Direct Testimony and Schedules Michael A. Perala

Before the Minnesota Public Utilities Commission

State of Minnesota

In the Matter of the Application of Minnesota Power for Authority to Increase Rates for Electric Utility Service in Minnesota

Docket No. E015/GR-16-664

Exhibit _____

LARGE POWER CUSTOMER DEMAND AND FORECASTING

November 2, 2016

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| 1 | | I. INTRODUCTION AND QUALIFICATIONS |
|----|----|---|
| 2 | Q. | Please state your name and business address. |
| 3 | A. | My name is Michael A. Perala and my business address is 401 Douglas Avenue, |
| 4 | | Eveleth, Minnesota, 55734. |
| 5 | | |
| 6 | Q. | By whom are you employed and in what position? |
| 7 | A. | I am employed by ALLETE, Inc., doing business as Minnesota Power ("Minnesota |
| 8 | | Power" or the "Company"). My current position is Director – Strategic Accounts. |
| 9 | | |
| 10 | Q. | Please summarize your qualifications and experience. |
| 11 | A. | I have 15 years of experience with Minnesota Power, all of which have been in the |
| 12 | | Marketing Department. I have had the positions of Key Account Engineer, Key |
| 13 | | Account Manager, Segment Leader, Manager of Strategic Accounts, and, most |
| 14 | | recently, Director of Strategic Accounts. Prior to joining Minnesota Power, I worked |
| 15 | | for LTV Steel Mining Company in Hoyt Lakes, Minnesota. During my tenure there, |
| 16 | | I held several positions in engineering, operations, and maintenance management. I |
| 17 | | was the Manager of Operations in the pellet plant when the final pellets were made on |
| 18 | | January 5, 2001. I also worked for four years in the wood products industry at the |
| 19 | | Potlatch oriented strand board plant in Cook, Minnesota, as the Plant Engineer during |
| 20 | | the conceptual design phases of their \$62 million expansion project in the latter |
| 21 | | 1990s. I graduated in 1987 from North Dakota State University with a Bachelor of |
| 22 | | Science degree in Electrical and Electronics Engineering, and in 1999 from the |
| 23 | | College of St. Scholastica with a Master of Arts degree in Management. I am a |
| 24 | | Registered Professional Engineer in the State of Minnesota. |
| 25 | | |
| 26 | | In my current position with Minnesota Power, I am responsible for managing the |
| 27 | | relationships with our large industrial customers in our mining and pulp and paper |

segments. I directly supervise several Key Account Managers who work directly
with our customers on all facets of providing professional customer service, including

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contract negotiation, billing, budgeting, repair and maintenance work, and efficiency

| 1 | | and conservation. I also supervise a Marketing Analyst team that assists in external |
|----|----|---|
| 2 | | sensing, development of new products and services, budgeting, and load forecasting |
| 3 | | and customer energy usage analysis. |
| 4 | | |
| 5 | Q. | What is the purpose of your testimony? |
| 6 | А. | My testimony explains how the Company develops the sales forecast for its Large |
| 7 | | Power ("LP") load. I also provide information on our LP customers, industry trends, |
| 8 | | and global economic market information that was used to develop our 2017 test year |
| 9 | | sales forecast for our LP customers. I identify changes at several of our LP customers |
| 10 | | that are reflected in the 2017 test year sales forecast. Finally, I provide information |
| 11 | | on current negotiations and the current status of our LP customer contracts. |
| 12 | | |
| 13 | Q. | Are you sponsoring any exhibits in this proceeding? |
| 14 | А. | Yes. I am sponsoring the following exhibits: |
| 15 | | • Exhibit (Perala) – Schedule 1 – International Monetary Fund, Gross |
| 16 | | Domestic Product ("GDP") projections, July 2016. |
| 17 | | • Exhibit (Perala) – Schedule 2 – Excerpts from Cliffs Natural Resources |
| 18 | | Inc.'s Form 10-Q for 2015. |
| 19 | | • Exhibit (Perala) – Schedule 3 – American Iron and Steel Institute's News |
| 20 | | Release regarding U.S. Steel Imports, Jan. 27, 2016. |
| 21 | | • Exhibit (Perala) – Schedule 4 – World Steel Association's Steel Demand |
| 22 | | Forecasts, April 2016. |
| 23 | | • Exhibit (Perala) – Schedule 5 – ArcelorMittal's Second Quarter Half- |
| 24 | | Year Shipment Summary, July 2016. |
| 25 | | • Exhibit (Perala) – Schedule 6 – Excerpts from U.S. Steel Corporation's |
| 26 | | Form 10-Q, June 30, 2016. |
| 27 | | • Exhibit (Perala) – Schedule 7 – Excerpts from AK Steel's 10-Q, June 30, |
| 28 | | 2016. |

