.S. federal and state income taxes.

PROVISION FOR INCOME TAXES

The effective tax rate in 2016 was 30.7% compared with 20.2% in 2015. The increase in the rate between 2015 and 2016 is primarily due to the change in the relative proportions of net earnings attributable to noncontrolling interests to total pre-tax earnings between the periods. The effective tax rate in 2015 also benefited from lower state income taxes caused by state tax credits and the reversal of previously unrecognized tax benefits. These decreases in the 2015 rate were somewhat offset by an increase as a result of the $153.0 million financial statement impairment of an investment in a foreign joint venture. Nucor has concluded U.S. federal income tax matters for years through 2012. Tax years 2013 through 2015 remain open to examination by the Internal Revenue Service. The Canada Revenue Agency has substantially concluded its examination of the 2012 Canadian returns for Harris Steel Group Inc. and certain related affiliates and is now examining the 2013 Canadian returns. The tax years 2009 through 2015 remain open to examination by other major taxing jurisdictions to which Nucor is subject (primarily Canada and other state and local jurisdictions).

NET EARNINGS AND RETURN ON EQUITY

Nucor reported net earnings of $796.3 million, or $2.48 per diluted share, in 2016, compared to net earnings of $80.7 million, or $0.25 per diluted share, in 2015. Net earnings attributable to Nucor stockholders as a percentage of net sales was 4.9% and 0.5% in 2016 and 2015, respectively. Return on average stockholders' equity was 10.4% and 1.0% in 2016 and 2015, respectively.

COMPARISON OF 2015 TO 2014
RESULTS OF OPERATIONS

NET SALES

Net sales to external customers by segment for 2015 and 2014 were as follows:

(in thousands)

Year Ended December 31,	2015	2014	% Change
Steel mills	$ 11,084,331	$ 14,723,642	-25%
Steel products	3,966,895	4,032,385	-2%
Raw materials	1,388,050	2,349,114	-41%
Total net sales to external customers	$ 16,439,276	$ 21,105,141	-22%

Net sales for 2015 decreased 22% from the prior year. The average sales price per ton decreased 13% from $830 in 2014 to $725 in 2015, while total tons shipped to outside customers decreased 11% from 25.4 million tons in 2014 to 22.7 million tons in 2015.

In the steel mills segment, production and sales tons were as follows:

(in thousands)

Year Ended December 31,	2015	2014	% Change
Steel production	19,294	21,135	-9%
Outside steel shipments	17,006	18,681	-9%
Inside steel shipments	2,854	3,286	-13%
Total steel shipments	19,860	21,967	-10%

Net sales to external customers in the steel mills segment decreased 25% due to a 17% decrease in the average sales price per ton from $788 in 2014 to $651 in 2015 and a 9% decrease in tons sold to outside customers.

Outside sales tonnage for the steel products segment was as follows:

(in thousands)

Year Ended December 31,	2015	2014	% Change
Joist sales	427	421	1%
Deck sales	401	396	1%
Cold finished sales	449	504	-11%
Fabricated concrete reinforcing steel sales	1,190	1,185	—

Net sales to external customers in the steel products segment decreased 2% in 2015 from 2014 due to a 1% decrease in tons sold to outside customers and a 1% decrease in the average sales price per ton from $1,383 in 2014 to $1,374 in 2015.

Sales for the raw materials segment decreased 41% from 2014 primarily due to decreased volumes in DJJ's brokerage and processing businesses. Approximately 88% of outside sales in the raw materials segment in 2015 were from DJJ's brokerage operations and approximately 8% of the outside sales were from DJJ's scrap processing operations (81% and 12%, respectively, in 2014).

GROSS MARGIN

In 2015, Nucor recorded gross margins of $1.11 billion (7%) compared to $1.85 billion (9%) in 2014. The year-over-year dollar decrease was primarily the result of the 13% decrease in the average sales price per ton and 11% decrease in tons shipped to outside customers. Gross margin during 2015 was also affected by the following factors:

- In the steel mills segment, the average scrap and scrap substitute cost per ton used decreased 29% from $381 in 2014 to $270 in 2015; however, overall metal margin decreased significantly in 2015 due to lower sales prices and volumes.
- Total steel mill energy costs decreased approximately $3 per ton from 2014 to 2015 primarily due to lower natural gas and electricity unit costs.
- Nucor's 2014 gross margins were negatively impacted by $8.9 million in inventory-related purchase accounting adjustments associated with our acquisition of Gallatin Steel Company (Gallatin) in the fourth quarter of 2014 (none in 2015).
- Gross margins in the steel products segment for 2015 increased significantly compared to 2014 primarily due to improved performance in our joist, deck, rebar and building systems operations. These operations experienced margin expansion in 2015 due to lower input costs caused by decreased steel prices and the successful execution of cost reduction strategies.
- Our Nucor Steel Louisiana DRI facility experienced an equipment failure in the fourth quarter of 2014 that suspended production operations until late in the first quarter of 2015. The facility's margins in 2015 were negatively impacted by working through higher-cost iron ore that was purchased at the end of 2014 but was unable to be used until the facility resumed operations. Following a planned maintenance outage that occurred in the fourth quarter of 2015, Nucor Steel Louisiana did not initially resume operations due to market conditions. The Louisiana DRI facility resumed operations in late January 2016.
- Gross margins related to DJJ's scrap processing and brokerage operations decreased during 2015 compared to 2014 due to weaker demand for scrap and other metallic commodities as steel mill utilization decreased.

MARKETING, ADMINISTRATIVE AND OTHER EXPENSES

Profit sharing costs decreased from 2014 to 2015. In 2015, profit sharing costs consisted of $60.5 million of contributions, including the Company's matching contribution, made to the Company's Profit Sharing and Retirement Savings Plan for qualified employees ($110.1 million in 2014). Stock-based compensation included in marketing, administrative and other expenses decreased 3% to $21.3 million in 2015 compared with $21.9 million in 2014 and includes costs associated with vesting of stock awards granted in prior years.

EQUITY EARNINGS OF UNCONSOLIDATED AFFILIATES

Equity method investment earnings were $5.3 million in 2015 and $13.5 million in 2014. The decrease in equity method investment earnings from 2014 to 2015 is primarily due to decreased earnings at NuMit and 2015 losses at Hunter Ridge Energy Services LLC compared to earnings in 2014, partially offset by a decrease in losses at Duferdofin Nucor.

IMPAIRMENTS AND LOSSES ON ASSETS

In 2015, Nucor recorded $244.8 million in charges for impairments and losses on assets. The charges for impairments in 2015 related to the $153.0 million impairment charge against the Company's investment in Duferdofin Nucor (see Note 9 to the Consolidated Financial Statements) and the $84.1 million charge related to a blast furnace project that will not be utilized in the future (see Note 7 to the Consolidated Financial Statements). These charges are included in the steel mills segment and the raw materials segment, respectively.

In 2014, Nucor recorded $25.4 million of impairments and losses on assets primarily related to a $9.0 million charge on the disposal of assets and a $12.5 million charge related to the partial write-down of assets, both in the steel mills segment.

INTEREST EXPENSE (INCOME)

Net interest expense is detailed below:

(in thousands)

Year Ended December 31,	2015	2014
Interest expense	$177,543	$174,142
Interest income	(4,012)	(4,886)
Interest expense, net	$173,531	$169,256

Gross interest expense increased in 2015 as compared to 2014 due primarily to lower capitalized interest during 2015. The decrease in 2015 as compared to 2014 in gross interest income is attributable to lower interest income received on credit facilities that Nucor extended to a joint venture as the joint venture fully repaid its credit facilities in 2014.

EARNINGS BEFORE INCOME TAXES AND NONCONTROLLING INTERESTS

Earnings before income taxes and noncontrolling interests by segment for 2015 and 2014 were as follows:

(in thousands)

Year Ended December 31,	2015	2014
Steel mills	$ 629,256	$1,594,352
Steel products	276,048	166,323
Raw materials	(283,938)	(29,053)
Corporate/eliminations	(379,500)	(584,334)
Earnings before income taxes and noncontrolling interests	$ 241,866	$1,147,288

Earnings before income taxes and noncontrolling interests in the steel mills segment for 2015 decreased significantly from 2014 due to significantly lower total metal margin dollars caused by lower sales volume and lower average sales prices resulting from the factors discussed above. The $153.0 million impairment charge related to Duferdofin Nucor significantly impacted the steel mills segment and caused the segment to report a loss before income taxes and noncontrolling interests in the fourth quarter of 2015. The steel mills segment's profitability in 2014 was impacted by a $9.0 million charge on the disposal of assets and a $12.5 million charge related to the partial write-down of assets within the segment. Market conditions were much more challenging for the steel mills segment in 2015 as compared to 2014 due to the steep drop in oil prices and the significant negative impact on energy-related steel. Imports remained at historically high levels and accounted for an estimated 34% of the finished and semi-finished steel market in 2015.

In the steel products segment, earnings before income taxes and noncontrolling interests increased significantly in 2015 compared to 2014. Nonresidential construction markets experienced a slight decrease in demand as nonresidential building construction starts were lower in 2015 as compared to 2014. Despite this slight decrease in demand and only modest increases in volumes for our joist, deck, rebar fabrication and building systems operations, the steel products segment was able to expand its margins in 2015 due to lower steel costs.

Earnings before income taxes and noncontrolling interests in the raw materials segment for 2015 decreased significantly from 2014. DJJ's brokerage and scrap processing operations had lower sales volumes and average selling prices in 2015 compared to 2014. Falling prices throughout 2015 caused margin compression at our scrap processing businesses. The raw materials segment was also impacted by the decreased performance of our DRI facilities in 2015 as previously discussed. Also negatively impacting the profitability of the raw materials segment in 2015 was the $84.1 million impairment charge for assets related to a blast furnace project.

NONCONTROLLING INTERESTS

The 13% increase in earnings attributable to noncontrolling interests from 2014 to 2015 was primarily due to increased metal margins as a result of lower raw materials costs, a more favorable product mix and the impact of a planned three-week outage associated with a capital project in the second quarter of 2014, partially offset by decreased volumes.

PROVISION FOR INCOME TAXES

The effective tax rate in 2015 was 20.2% compared with 32.1% in 2014. The decrease in the rate between 2014 and 2015 is primarily due to the change in the relative proportions of net earnings attributable to noncontrolling interests to total pre-tax earnings between the periods. The effective tax rate in 2015 also benefited from lower state income taxes caused by state tax credits and the reversal of previously unrecognized tax benefits. These decreases in the 2015 rate were somewhat offset by an increase as a result of the $153.0 million financial statement impairment of an investment in a foreign joint venture.

NET EARNINGS AND RETURN ON EQUITY

Nucor reported net earnings of $80.7 million, or $0.25 per diluted share, in 2015, compared to net earnings of $679.3 million, or $2.11 per diluted share, in 2014. Net earnings attributable to Nucor stockholders as a percentage of net sales was 0.5% and 3.2% in 2015 and 2014, respectively. Return on average stockholders' equity was 1.0% and 8.4% in 2015 and 2014, respectively.

LIQUIDITY AND CAPITAL RESOURCES

Nucor's cash and cash equivalents and short-term investments position remained strong at $2.20 billion at the end of 2016. Approximately $348.8 million and $360.6 million of the cash and cash equivalents position at December 31, 2016 and December 31, 2015, respectively, was held by our majority-owned joint ventures. Cash flows provided by operating activities provide us with a significant source of liquidity. When needed, we have external short-term financing sources available, including the issuance of commercial paper and borrowings under our bank credit facilities. We also issue long-term debt from time to time.

Nucor has a $1.5 billion revolving credit facility that matures in April 2021 and was undrawn at December 31, 2016. We believe our financial strength is a key strategic advantage among domestic steel producers, particularly during recessionary business cycles. We carry the highest credit ratings of any steel producer headquartered in North America, with an A- long-term rating from Standard and Poor's and a Baa1 long-term rating from Moody's. Our credit ratings are dependent, however, upon a number of factors, both qualitative and quantitative, and are subject to change at any time. The disclosure of our credit ratings is made in order to enhance investors' understanding of our sources of liquidity and the impact of our credit ratings on our cost of funds. Based upon the preceding factors, we expect to continue to have adequate access to the capital markets at a reasonable cost of funds for liquidity purposes when needed.

Selected Measures of Liquidity and Capital Resources

(dollars in thousands)

December 31,	2016	2015
Cash and cash equivalents	$ 2,045,961	$ 1,939,469
Short-term investments	150,000	100,000
Working capital	4,116,427	4,469,232
Current ratio	2.7	4.2

The current ratio was 2.7 at year end 2016 compared with 4.2 at year end 2015. The current ratio was negatively impacted by the reclassification of $600.0 million of debt due in December 2017 from non-current to current liabilities, a 48% increase in accounts payable due primarily to a 24% rise in the value of scrap and scrap substitutes on hand from year end 2015 to year end 2016, as well as a 48% increase in salaries, wages and related accruals mainly due to greater performance-based bonus accruals resulting from Nucor's improved profitability in 2016 over the prior year.

The current ratio was positively impacted by an 18% increase in accounts receivable and a 10% increase in inventory from year end 2015. The increase in accounts receivable was primarily due to a 14% increase in outside shipments in the fourth quarter of 2016 compared with the prior year fourth quarter. Inventories increased from year end 2015 due to the rise in the value of scrap and scrap substitutes previously mentioned. Finally, the 8% increase from 2015 in cash and cash equivalents and short-term investments was primarily due to the robust $1.74 billion of cash generated by operating activities during 2016, partially offset by cash used for capital expenditures, acquisitions and dividends.

In 2016, total accounts receivable turned approximately every five weeks and inventories turned approximately every eight weeks. These ratios compare with accounts receivable turnover of approximately every five weeks and inventory turnover of approximately every nine weeks in 2015.

Funds provided by operations, cash and cash equivalents, short-term investments and new borrowings under existing credit facilities are expected to be adequate to meet future capital expenditure and working capital requirements for existing operations for at least the next 24 months.

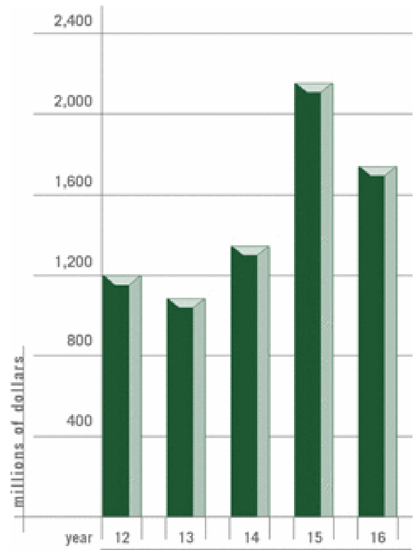
We have a simple capital structure with no off-balance sheet arrangements or relationships with unconsolidated special purpose entities that we believe could have a material impact on our financial condition or liquidity.

CAPITAL ALLOCATION STRATEGY

Nucor's strong cash and cash equivalents and short-term investments position provides many opportunities for prudent deployment of our capital. We have three approaches to allocating our capital. Nucor's highest capital allocation priority is to invest for profitable long-term growth through our multi-pronged strategy of optimizing existing operations, acquisitions and greenfield expansions. Our second priority is to provide our stockholders with cash dividends that are consistent with our success in delivering long-term earnings growth. Our third priority is to opportunistically repurchase our stock when our cash position is strong and attractively priced growth opportunities are limited. In September 2015, Nucor's Board of Directors authorized the repurchase of up to $900 million of the Company's common stock. For the first time since 2008, Nucor repurchased approximately 1.7 million shares of stock for $66.5 million in December 2015 and approximately 0.1 million shares of stock for $5.2 million in February 2016.

OPERATING ACTIVITIES

Cash provided by operating activities was $1.74 billion in 2016, a decrease of 19% compared with cash provided by operating activities of $2.16 billion in 2015. The primary reason for the change is decreased cash generated from changes in operating assets and liabilities of $20.9 million in 2016 compared with cash generated by changes in operating assets and liabilities of $1.21 billion in 2015. The decrease in cash generated from changes in operating assets and liabilities was partially offset by the $707.4 million increase in net earnings and the increase in deferred income taxes in 2016 over the prior year. The funding of working capital increased from the prior year due mainly to increases in accounts receivable and inventories, partially offset by increases in accounts payable and salaries, wages and related accruals. Accounts receivable increased due to a 14% increase in outside shipments in the fourth quarter of 2016 from the fourth quarter of 2015, while average sales price per ton remained consistent during those periods. Inventories and accounts payable increased due to a 24% increase in scrap and scrap substitutes cost per ton in inventory from year end 2015. The increase in salaries, wages and related accruals as compared with 2015 is mainly due to greater performance-based bonus accruals resulting from the Company's increased profitability in 2016 over 2015.