| 1 | | • Exhibit (Perala) – Schedule 8 – World Steel Association's Crude Steel |
|----|----|--|
| 2 | | Production by Process, 1995. |
| 3 | | • Exhibit (Perala) – Schedule 9 – World Steel Association's Crude Steel |
| 4 | | Production by Process, 2015. |
| 5 | | • Exhibit (Perala) – Schedule 10 – Annual Minnesota Taconite Production |
| 6 | | (1995-2015). |
| 7 | | • Exhibit (Perala) – Schedule 11 – Baker Hughes' U.S. Rig Count. |
| 8 | | • Exhibit (Perala) – Schedule 12 – HSI Oil and Natural Gas Prices (2008- |
| 9 | | 2017). |
| 10 | | • Exhibit (Perala) – Schedule 13 – Transcript of U.S. Steel's Second |
| 11 | | Quarter Earnings Call, July 27, 2016. |
| 12 | | • Exhibit (Perala) – Schedule 14 – Mesabi Daily News, "Mustang Powered: |
| 13 | | Cliffs Breaks Ground on UTAC's New Life," Aug. 11, 2016. |
| 14 | | • Exhibit (Perala) – Schedule 15 – PR Newswire, "Magnetation LLC |
| 15 | | Announces Potential Shutdown of its Minnesota and Indiana Facilities," Aug. |
| 16 | | 26, 2016. |
| 17 | | • Exhibit (Perala) – Schedule 16 – RISI U.S. Demand for Printing and |
| 18 | | Writing Papers, July 2016. |
| 19 | | • Exhibit (Perala) – Schedule 17 – Summary of Contract Status for LP |
| 20 | | Tariff, Large Light and Power Tariff, and other customers. |
| 21 | | |
| 22 | | II. LARGE POWER CUSTOMER SALES FORECASTING |
| 23 | Q. | How much of Minnesota Power's sales are attributed to LP customers? |
| 24 | A. | Minnesota Power is unique among Minnesota utilities in that more than half of its |
| 25 | | sales are attributed to a few large industrial customers. In 2015, 62 percent of |
| 26 | | Minnesota Power's retail megawatt-hour ("MWh") sales were to LP customers, |
| 27 | | primarily in the taconite mining, iron concentrate, and pulp and paper industries. |
| 28 | | Minnesota Power also serves pipeline customers on its Large Light and Power |
| 29 | | ("LLP") tariff. |

Q. Under what type of an arrangement do LP customers purchase power from Minnesota Power?

A. The LP customers' electric service requirements and the terms of conditions of that
service are outlined in Minnesota Power's LP Service Schedule and through customer
contracts that are incorporated as tariffs themselves upon approval from the
Minnesota Public Utilities Commission ("Commission"). These customer contracts
supplement the LP tariff and govern customer specific items such as minimum and
maximum usage levels, points of delivery, delivery voltage, and maintenance outage
periods.

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12 Q. How many LP customer contracts does Minnesota Power have?

A. Minnesota Power has nine LP customer contracts, each serving at least 10 megawatts
("MW") of load. These contracts define our electric service for six taconite
producing facilities served through four LP customer contracts, two concentrate
reclamation plants under a single LP contract, and four paper and pulp mills. Table 1
below, as well as Exhibit ____ (Perala), Schedule 17, summarizes these nine LP
customers and the status of their contracts.

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Table 1

| Customer | Industry | Ownership | Earliest Termination Date as of October 2016 |
|--|----------|--|---|
| ArcelorMittal USA, Inc Minorca Mine | Taconite | ArcelorMittal S.A. | Dec. 31, 2025 |
| Hibbing Taconite Co. | Taconite | 62.3%-ArcelorMittal S.A. 23.0%-Cliffs Natural Resources Inc. 14.7%-USS Corporation | Oct. 31, 2020 |

| Customer | Industry | Ownership | Earliest Termination Date as of October 2016 |
|---|---------------------|---|---|
| Cliffs Natural Resources (United Taconite LLC and Northshore Mining- Babbitt Mine) | Taconite | Cliffs Natural Resources Inc. | Dec. 31, 2026 |
| USS Corporation (USS- Minnesota Ore) | Taconite | USS Corporation | Dec. 31, 2021 |
| Boise, Inc. | Paper | Packaging Corporation of America | Dec. 31, 2023 |
| UPM, Blandin Paper Mill | Paper | UPM-Kymmene Corporation | Oct. 31, 2020 |
| NewPage Corporation | Paper and Pulp | Verso Corporation | Dec. 31, 2022 |
| Sappi Cloquet LLC | Paper and Pulp | Sappi Limited | Jan. 31, 2020 |
| Magnetation, LLC | Iron Concentrate | 50.1%-Magnetation, Inc. 49.9%-AK Steel Corporation | Dec. 31, 2025 |