CASH PROVIDED BY OPERATIONS

INVESTING ACTIVITIES

Our business is capital intensive; therefore, cash used in investing activities primarily represents capital expenditures for new facilities, the expansion and upgrading of existing facilities and the acquisition of other companies. Cash used in investing activities increased $583.4 million from 2015 to 2016. The largest factor contributing to the increase in cash used in investing activities was the $455.7 million increase in cash paid for the acquisition of other companies in 2016 over the prior year, mainly due to the use of $424.7 million of cash for the acquisition of Independence Tube Corporation in the fourth quarter of 2016. Nucor invested $604.8 million in new facilities and expansion or upgrading of existing facilities in 2016 compared with $374.1 million in 2015. The increase in capital expenditures is due to Nucor's purchase of 49% of Encana Oil & Gas (USA) Inc.'s leasehold interest covering approximately 54,000 acres in the South Piceance Basin, NYS's quench and self-tempering expansion, the addition of a cold mill complex at Nucor Steel Arkansas and various other capital expansion projects. These increases in cash used for investing activities were partially offset by the receipt of $135.0 million from the sale of our 50% equity interest in Hunter Ridge Energy Services LLC.

FINANCING ACTIVITIES

Cash used in financing activities in 2016 was $614.0 million compared with cash used in financing activities of $789.8 million in 2015. The majority of the change was due to the first quarter 2015 repayment of approximately $151 million of commercial paper that was issued in 2014 and outstanding at year end 2014 to partially fund the acquisition of Gallatin. Additionally, cash used to repurchase treasury stock decreased from $66.5 million in 2015 to $5.2 million in 2016.

In 2016, Nucor increased its quarterly base dividend, resulting in dividends paid of $481.1 million in 2016 compared with $479.4 million in 2015.

Our credit facility includes only one financial covenant, which is a limit of 60% on the ratio of funded debt to total capitalization. In addition, the credit facility contains customary non-financial covenants, including a limit on Nucor's ability to pledge the Company's assets and a limit on consolidations, mergers and sales of assets. Our funded debt to total capital ratio was 35% at the end of 2016 and 36% at the end of 2015, and we were in compliance with all other covenants under our credit facility at the end of 2016.

MARKET RISK

Nucor's largest exposure to market risk is in our steel mills and steel products segments. Our utilization rates for the steel mills and steel products' facilities for the fourth quarter of 2016 were 74% and 60%, respectively. A significant portion of our steel mills and steel products segments sales are into the commercial, industrial and municipal construction markets. These markets continue to be depressed when compared to historical levels, and the domestic steel industry continues to be negatively affected by imported steel. Our largest single customer in 2016 represented approximately 4% of sales and consistently pays within terms. In the raw materials segment, we are exposed to price fluctuations related to the purchase of scrap steel and iron ore. Our exposure to market risk is mitigated by the fact that our steel mills use a significant portion of the products of this segment.

Nucor's tax-exempt industrial development revenue bonds (IDRBs), including the Gulf Opportunity Zone bonds, have variable interest rates that are adjusted weekly. These IDRBs represent 23% of Nucor's long-term debt outstanding at December 31, 2016. The remaining 77% of Nucor's long-term debt is at fixed rates. Future changes in interest rates are not expected to significantly impact earnings. From time to time, Nucor makes use of interest rate swaps to manage interest rate risk. As of December 31, 2016, there were no such contracts outstanding. Nucor's investment practice is to invest in securities that are highly liquid with short maturities. As a result, we do not expect changes in interest rates to have a significant impact on the value of our investment securities recorded as short-term investments.

Nucor also uses derivative financial instruments from time to time to partially manage its exposure to price risk related to natural gas purchases used in the production process as well as scrap, copper and aluminum purchased for resale to its customers. In addition, Nucor uses forward foreign exchange contracts from time to time to hedge cash flows associated with certain assets and liabilities, firm commitments and anticipated transactions. Nucor generally does not enter into derivative instruments for any purpose other than hedging the cash flows associated with specific volumes of commodities that will be purchased and processed or sold in future periods and hedging the exposures related to changes in the fair value of outstanding fixed-rate debt instruments and foreign currency transactions. Nucor recognizes all derivative instruments in the consolidated balance sheets at fair value.

The Company is exposed to foreign currency risk primarily through its operations in Canada, Europe and Trinidad. We periodically use derivative contracts to mitigate the risk of currency fluctuations.

CONTRACTUAL OBLIGATIONS AND OTHER COMMERCIAL COMMITMENTS

The following table sets forth our contractual obligations and other commercial commitments as of December 31, 2016 for the periods presented:

(in thousands)

	Payments Due By Period				
Contractual Obligations	Total	2017	2018 - 2019	2020 - 2021	2022 and thereafter
Long-term debt	$ 4,360,600	$ 600,000	$ 500,000	$ 20,000	$3,240,600
Estimated interest on long-term debt(1)	2,091,939	182,240	254,918	242,666	1,412,115
Capital leases	31,868	3,597	7,194	7,194	13,883
Operating leases	103,481	27,705	39,251	22,343	14,182
Raw material purchase commitments(2)	1,697,564	1,045,836	430,295	115,738	105,695
Utility purchase commitments(2)	945,515	224,339	217,632	153,700	349,844
Other unconditional purchase obligations(3)	101,557	96,884	2,424	1,420	829
Other long-term obligations(4)	513,938	341,776	53,774	11,758	106,630
Total contractual obligations	$ 9,846,462	$2,522,377	$1,505,488	$ 574,819	$5,243,778

(1) Interest is estimated using applicable rates at December 31, 2016 for Nucor's outstanding fixed and variable rate debt.

(2) Nucor enters into contracts for the purchase of scrap and scrap substitutes, iron ore, electricity, natural gas and other raw materials and related services. These contracts include multi-year commitments and minimum annual purchase requirements and are valued at prices in effect on December 31, 2016, or according to the contract language. These contracts are part of normal operations and are reflected in historical operating cash flow trends. We do not believe such commitments will adversely affect our liquidity position.

(3) Purchase obligations include commitments for capital expenditures on operating machinery and equipment.

(4) Other long-term obligations include amounts associated with Nucor's early-retiree medical benefits, management compensation and guarantees.

Note: In addition to the amounts shown in the table above, $44.1 million of unrecognized tax benefits have been recorded as liabilities, and we are uncertain as to if or when such amounts may be settled. Related to these unrecognized tax benefits, we have also recorded a liability for potential penalties and interest of $18.4 million at December 31, 2016.

DIVIDENDS

Nucor has increased its base cash dividend every year since it began paying dividends in 1973. Nucor paid dividends of $1.50 per share in 2016, compared with $1.49 per share in 2015. In November 2016, the Board of Directors increased the base quarterly dividend to $0.3775 per share. The base quarterly dividend has more than tripled over the past ten years. In February 2017, the board of directors declared Nucor's 176th consecutive quarterly cash dividend of $0.3775 per share payable on May 11, 2017 to stockholders of record on March 31, 2017.

OUTLOOK

In 2017, we expect to take advantage of our position of strength to grow Nucor's long-term earnings power and stockholder value despite a U.S. economy burdened by a challenging regulatory and overall business environment. We have invested significant capital into our business since the last cyclical peak in 2008. We have done so over a broad range of strategic acquisitions and investments that we believe will further enhance our ability to grow Nucor's long-term earnings power by increasing our channels to market, expanding our product portfolios into higher value-added offerings that are less vulnerable to imports, improving our highly variable low cost structure and building upon our market leadership positions. With many of these capital projects completed and ready to yield results, we will focus on execution in order to generate strong returns on these investments. We will also utilize our strong liquidity position to seek investment opportunities to further grow our long-term earnings capacity.

We are very encouraged regarding full year volume, pricing and profitability and believe our 2017 results could significantly exceed the prior year. We expect our sheet mills to perform more consistently in 2017 due to the full year benefit of recent trade actions. Our plate mills and bar mills are also expected to deliver improved profitability as the pending plate and rebar cases are expected to conclude in 2017. Additionally, improved conditions in energy markets are expected to result in higher drilling activity and rig counts, benefitting energy-related steel mill products. Consumer confidence has risen sharply in December 2016 and in January 2017 due to a more optimistic outlook for the economy and job growth during the year ahead. Subject to timing, proposed infrastructure bills should benefit not just our steel mills segment but a number of steel products as well. While utilization rates remained depressed in 2016 we have realized some increase in momentum early in 2017. Due to lower industry output, reduced inventory levels at our service center customers and slight decreases in import volumes, we have been able to realize significant price increases for certain products within our steel mills segment late in 2016, and this has continued in early 2017. We expect that our downstream steel products segment will continue to build on its positive results after the typical seasonal slow-down in construction that the winter season brings. We anticipate improvement in the performance of the raw materials segment due to demand-driven stronger margins at our DRI mills as well as our scrap recycling businesses.

We expect our first quarter operating results to increase compared to the fourth quarter of 2016. Spot prices on many of our products continue to improve and lead times are extending. Many sources predict healthy increases in nonresidential construction markets in 2017. The domestic automotive market experienced a second consecutive record year in 2016, with 17.6 million vehicles sold. With an improved labor market and stable gasoline prices, vehicle sales are expected to continue to be strong in 2017. The energy markets languished throughout much of 2016 after the collapse in global oil prices in 2015 triggered inventory reductions among pipe and tube producers serving those markets. The energy market, especially oil country tubular goods, is slowly recovering and we expect modest improvement throughout 2017. Backlogs in both the steel mills and steel products segments strengthened late in 2016, and we believe several end-use markets such as nonresidential construction, automotive and energy will experience real demand improvement that may gain momentum throughout 2017. However, the effect this improvement in demand will have on our operating rates will be challenged by excess foreign steel capacity and the threat of continued increases in imported steel. We have aggressively fought to stem the tide of unfairly traded imports and we applaud recent trade legislation that puts our nation in a much stronger position to hold foreign governments accountable when violating U.S. trade laws. Trade cases initiated by the U.S. steel industry targeting several products groups are having a positive impact as steel imports decreased approximately 15% in 2016 when compared to 2015. We expect that scrap prices will increase slightly over the balance of 2017 and that we will continue to experience fluctuations in raw material costs throughout the year. We have made significant investments in our raw materials segment and will continue to utilize our unmatched global supply chain to optimize our raw material costs.

We are committed to executing on the opportunities we see ahead to reward Nucor stockholders with very attractive long-term returns on their valuable capital invested in our company. Nucor is the only steel producer headquartered in North America with the extremely important competitive advantage of an investment-grade credit rating. Our industry-leading financial strength allows us to support investments in our facilities that will prepare us for increased profitability as we enter into more favorable market conditions. In 2017, as we have in our past, we will allocate capital to investments that build our long-term earnings power. Capital expenditures are currently projected to be approximately $575 million in 2017. Included in this total are primarily investments in our core operations to expand our product offerings and keep them state-of-the-art and globally cost-competitive.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

Our discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at year end and the reported amount of revenues and expenses during the year. On an ongoing basis, we evaluate our estimates, including those related to the valuation allowances for receivables, the carrying value of non-current assets, reserves for environmental obligations and income taxes. Our estimates are based on historical experience and various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Accordingly, actual costs could differ materially from these estimates under different assumptions or conditions. We believe the following critical accounting policies affect our significant judgments and estimates used in the preparation of our consolidated financial statements.

ALLOWANCES FOR DOUBTFUL ACCOUNTS

We maintain allowances for doubtful accounts for estimated losses resulting from the inability of our customers to make required payments. If the financial condition of our customers were to deteriorate, resulting in an impairment of their ability to make payments, additional allowances may be required.

INVENTORIES

Inventories are stated at the lower of cost or market. The Company records any amount required to reduce the carrying value of inventory to net realizable value as a charge to cost of products sold. In the fourth quarter of 2016, the Company changed its accounting method for valuing its inventories held by the parent company and NYS to the first-in, first-out (FIFO) method of accounting from the last-in, first-out (LIFO) method. All inventories held by other subsidiaries of the parent company are also valued using the FIFO method. The Company believes that the FIFO method is preferable as it improves comparability with our most similar peers, it more closely resembles the physical flow of our inventory, it better matches revenue with expenses and it aligns with how the Company internally monitors the performance of our businesses.

If steel selling prices were to decline in future quarters, write-downs of inventory could result. Specifically, the valuation of raw material inventories purchased during periods of peak market pricing would most likely be impacted. Low utilization rates at our steel mills or raw materials facilities could hinder our ability to work through high-priced scrap and scrap substitutes (particularly pig iron and iron ore), leading to period-end exposure when comparing carrying value to net realizable value.

LONG-LIVED ASSET IMPAIRMENTS

We evaluate our property, plant and equipment and finite-lived intangible assets for potential impairment on an individual asset basis or at the lowest level asset grouping for which cash flows can be independently identified. Asset impairments are assessed whenever circumstances indicate that the carrying amounts of those productive assets could exceed their projected undiscounted cash flows. In developing estimated values for assets that we currently use in our operations, we utilize judgments and assumptions of future undiscounted cash flows that the assets will produce. When it is determined that an impairment exists, the related assets are written down to estimated fair market value.

Certain long-lived asset groupings were tested for impairment during the fourth quarter of 2016. Undiscounted cash flows for each asset grouping were estimated using management's long-range estimates of market conditions associated with each asset grouping over the estimated useful life of the principal asset within the group. Our undiscounted cash flow analysis indicated that those long-lived asset groupings were recoverable as of December 31, 2016; however, if our projected cash flows are not realized, either because of an extended recessionary period or other unforeseen events, impairment charges may be required in future periods. A 5% decrease in the projected cash flows of each of our asset groupings would not result in an impairment.

Due to the current natural gas pricing environment, Nucor performed an impairment assessment of its proved producing natural gas well assets in December 2016. One of the main assumptions that most significantly affects the undiscounted cash flows determination is management's estimate of future natural gas prices. The pricing used in this impairment assessment was developed by management based on projected natural gas market supply and demand dynamics, in conjunction with a review of projections by numerous sources of market data. This analysis was performed on each of Nucor's three groups of wells, with each group defined by common geographic location. Each of Nucor's three groups of wells passed the impairment test. One of the groups of wells had estimated undiscounted cash flows that were noticeably closer to its carrying value of $80.8 million as of December 31, 2016. Changes in the natural gas industry or a prolonged low price environment beyond what had already been assumed in the analysis could cause management to revise the natural gas price assumption, which could possibly result in an impairment of a portion or all of the groups of proved well assets.

In the fourth quarter of 2015, we determined that certain assets, the majority of which were engineering and equipment related to the blast furnace project at our St. James Parish, Louisiana site, would not be utilized in the future. As a result of this determination, Nucor recorded an $84.1 million impairment charge for the entire balance of those assets, which is included in the raw materials segment. The impairment charge is included in impairments and losses on assets in the consolidated statement of earnings in 2015. The assets that were impaired, the majority of which were acquired in 2008, were a viable option that were anticipated to be utilized up until the decision was made that such assets would not be utilized. The decision about whether or not to move forward with construction of the blast furnace utilizing these assets was delayed to focus on the construction of the DRI plant at the site. The decision was further delayed because of challenging conditions in domestic and global steel industries, particularly increased excess capacity, both domestically and globally. In the meantime, technology advances and supply and demand in the raw materials market led management to reconsider its plans for the previously proposed blast furnace. If we decide to proceed with a blast furnace at the site in the future, the project design will be evaluated at that time utilizing new equipment and engineering.

GOODWILL

Goodwill is tested annually for impairment and whenever events or circumstances change that would make it more likely than not that an impairment may have occurred. We perform our annual impairment analysis as of the first day of the fourth quarter each year. The evaluation of impairment involves comparing the current estimated fair value of each reporting unit to the recorded value, including goodwill.

When appropriate, Nucor performs a qualitative assessment to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount. For certain reporting units it is necessary to perform a quantitative analysis. In these instances, a discounted cash flow model is used to determine the current estimated fair value of these reporting units. Key assumptions used to determine the fair value of each reporting unit as part of our annual testing (and any required interim testing) include: (a) expected cash flow for the five-year period following the testing date (including market share, sales volumes and prices, costs to produce and estimated capital needs); (b) an estimated terminal value using a terminal year growth rate determined based on the growth prospects of the reporting unit; (c) a discount rate based on management's best estimate of the after-tax weighted average cost of capital; and (d) a probability-weighted scenario approach by which varying cash flows are assigned to certain scenarios based on the likelihood of occurrence. Management considers historical and anticipated future results, general economic and market conditions, the impact of planned business and operational strategies and all available information at the time the fair values of its reporting units are estimated.

Our fourth quarter 2016 annual goodwill impairment analysis did not result in an impairment charge. Management does not believe that future impairment of these reporting units is probable. However, the performance of certain businesses that comprise our reporting units requires continued improvement. An increase of approximately 50 basis points in the discount rate, a critical assumption in which a minor change can have a significant impact on the estimated fair value, would not result in an impairment charge.

Nucor will continue to monitor operating results within all reporting units throughout the upcoming year in an effort to determine if events and circumstances warrant further interim impairment testing. Otherwise, all reporting units will again be subject to the required annual impairment test during our fourth quarter of 2017. Changes in the judgments and estimates underlying our analysis of goodwill for possible impairment, including expected future operating cash flows and discount rate, could decrease the estimated fair value of our reporting units in the future and could result in an impairment of goodwill.