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A. <u>Forecasting Approach</u>

3 Q. How does Minnesota Power prepare its sales forecast for its LP customers?

At the start of our forecasting process, we gather customer, industry, and economic 4 A. 5 information from a variety of sources. Our Marketing team, including Key Account 6 Managers and Marketing Analysts, is continually gathering information about our LP 7 customers, about their industry, and also global, state, and local economic outlooks. 8 Our Account Managers, as well as others from the Company, are in direct contact 9 with our customers. As part of these interactions, we frequently discuss the state of 10 the industry with our customers as well as their future production plans. Through 11 these discussions, the Company can effectively gauge the operational and strategic 12 plans that our customers have and how Minnesota Power can serve their energy needs to encourage and foster growth, efficiency, sustainability, and mutual successes. 13

Q. Could you simply ask your customers for their sales forecast and incorporate
 that information directly into your sales forecasting processes instead of
 undertaking the process you described?

4 Yes, to a point, but the timing for when Minnesota Power needs sales forecast A. 5 information does not directly align with our customers' timing of when they develop their budget information. Additionally, our planning needs require that we take 6 7 longer looks into the future than our customers' typical planning horizons would 8 provide. Further, we have learned through years of experience that our customers, 9 particularly at the local level, have, at times, been more focused on the specifics of 10 their individual operations and their direct supplier/customer relationship than on the 11 interrelations between steel production and general consumer demand for steel. As a 12 result, our customers' forecasts, at times, have had inaccuracies due to failure to consider macro business trends. Thus, to prepare a more accurate sales forecast, we 13 14 meld our customers' direct information with our own external information and our 15 analysis of macro business trends.

16

17 Q. Would solely using econometric modeling and statistics provide accurate LP 18 customer sales forecasts?

19 A. Not necessarily. We have learned that relying solely on generalized industry metrics 20 as an indicator of our customers' operating rates – for instance, domestic automotive 21 sales projections – fails to capture the supplier/customer relationships. This approach 22 is also too high level to account for the customer/corporate parent dynamic that may 23 lead to either a local idling or shutdown of capacity or, in the alternative, to a capital 24 project addition at a customer site. Thus, a macro industry metric may infer strong 25 customer operations but a specific local customer operation may be weak, or vice 26 versa.

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Also, the Company's econometric modeling approach documented in the Annual Forecast Report ("AFR") only produces estimates for whole industrial sectors (Mining, Paper, and Other Industrial). The AFR analysis does not produce the estimates for individual customers that are necessary for detailed short-term budgeting.

- Our experience has determined that our best sales forecasts come from a thorough analysis and vetting of both types of information. We use the macro/statistical analysis provided by Company witness Ms. Julie Pierce's load forecasting team (i.e., the macro analysis) in conjunction with the work of my team (i.e., the micro analysis) to produce Minnesota Power's LP customers' sales forecasts.
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B. <u>Industry Data</u>

Q. What sources of data do you rely on to gather industry information that could impact your customers' future energy needs?

- 13 Many of us at Minnesota Power are actively involved and deeply embedded in our LP A. 14 customers' trade organizations. By way of example, I serve on the Board of Directors 15 of MiningMinnesota, the trade organization for non-ferrous exploration and 16 development in Minnesota. Pat Mullen, our Vice President of Marketing and Corporate Communications, is on the Board of Directors of the Minnesota Forest 17 18 Industries. Margaret Hodnik, our Vice President of Minnesota Power Regulatory and 19 Legislative Affairs, is on the Board of Directors of the Iron Mining Association of 20 Minnesota. Several others from Minnesota Power actively participate and contribute 21 time, talent, and effort in sub-committees at these organizations as well. We use our 22 interactions in these organizations to identify issues, trends, opportunities, and 23 challenges that the industries face and to further our understanding of their energy 24 needs.
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Q. What other sources do you use to gather industry information?

A. We also subscribe to numerous industry periodicals and track industry news on a
macro level to supplement our knowledge of our customers' industries. For the
mining industry, we subscribe and review information from World Steel Dynamics,
Steel Market Update, American Metal Markets, Steel Business Briefing, Skillings

Mining Review, and several others. For the paper industry, we subscribe and review 2 information from the Technical Association of the Pulp and Paper Industry 3 ("TAPPI"), the Global Pulp and Paper Industry Intelligence Organization ("RISI"), 4 the Wisconsin Paper Council newsletter, the Paper Trader and Mill Intelligence 5 periodical, and several others.