EQUITY METHOD INVESTMENTS

Investments in joint ventures in which Nucor shares control over the financial and operating decisions but in which Nucor is not the primary beneficiary are accounted for under the equity method. Each of the Company's equity method investments is subject to a review for impairment if, and when, circumstances indicate that an other-than-temporary decline in value below its carrying amount may have occurred. Examples of such circumstances include, but are not limited to, a significant deterioration in the earnings performance or business prospects of the investee; missed financial projections; a significant adverse change in the regulatory, tax, economic or technological environment of the investee; a significant adverse change in the general market condition of either the geographic area or the industry in which the investee operates; and recurring negative cash flows from operations. If management considers the decline to be other than temporary, the Company would write down the investment to its estimated fair market value. An other-than-temporary decline in carrying value is determined to have occurred when, in management's judgment, a decline in fair value below carrying value is of such length of time and/or severity that it is considered long-term.

In the event that an impairment review is necessary, we calculate the estimated fair value of our equity method investments using a probability-weighted multiple-scenario income approach. Management's analysis includes three discounted cash flow scenarios (best case, base case and recessionary case), which contain forecasted near-term cash flows under each scenario. Generally, (i) the best case scenario contains estimates of future results ranging from slightly higher than recent operating performance to levels that are consistent with historical operating and financial performance (i.e., results experienced prior to the onset of the recessionary period that began in 2008); (ii) the base case scenario has estimates of future results ranging from generally in line with recent operating performance to levels that are more conservative than historical operating and financial performance; and (iii) the recessionary case scenario has estimates of future results which include limited growth resulting only from operational cost improvements and limited benefits of new higher-value product offerings. Management determines the probability that each cash flow scenario will come to fruition based on the specific facts and circumstances of each of the preceding scenarios, with the base case typically receiving the majority of the weighting.

Key assumptions used to determine the fair value of our equity method investments include: (a) expected cash flow for the six-year period following the testing date (including market share, sales volumes and prices, costs to produce and estimated capital needs); (b) an estimated terminal value using a terminal year growth rate determined based on the growth prospects of the reporting unit; (c) a discount rate based on management's best estimate of the after-tax weighted average cost of capital; and (d) a probability-weighted scenario approach by which varying cash flows are assigned to certain scenarios based on the likelihood of occurrence. While the assumptions that most significantly affect the fair value determination include projected revenues, metal margins and discount rate, the assumptions are often interdependent and no single factor predominates in determining the estimated fair value. Management considers historical and anticipated future results, general economic and market conditions, the impact of planned business and operational strategies and all available information at the time the fair values of its investments are estimated. Those estimates and judgments may or may not ultimately prove appropriate.

In the fourth quarter of 2015, Nucor assessed its equity investment in Duferdofin Nucor for impairment due to the protracted challenging steel market conditions caused by global overcapacity, which increased in 2015, and the difficult economic environment in Europe. After completing its assessment, Nucor determined that the carrying amount exceeded its estimated fair value. The impairment condition was considered to be other than temporary, and, as a result, the Company recorded a $153.0 million impairment charge against the Company's investment in Duferdofin Nucor in the fourth quarter of 2015. This charge is included in impairments and losses on assets in the consolidated statement of earnings for 2015. The assumptions that most significantly affect the fair value determination include projected revenues, metal margins and the discount rate. While the operating performance of Duferdofin Nucor showed meaningful improvement in 2016, steel market conditions in Europe continued to be challenging through the fourth quarter of 2016, and, therefore, it is reasonably possible that material deviation of future performance from the estimates used in our most recent valuation could result in further impairment of our investment in Duferdofin Nucor. We will continue to monitor for potential triggering events that could affect the carrying value of our investment in Duferdofin Nucor as a result of future market conditions and any changes in business strategy.

ENVIRONMENTAL REMEDIATION

We are subject to environmental laws and regulations established by federal, state and local authorities, and we make provisions for the estimated costs related to compliance. Undiscounted remediation liabilities are accrued based on estimates of known environmental exposures. The accruals are reviewed periodically and, as investigations and remediation proceed, adjustments are made as we believe are necessary. Our measurement of environmental liabilities is based on currently available facts, present laws and regulations and current technology.

INCOME TAXES

We utilize the liability method of accounting for income taxes. Under the liability method, deferred taxes are determined based on the temporary differences between the financial statement and tax basis of assets and liabilities using tax rates expected to be in effect during the years in which the basis differences reverse. A valuation allowance is recorded when it is more likely than not that some of the deferred tax assets will not be realized. We recognize the effect of income tax positions only if those positions are more likely than not of being sustained. Potential accrued interest and penalties related to unrecognized tax benefits within operations are recognized as a component of interest expense and other expenses.

RECENT ACCOUNTING PRONOUNCEMENTS

See Note 2 to the Consolidated Financial Statements for a discussion of new accounting pronouncements adopted by Nucor during 2016 and the expected financial impact of accounting pronouncements recently issued or proposed but not yet required to be adopted.

(dollar and share amounts in thousands, except per share data)

	2016	2015	2014	2013	2012
FOR THE YEAR**					
Net sales	$ 16,208,122	$ 16,439,276	$ 21,105,141	$ 19,052,046	$ 19,429,273
Costs, expenses and other:					
Cost of products sold	14,182,215	15,325,386	19,255,904	17,623,976	18,071,671
Marketing, administrative and other expenses	596,761	458,989	520,805	467,904	437,337
Equity in (earnings) losses of unconsolidated affiliates	(38,757)	(5,329)	(13,505)	(9,297)	13,323
Impairments and losses on assets	—	244,833	25,393	14,000	47,563
Interest expense, net	169,244	173,531	169,256	146,895	162,375
	14,909,463	16,197,410	19,957,853	18,243,478	18,732,269
Earnings before income taxes and noncontrolling interests	1,298,659	241,866	1,147,288	808,568	697,004
Provision for income taxes	398,243	48,836	368,724	214,853	204,312
Net earnings	900,416	193,030	778,564	593,715	492,692
Earnings attributable to noncontrolling interests	104,145	112,306	99,227	94,330	83,207
Net earnings attributable to Nucor stockholders	796,271	80,724	679,337	499,385	409,485
Net earnings per share:					
Basic	2.48	0.25	2.12	1.56	1.28
Diluted	2.48	0.25	2.11	1.56	1.28
Dividends declared per share	1.5025	1.4925	1.4825	1.4725	1.4625
Percentage of net earnings to net sales	4.9%	0.5%	3.2%	2.6%	2.1%
Return on average stockholders' equity	10.4%	1.0%	8.4%	6.2%	5.1%
Capital expenditures	617,677	364,768	568,867	1,230,418	1,019,334
Acquisitions (net of cash acquired)	474,788	19,089	768,581	—	760,833
Depreciation	613,192	625,757	652,000	535,852	534,010
Sales per average employee	690	690	921	859	906
AT YEAR END					
Current assets	$ 6,506,393	$ 5,854,405	$ 6,808,805	$ 6,814,189	$ 6,057,321
Current liabilities	2,389,966	1,385,173	2,097,776	1,960,216	2,029,568
Working capital	4,116,427	4,469,232	4,711,029	4,853,973	4,027,753
Cash provided by operating activities	1,737,533	2,157,043	1,342,898	1,077,949	1,200,385
Current ratio	2.7	4.2	3.2	3.5	3.0
Property, plant and equipment, net	5,078,650	4,891,153	5,287,639	4,917,024	4,283,056
Total assets	15,223,518	14,326,969	15,956,467	15,578,128	14,524,972
Long-term debt (including current maturities)	4,339,141	4,337,145	4,350,558	4,350,902	3,607,156
Percentage of debt to capital(1)	34.5%	35.6%	34.0%	34.4%	30.3%
Total Nucor stockholders' equity	7,879,865	7,477,816	8,110,342	8,018,250	8,002,692
Per share	24.72	23.52	25.42	25.19	25.19
Shares outstanding	318,737	317,962	319,033	318,328	317,663
Employees	23,900	23,700	23,600	22,300	22,200

(1)Long-term debt divided by total equity plus long-term debt.

*** In the fourth quarter of 2016, Nucor changed its accounting method for valuing certain inventories from the last-in, first-out (LIFO) inventory valuation method. All periods presented in the above table reflect this change in accounting principle. See Note 2 to the Consolidated Financial Statements for more information related to the change in accounting principle.*

MANAGEMENT'S REPORT on internal control over financial reporting

Nucor's management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934, as amended.

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.

Management assessed the effectiveness of Nucor's internal control over financial reporting as of December 31, 2016. In making this assessment, management used criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in *Internal Control – Integrated Framework (2013).*

Our evaluation did not include the internal controls over financial reporting of Independence Tube Corporation, which was acquired on October 31, 2016. Total assets and total revenues for the acquisition represent 1.94% and 0.37%, respectively, of the related consolidated financial statement amounts as of and for the fiscal year ended December 31, 2016.

Based on its assessment, management concluded that Nucor's internal control over financial reporting was effective as of December 31, 2016. PricewaterhouseCoopers LLP, an independent registered public accounting firm, has audited the effectiveness of Nucor's internal control over financial reporting as of December 31, 2016 as stated in their report which is included herein.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and Board of Directors
Nucor Corporation:

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of earnings, comprehensive income, stockholders' equity and cash flows present fairly, in all material respects, the financial position of Nucor Corporation and its subsidiaries at December 31, 2016 and 2015, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2016 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, 2016, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these financial statements, for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express opinions on these financial statements and on the Company's internal control over financial reporting based on our integrated audits. We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management and evaluating the overall financial statement presentation. 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.

As discussed in Note 2 to the consolidated financial statements, the Company changed the manner in which it accounts for certain inventory from the last in, first out (LIFO) method to the first in, first out (FIFO) method in 2016.

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.

As described in Management's Report on Internal Control over Financial Reporting, management has excluded Independence Tube Corporation from its assessment of internal control over financial reporting as of December 31, 2016 because it was acquired by the Company in a purchase business combination during 2016. We have also excluded Independence Tube Corporation from our audit of internal control over financial reporting. Independence Tube Corporation is a wholly-owned subsidiary whose total assets and total revenues represent 1.94% and 0.37%, respectively, of the related consolidated financial statement amounts as of and for the year ended December 31, 2016.

PricewaterhouseCoopers LLP

Charlotte, North Carolina
February 28, 2017

CONSOLIDATED BALANCE SHEETS (in thousands)

December 31,	2016	2015
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents (Note 14)	$ 2,045,961	$ 1,939,469
Short-term investments (Notes 4 and 14)	150,000	100,000
Accounts receivable, net (Note 5)	1,631,676	1,383,823
Inventories, net (Notes 2 and 6)	2,479,958	2,245,469
Other current assets (Note 13)	198,798	185,644
Total current assets	6,506,393	5,854,405
PROPERTY, PLANT AND EQUIPMENT, NET (Note 7)	5,078,650	4,891,153
GOODWILL (Notes 3 and 8)	2,052,728	2,011,278
OTHER INTANGIBLE ASSETS, NET (Notes 3 and 8)	866,835	770,672
OTHER ASSETS (Note 9)	718,912	799,461
TOTAL ASSETS	$ 15,223,518	$ 14,326,969
LIABILITIES AND EQUITY		
CURRENT LIABILITIES:		
Short-term debt (Notes 11 and 14)	$ 17,959	$ 51,315
Long-term debt due within one year (Notes 11 and 14)	600,000	—
Accounts payable (Note 10)	838,109	566,527
Salaries, wages and related accruals (Note 17)	428,829	289,004
Accrued expenses and other current liabilities (Notes 10, 13 and 15)	505,069	478,327
Total current liabilities	2,389,966	1,385,173
LONG-TERM DEBT DUE AFTER ONE YEAR (Notes 2, 11 and 14)	3,739,141	4,337,145
DEFERRED CREDITS AND OTHER LIABILITIES (Notes 2, 13, 15, 17 and 19)	839,703	754,774
TOTAL LIABILITIES	6,968,810	6,477,092
COMMITMENTS AND CONTINGENCIES (Notes 13 and 15)		
EQUITY		
NUCOR STOCKHOLDERS' EQUITY (Notes 12 and 16):		
Common stock (800,000 shares authorized; 379,334 and 378,566 shares issued, respectively)	151,734	151,426
Additional paid-in capital	1,974,672	1,918,970
Retained earnings (Note 2)	7,630,916	7,316,910
Accumulated other comprehensive loss, net of income taxes (Notes 2, 13 and 20)	(317,843)	(351,362)
Treasury stock (60,597 and 60,604 shares, respectively)	(1,559,614)	(1,558,128)
Total Nucor stockholders' equity	7,879,865	7,477,816
NONCONTROLLING INTERESTS	374,843	372,061
TOTAL EQUITY	8,254,708	7,849,877
TOTAL LIABILITIES AND EQUITY	$ 15,223,518	$ 14,326,969

See notes to consolidated financial statements.

CONSOLIDATED STATEMENTS OF EARNINGS			*(in thousands, except per share data)*
Year Ended December 31,	2016	2015	2014
NET SALES	$16,208,122	$16,439,276	$21,105,141
COSTS, EXPENSES AND OTHER:			
Cost of products sold (Notes 2, 6 and 20)	14,182,215	15,325,386	19,255,904
Marketing, administrative and other expenses (Note 20)	596,761	458,989	520,805
Equity in earnings of unconsolidated affiliates	(38,757)	(5,329)	(13,505)
Impairments and losses on assets (Notes 7, 9 and 24)	—	244,833	25,393
Interest expense, net (Notes 7, 18 and 19)	169,244	173,531	169,256
	14,909,463	16,197,410	19,957,853
EARNINGS BEFORE INCOME TAXES AND NONCONTROLLING INTERESTS	1,298,659	241,866	1,147,288
PROVISION FOR INCOME TAXES (Notes 2, 19 and 24)	398,243	48,836	368,724
NET EARNINGS (Note 2)	900,416	193,030	778,564
EARNINGS ATTRIBUTABLE TO NONCONTROLLING INTERESTS (Notes 2 and 6)	104,145	112,306	99,227
NET EARNINGS ATTRIBUTABLE TO NUCOR STOCKHOLDERS (Note 2)	$ 796,271	$ 80,724	$ 679,337
NET EARNINGS PER SHARE (Notes 2 and 21):			
Basic	$2.48	$0.25	$2.12
Diluted	$2.48	$0.25	$2.11

See notes to consolidated financial statements.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

(in thousands)

Year Ended December 31,	2016	2015	2014
NET EARNINGS	$ 900,416	$ 193,030	$ 778,564
OTHER COMPREHENSIVE INCOME (LOSS):			
Net unrealized income (loss) on hedging derivatives, net of income taxes of $1,500, ($5,600) and ($4,900) for 2016, 2015 and 2014, respectively	2,570	(9,498)	(8,542)
Reclassification adjustment for loss on settlement of hedging derivatives included in net earnings, net of income taxes of $5,800, $3,500 and $200 for 2016, 2015 and 2014, respectively	9,880	5,798	542
Foreign currency translation gain (loss), net of income taxes of $0, $0 and $400 for 2016, 2015 and 2014, respectively	25,495	(205,397)	(141,530)
Adjustment to early retiree medical plan, net of income taxes of ($1,291), $127 and ($1,921) for 2016, 2015 and 2014, respectively	(3,589)	1,485	(4,228)
Reclassification adjustment for gain on early retiree medical plan included in net earnings, net of income taxes of ($309), ($414) and ($557) for 2016, 2015 and 2014, respectively	(837)	(742)	(1,030)
Other, net of income taxes of $0, $1,500 and $0 for 2016, 2015 and 2014, respectively	—	2,700	—
	33,519	(205,654)	(154,788)
COMPREHENSIVE INCOME (LOSS)	933,935	(12,624)	623,776
COMPREHENSIVE INCOME ATTRIBUTABLE TO NONCONTROLLING INTERESTS	(104,145)	(112,306)	(99,227)
COMPREHENSIVE INCOME (LOSS) ATTRIBUTABLE TO NUCOR STOCKHOLDERS	$ 829,790	$ (124,930)	$ 524,549

See notes to consolidated financial statements.