7 In addition, our Marketing Analysts assist our Key Account Managers in tracking 8 several relevant industry metrics, including, but not limited to, raw steel capacity 9 utilization rates, steel and iron ore pricing levels, steel imports and exports, drill rig 10 counts, iron ore and steel inventory levels, Lake Superior boat traffic, pricing levels 11 for various grades of paper, and business analyst reports of our customers, their industries, their corporate parents, and their competitors. We also use publicly 12 13 available information from the U.S. Securities and Exchange Commission, the U.S. 14 Census Bureau, American Iron and Steel Institute, World Steel Association, the 15 United States Geological Survey, and other sources to provide the information we 16 need for our load forecasting purposes.

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18 Q. What sources of data do you rely on to gather information about global, state, 19 and local economic trends that could impact your customers' future energy 20 needs?

21 A. We look at several pieces of economic data provided by the Strategy and Planning 22 Group under Ms. Pierce's leadership, including, but not limited to, the Institute of 23 Supply Management Manufacturing Indices, consumer spending, exchange rates, 24 savings rates, capital investment rates, Federal Reserve Business Outlook surveys, 25 Industrial Production Indices for steel and paper, the Chicago Index of Activity, and 26 many more.

- 1 C. <u>Customer Data</u>
- Q. Please describe how LP customers interact with Minnesota Power regarding
 their anticipated energy demands.

A. Minnesota Power works closely with its LP customers on an ongoing basis to plan for
their future energy needs and to ensure their electric service remains reliable. We
devote a great deal of attention to understanding their near-term operating plans
because changes in our customers' operating rates or load additions/subtractions at
any LP customer site can have a large impact on other areas of our Company. As
such, our Key Account Managers begin working with our customers early in the year
to understand their energy needs for the next year.

11

12 In some cases, we work directly with our LP customers to calculate their energy budget for their own internal budgeting based on production estimates they provide to 13 14 us. In other cases, we provide the energy consumption and pricing information to 15 them, based on our records of their historic consumption at various production levels, 16 for their use in their budgeting process. In still other cases, we work with them to identify the power requirements that they will need to purchase from Minnesota 17 18 Power to supplement their own self-generation expectations. In every case, we are 19 either embedded or aligned at some level with our customers in the preparation of 20 their operating plans and energy needs for the following year.

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In some circumstances, our timelines and needs require us to forecast or project customers' load in advance of their normal budget and estimate processes for the upcoming year. In those instances, our processes are very similar, and we typically use the summary information that we derive as the first step in working with customers on their budgeting processes later in the year.

1Q.Is the information provided in these yearly budgets updated throughout the2year?

A. Yes. Our estimates for the coming year are supplemented at intervals during the year
with more granular commitments from our customers as to their short-term operating
plans. Most commonly, this is accomplished through an LP customer's written
submittal of demand nominations. These demand nominations indicate the amount of
increased power demand requirements by an LP customer above the minimum
demand or take-or-pay levels specified in the individual LP customer's contract.

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10 The frequency of these demand nominations varies according to the terms of the 11 customer's respective contract. Some of our LP customers, specifically those with 12 large quantities of their own generation and relatively small and stable quantities of 13 purchased power from the Company, nominate on a monthly basis. Most of our other 14 LP customers nominate three or four times annually with either a month's or two 15 months' advance notice. In every case, these nominations reflect binding, take-or-pay 16 commitments from our LP customers for the respective nominating period.

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18 Q. To what extent does Minnesota Power use formal demand nominations in 19 preparing its annual sales budget?

A. The Company's sales budget for the upcoming year is typically completed by late summer of the year prior. Thus, in most years, our sales budgets are completed well ahead of the nomination deadlines for any of the various nomination periods in the next year. In addition, these formal nominations would be of limited use because our sales budgets are annual budgets, whereas the formal demand nominations cover shorter periods.

anticipate their future operating levels and energy requirements.

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That being said, we do use the historical nominations that customers have provided

for various seasons and under various business conditions as tools to help us

- 1Q.Are there other ways in which Minnesota Power obtains customer information2for use in its forecasting?
- A. Yes. We provide our customers with periodic updates on their energy usage for their
 use in updating their operating budgets. We have some customers who prepare
 current estimates on a monthly basis for the balance of the year; others who prepare
 quarterly updates for the balance of the year; and yet others who prepare rolling twoyear forecasts. A couple of our customers actually prepare ten-year operating
 projections and update them on an annual basis.
- 10 To prepare any of those forecasts for our customers, we first need them to provide us 11 with their most current production estimates, and we use those production estimates 12 to aid us in our sales budget updates as well. We compare these periodic customer 13 updates with our forecast information, either using them to validate what we already 14 have or incorporating changes in our forecasts that are indicated by this updated 15 customer information.
- 16

Q. What other information does Minnesota Power receive from its customers regarding their future energy needs?

- A. Minnesota Power also receives information from LP customers via pre-nomination
 predictions. These pre-nomination customer predictions take several forms. Some of
 this information is shared with us by LP customers during the budget development
 process. Some of this information is shared in response to changes in customer plans
 or in response to informal discussions about occurrences in the customers' industries,
 while other information is related to the customers' requests for current estimates that
 were previously communicated and described.
- 26

This information is received on an ad hoc or as-needed basis and does not follow as strict a calendar as the formalized nominations do. Oftentimes, these predictions encompass widely varying timeframes. Since the predictions are not binding on the

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Q. Does the Company use pre-nomination information from its LP customers to prepare its annual sales budget?

a customer's future energy demand.

customer, they are sometimes informal and may represent the most optimistic view of

Yes, although we factor in the considerations noted above. Once the Company's 6 A. 7 accounting department produces its timeline for development of the annual sales 8 budget, which typically comes out in late spring or early summer, our Account 9 Managers meet with each of our customers to discuss their outlooks for the coming 10 year. With our taconite customers, the pre-nomination information that we receive 11 will be in the form of production expectations. With our paper customers, the 12 guidance we receive will typically be more vague, essentially constituting a 13 comparison to the current year as well as a discussion regarding the market outlooks 14 for the types of paper that they produce.

15

Q. Did the Company obtain pre-nomination information from its LP customers for preparation of the 2017 test year sales forecast?

18 A. We did. Our task was a bit tougher this year due to the significant reduction in our 19 customers' operating rates in 2015 and 2016. Minnesota taconite production in 2015 20 was only 74 percent of capacity and final 2016 production is not expected to be much 21 higher, if at all. We have had significant customer downtime in 2016 at United 22 Taconite, Northshore Mining, and Keetac, plus idling of Mesabi Nugget, Mining 23 Resources, Magnetation Plant 2, and most recently Magnetation Plant 4. As we were 24 considering these factors in developing our 2017 forecast, both the Company and our 25 customers found it more difficult to try to predict the futures of those facilities. 26 Because many of the actions taken or contemplated to address unfairly traded steel 27 had yet to be finalized or their impacts yet to be felt by our customers, the outcomes 28 were very uncertain. Customer outlooks changed during our 2017 test year sales 29 forecast process, and in some cases, even after it was complete. In fact, we modified 30 our original projections upward based on customer announcements of quicker restarts

at United Taconite and Northshore Mining. We also modified our sales projections downward based on the announcement by Magnetation that they intended to wind down their operations beginning in the fall of 2016. We have since incorporated these adjustments into the 2017 test year sales forecast.

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6 Q. How are both the customer and industry data that you described used in the 7 forecasting process for the LP customers?

Our Marketing Analysts compile and analyze this data and work with our sales 8 A. 9 forecasting teams to develop a forecast for the LP industrial sector. We have a series 10 of interactions and meetings in which we compare the draft forecast for the coming 11 year with our scenarios and forecasts developed for the mid- and long-term associated 12 with the Integrated Resource Plan and AFR. Through these interactions and 13 meetings, we can determine if they are aligned and identify points of difference to 14 collectively resolve these differences. This iterative process occurs over several 15 weeks until we reach a consensus sales forecast, which is then sent to others in the 16 Company. The testimony of Ms. Pierce indicates how this information is then used in 17 both the overall Company sales forecast and the development of the Company asset-18 based sales budget.

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III. 2017 LARGE POWER SALES FORECAST

A. <u>Mining Customers</u>

22 Q. Describe Minnesota Power's large industrial mining customers.

23 A. Minnesota Power provides service to all six of Minnesota's taconite plants, a value-24 added iron nugget production facility, and three iron concentrate reclaim facilities. 25 The six taconite plants are owned by three principal corporate owners: United States 26 Steel Corporation ("U.S. Steel"), Cliffs Natural Resources Inc. ("Cliffs"), and 27 ArcelorMittal Steel-USA. We also provide wholesale municipal electric service to 28 the Nashwauk Public Utilities Commission, which in turn provides service to the new 29 taconite mining facility currently under construction by Essar Steel Minnesota LLC. 30 We provide electric service to PolyMet, a non-ferrous mining and processing

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Q. What are the global economic trends currently impacting the Minnesota mining industry?

to construct and operate an open-pit mining and processing facility.

operation that has completed its environmental review and is in the permitting stage