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

(in thousands, except per share data)

	TOTAL	COMMON STOCK SHARES	COMMON STOCK AMOUNT	ADDITIONAL PAID-IN CAPITAL	RETAINED EARNINGS	ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)	TREASURY STOCK (AT COST) SHARES	TREASURY STOCK (AT COST) AMOUNT	TOTAL NUCOR STOCKHOLDERS' EQUITY	NON-CONTROLLING INTERESTS
BALANCES, December 31, 2013	$8,314,422	377,525	$151,010	$1,843,353	$7,512,922	$ 9,080	59,197	$(1,498,114)	$8,018,251	$296,171
Net earnings in 2014	778,564				679,337				679,337	99,227
Other comprehensive income (loss)	(154,788)					(154,788)			(154,788)	
Stock options exercised	5,614	136	54	5,560					5,614	
Stock option expense	7,716			7,716					7,716	
Issuance of stock under award plans, net of forfeitures	29,667	431	173	26,009			(138)	3,485	29,667	
Amortization of unearned compensation	718			718					718	
Cash dividends ($1.4825 per share)	(476,172)				(476,172)				(476,172)	
Distributions to noncontrolling interests	(63,705)									(63,705)
BALANCES, December 31, 2014	8,442,036	378,092	151,237	1,883,356	7,716,087	(145,708)	59,059	(1,494,629)	8,110,343	331,693
Net earnings in 2015	193,030				80,724				80,724	112,306
Other comprehensive income (loss)	(205,654)					(205,654)			(205,654)	
Stock options exercised	424	10	4	420					424	
Stock option expense	7,433			7,433					7,433	
Issuance of stock under award plans, net of forfeitures	30,120	464	185	26,929			(119)	3,006	30,120	
Amortization of unearned compensation	832			832					832	
Treasury stock acquired	(66,505)						1,664	(66,505)	(66,505)	
Cash dividends ($1.4925 per share)	(479,901)				(479,901)				(479,901)	
Distributions to noncontrolling interests	(71,938)									(71,938)
BALANCES, December 31, 2015	7,849,877	378,566	151,426	1,918,970	7,316,910	(351,362)	60,604	(1,558,128)	7,477,816	372,061
Net earnings in 2016	900,416				796,271				796,271	104,145
Other comprehensive income (loss)	33,519					33,519			33,519	
Stock options exercised	15,670	400	160	15,510					15,670	
Stock option expense	7,833			7,833					7,833	
Issuance of stock under award plans, net of forfeitures	35,953	368	148	32,118			(143)	3,687	35,953	
Amortization of unearned compensation	843			843					843	
Treasury stock acquired	(5,173)						136	(5,173)	(5,173)	
Cash dividends ($1.5025 per share)	(482,265)				(482,265)				(482,265)	
Distributions to noncontrolling interests	(99,588)									(99,588)
Other	(2,377)			(602)					(602)	(1,775)
BALANCES, December 31, 2016	$8,254,708	379,334	$151,734	$1,974,672	$7,630,916	$(317,843)	60,597	$(1,559,614)	$7,879,865	$374,843

See notes to consolidated financial statements.

CONSOLIDATED STATEMENTS OF CASH FLOWS			(in thousands)
Year Ended December 31,	2016	2015	2014
OPERATING ACTIVITIES:			
Net earnings	$ 900,416	$ 193,030	$ 778,564
Adjustments:			
Depreciation	613,192	625,757	652,000
Amortization	73,862	74,260	72,423
Stock-based compensation	56,511	45,794	46,384
Deferred income taxes	71,455	(246,836)	70,801
Distributions from affiliates	40,602	15,132	53,738
Equity in earnings of unconsolidated affiliates	(38,757)	(5,329)	(13,505)
Impairments and losses on assets	—	244,833	25,393
Changes in assets and liabilities (exclusive of acquisitions and dispositions):			
Accounts receivable	(217,736)	655,489	(179,181)
Inventories	(132,639)	1,061,202	11,326
Accounts payable	236,788	(438,788)	(111,859)
Federal income taxes	3,555	62,656	(111,687)
Salaries, wages and related accruals	133,544	(56,267)	67,973
Other operating activities	(3,260)	(73,890)	(19,472)
Cash provided by operating activities	1,737,533	2,157,043	1,342,898
INVESTING ACTIVITIES:			
Capital expenditures	(604,840)	(374,123)	(667,982)
Investment in and advances to affiliates	(63,167)	(80,409)	(97,841)
Divestiture of affiliates	135,000	—	—
Repayment of advances to affiliates	—	—	122,000
Disposition of plant and equipment	18,571	29,390	36,563
Acquisitions (net of cash acquired)	(474,788)	(19,089)	(768,581)
Purchases of investments	(650,000)	(111,927)	(100,000)
Proceeds from the sale of investments	600,000	111,452	27,529
Other investing activities	14,106	3,010	10,250
Cash used in investing activities	(1,025,118)	(441,696)	(1,438,062)
FINANCING ACTIVITIES:			
Net change in short-term debt	(33,360)	(155,816)	178,308
Repayment of long-term debt	—	(16,300)	(5,358)
Issuance of common stock	15,751	424	5,614
Excess tax benefits from stock-based compensation	2,784	2,000	3,400
Distributions to noncontrolling interests	(99,588)	(71,938)	(63,705)
Cash dividends	(481,083)	(479,432)	(475,123)
Acquisition of treasury stock	(5,173)	(66,505)	—
Other financing activities	(13,297)	(2,184)	(2,183)
Cash used in financing activities	(613,966)	(789,751)	(359,047)
Effect of exchange rate changes on cash	8,043	(10,271)	(4,897)
INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	106,492	915,325	(459,108)
CASH AND CASH EQUIVALENTS — BEGINNING OF YEAR	1,939,469	1,024,144	1,483,252
CASH AND CASH EQUIVALENTS — END OF YEAR	$ 2,045,961	$1,939,469	$ 1,024,144
NON-CASH INVESTING ACTIVITY:			
Change in accrued plant and equipment purchases	$ 12,837	$ (9,355)	$ (99,115)

See notes to consolidated financial statements.

YEARS ENDED DECEMBER 31, 2016, 2015 AND 2014

1. NATURE OF OPERATIONS AND BASIS OF PRESENTATION

Nature of Operations Nucor is principally a manufacturer of steel and steel products, as well as a scrap broker and processor, with operating facilities and customers primarily located in North America.

Principles of Consolidation The consolidated financial statements include Nucor and its controlled subsidiaries, including Nucor-Yamato Steel Company, a limited partnership of which Nucor owns 51%. All intercompany transactions are eliminated.

Distributions are made to noncontrolling interest partners in Nucor-Yamato Steel Company in accordance with the limited partnership agreement by mutual agreement of the general partners. At a minimum, sufficient cash is distributed so that each partner may pay their U.S. federal and state income taxes.

Use of Estimates The preparation of financial statements in conformity with generally accepted accounting principles in the United States of America requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from these estimates.

Reclassifications Certain reclassifications of prior years' data have been made to conform to current year presentation.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Cash and Cash Equivalents Cash equivalents are recorded at cost plus accrued interest, which approximates fair value, and have original maturities of three months or less at the date of purchase. Cash and cash equivalents are maintained primarily with a few high-credit quality financial institutions.

Short-term Investments Short-term investments are recorded at cost plus accrued interest, which approximates fair value. Unrealized gains and losses on investments classified as available-for-sale are recorded as a component of accumulated other comprehensive income (loss). Management determines the appropriate classification of its investments at the time of purchase and re-evaluates such determination at each balance sheet date.

Inventories At December 31, 2016, inventories were stated at the lower of cost or market. In the fourth quarter of 2016, the Company changed its accounting method for valuing its inventories held by the parent company and Nucor-Yamato Steel Company to the first-in, first-out (FIFO) method of accounting from the last-in, first-out (LIFO) method. All inventories held by other subsidiaries of the parent company were previously and continue to be valued using the FIFO method. The Company believes that the FIFO method is preferable as it improves comparability with our most similar peers, it more closely resembles the physical flow of our inventory, it better matches revenue with expenses and it aligns with how the Company internally monitors the performance of our businesses.

The effects of the change in accounting principle from LIFO to FIFO have been retrospectively applied to all periods presented. As a result of the retrospective application of the change in accounting principle, certain financial statement line items in the Company's consolidated balance sheet as of December 31, 2015 and its consolidated statements of earnings and consolidated statements of cash flows for 2015 and 2014 were adjusted as follows.

(in thousands, except per share data)

	As Originally Reported	Effect of Change	As Adjusted
CONSOLIDATED STATEMENT OF EARNINGS Year Ended December 31, 2015			
Cost of products sold	$ 14,858,014	$ 467,372	$ 15,325,386
Provision for income taxes	213,154	(164,318)	48,836
Net earnings	496,084	(303,054)	193,030
Earnings attributable to noncontrolling interests	138,425	(26,119)	112,306
Net earnings attributable to Nucor stockholders	357,659	(276,935)	80,724
Net earnings per share:			
Basic	$1.11	$(0.86)	$0.25
Diluted	$1.11	$(0.86)	$0.25
CONSOLIDATED STATEMENT OF EARNINGS Year Ended December 31, 2014			
Cost of products sold	$ 19,198,615	$ 57,289	$ 19,255,904
Provision for income taxes	388,787	(20,063)	368,724
Net earnings	815,790	(37,226)	778,564
Earnings attributable to noncontrolling interests	101,844	(2,617)	99,227
Net earnings attributable to Nucor stockholders	713,946	(34,609)	679,337
Net earnings per share:			
Basic	$2.22	$(0.10)	$2.12
Diluted	$2.22	$(0.11)	$2.11
CONSOLIDATED BALANCE SHEET as of December 31, 2015			
Inventories, net	$ 2,145,444	$ 100,025	$ 2,245,469
Deferred credits and other liabilities	718,613	36,161	754,774
Retained earnings	7,255,972	60,938	7,316,910
CONSOLIDATED STATEMENT OF CASH FLOWS Year Ended December 31, 2015			
Net earnings	$ 496,084	$ (303,054)	$ 193,030
Changes in inventories	593,830	467,372	1,061,202
Changes in deferred income taxes	(82,518)	(164,318)	(246,836)
CONSOLIDATED STATEMENT OF CASH FLOWS Year Ended December 31, 2014			
Net earnings	$ 815,790	$ (37,226)	$ 778,564
Changes in inventories	(45,963)	57,289	11,326
Changes in deferred income taxes	90,864	(20,063)	70,801

The effects of the change in accounting principle from LIFO to FIFO have been retrospectively applied to all periods presented in Notes 6, 19, 21, 22 and 24 of the consolidated financial statements.

The following table shows the effect of the change in accounting principle from LIFO to FIFO on net earnings, earnings attributable to noncontrolling interests, net earnings attributable to Nucor stockholders and the related basic and diluted earnings per share for the year ended December 31, 2016.

(in thousands, except per share data)

	As Computed under LIFO	As Computed under FIFO	Effect of Change
CONSOLIDATED STATEMENT OF EARNINGS Year Ended December 31, 2016			
Net earnings	$ 810,304	$ 900,416	$ 90,112
Earnings attributable to noncontrolling interests	99,500	104,145	4,645
Net earnings attributable to Nucor stockholders	710,804	796,271	85,467
Net earnings per share:			
Basic	$2.22	$2.48	$0.26
Diluted	$2.22	$2.48	$0.26

Property, Plant and Equipment Property, plant and equipment is stated at cost, except for property, plant and equipment acquired through acquisitions which is recorded at acquisition date fair value. With the exception of our natural gas wells, depreciation is provided on a straight-line basis over the estimated useful lives of the assets. Depletion of all capitalized costs associated with our natural gas producing properties is expensed on a unit-of-production basis by individual field as the gas from the proved developed reserves is produced. The costs of acquiring unproved natural gas leasehold acreage are capitalized. When proved reserves are found on unproved properties, the associated leasehold cost is transferred to proved properties. Unproved leases are reviewed periodically for any impairment triggering event, and a valuation allowance is provided for any estimated decline in value. The costs of planned major maintenance activities are capitalized as part of other current assets and amortized over the period until the next scheduled major maintenance activity. All other repairs and maintenance activities are expensed when incurred.

Goodwill and Other Intangibles Goodwill is the excess of cost over the fair value of net assets of businesses acquired. Goodwill is not amortized but is tested annually for impairment and whenever events or circumstances change that would make it more likely than not that an impairment may have occurred. We perform our annual impairment analysis as of the first day of the fourth quarter each year. The evaluation of impairment involves comparing the current estimated fair value of each reporting unit, which is a level below the reportable segment, to the recorded value, including goodwill. When appropriate, Nucor performs a qualitative assessment to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount. For certain reporting units, it is necessary to perform a quantitative analysis. In these instances, a discounted cash flow model is used to determine the current estimated fair value of these reporting units. A number of significant assumptions and estimates are involved in the application of the discounted cash flow model to forecast operating cash flows, including market growth and market share, sales volumes and prices, costs to produce, discount rate and estimated capital needs. Management considers historical experience and all available information at the time the fair values of its reporting units are estimated. Assumptions in estimating future cash flows are subject to a high degree of judgment and complexity. Changes in assumptions and estimates may affect the fair value of goodwill and could result in impairment charges in future periods.

Finite-lived intangible assets are amortized over their estimated useful lives.

Long-Lived Asset Impairments We evaluate our property, plant and equipment and finite-lived intangible assets for potential impairment on an individual asset basis or at the lowest level asset grouping for which independent cash flows can be separately identified. Asset impairments are assessed whenever circumstances indicate that the carrying amounts of those productive assets could exceed their projected undiscounted cash flows. When it is determined that impairment exists, the related assets are written down to their estimated fair market value.

Equity Method Investments Investments in joint ventures in which Nucor shares control over the financial and operating decisions but in which Nucor is not the primary beneficiary are accounted for under the equity method. Each of the Company's equity method investments is subject to a review for impairment if, and when, circumstances indicate that a decline in value below its carrying amount may have occurred. Examples of such circumstances include, but are not limited to, a significant deterioration in the earnings performance or business prospects of the investee; missed financial projections; a significant adverse change in the regulatory, economic or technological environment of the investee; a significant adverse change in the general market condition of either the geographic area or the industry in which the investee operates and recurring negative cash flows from operations. If management considers the decline to be other than temporary, the Company would write down the investment to its estimated fair market value.

Derivative Financial Instruments Nucor periodically uses derivative financial instruments primarily to partially manage its exposure to price risk related to natural gas purchases used in the production process as well as to scrap, copper and aluminum purchased for resale to its customers. In addition, Nucor periodically uses derivatives to partially manage its exposure to changes in interest rates on outstanding debt instruments and uses forward foreign exchange contracts to hedge cash flows associated with certain assets and liabilities, firm commitments and anticipated transactions.

Nucor recognizes all derivative instruments in the consolidated balance sheets at fair value. Amounts included in accumulated other comprehensive income (loss) related to cash flow hedges are reclassified into earnings when the underlying transaction is recognized in net earnings. Changes in fair value hedges are reported in earnings along with changes in the fair value of the hedged items. When cash flow and fair value hedges affect net earnings, they are included on the same financial statement line as the underlying transaction (cost of products sold or interest expense). If these instruments do not meet hedge accounting criteria or contain ineffectiveness, the change in fair value (or a portion thereof) is recognized immediately in earnings in the same financial statement line as the underlying transaction.

Revenue Recognition Nucor recognizes revenue when persuasive evidence of a contractual arrangement exists, delivery has occurred, the sales price is fixed or determinable and collection is reasonably assured. Product is considered delivered to the customer once it has been shipped and title and risk of loss has been transferred.

Income Taxes Nucor utilizes the liability method of accounting for income taxes. Under the liability method, deferred taxes are determined based on the temporary differences between the financial statement and tax basis of assets and liabilities using tax rates expected to be in effect during the years in which the basis differences reverse. A valuation allowance is recorded when it is more likely than not that some of the deferred tax assets will not be realized.

Nucor recognizes the effect of income tax positions only if those positions are more likely than not of being sustained. Potential accrued interest and penalties related to unrecognized tax benefits are recognized as a component of interest expense.

Nucor's intention is to permanently reinvest the earnings of certain foreign investments. Accordingly, no provisions have been made for taxes that may be payable upon remittance of such earnings.

Stock-Based Compensation The Company recognizes the cost of stock-based compensation as an expense using fair value measurement methods. The assumptions used to calculate the fair value of stock-based compensation granted are evaluated and revised, as necessary, to reflect market conditions and experience.

Foreign Currency Translation For Nucor's operations where the functional currency is other than the U.S. dollar, assets and liabilities have been translated at year-end exchange rates, and income and expenses have been translated using average exchange rates for the respective periods. Adjustments resulting from the process of translating an entity's financial statements into the U.S. dollar have been recorded in accumulated other comprehensive income (loss) and are included in net earnings only upon sale or liquidation of the underlying investments. Foreign currency transaction gains and losses are included in net earnings in the period they occur.

Recently Adopted Accounting Pronouncements In the first quarter of 2016, Nucor adopted new accounting guidance that requires debt issuance costs related to a recognized debt liability be presented in the balance sheet as a direct deduction from the carrying amount of that debt liability, consistent with debt discounts. This new guidance is applied retrospectively for the Company for all periods presented. As of December 31, 2015, the Company reclassified $23.5 million of deferred long-term debt issuance costs from other assets to long-term debt due after one year in the consolidated balance sheets.

In the first quarter of 2016, Nucor adopted new accounting guidance that requires an acquirer in a business combination to recognize adjustments to provisional amounts that are identified during the measurement period in the reporting period in which the adjustment amounts are determined. This standard is applied prospectively for the Company beginning January 1, 2016. The adoption of this standard did not have a material effect on the Company's consolidated financial statements.

In the fourth quarter of 2016, Nucor adopted new accounting guidance that specifies the responsibility that an entity's management has to evaluate whether there is substantial doubt about the entity's ability to continue as a going concern. This standard is applied prospectively for the Company beginning with the annual and interim reporting periods ending December 31, 2016. The adoption of this standard did not have an effect on the Company's consolidated financial statements.

Recently Issued Accounting Pronouncements In May 2014, new accounting guidance was issued that will supersede nearly all existing accounting guidance related to revenue recognition. The new guidance provides that an entity recognizes revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. This update also requires additional disclosure about the nature, amount, timing and uncertainty of revenue and cash flows arising from customer contracts, including significant judgments and changes in judgments, and assets recognized from costs incurred to obtain or fulfill a contract. The Financial Accounting Standards Board has also issued a number of updates to this new accounting guidance. The standard is effective for the Company for annual and interim reporting periods beginning after December 15, 2017 and is not expected to have a material effect on the Company's consolidated financial statements.

In January 2016, new accounting guidance was issued regarding the recognition and measurement of financial assets and financial liabilities. Changes to the current accounting guidance primarily affect the accounting for equity investments, financial liabilities under the fair value option, and the presentation and disclosure requirements for financial instruments. In addition, the Financial Accounting Standards Board clarified guidance related to the valuation allowance assessment when recognizing deferred tax assets resulting from unrealized losses on available-for-sale debt securities. The accounting for other financial instruments, such as loans, investments in debt securities, and financial liabilities, is largely unchanged. The standard is effective for the Company for annual and interim reporting periods beginning after December 15, 2017 and is not expected to have a material effect on the Company's consolidated financial statements.

In February 2016, new accounting guidance was issued regarding the accounting for leases. The new guidance requires all lessees to recognize on the balance sheet right to use assets and lease liabilities for the rights and obligations created by lease arrangements with terms greater than 12 months. The standard is effective for the Company for annual and interim reporting periods beginning after December 15, 2018. The Company is evaluating the impact that the adoption of this new guidance will have on its consolidated financial statements.

In March 2016, new accounting guidance was issued regarding employee share-based payment accounting. The new guidance simplifies certain aspects of the accounting for share-based payment transactions, including income tax requirements, forfeitures and presentation on the balance sheet and statement of cash flows. The new guidance is effective for the Company for annual and interim reporting periods beginning after December 15, 2016 and is not expected to have a material effect on the Company's consolidated financial statements.

In August 2016, new accounting guidance was issued regarding the presentation and classification of certain cash receipts and cash payments in the statement of cash flows. The new guidance addresses specific cash flow presentation issues in order to reduce diversity in existing practice. The new guidance is effective for the Company for annual and interim reporting periods beginning after December 15, 2017. The Company is evaluating the impact that the adoption of this new guidance will have on its consolidated financial statements.

In October 2016, new accounting guidance was issued regarding intra-entity transfers of assets other than inventory. The new guidance requires that an entity should recognize the income tax consequences of an intra-entity transfer of an asset other than inventory when the transfer occurs. The new guidance is effective for the Company for annual and interim reporting periods beginning after December 15, 2017. The Company is evaluating the impact that the adoption of this new guidance will have on its consolidated financial statements.

3. ACQUISITIONS AND DISPOSITIONS

On October 31, 2016, Nucor used cash on hand to acquire Independence Tube Corporation (ITC) for a purchase price of $430.1 million. ITC is a leading manufacturer of hollow structural section (HSS) tubing, which is primarily used in nonresidential construction markets. ITC has the ability to produce approximately 650,000 tons of HSS tubing annually at its four facilities, two of which are in Illinois and the other two are in Alabama. This acquisition not only further expands Nucor's product portfolio to include the HSS tubing market but the Company also believes it will be an important, value-added channel to market for Nucor's hot-rolled sheet steel, as ITC's plants are located in close proximity to Nucor's sheet mills in Alabama, Indiana and Kentucky. ITC's financial results are included as part of the steel mills segment (see Note 22).

We have allocated the purchase price for ITC to its individual assets acquired and liabilities assumed.

The following table summarizes the fair values of the assets acquired and liabilities assumed of ITC as of the date of acquision:

	(in thousands)
Cash	$ 1,058
Accounts receivable	33,173
Inventory	94,400
Other current assets	1,743
Property, plant and equipment	177,668
Goodwill	29,522
Other intangible assets	130,900
Other assets	1,287
Total assets acquired	469,751
Current liabilities	39,633
Total liabilities assumed	39,633
Net assets acquired	$430,118

The following table summarizes the purchase price allocation to the identifiable intangible assets of ITC as of the date of acquisition:

(in thousands, except years)

		Weighted-Average Life
Customer relationships	$119,000	15 years
Trademarks and trade names	7,100	15 years
Other	4,800	5 years
	$130,900	

The goodwill of $29.5 million is calculated as the excess of the purchase price over the fair values of the assets and liabilities acquired and has been allocated to the steel mills segment (see Note 8). Goodwill recognized for tax purposes was $30.5 million, all of which is deductible for tax purposes.

On October 8, 2014, Nucor acquired the entire equity interest in Gallatin Steel Company (Gallatin) for a cash purchase price of $779.1 million, including working capital adjustments. The acquisition was partially funded by the issuance of approximately $300 million of commercial paper with the remaining funds coming from cash on hand. Located on the Ohio River in Ghent, Kentucky, Gallatin has an annual sheet steel production capacity of approximately 1,600,000 tons. This acquisition is strategically important as it expands Nucor's footprint in the midwestern United States market, and it will broaden Nucor's product offerings. Gallatin's financial results are included as part of the steel mills segment (see Note 22).

We have allocated the purchase price for Gallatin to its individual assets acquired and liabilities assumed.

The following table summarizes the fair values of the assets acquired and liabilities assumed of Gallatin as of the date of acquisition:

	(in thousands)
Cash	$ 48,957
Accounts receivable	82,291
Inventory	101,692
Other current assets	5,117
Property, plant and equipment	483,007
Goodwill	94,737
Other intangible assets	67,150
Other assets	2,529
Total assets acquired	885,480
Current liabilities	104,315
Long-term debt	2,093
Total liabilities assumed	106,408
Net assets acquired	$779,072

The following table summarizes the purchase price allocation to the identifiable intangible assets of Gallatin as of the date of acquisition:

(in thousands, except years)

		Weighted-Average Life
Customer relationships	$58,250	20 years
Trademarks and trade names	8,900	5 years
	$67,150	

The goodwill of $94.7 million is calculated as the excess of the purchase price over the fair values of the assets and liabilities acquired and has been allocated to the steel mills segment (see Note 8). Goodwill recognized for tax purposes was $98.1 million, all of which is deductible for tax purposes.

Other minor acquisitions, exclusive of purchase price adjustments of acquisitions made and net of cash acquired, totaled $50.1 million in 2016, $19.1 million in 2015 and $38.5 million in 2014.

4. SHORT-TERM INVESTMENTS

Nucor held $150.0 million and $100.0 million of short-term investments as of December 31, 2016 and 2015, respectively. The investments held as of December 31, 2016 consisted of certificates of deposit (CDs). The investments held as of December 31, 2015 consisted of CDs and fixed term deposits. These investments are classified as available-for-sale. The interest rates on the fixed term deposits and CDs are fixed at inception and interest income is recorded as earned.

No realized or unrealized gains or losses were incurred in 2016, 2015 or 2014.

The contractual maturities of all of the fixed term deposits and CDs outstanding at December 31, 2016 are before December 31, 2017.

5. ACCOUNTS RECEIVABLE

An allowance for doubtful accounts is maintained for estimated losses resulting from the inability of our customers to make required payments. Accounts receivable are stated net of the allowance for doubtful accounts of $45.9 million at December 31, 2016 ($43.2 million at December 31, 2015 and $65.4 million at December 31, 2014).

6. INVENTORIES

Inventories consist of approximately 37% raw materials and supplies and 63% finished and semi-finished products at December 31, 2016 (38% and 62%, respectively, at December 31, 2015). Nucor's manufacturing process consists of a continuous, vertically integrated process from which products are sold to customers at various stages throughout the process. Since most steel products can be classified as either finished or semi-finished products, these two categories of inventory are combined. Use of the lower of cost or market methodology reduced inventories by $2.2 million at December 31, 2016 ($5.7 million at December 31, 2015).

Previously, the Company utilized the LIFO method to account for a portion of its inventory, while the rest of the business was on the FIFO method. As described in Note 2, in the fourth quarter of 2016 the Company elected to change the method of accounting for all remaining inventory from LIFO to FIFO. The effects of this change in accounting principle have been retrospectively applied to all periods presented.

In the fourth quarter of 2016, the Company changed its estimates of FIFO inventory cost based on the updated normal capacity determination and related full absorption costing. As a result of this change in estimate, unabsorbed production costs decreased and the FIFO value of inventory on hand at year end increased by $77.6 million ($0.16 per diluted share). This change in estimate also had the effect of reducing cost of products sold in the fourth quarter of 2016 by $83.0 million with an offsetting $5.4 million recorded in earnings attributable to noncontrolling interests in the consolidated statements of earnings.

7. PROPERTY, PLANT AND EQUIPMENT

(in thousands)

December 31,	2016	2015
Land and improvements	$ 602,218	$ 585,057
Buildings and improvements	1,169,064	1,033,610
Machinery and equipment	10,524,030	10,229,602
Proved oil and gas properties	551,019	586,362
Leasehold interest in unproved oil and gas properties	165,000	—
Construction in process and equipment deposits	224,677	197,278
	13,236,008	12,631,909
Less accumulated depreciation	(8,157,358)	(7,740,756)
	$ 5,078,650	$ 4,891,153

The estimated useful lives primarily range from 5 to 25 years for land improvements, 4 to 40 years for buildings and improvements and 2 to 15 years for machinery and equipment. The useful life for proved oil and gas properties is based on the unit-of-production method and varies by well.

Due to the current natural gas pricing environment, Nucor performed an impairment assessment of its proved producing natural gas well assets in December 2016. One of the main assumptions that most significantly affects the undiscounted cash flows determination is management's estimate of future natural gas prices. The pricing used in this impairment assessment was developed by management based on projected natural gas market supply and demand dynamics, in conjunction with a review of projections by numerous sources of market data. This analysis was performed on each of Nucor's three groups of wells, with each group defined by common geographic location. Each of Nucor's three groups of wells passed the impairment test. One of the groups of wells had estimated undiscounted cash flows that were noticeably closer to its carrying value of $80.8 million as of December 31, 2016. Changes in the natural gas industry or a prolonged low price environment beyond what had already been assumed in the analysis could cause management to revise the natural gas price assumptions, which could possibly result in an impairment of a portion or all of the groups of proved well assets.

On October 1, 2016, Nucor purchased 49% of Encana Oil & Gas (USA) Inc.'s leasehold interest in unproved oil and gas properties covering approximately 54,000 acres in the South Piceance Basin for $165.0 million.

In the fourth quarter of 2015, we determined that certain assets, the majority of which were engineering and equipment related to a blast furnace project at our St. James Parish, Louisiana site, will not be utilized in the future. As a result of this determination, Nucor recorded an $84.1 million impairment charge for the entire balance of those assets, which is included in the raw materials segment. The impairment charge is included in impairments and losses on assets in the consolidated statement of earnings in 2015. The assets that were impaired, the majority of which were acquired in 2008, were a viable option that were anticipated to be utilized up until the decision was made that such assets would not be utilized. The decision about whether or not to move forward with construction of the blast furnace utilizing these assets was delayed to focus on the construction of the DRI plant at the site. The decision was further delayed because of challenging conditions in domestic and global steel industries, particularly increased excess capacity, both domestically and globally. In the meantime, technology advances and supply and demand in the raw materials market led management to reconsider its plans for the previously proposed blast furnace. If we decide to proceed with a blast furnace at the site in the future, the project design will be evaluated at that time utilizing new equipment and engineering.

Nucor capitalized $3.9 million of interest expense in 2016 ($0.3 million in 2015 and $2.9 million in 2014) related to the borrowing costs associated with various construction projects.

8. GOODWILL AND OTHER INTANGIBLE ASSETS

The change in the net carrying amount of goodwill for the years ended December 31, 2016 and 2015 by segment is as follows:

(in thousands)

	Steel Mills	Steel Products	Raw Materials	Total
Balance, December 31, 2014	$ 594,402	$ 744,685	$ 729,577	$ 2,068,664
Translation	—	(53,618)	—	(53,618)
Other	(3,768)	—	—	(3,768)
Balance, December 31, 2015	590,634	691,067	729,577	2,011,278
Acquisitions	29,522	—	—	29,522
Translation	—	11,928	—	11,928
Balance, December 31, 2016	$ 620,156	$ 702,995	$ 729,577	$ 2,052,728

The majority of goodwill is not tax deductible.

Intangible assets with estimated lives of 5 to 22 years are amortized on a straight-line or accelerated basis and are comprised of the following:

(in thousands)

December 31,	2016		2015	
	Gross Amount	Accumulated Amortization	Gross Amount	Accumulated Amortization
Customer relationships	$1,295,803	$566,884	$1,185,299	$517,817
Trademarks and trade names	161,851	66,494	155,864	57,756
Other	62,807	20,248	23,025	17,943
	$1,520,461	$653,626	$1,364,188	$593,516

During the third quarter of 2016, Nucor acquired the remaining ownership interest in a former joint venture entity that Nucor previously accounted for as an equity method investment. As a result of the transaction, Nucor obtained control and began to consolidate that entity. That entity's intangible assets, the majority of which are patents, are included in other intangible assets, net in the consolidated balance sheet at December 31, 2016. The gross amount and related accumulated amortization of these assets were $36.3 million and $2.1 million, respectively, at December 31, 2016.

Intangible asset amortization expense was $73.9 million in 2016 ($74.3 million in 2015 and $72.4 million in 2014). Annual amortization expense is estimated to be $82.2 million in 2017, $79.0 million in 2018, $76.1 million in 2019, $73.7 million in 2020 and $72.5 million in 2021.

The Company completed its annual goodwill impairment testing as of the first day of the fourth quarters of 2016, 2015 and 2014 and concluded that as of such dates there was no impairment of goodwill for any of its reporting units. We do not believe there are any reporting units at significant risk of goodwill impairment in the next twelve months. However, assumptions in estimating reporting unit fair values are subject to a high degree of judgment and complexity. Changes in assumptions and estimates may affect the estimated reporting unit fair values and could result in impairment charges in future periods.

There are no significant historical accumulated impairment charges, by segment or in the aggregate, related to goodwill.

9. EQUITY INVESTMENTS

The carrying value of our equity investments in domestic and foreign companies was $663.4 million at December 31, 2016 ($746.6 million at December 31, 2015) and is recorded in other assets in the consolidated balance sheets.

Duferdofin Nucor Nucor owns a 50% economic and voting interest in Duferdofin Nucor S.r.l. (Duferdofin Nucor), an Italian steel manufacturer, and accounts for the investment (on a one-month lag basis) under the equity method, as control and risk of loss are shared equally between the members.

Nucor's investment in Duferdofin Nucor at December 31, 2016 was $256.6 million ($258.2 million at December 31, 2015). Nucor's 50% share of the total net assets of Duferdofin Nucor was $102.0 million at December 31, 2016, resulting in a basis difference of $154.6 million due to the step-up to fair value of certain assets and liabilities attributable to Duferdofin Nucor as well as the identification of goodwill ($81.2 million) and finite-lived intangible assets. This basis difference, excluding the portion attributable to goodwill, is being amortized based on the remaining estimated useful lives of the various underlying net assets, as appropriate. Amortization expense associated with the fair value step-up was $8.8 million in 2016 ($8.8 million in 2015 and $10.5 million in 2014).

As of December 31, 2016, Nucor had outstanding notes receivable of €35.0 million ($36.9 million) from Duferdofin Nucor (€35.0 million, or $38.2 million, as of December 31, 2015). The notes receivable bear interest at 0.94% and will reset annually on September 30 to the twelve-month Euro Interbank Offered Rate (Euribor) plus 1% per year. The principal amounts are due on January 31, 2019. As of December 31, 2016 and December 31, 2015, the notes receivable were classified in other assets in the consolidated balance sheets.

Nucor has issued a guarantee, the fair value of which is immaterial, for its ownership percentage (50%) of Duferdofin Nucor's borrowings under Facility A of a Structured Trade Finance Facilities Agreement (Facility A). The maximum amount Duferdofin Nucor could borrow under Facility A was €122.5 million ($129.1 million) at December 31, 2016. As of December 31, 2016, there was €107.0 million ($112.7 million) outstanding under that facility (€119.0 million, or $129.8 million, at December 31, 2015). Facility A was amended in 2015 to extend the maturity date to October 12, 2018. If Duferdofin Nucor fails to pay when due any amounts for which it is obligated under Facility A, Nucor could be required to pay 50% of such amounts pursuant to and in accordance with the terms of its guarantee. Any indebtedness of Duferdofin Nucor to Nucor is effectively subordinated to the indebtedness of Duferdofin Nucor under Facility A. Nucor has not recorded any liability associated with this guarantee.