- A. There has been a general historical correlation between U.S. Steel production and
 Minnesota taconite production. As such, it is important to examine trends impacting
 the U.S. steel industry to determine how these trends will impact future Minnesota
 taconite production. In examining the U.S. steel industry, there are several factors
 that are expected to continue to stress the domestic steelmaking and iron production
 for the next several years. These factors are: (1) high global iron ore supply; (2) high
 steel import levels; and (3) technology changes in steelmaking.
- 13

14 Q. How does increased global iron ore supply impact Minnesota Power's mining 15 customers?

- 16 A. Despite slowing global steel demand growth, world iron ore production capacity is 17 continuing to increase. Global mining companies have planned and executed 18 capacity expansion strategies over the past decade and a half to support sustained 19 Chinese economic growth. However, in recent years, China's economic growth has 20 slowed. In 2015, according to the International Monetary Fund ("IMF"), the Chinese 21 GDP grew at its lowest rate since 1991 at 6.9 percent. See Exhibit (Perala), 22 Schedule 1. The IMF forecasts China's GDP growth to slow further in 2016 to 6.6 23 percent and again in 2017 to 6.2 percent.
- 24

25 Despite China's slowing growth, significant iron ore capacity additions are still 26 coming on line and are adding to the world supply of iron ore. For example, Gina 27 Rinehart's Roy Hill Mine in Australia and Vale's S11D project in Brazil will be 28 online this year. At full production, those two mines will collectively add 29 approximately 140 million tons of global iron ore capacity – more than three times 30 the total capacity of the Minnesota taconite industry. While there are barriers that

1 prevent foreign ore from entering the U.S. market, the excess supply still affects 2 Minnesota iron ore producers by depressing the prices for iron ore and iron-related 3 products. Merchant pellet companies such as Cliffs and Magnetation have pellet 4 supply agreements with their customers with various pricing components, and the 5 IODEX (seaborne iron ore price) can be one of those factors present in the pricing 6 formulas for their products. This is displayed in Cliffs 2015 10-Q report, excerpted at 7 Exhibit ____(Perala), Schedule 2, where Cliffs reported that a \$30 per ton decrease in the Platts' IODEX reduces their U.S. iron ore segment realized revenues by \$5 per 8 9 ton. Also, Magnetation filed for bankruptcy in May 2015, citing depressed world iron 10 ore prices as a contributing factor.

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12 Along with depressed pricing, excess world iron ore capacity affects the Minnesota taconite industry by lowering the production cost of foreign steelmakers, leading to 13 14 lower world steel prices. These lower foreign steel prices typically encourage 15 increased levels of domestic steel imports and are certainly tied to the recent high 16 levels of imports of unfairly traded steel. The higher level of imports has historically displaced U.S. steel and iron ore production. These low iron ore prices are expected 17 18 to continue for the foreseeable future as the aforementioned iron ore capacity comes 19 online and global steel consumption does not increase correspondingly.

20

Q. How have high steel import levels impacted Minnesota Power mining customers?

23 A. The excessive volume of unfairly untraded steel being imported into the U.S. has 24 been highly publicized at both a local and national level. In 2015, steel imports 25 captured a record 29 percent market share of the U.S. market, as reported by the 26 American Iron and Steel Institute in Exhibit ___(Perala), Schedule 3. These 27 unprecedented levels of steel imports were a direct result of the global oversupply of 28 steel. The World Steel Association reported Chinese steel demand fell 5.4 percent 29 and is forecasting further erosion in 2016 and 2017, at decreases of 4 percent and 3 30 percent respectively. See Exhibit ___(Perala), Schedule 4. With reduced Chinese

demand, excess steel produced to serve their expected steel needs was exported to other countries, most notably in Europe and North America. Much of this steel was dumped illegally or unfairly subsidized by foreign governments, allowing for global steel prices to collapse. This impact has been underscored by the Department of Commerce's and International Trade Commission's final determinations on the antidumping and countervailing suits in the U.S. for hot-rolled, cold-rolled, and corrosion resistant steel products.

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9 Despite the recent positive trade rulings, domestic steelmakers and Minnesota 10 taconite producers are still feeling the effects of the flood of imports with stressed 11 balance sheets and reduced sales volumes. As shown in Exhibit ____(Perala), 12 Schedules 5, 6 and 7, steel shipments for ArcelorMittal, U.S. Steel, and AK Steel 13 were down 2 percent, 3 percent and 10 percent, respectively, in the first half of 2016 14 versus 2015.