NuMit Nucor has a 50% economic and voting interest in NuMit LLC (NuMit). NuMit owns 100% of the equity interest in Steel Technologies LLC, an operator of 25 sheet processing facilities located throughout the United States, Canada and Mexico. Nucor accounts for the investment in NuMit (on a one-month lag basis) under the equity method, as control and risk of loss are shared equally between the members. Nucor's investment in NuMit at December 31, 2016 was $325.1 million ($314.5 million as of December 31, 2015). Nucor received distributions of $38.6 million, $13.1 million, and $52.7 million from NuMit during 2016, 2015 and 2014, respectively.

Hunter Ridge In the third quarter of 2016, Nucor sold its 50% economic and voting interest in Hunter Ridge Energy Services LLC (Hunter Ridge) for $135.0 million. Hunter Ridge provides services for the gathering, separation and compression of energy products, including natural gas produced by some of Nucor's natural gas wells. Nucor accounted for the investment in Hunter Ridge (on a one-month lag basis) under the equity method, as control and risk of loss were shared equally between the members. Nucor's investment in Hunter Ridge at the date of sale was $133.3 million ($135.9 million at December 31, 2015).

All Equity Investments Nucor reviews its equity investments for impairment if and when circumstances indicate that a decline in value below their carrying amounts may have occurred. In the fourth quarter of 2015, Nucor assessed its equity investment in Duferdofin Nucor for impairment due to the protracted challenging steel market conditions caused by excess global overcapacity, which increased in 2015, and the difficult economic environment in Europe. After completing its assessment, the Company determined that the carrying amount exceeded its estimated fair value. The impairment condition was considered to be other than temporary and, as a result, the Company recorded a $153.0 million impairment charge against the Company's investment in Duferdofin Nucor in the fourth quarter of 2015. While the operating performance of Duferdofin Nucor showed meaningful improvement in 2016, steel market conditions in Europe have continued to be challenging. Therefore, it is reasonably possible that material deviation of future performance from the estimates used in our most recent valuation could result in further impairment of our investment in Duferdofin Nucor. We will continue to monitor for potential triggering events that could affect the carrying value of our investment in Duferdofin Nucor as a result of future market conditions and any changes in our business strategy.

10. CURRENT LIABILITIES

Book overdrafts, included in accounts payable in the consolidated balance sheets, were $61.3 million at December 31, 2016 ($62.8 million at December 31, 2015). Dividends payable, included in accrued expenses and other current liabilities in the consolidated balance sheets, were $121.3 million at December 31, 2016 ($120.2 million at December 31, 2015).

11. DEBT AND OTHER FINANCING ARRANGEMENTS

(in thousands)

December 31,	2016	2015
Industrial revenue bonds:		
0.30% to 1.00%, variable,		
due from 2020 to 2040	$1,010,600	$1,010,600
Notes, 5.75%, due 2017	600,000	600,000
Notes, 5.85%, due 2018	500,000	500,000
Notes, 4.125%, due 2022	600,000	600,000
Notes, 4.0%, due 2023	500,000	500,000
Notes, 6.40%, due 2037	650,000	650,000
Notes, 5.20%, due 2043	500,000	500,000
Total long-term debt	4,360,600	4,360,600
Less debt issuance costs	21,459	23,455
Total amounts outstanding	4,339,141	4,337,145
Less current maturities	600,000	—
Total long-term debt due after one year	$3,739,141	$4,337,145

Annual aggregate long-term debt maturities are: $600.0 million in 2017, $500.0 million in 2018, none in 2019, $20.0 million in 2020, none in 2021 and $3.241 billion thereafter.

Nucor has a $1.50 billion unsecured revolving credit facility that matures in April 2021. The unsecured revolving credit facility provides up to $1.50 billion in revolving loans and allows up to $500.0 million in additional commitments at Nucor's election in accordance with the terms set forth in the credit agreement. Up to the equivalent of $850.0 million of the credit facility is available for foreign currency loans, up to $100.0 million is available for the issuance of letters of credit and up to $500.0 million is available for the issuance of revolving loans for Nucor subsidiaries in accordance with terms set forth in the credit agreement. The credit facility provides for a pricing grid based upon the credit rating of Nucor's senior unsecured long-term debt and, alternatively, interest rates quoted by lenders in connection with competitive bidding. The credit facility includes customary financial and other covenants, including a limit on the ratio of funded debt to capital of 60%, a limit on Nucor's ability to pledge the Company's assets and a limit on consolidations, mergers and sales of assets. As of December 31, 2016, Nucor's funded debt to total capital ratio was 35%, and Nucor was in compliance with all covenants under the credit facility. No borrowings were outstanding under the credit facility as of December 31, 2016 and 2015.

Harris Steel has credit facilities totaling approximately $26.2 million, with no outstanding borrowings at December 31, 2016 ($25.1 million at December 31, 2015). In addition, the business of Nucor Trading S.A. is financed by uncommitted trade credit arrangements with a number of European banking institutions. As of December 31, 2016, Nucor Trading S.A. had outstanding borrowings of $18.0 million, which is presented in short-term debt in the consolidated balance sheets ($51.3 million at December 31, 2015).

Letters of credit totaling $41.2 million were outstanding as of December 31, 2016 ($58.0 million as of December 31, 2015), related to certain obligations, including workers' compensation, utilities deposits and credit arrangements by Nucor Trading S.A. for commitments to purchase inventories.

12. CAPITAL STOCK

The par value of Nucor's common stock is $0.40 per share and there are 800 million shares authorized. In addition, 250,000 shares of preferred stock, par value of $4.00 per share, are authorized, with preferences, rights and restrictions as may be fixed by Nucor's Board of Directors. There are no shares of preferred stock issued or outstanding.

In September 2015, Nucor's Board of Directors approved the repurchase of up to $900 million of the Company's common stock. The Board of Directors also terminated any previously authorized repurchase programs. The Company repurchased $5.2 million of its common stock in 2016 ($66.5 million in 2015 and none in 2014).

13. DERIVATIVE FINANCIAL INSTRUMENTS

The following tables summarize information regarding Nucor's derivative instruments:

Fair Value of Derivative Instruments

(in thousands)

		Fair Value	
December 31,	Consolidated Balance Sheet Location	2016	2015
Asset derivatives designated as hedging instruments:			
Commodity contracts	Other current assets	$ 1,250	$ —
Asset derivatives not designated as hedging instruments:			
Foreign exchange contracts	Other current assets	779	909
Total asset derivatives		$ 2,029	$ 909
Liability derivatives designated as hedging instruments:			
Commodity contracts	Accrued expenses and other current liabilities	$ —	$ (15,700)
Commodity contracts	Deferred credits and other liabilities	—	(2,800)
Total liability derivatives designated as hedging instruments		—	(18,500)
Liability derivatives not designated as hedging instruments:			
Commodity contracts	Accrued expenses and other current liabilities	(605)	(353)
Total liability derivatives		$ (605)	$ (18,853)

The Effect of Derivative Instruments on the Consolidated Statements of Earnings

Derivatives Designated as Hedging Instruments *(in thousands)*

Derivatives in Cash Flow Hedging Relationships	Statement of Earnings Location	Amount of Gain or (Loss), net of tax, Recognized in OCI on Derivatives (Effective Portion)			Amount of Gain or (Loss), net of tax, Reclassified from Accumulated OCI into Earnings on Derivatives (Effective Portion)			Amount of Gain or (Loss), net of tax, Recognized in Earnings on Derivatives (Ineffective Portion)		
Year Ended December 31,		2016	2015	2014	2016	2015	2014	2016	2015	2014
Commodity contracts	Cost of products sold	$2,570	$(9,498)	$(8,542)	$(9,880)	$(5,798)	$(542)	$ —	$ —	$ —

Derivatives Not Designated as Hedging Instruments *(in thousands)*

Derivatives Not Designated as Hedging Instruments	Statement of Earnings Location	Amount of Gain or (Loss) Recognized in Earnings on Derivatives		
Year Ended December 31,		2016	2015	2014
Commodity contracts	Cost of products sold	$ (3,251)	$2,894	$1,890
Foreign exchange contracts	Cost of products sold	238	2,392	748
Total		$ (3,013)	$5,286	$2,638

At December 31, 2016, natural gas swaps covering approximately 19.2 million MMBTUs (extending through December 2019) were outstanding.

14. FAIR VALUE MEASUREMENTS

The following table summarizes information regarding Nucor's financial assets and liabilities that are measured at fair value as of December 31, 2016 and 2015. Nucor does not have any non-financial assets or liabilities that are measured at fair value on a recurring basis.

(in thousands)

		Fair Value Measurements at Reporting Date Using		
December 31,	Carrying Amount in Consolidated Balance Sheets	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
2016				
Assets:				
Cash equivalents	$1,609,523	$1,609,523	$ —	
Short-term investments	150,000	150,000	—	
Commodity and foreign exchange contracts	2,029	—	2,029	—
Total assets	$1,761,552	$1,759,523	$ 2,029	—
Liabilities:				
Commodity contracts	$ (605)	—	$ (605)	—
2015				
Assets:				
Cash equivalents	$1,668,567	$1,668,567	$ —	
Short-term investments	100,000	100,000	—	
Foreign exchange contracts	909	—	909	—
Total assets	$1,769,476	$1,768,567	$ 909	—
Liabilities:				
Commodity contracts	$ (18,853)	—	$ (18,853)	—

Fair value measurements for Nucor's cash equivalents and short-term investments are classified under Level 1 because such measurements are based on quoted market prices in active markets for identical assets. Fair value measurements for Nucor's derivatives are classified under Level 2 because such measurements are based on published market prices for similar assets or are estimated based on published market prices for similar assets or are estimated based on observable inputs such as interest rates, yield curves, credit risks, spot and future commodity prices and spot and future exchange rates. There were no transfers between levels in the fair value hierarchy for the periods presented.

The fair value of short-term and long-term debt, including current maturities, was approximately $4.70 billion at December 31, 2016 ($4.44 billion at December 31, 2015). The debt fair value estimates are classified under Level 2 because such estimates are based on readily available market prices of our debt at December 31, 2016 and 2015, or similar debt with the same maturities, ratings and interest rates.

Disclosures are required for certain assets and liabilities that are measured at fair value, but are recognized and disclosed on a nonrecurring basis in periods subsequent to initial recognition. For Nucor, our equity investment in Duferdofin Nucor was measured at fair value as a result of the impairment recorded in 2015 (see Note 9).

15. CONTINGENCIES

Nucor is subject to environmental laws and regulations established by federal, state and local authorities and, accordingly, makes provisions for the estimated costs of compliance. Of the undiscounted total of $21.9 million of accrued environmental costs at December 31, 2016 ($21.1 million at December 31, 2015), $9.5 million was classified in accrued expenses and other current liabilities ($9.7 million at December 31, 2015) and $12.4 million was classified in deferred credits and other liabilities ($11.4 million at December 31, 2015). Inherent uncertainties exist in these estimates primarily due to unknown conditions, evolving remediation technology and changing governmental regulations and legal standards.

Since 2008, Nucor has been a defendant, along with other major steel producers, in several related antitrust class-action proceedings filed by Standard Iron Works and other steel purchasers in the United States District Court for the Northern District of Illinois. The majority of these complaints were filed in September and October of 2008, with two additional complaints being filed in July and December of 2010. Two of these complaints were voluntarily dismissed and are no longer pending. The plaintiffs allege that from April 1, 2005 through December 31, 2007, eight steel manufacturers, including Nucor, engaged in anticompetitive activities with respect to the production and sale of steel. Nucor denies those allegations. The plaintiffs sought monetary and other relief on behalf of themselves and classes of direct and indirect purchasers of steel products from the defendants in the U.S. between April 1, 2005 and December 31, 2007.

On September 30, 2016, Nucor entered into an agreement to settle the claims of the class of direct purchasers of steel products for the amount of $23.4 million, which was paid during the fourth quarter of 2016. Nucor believes the plaintiffs' claims are without merit and did not admit liability or the validity of the plaintiffs' claims as part of the settlement, but entered into the settlement in order to avoid the burden, expense and distraction of further litigation. The settlement was subject to court approval. On November 3, 2016, the court granted preliminary approval of the settlement. Direct purchasers of steel products were given notice of the settlement and the opportunity to object to the settlement or to opt out as class members. No purchasers timely objected to the settlement, and only two purchasers filed notices of intent to opt out. On February 16, 2017, the Court granted final approval of the settlement. The settlement does not resolve claims asserted by a separate putative class of indirect purchasers of steel products. Nucor and other Defendants have moved to dismiss those indirect purchaser claims. We will continue to vigorously defend against the indirect purchasers' claims and any other claims relating to these allegations. We cannot at this time predict the outcome of the remaining litigation or estimate the range of Nucor's potential exposure (if any) and, consequently, have not recorded any reserves or contingencies related to the class of indirect purchasers.

We are from time to time a party to various other lawsuits, claims and legal proceedings that arise in the ordinary course of business. With respect to all such lawsuits, claims and proceedings, we record reserves when it is probable a liability has been incurred and the amount of loss can be reasonably estimated. We do not believe that any of these proceedings, individually or in the aggregate, would be expected to have a material adverse effect on our results of operations, financial position or cash flows. Nucor maintains liability insurance for certain risks that is subject to certain self-insurance limits.

16. STOCK-BASED COMPENSATION

Stock Options Stock options may be granted to Nucor's key employees, officers and non-employee directors with exercise prices at 100% of the market value on the date of the grant. The stock options granted are generally exercisable at the end of three years and have a term of 10 years. New shares are issued upon exercise of stock options.

A summary of activity under Nucor's stock option plans is as follows:

(shares in thousands)

Year Ended December 31,	2016		2015		2014	
	Shares	Weighted-Average Exercise Price	Shares	Weighted-Average Exercise Price	Shares	Weighted-Average Exercise Price
Number of shares under option:						
Outstanding at beginning of year	3,092	$43.51	2,422	$42.39	2,089	$40.47
Granted	899	$48.80	700	$47.59	469	$50.63
Exercised	(400)	$39.19	(10)	$42.34	(136)	$41.30
Canceled	—	—	(20)	$50.63	—	—
Outstanding at end of year	3,591	$45.32	3,092	$43.51	2,422	$42.39
Options exercisable at end of year	1,557	$40.80	1,531	$39.35	1,263	$40.40

The shares reserved for future grants as of December 31, 2016, 2015 and 2014 are reflected in the restricted stock units table below. The total intrinsic value of stock options (the amount by which the stock price exceeded the exercise price of the stock option on the date of exercise) that were exercised during 2016 was $6.8 million ($0.1 million in 2015 and $2.0 million in 2014).

The following table summarizes information about stock options outstanding at December 31, 2016:

(shares in thousands)

	Options Outstanding		
Exercise Price	Options Outstanding	Options Exercisable	Weighted-Average Remaining Contractual Life
$35.76	531	531	5.4 years
$42.34	520	520	4.4 years
$44.51	506	506	6.4 years
$47.59	700	—	8.4 years
$48.80	899	—	9.4 years
$50.63	435	—	7.4 years
$35.76 – $50.63	3,591	1,557	7.2 years

As of December 31, 2016, the total aggregate intrinsic value of stock options outstanding and stock options exercisable was $51.0 million and $29.2 million, respectively.

The grant date fair value of stock options granted was $9.12 per share in 2016 ($11.71 per share in 2015 and $17.48 per share in 2014). The fair value was estimated using the Black-Scholes option-pricing model with the following assumptions:

	2016	2015	2014
Exercise price	$48.80	$47.59	$50.63
Expected dividend yield	3.07%	3.13%	2.92%
Expected stock price volatility	26.14%	33.32%	45.00%
Risk-free interest rate	1.67%	1.86%	2.03%
Expected life (in years)	6.5	6.5	6.5

Stock options granted to employees who are eligible for retirement on the date of grant are expensed immediately since these awards vest upon retirement from the Company. Retirement, for purposes of vesting in these stock options, means termination of employment after satisfying age and years of service requirements. Similarly, stock options granted to employees who will become retirement-eligible prior to the end of the vesting term are expensed over the period through which the employee will become retirement-eligible. Compensation expense for stock options granted to employees who are not retirement-eligible is recognized on a straight-line basis over the vesting period. Compensation expense for stock options was $7.8 million in 2016 ($7.4 million in 2015 and $7.7 million in 2014). As of December 31, 2016, unrecognized compensation expense related to stock options was $1.6 million, which is expected to be recognized over a weighted-average period of two years.

Restricted Stock Units Nucor annually grants restricted stock units (RSUs) to key employees, officers and non-employee directors. The RSUs typically vest and are converted to common stock in three equal installments on each of the first three anniversaries of the grant date. A portion of the RSUs awarded to an officer vest upon the officer's retirement. Retirement, for purposes of vesting in these RSUs only, means termination of employment with approval of the Compensation and Executive Development Committee of the Board of Directors after satisfying age and years of service requirements. RSUs granted to non-employee directors are fully vested on the grant date and are payable to the non-employee director in the form of common stock after the termination of the director's service on the Board of Directors.