15

Q. How have technology changes in steelmaking impacted Minnesota Power's mining customers?

- 18 A. Over the past 20 years, the U.S. steel industry has been making a fundamental shift 19 away from traditional blast furnace production (fed by Minnesota taconite) towards 20 Electric Arc Furnaces ("EAFs"), also known as "mini mills." The World Steel 21 Association indicates that blast furnace production's share of U.S. crude steel 22 production fell from almost 60 percent in 1995 to just 37 percent in 2015. Exhibit 23 (Perala), Schedules 8 and 9. The transition to EAFs has been fueled by their 24 relatively lower capital investment costs, lower emissions, and their flexibility to 25 rapidly ramp up and down with market conditions. EAFs are fed mostly by scrap, 26 imported smelted "pig" iron, and some Direct Reduced Iron ("DRI").
- 27

The majority of Minnesota iron ore operations do not currently serve EAFs, with the exception of the iron nuggets made at the indefinitely-idled Mesabi Nugget and trial DR-Grade pellet production at Cliffs' Northshore Mining Company. Minnesota's

| 1 | | limited sales to EAFs can be seen in Minnesota taconite production totals as provided |
|----|----|--|
| 2 | | in Exhibit(Perala), Schedule 10. From 1995 through 2000, full production was |
| 3 | | considered 45 million tons, but after 2001, and the LTV Steel Mining Company |
| 4 | | closure, Minnesota taconite production has not exceeded 40 million tons on a tax |
| 5 | | reported basis. As environmental standards become even tighter, existing blast |
| 6 | | furnaces continue to age, and EAFs become even more efficient, EAFs' share of steel |
| 7 | | production are expected to continue to grow and negatively affect Minnesota taconite |
| 8 | | production. |
| 9 | | |
| 10 | Q. | Do you expect these trends to continue into 2017? |
| 11 | A. | We do. The industry transformation in steel has been occurring for several years and |
| 12 | | is expected to continue. |
| 13 | | |
| 14 | Q. | How do these trends impact Minnesota Power's mining customers? |
| 15 | A. | In 2016, Minnesota Power's mining customers showed modest signs of improving |
| 16 | | conditions, but have yet to fully recover. In 2017, we anticipate a continued softness |
| 17 | | in the domestic iron ore markets. |
| 18 | | |
| 19 | Q. | How specifically do these trends impact Minnesota Power's 2017 test year sales |
| 20 | | forecast? |
| 21 | A. | The 2017 test year sales forecast reflects continued reduced output at several mining |
| 22 | | customers as a result of these global trends. Keetac, Mesabi Nugget, Mining |
| 23 | | Resources, and Magnetation's Plant 2 and Plant 4 are all expected to remain idle in |
| 24 | | the 2017 test year sales forecast due to adverse market conditions and lack of |
| 25 | | demand. |
| 26 | | |
| 27 | Q. | Are there other mining customer-specific items of note in the 2017 test year sales |
| 28 | | forecast? |
| 29 | A. | Yes. My Direct Testimony below addresses specific considerations related to U.S. |
| | | |
| 30 | | Steel, Cliffs, Magnetation, PolyMet, and Essar Steel Minnesota. |

- 1 2 **U.S. Steel Corporation** 1. 3 Q. Describe U.S. Steel's operations in Minnesota. 4 U.S. Steel is the largest integrated steel producer in the United States with steel-A. 5 making facilities located across the country. U.S. Steel's Minnesota mining operations include Minntac and Keetac. U.S. Steel also has partial ownership (15 6 7 percent) in a third mining operation, Hibbing Taconite (discussed later in my testimony). Minnesota Power provides electric service to U.S. Steel's Minntac and 8 9 Keetac production facilities. Minnesota Power recently reached agreement on a new 10 electric service agreement ("ESA") with U.S. Steel which, upon Commission 11 approval, will define the electric service Minnesota Power will provide to these two 12 facilities through at least 2021 (Docket No. E015/M-16-836). 13 14 **Q**. Can you summarize the key terms of this new ESA? 15 A. Yes. Under this new ESA, U.S. Steel commits to purchase all of its electric service 16 requirements for U.S. Steel's Minntac and Keetac facilities from Minnesota Power through at least December 31, 2021. In addition, the agreement further optimizes the 17 18 operating synergies between the two U.S. Steel facilities. Finally, the agreement 19 provides U.S. Steel with additional operating flexibility and cost reduction potential 20 through modified nomination, maintenance shutdown, and energy efficiency 21 provisions. 22 23 **O**. Have there been any other recent changes to U.S. Steel's Minnesota operations? 24 A. Yes. During 2015, U.S. Steel expanded its Minntac mining operations by 483 acres 25 though an expansion of its East Pit mining area, thereby extending the Minntac mine 26 life by approximately 15 years. Due to low steel demand and adverse market 27 conditions, U.S. Steel idled the Keetac mining operation in April 2015, and Keetac
- 28 29

remains idled to date.