RSUs granted to employees who are eligible for retirement on the date of grant are expensed immediately, and RSUs granted to employees who will become retirement-eligible prior to the end of the vesting term are expensed over the period through which the employee will become retirement-eligible since these awards vest upon retirement from the Company. Compensation expense for RSUs granted to employees who are not retirement-eligible is recognized on a straight-line basis over the vesting period.

Cash dividend equivalents are paid to holders of RSUs each quarter. Dividend equivalents paid on RSUs expected to vest are recognized as a reduction in retained earnings.

The fair value of the RSUs is determined based on the closing stock price of Nucor's common stock on the date of the grant. A summary of Nucor's RSU activity is as follows:

(shares in thousands)

Year Ended December 31,	2016		2015		2014	
	Shares	Grant Date Fair Value	Shares	Grant Date Fair Value	Shares	Grant Date Fair Value
Restricted stock units:						
Unvested at beginning of year	1,031	$47.93	1,012	$45.98	1,122	$42.51
Granted	723	$48.80	790	$47.59	655	$50.63
Vested	(681)	$48.09	(756)	$44.99	(752)	$44.90
Canceled	(33)	$46.44	(15)	$46.61	(13)	$42.66
Unvested at end of year	1,040	$48.47	1,031	$47.93	1,012	$45.98
Shares reserved for future grants (stock options and RSUs)	8,706		10,349		11,851	

Compensation expense for RSUs was $33.9 million in 2016 ($34.8 million in 2015 and $32.6 million in 2014). The total fair value of shares vested during 2016 was $33.4 million ($35.8 million in 2015 and $38.1 million in 2014). As of December 31, 2016, unrecognized compensation expense related to unvested RSUs was $31.1 million, which is expected to be recognized over a weighted-average period of 2.1 years.

Restricted Stock Awards Nucor's Senior Officers Long-Term Incentive Plan (LTIP) and Annual Incentive Plan (AIP) authorize the award of shares of common stock to officers subject to certain conditions and restrictions.

The LTIP provides for the award of shares of restricted common stock at the end of each LTIP performance measurement period at no cost to officers if certain financial performance goals are met during the period. One-third of the LTIP restricted stock award vests upon each of the first three anniversaries of the award date or, if earlier, upon the officer's attainment of age 55 while employed by Nucor. Although participants are entitled to cash dividends and may vote such awarded shares, the sale or transfer of such shares is limited during the restricted period.

The AIP provides for the payment of annual cash incentive awards. An AIP participant may elect, however, to defer payment of up to one-half of an annual incentive award. In such event, the deferred AIP award is converted into common stock units and credited with a deferral incentive, in the form of additional common stock units, equal to 25% of the number of common stock units attributable to the deferred AIP award. Common stock units attributable to deferred AIP awards are fully vested. Common stock units credited as a deferral incentive vest upon the AIP participant's attainment of age 55 while employed by Nucor. Vested common stock units are paid to AIP participants in the form of shares of common stock following their termination of employment with Nucor.

A summary of Nucor's restricted stock activity under the AIP and the LTIP is as follows:

(shares in thousands)

Year Ended December 31,	2016		2015		2014	
	Shares	Grant Date Fair Value	Shares	Grant Date Fair Value	Shares	Grant Date Fair Value
Restricted stock awards and units:						
Unvested at beginning of year	63	$48.07	65	$48.20	73	$45.49
Granted	123	$44.03	136	$47.07	127	$50.35
Vested	(116)	$45.16	(138)	$47.15	(135)	$48.76
Canceled	(3)	$45.75	—	—	—	—
Unvested at end of year	67	$45.77	63	$48.07	65	$48.20
Shares reserved for future grants	855		975		1,111	

Compensation expense for common stock and common stock units awarded under the AIP and the LTIP is recorded over the performance measurement and vesting periods based on the anticipated number and market value of shares of common stock and common stock units to be awarded. Compensation expense for anticipated awards based upon Nucor's financial performance, exclusive of amounts payable in cash, was $14.8 million in 2016 ($3.4 million in 2015 and $6.1 million in 2014). The total fair value of shares vested during 2016 was $5.2 million ($6.5 million in 2015 and $6.8 million in 2014). As of December 31, 2016, unrecognized compensation expense related to unvested restricted stock awards was $0.7 million, which is expected to be recognized over a weighted-average period of 1.6 years.

17. EMPLOYEE BENEFIT PLANS

Nucor makes contributions to a Profit Sharing and Retirement Savings Plan for qualified employees based on the profitability of the Company. Nucor's expense for these benefits totaled $129.0 million in 2016 ($60.5 million in 2015 and $110.1 million in 2014). The related liability for these benefits is included in salaries, wages and related accruals in the consolidated balance sheets.

Nucor also has a medical plan covering certain eligible early retirees. The unfunded obligation, included in deferred credits and other liabilities in the consolidated balance sheets, totaled $20.4 million at December 31, 2016 ($15.6 million at December 31, 2015). The expense associated with this early retiree medical plan totaled $0.6 million in 2016 (expense of $1.1 million in 2015 and benefit of $0.6 million in 2014).

The discount rate used was 4.2% in 2016 (4.4% in 2015 and 3.8% in 2014). The health care cost increase trend rate used was 6.8% in 2016 (7.1% in 2015 and 6.5% in 2014). The health care cost increase in the trend rate is projected to decline gradually to 4.5% by 2037.

18. INTEREST EXPENSE (INCOME)

The components of net interest expense are as follows:

(in thousands)

Year Ended December 31,	2016	2015	2014
Interest expense	$181,179	$177,543	$174,142
Interest income	(11,935)	(4,012)	(4,886)
Interest expense, net	$169,244	$173,531	$169,256

Interest paid was $183.4 million in 2016 ($180.0 million in 2015 and $180.5 million in 2014).

19. INCOME TAXES

Components of earnings (losses) from continuing operations before income taxes and noncontrolling interests are as follows:

(in thousands)

Year Ended December 31,	2016	2015	2014
United States	$ 1,241,117	$ 407,666	$ 1,104,664
Foreign	57,542	(165,800)	42,624
	$ 1,298,659	$ 241,866	$ 1,147,288

The provision for income taxes consists of the following:

(in thousands)

Year Ended December 31,	2016	2015	2014
Current:			
Federal	$ 286,224	$ 285,856	$ 247,898
State	27,353	4,618	30,790
Foreign	13,211	5,198	19,235
Total current	326,788	295,672	297,923
Deferred:			
Federal	71,777	(213,601)	76,356
State	5,193	(21,240)	2,530
Foreign	(5,515)	(11,995)	(8,085)
Total deferred	71,455	(246,836)	70,801
Total provision for income taxes	$ 398,243	$ 48,836	$ 368,724

A reconciliation of the federal statutory tax rate (35%) to the total provision is as follows:

Year Ended December 31,	2016	2015	2014
Taxes computed at statutory rate	35.00%	35.00%	35.00%
State income taxes, net of federal income tax benefit	1.67%	-5.02%	3.40%
Federal research credit	-0.28%	-1.47%	-0.28%
Domestic manufacturing deduction	-2.11%	-9.98%	-2.39%
Equity in losses of foreign joint venture	0.27%	2.88%	0.89%
Impairment on investment in foreign joint venture	—	22.14%	—
Foreign rate differential	-1.05%	-5.04%	-0.97%
Noncontrolling interests	-2.81%	-16.27%	-3.03%
Out-of-period correction	-0.22%	-4.02%	-1.15%
Other, net	0.20%	1.97%	0.67%
Provision for income taxes	30.67%	20.19%	32.14%

The 2015 and 2014 provisions included out-of-period non-cash gains related to corrections to tax balances of $9.7 million and $13.2 million, respectively. These out-of-period adjustments were not material to the period of correction or any previously reported periods.

Deferred tax assets and liabilities resulted from the following:

		(in thousands)
December 31,	2016	2015
Deferred tax assets:		
Accrued liabilities and reserves	$ 195,787	$ 209,854
Allowance for doubtful accounts	15,511	12,912
Inventory	75,550	172,638
Post-retirement benefits	12,163	9,773
Commodity hedges	—	7,149
Net operating loss carryforward	11,544	14,690
Tax credit carryforwards	18,358	19,601
Total deferred tax assets	328,913	446,617
Deferred tax liabilities:		
Holdbacks and amounts not due under contracts	(9,999)	(10,479)
Commodity hedges	(316)	—
Cumulative translation adjustments	—	(3,325)
Intangibles	(246,697)	(244,496)
Property, plant and equipment	(630,500)	(673,676)
Total deferred tax liabilities	(887,512)	(931,976)
Total net deferred tax liabilities	$(558,599)	$(485,359)

Non-current deferred tax liabilities included in deferred credits and other liabilities were $558.6 million at December 31, 2016 ($485.4 million at December 31, 2015). Nucor paid $329.3 million in net federal, state and foreign income taxes in 2016 ($260.3 million and $398.7 million in 2015 and 2014, respectively).

Cumulative undistributed foreign earnings for which U.S. taxes have not been provided are included in consolidated retained earnings in the amount of $190.1 million at December 31, 2016 ($169.6 million at December 31, 2015). These earnings are considered to be indefinitely reinvested and, accordingly, no provisions for U.S. federal and state income taxes are required. It is not practicable to determine the amount of unrecognized deferred tax liability related to the unremitted earnings.

State net operating loss carryforwards were $573.4 million at December 31, 2016 ($487.9 million at December 31, 2015). If unused, they will expire between 2017 and 2036. Foreign net operating loss carryforwards were $18.5 million at December 31, 2016 ($22.3 million at December 31, 2015). If unused, they will expire between 2028 and 2036.

At December 31, 2016, Nucor had approximately $44.1 million of unrecognized tax benefits, of which $43.4 million would affect Nucor’s effective tax rate, if recognized. At December 31, 2015, Nucor had approximately $50.5 million of unrecognized tax benefits, of which $49.8 million would affect Nucor’s effective tax rate, if recognized.

A reconciliation of the beginning and ending amounts of unrecognized tax benefits recorded in deferred credits and other liabilities is as follows:

(in thousands)

Year Ended December 31,	2016	2015	2014
Balance at beginning of year	$50,510	$ 63,001	$65,975
Additions based on tax positions related to current year	6,157	6,508	6,295
Reductions based on tax positions related to current year	—	—	—
Additions based on tax positions related to prior years	147	241	5,673
Reductions based on tax positions related to prior years	(8,201)	(13,294)	(7,449)
(Reductions) additions due to settlements with taxing authorities	(258)	930	—
Reductions due to statute of limitations lapse	(4,267)	(6,876)	(7,493)
Balance at end of year	$44,088	$ 50,510	$63,001

We estimate that in the next twelve months, our gross uncertain tax positions, exclusive of interest, could decrease by as much as $8.6 million, as a result of the expiration of the statute of limitations.

During 2016, Nucor recognized $2.8 million of benefit in interest and penalties ($7.0 million of benefit in 2015 and $9.0 million of benefit in 2014). The interest and penalties are included in interest expense and other expenses, respectively, in the consolidated statements of earnings. As of December 31, 2016, Nucor had approximately $18.4 million of accrued interest and penalties related to uncertain tax positions on the consolidated balance sheet (approximately $21.2 million at December 31, 2015).

Nucor has concluded U.S. federal income tax matters for years through 2012. The tax years 2013 through 2015 remain open to examination by the Internal Revenue Service. The Canada Revenue Agency has substantially concluded its examination of the 2012 Canadian returns for Harris Steel Group Inc. and certain related affiliates and is now examining the 2013 Canadian returns. The tax years 2009 through 2015 remain open to examination by other major taxing jurisdictions to which Nucor is subject (primarily Canada and other state and local jurisdictions).

20. ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)

The following tables reflect the changes in accumulated other comprehensive income (loss) by component:

(in thousands)

	Gains and Losses on Hedging Derivatives	Foreign Currency Gain (Loss)	Adjustment to Early Retiree Medical Plan	Total
December 31, 2015	$ (11,700)	$ (351,665)	$ 12,003	$ (351,362)
Other comprehensive income (loss) before reclassifications	2,570	25,495	(3,589)	24,476
Amounts reclassified from accumulated other comprehensive (loss) income into earnings(1)	9,880	—	(837)	9,043
Net current-period other comprehensive (loss) income	12,450	25,495	(4,426)	33,519
December 31, 2016	$ 750	$ (326,170)	$ 7,577	$ (317,843)

(1) Includes $9,880 and ($837) net-of-tax impact of accumulated other comprehensive income reclassifications into cost of products sold for net losses on commodity contracts and adjustment to early retiree medical plan, respectively. The tax impacts of these reclassifications were $5,800 and ($309), respectively.

(in thousands)

	Gains and Losses on Hedging Derivatives	Foreign Currency Gain (Loss)	Adjustment to Early Retiree Medical Plan	Total
December 31, 2014	$ (8,000)	$ (148,968)	$ 11,260	$ (145,708)
Other comprehensive income (loss) before reclassifications	(9,498)	(205,397)	1,485	(213,410)
Amounts reclassified from accumulated other comprehensive (loss) income into earnings(2)	5,798	2,700	(742)	7,756
Net current-period other comprehensive (loss) income	(3,700)	(202,697)	743	(205,654)
December 31, 2015	$ (11,700)	$ (351,665)	$ 12,003	$ (351,362)

(2)Includes $5,798 and ($742) net-of-tax impact of accumulated other comprehensive income reclassifications into cost of products sold for net losses on commodity contracts and adjustment to early retiree medical plan, respectively. The tax impacts of these reclassifications were $3,500 and ($414), respectively. Also includes $2,700 of accumulated other comprehensive income reclassification into marketing, administrative and other expenses for net losses on translation. The tax impact of this reclassification was $1,500.

21. EARNINGS PER SHARE

The computations of basic and diluted net earnings per share are as follows:

(in thousands, except per share data)

Year Ended December 31,	2016	2015	2014
Basic net earnings per share:			
Basic net earnings	$ 796,271	$ 80,724	$ 679,337
Earnings allocated to participating securities	(2,632)	(1,514)	(2,321)
Net earnings available to common stockholders	$ 793,639	$ 79,210	$ 677,016
Average shares outstanding	319,563	320,565	319,838
Basic net earnings per share	$ 2.48	$ 0.25	$ 2.12
Diluted net earnings per share:			
Diluted net earnings	$ 796,271	$ 80,724	$ 679,337
Earnings allocated to participating securities	(2,631)	(1,514)	(2,321)
Net earnings available to common stockholders	$ 793,640	$ 79,210	$ 677,016
Diluted average shares outstanding:			
Basic shares outstanding	319,563	320,565	319,838
Dilutive effect of stock options and other	259	114	289
	319,822	320,679	320,127
Diluted net earnings per share	$ 2.48	$ 0.25	$ 2.11

The following stock options were excluded from the computation of diluted net earnings per share because their effect would have been anti-dilutive:

(shares in thousands)

Year Ended December 31,	2016	2015	2014
Anti-dilutive stock options:			
Weighted-average shares	942	1,226	—
Weighted-average exercise price	$47.04	$47.20	$ —

22. SEGMENTS

Nucor reports its results in the following segments: steel mills, steel products and raw materials. The steel mills segment includes carbon and alloy steel in sheet, bars, structural and plate; steel foundation distributors; tubular products businesses; steel trading businesses; rebar distribution businesses; and Nucor's equity method investments in Duferdofin Nucor and NuMit. The steel products segment includes steel joists and joist girders, steel deck, fabricated concrete reinforcing steel, cold finished steel, steel fasteners, metal building systems, steel grating and wire and wire mesh. The raw materials segment includes The David J. Joseph Company and its affiliates (DJJ), primarily a scrap broker and processor; Nu-Iron Unlimited and Nucor Steel Louisiana, two facilities that produce Direct Reduced Iron (DRI) used by the steel mills; our natural gas production operations; and Nucor's equity method investment in Hunter Ridge. Nucor sold its 50% interest in Hunter Ridge during the third quarter of 2016. The steel mills, steel products and raw materials segments are consistent with the way Nucor manages its business, which is primarily based upon the similarity of the types of products produced and sold by each segment.

Net interest expense, other income, profit sharing expense and stock-based compensation are shown under Corporate/eliminations. Corporate assets primarily include cash and cash equivalents, short-term investments, allowances to eliminate intercompany profit in inventory, deferred income tax assets, federal and state income taxes receivable and investments in and advances to affiliates. The balance of Corporate assets at December 31, 2015 and 2014 was adjusted due to the adoption of new accounting guidance requiring the reclassification of debt issuance costs into liabilities in the first quarter of 2016 (see Note 2). The balance of Corporate assets and earnings (loss) before income taxes and noncontrolling interests as of and for the periods ending December 31, 2015 and 2014 was adjusted due to the change in accounting principle from LIFO to FIFO for certain inventories (see Note 2), as previously the impact of LIFO was recognized in Corporate/eliminations consistent with our internal reporting.

Nucor's results by segment are as follows:

(in thousands)

Year Ended December 31,	2016	2015	2014
Net sales to external customers:			
Steel mills	$11,312,048	$11,084,331	$ 14,723,642
Steel products	3,687,448	3,966,895	4,032,385
Raw materials	1,208,626	1,388,050	2,349,114
	$16,208,122	$16,439,276	$ 21,105,141
Intercompany sales:			
Steel mills	$ 2,070,077	$ 2,152,157	$ 2,904,317
Steel products	106,838	90,969	105,383
Raw materials	5,997,498	6,279,316	9,618,145
Corporate/eliminations	(8,174,413)	(8,522,442)	(12,627,845)
	$ —	$ —	$ —
Depreciation expense:			
Steel mills	$ 377,627	$ 381,352	$ 366,568
Steel products	36,906	39,512	42,777
Raw materials	191,466	198,705	235,443
Corporate	7,193	6,188	7,212
	$ 613,192	$ 625,757	$ 652,000
Amortization expense:			
Steel mills	$ 22,479	$ 18,789	$ 15,269
Steel products	21,998	23,932	27,644
Raw materials	29,385	31,539	29,510
	$ 73,862	$ 74,260	$ 72,423
Earnings (loss) before income taxes and noncontrolling interests:			
Steel mills	$ 1,724,168	$ 629,256	$ 1,594,352
Steel products	249,970	276,048	166,323
Raw materials	(95,121)	(283,938)	(29,053)
Corporate/eliminations	(580,358)	(379,500)	(584,334)
	$ 1,298,659	$ 241,866	$ 1,147,288
Segment assets:			
Steel mills	$ 8,084,773	$ 7,318,169	$ 8,528,623
Steel products	2,544,344	2,485,122	2,731,320
Raw materials	3,235,237	3,123,190	3,858,254
Corporate/eliminations	1,359,164	1,400,488	838,270
	$15,223,518	$14,326,969	$ 15,956,467
Capital expenditures:			
Steel mills	$ 375,996	$ 248,532	$ 343,767
Steel products	30,698	41,291	27,262
Raw materials	194,112	74,607	197,252
Corporate	16,871	338	586
	$ 617,677	$ 364,768	$ 568,867

Net sales by product were as follows. Further product group breakdown is impracticable.

(in thousands)

Year Ended December 31,	2016	2015	2014
Net sales to external customers:			
Sheet	$ 5,178,467	$ 4,628,805	$ 5,988,303
Bar	2,886,648	3,005,450	4,051,171
Structural	1,982,642	2,137,413	2,617,196
Plate	1,204,185	1,312,663	2,066,972
Tubular products	60,106	—	—
Steel products	3,687,448	3,966,895	4,032,385
Raw materials	1,208,626	1,388,050	2,349,114
	$ 16,208,122	$ 16,439,276	$ 21,105,141

23. SUBSEQUENT EVENTS

On January 9, 2017, Nucor used cash on hand to acquire Southland Tube for a purchase price of approximately $130 million. Southland Tube is a manufacturer of HSS tubing, which is primarily used in nonresidential construction markets. Southland Tube had shipments of approximately 240,000 tons in 2016 and has one manufacturing facility in Birmingham, Alabama.

Nucor further expanded its value-added product offerings to its customers within the pipe and tube market through the January 20, 2017 acquisition of Republic Conduit for a purchase price of approximately $335 million. Republic Conduit produces steel electrical conduit primarily used to protect and route electrical wiring in various nonresidential structures such as hospitals, office buildings and stadiums. With its two facilities located in Kentucky and Georgia, Republic Conduit's annual shipment volume has averaged 146,000 tons during the past two years.

24. QUARTERLY INFORMATION (UNAUDITED)

(in thousands, except per share data)

Year Ended December 31,	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
2016				
Net sales	$3,715,576	$4,245,772	$4,290,236	$3,956,538
Gross margin(1)	314,985	585,260	682,236	443,426
Net earnings (loss)(2)	122,497	271,369	331,365	175,185
Net earnings (loss) attributable to Nucor stockholders(2)	87,565	243,620	305,447	159,639
Net earnings (loss) per share:				
Basic	$0.27	$0.76	$0.95	$0.50
Diluted	$0.27	$0.76	$0.95	$0.50
2015				
Net sales	$4,399,440	$4,357,609	$4,225,514	$3,456,713
Gross margin	271,036	291,552	383,207	168,095
Net earnings (loss)(3)	72,764	98,282	177,090	(155,106)
Net earnings (loss) attributable to Nucor stockholders(3)	58,232	67,613	142,360	(187,481)
Net earnings (loss) per share:				
Basic	$0.18	$0.21	$0.44	$(0.59)
Diluted	$0.18	$0.21	$0.44	$(0.59)

(1) Fourth quarter results include a benefit of $83.0 million related to the effects of a change in estimate related to the cost of certain inventories.

(2) First quarter results include out-of-period non-cash gains totaling $13.4 million related to a noncontrolling interest adjustment and to tax adjustments. Third quarter results were impacted by charges related to legal settlements of $33.7 million and a net benefit of $11.1 million related to fair value adjustments to assets in the Corporate/eliminations segment.

(3) Second quarter results include a $9.3 million benefit related to state tax credits. Third quarter results were impacted by an out-of-period non-cash gain of $10.2 million related to a correction of deferred tax balances. Fourth quarter results were impacted by a $153.0 million impairment charge related to our Duferdofin Nucor S.r.l. joint venture and an $84.1 million pre-tax impairment charge on assets related to the blast furnace project at the St. James Parish site.

The following tables show quarterly information reflecting the effect of the change in inventory valuation method from LIFO to FIFO. Refer to Note 2 for more information related to the change in accounting principle the Company made in the fourth quarter of 2016.

(in thousands, except per share data)

Year Ended December 31, 2016	FIRST QUARTER	SECOND QUARTER	THIRD QUARTER	FOURTH QUARTER
Gross margin using previous inventory valuation method (LIFO)	$286,948	$566,260	$624,336	$407,028
Effect of change	28,037	19,000	57,900	36,398
Gross margin using current inventory valuation method (FIFO)	$314,985	$585,260	$682,236	$443,426
Net earnings using previous inventory valuation method (LIFO)	$104,461	$258,336	$294,484	$153,023
Effect of change	18,036	13,033	36,881	22,162
Net earnings using current inventory valuation method (FIFO)	$122,497	$271,369	$331,365	$175,185
Net earnings attributable to Nucor stockholders using previous inventory valuation method (LIFO)	$ 70,754	$233,772	$270,036	$136,242
Effect of change	16,811	9,848	35,411	23,397
Net earnings attributable to Nucor stockholders using current inventory valuation method (FIFO)	$ 87,565	$243,620	$305,447	$159,639
Basic net earnings per share using previous inventory valuation method (LIFO)	$0.22	$0.73	$0.84	$0.42
Effect of change	$0.05	$0.03	$0.11	$0.08
Basic net earnings per share using current inventory valuation method (FIFO)	$0.27	$0.76	$0.95	$0.50
Diluted net earnings per share using previous inventory valuation method (LIFO)	$0.22	$0.73	$0.84	$0.42
Effect of change	$0.05	$0.03	$0.11	$0.08
Diluted net earnings per share using current inventory valuation method (FIFO)	$0.27	$0.76	$0.95	$0.50

(in thousands, except per share data)

Year Ended December 31, 2015	FIRST QUARTER	SECOND QUARTER	THIRD QUARTER	FOURTH QUARTER
Gross margin using previous inventory valuation method (LIFO)	$288,282	$386,306	$523,836	$ 382,838
Effect of change	(17,246)	(94,754)	(140,629)	(214,743)
Gross margin using current inventory valuation method (FIFO)	$271,036	$291,552	$383,207	$ 168,095
Net earnings (loss) using previous inventory valuation method (LIFO)	$ 84,292	$159,344	$267,736	$ (15,288)
Effect of change	(11,528)	(61,062)	(90,646)	(139,818)
Net earnings (loss) using current inventory valuation method (FIFO)	$ 72,764	$ 98,282	$177,090	$(155,106)
Net earnings (loss) attributable to Nucor stockholders using previous inventory valuation method (LIFO)	$ 67,800	$124,755	$227,126	$ (62,022)
Effect of change	(9,568)	(57,142)	(84,766)	(125,459)
Net earnings (loss) attributable to Nucor stockholders using current inventory valuation method (FIFO)	$ 58,232	$ 67,613	$142,360	$(187,481)
Basic net earnings (loss) per share using previous inventory valuation method (LIFO)	$0.21	$0.39	$0.71	$(0.19)
Effect of change	$(0.03)	$(0.18)	$(0.27)	$(0.40)
Basic net earnings (loss) per share using current inventory valuation method (FIFO)	$0.18	$0.21	$0.44	$(0.59)
Diluted net earnings (loss) per share using previous inventory valuation method (LIFO)	$0.21	$0.39	$0.71	$(0.19)
Effect of change	$(0.03)	$(0.18)	$(0.27)	$(0.40)
Diluted net earnings (loss) per share using current inventory valuation method (FIFO)	$0.18	$0.21	$0.44	$(0.59)

CORPORATE OFFICE

1915 Rexford Road
Charlotte, North Carolina 28211
Phone 704/366-7000
Fax 704/362-4208

STOCK TRANSFERS
DIVIDEND DISBURSING
DIVIDEND REINVESTMENT

American Stock Transfer & Trust Company, LLC
6201 15th Avenue
Brooklyn, New York 11219
Phone 877/715-0504
Fax 718/236-2641

ANNUAL MEETING

The annual meeting of stockholders will be held at 10:00 a.m. on Thursday, May 11, 2017 at the Charlotte Marriott SouthPark, 2200 Rexford Road, Charlotte, NC 28211.

STOCK LISTING

Nucor's common stock is traded on the New York Stock Exchange under the symbol NUE. As of January 31, 2017, there were approximately 16,000 stockholders of record.

FORM 10-K

A copy of Nucor's 2016 annual report filed with the Securities and Exchange Commission (SEC) on Form 10-K is available to stockholders without charge upon request.

INTERNET ACCESS

Nucor's annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and all amendments to these reports are available without charge through Nucor's website, www.nucor.com, as soon as reasonably practicable after Nucor files these reports electronically with or furnishes them to the SEC. Additional information available on our website includes our Corporate Governance Principles, Board of Directors Committee Charters, Standards of Business Conduct and Ethics and Code of Ethics for Senior Financial Professionals as well as various other financial and statistical data.

STOCK PRICE AND DIVIDENDS PAID

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
2016				
Stock price:				
High	$48.52	$51.99	$57.08	$68.00
Low	33.90	45.32	44.81	45.30
Dividends paid	0.3750	0.3750	0.3750	0.3750
2015				
Stock price:				
High	$49.48	$50.70	$47.00	$43.93
Low	42.93	43.67	36.76	37.67
Dividends paid	0.3725	0.3725	0.3725	0.3725

STOCK PERFORMANCE

This graphic comparison assumes the investment of $100 in Nucor Corporation common stock, $100 in the S&P 500 Index and $100 in the S&P 1500 Steel Group Index, all at the year end 2011. The resulting cumulative total return assumes that cash dividends were reinvested. Nucor common stock comprised 36% of the S&P 1500 Steel Group Index at year end 2016 (29% at year end in 2011).

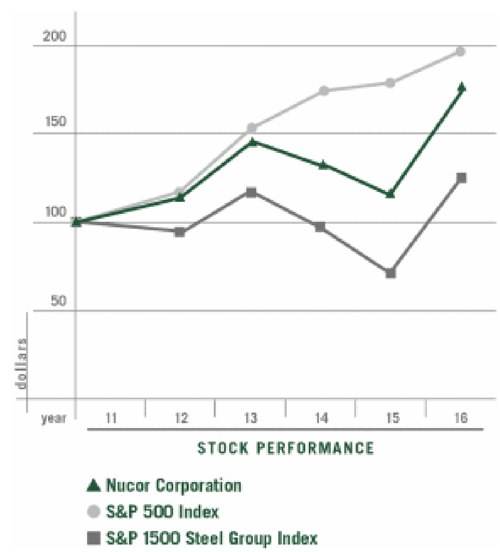


Exhibit 18

February 28, 2017

Board of Directors

Nucor Corporation
1915 Rexford Road
Charlotte, North Carolina 28211

Dear Directors:

We are providing this letter to you for inclusion as an exhibit to your Form 10-K filing pursuant to Item 601 of Regulation S-K.

We have audited the consolidated financial statements included in the Company's Annual Report on Form 10-K for the year ended December 31, 2016 and issued our report thereon dated February 28, 2017. Note 2 to the financial statements describes a change in accounting principle for inventory costing from last-in, first-out (LIFO) to first-in, first-out (FIFO). It should be understood that the preferability of one acceptable method of accounting over another for the cost of inventory has not been addressed in any authoritative accounting literature, and in expressing our concurrence below we have relied on management's determination that this change in accounting principle is preferable. Based on our reading of management's stated reasons and justification for this change in accounting principle in the Form 10-K, and our discussions with management as to their judgment about the relevant business planning factors relating to the change, we concur with management that such change represents, in the Company's circumstances, the adoption of a preferable accounting principle in conformity with Accounting Standards Codification 250, *Accounting Changes and Error Corrections*.

Very truly yours,

/s/ PricewaterhouseCoopers LLP

PricewaterhouseCoopers LLP

Exhibit 21
Nucor Corporation
2016 Form 10-K

Subsidiaries

Subsidiary	State or Other Jurisdiction of Incorporation of Organization
Nucor Steel Auburn, Inc.	Delaware
Nucor Steel Birmingham, Inc.	Delaware
Nucor Steel Decatur, LLC	Delaware
Nucor Steel Gallatin LLC	Kentucky
Nucor Steel Jackson, Inc.	Delaware
Nucor Steel Kankakee, Inc.	Delaware
Nucor Steel Kingman, LLC	Delaware
Nucor Steel Marion, Inc.	Delaware
Nucor Steel Memphis, Inc.	Delaware
Nucor Steel Seattle, Inc.	Delaware
Nucor Steel Tuscaloosa, Inc	Delaware
Nucor Steel Connecticut, Inc.	Delaware
Nucor-Yamato Steel Company	Delaware
Nu-Iron Unlimited	Trinidad
Nucor Castrip Arkansas LLC	Delaware
Harris Steel Inc.	Delaware
Harris U.S. Holdings Inc	Delaware
Harris Steel ULC	Canada
Magnatrax Corporation	Delaware
The David J. Joseph Company	Delaware
Ambassador Steel Corporation	Indiana
Nucor Energy Holdings Inc.	Delaware
Skyline Steel, LLC	Delaware
Nucor Steel Louisiana LLC	Delaware
Independence Tube Corporation	Illinois

Exhibit 23
Nucor Corporation
2016 Form 10-K

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (Numbers 333-196104, 333-108749, 333-108751 and 333-167070) and on Form S-3ASR (Number 333-198263) of Nucor Corporation of our report dated February 28, 2017 relating to the financial statements and the effectiveness of internal control over financial reporting, which appears in the Annual Report to Stockholders, which is incorporated in this Annual Report on Form 10-K.

/s/ PricewaterhouseCoopers LLP

Charlotte, North Carolina
February 28, 2017

Exhibit 31
Nucor Corporation
2016 Form 10-K

CERTIFICATION

I, John J. Ferriola, certify that:

1. I have reviewed this annual report on Form 10-K of Nucor Corporation;
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 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 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.

February 28, 2017

/s/ John J. Ferriola
John J. Ferriola
Chairman, Chief Executive Officer
and President

Exhibit 31(i)
Nucor Corporation
2016 Form 10-K

CERTIFICATION

I, James D. Frias, certify that:

1. **I have reviewed this annual report on Form 10-K of Nucor Corporation;**
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 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 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.

February 28, 2017

/s/ James D. Frias
James D. Frias
Chief Financial Officer, Treasurer
and Executive Vice President

Exhibit 32
Nucor Corporation
2016 Form 10-K

Certification of Principal Executive Officer
Pursuant to 18 U.S.C. § 1350,
As Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

In connection with the Annual Report on Form 10-K of Nucor Corporation (the "Registrant") for the year ended December 31, 2016, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, John J. Ferriola, Chairman, Chief Executive Officer and President (principal executive officer) of the Registrant, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Registrant.

/s/ John J. Ferriola ‘
Name: John J. Ferriola
Date: February 28, 2017

Exhibit 32(i)
Nucor Corporation
2016 Form 10-K

Certification of Principal Executive Officer
Pursuant to 18 U.S.C. § 1350,
As Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

In connection with the Annual Report of Nucor Corporation (the "Registrant"), on Form 10-K for the year ended December 31, 2016, as filed with the Securities and Exchange Commission (the "Report"), I, James D. Frias, Chief Financial Officer, Treasurer and Executive Vice President (principal financial officer) of the Registrant, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Registrant.

/s/ James D. Frias
Name: James D. Frias
Date: February 28, 2017