- Q. What was the impact of the new U.S. Steel ESA on the 2017 test year sales
 forecast?
- A. The 2017 test year sales forecast reflects the implementation of the U.S. Steel ESA.
 Additionally, our 2017 test year sales forecast reflects Minntac running strongly and
 Keetac remaining down.
- 6
- 7

Q. Why is it reasonable to assume that Keetac will remain idled through 2017?

The Keetac facility supplies pellets to the U.S. Steel Granite City steel plant in 8 A. 9 Granite City, Illinois. The Granite City steel plant, in turn, makes tubular steel goods 10 that serve the oil and gas industries. Baker Hughes, a company that supplies drilling 11 materials to the oil and gas industries, continues to report very low drill rig counts for domestic oil and gas rigs as shown in Exhibit ___(Perala), Schedule 11. This 12 13 indicates low oil and gas exploration activity and hence low demand for steel to 14 supply those industries. Due to the low drill rig counts, low price forecasts for oil and gas as shown in Exhibit ____(Perala), Schedule 12, and the indications of weakness in 15 16 the market for those goods, we forecast Keetac as remaining down in 2017.

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Our analysis was validated by the receipt of nominations for the fall 2016 period which indicated a continued idle state for Keetac and by U.S. Steel's earnings call for the second quarter of 2016. *See* Exhibit ___(Perala), Schedule 13. That call indicates that Keetac will remain idle at least until the Granite City mill restarts, and that they had no timetable for a Granite City restart. Company representatives stated that, in the current market conditions, there is enough capacity at Minntac to supply all of their operating needs and more.

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2. Cliffs Natural Resources Inc.

27 Q. Describe Cliffs' operations in Minnesota.

A. Cliffs is an international mining and natural resources company. Cliffs operates four
 iron ore mines in the United States and one iron mining complex in Western
 Australia. In Minnesota, Cliffs operates three iron ore mines in which they also have

either full or part ownership: United Taconite, Hibbing Taconite, and Northshore Mining. Minnesota Power supplies power to these three iron ore mines.

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Q. Explain the relationship between Silver Bay Power Co., Northshore Mining, and Minnesota Power.

- A. Silver Bay Power Co. ("SBPC") is a wholly owned subsidiary of Northshore Mining
 Co., which itself is a wholly owned subsidiary of Cliffs. Historically, SBPC has
 supplied Cliffs' electric energy needs for the Northshore Mining Co.'s Silver Bay
 taconite operations through its two coal-fired SBPC generating units and occasional
 energy purchased from Minnesota Power. Northshore Mining Co.'s Babbitt mining
 operation has been a Minnesota Power retail customer.
- 12

13 Q. Please describe recently executed agreements between Minnesota Power and 14 Cliffs.

- 15 A. Minnesota Power and Cliffs executed a series of agreements in May and June 2016 16 relating to several aspects of the business relationships between Minnesota Power and 17 Cliffs. Collectively, these agreements are referred to as the Northshore Mining/Silver 18 Bay Agreements ("Silver Bay Agreements"). One of the agreements is a new long-19 term power agreement for sale of power to SBPC through at least 2031. In turn, 20 SBPC sells power solely to Northshore Mining Company's Silver Bay taconite 21 The Silver Bay Agreements also include an agreement processing operations. 22 allowing Minnesota Power to gain land options for possible solar generation 23 development at Cliffs' Northshore and United Taconite facilities, as well as an 24 agreement for Minnesota Power to gain transportation rights related to the Cliffs-Erie 25 rail assets. Finally, we are finalizing an agreement to purchase transmission assets at 26 United Taconite. Collectively, the purchase price of the Silver Bay Agreements was 27 \$31 million.
- 28
- In addition to the Silver Bay Agreements, we executed a contract amendment governing retail service to Cliffs' United Taconite mining and processing operations

| 1 | | located in Forbes and Eveleth, Minnesota and to Cliffs' Northshore Mine located in |
|----|----|--|
| 2 | | Babbitt, Minnesota through at least the end of 2026. |
| 3 | | |
| 4 | Q. | Which of the Silver Bay Agreements require Commission approval? |
| 5 | А. | A petition for approval of the Amended and Restated Electric Service Agreement for |
| 6 | | United Taconite and Northshore - Babbitt has been filed with the Commission |
| 7 | | (Docket No. E015/M-16-534). A petition for approval of the purchase of |
| 8 | | transmission assets will be filed with the Commission. |
| 9 | | |
| 10 | Q. | Can you provide more perspective on what the Silver Bay Agreements mean for |
| 11 | | Minnesota Power? |
| 12 | A. | Yes. This is an important deal for Minnesota Power for several reasons. First and |
| 13 | | foremost, load growth of this size and scale is hard to come by. By providing all of |
| 14 | | the power needs for Silver Bay, rather than just the small amounts of power not |
| 15 | | supplied by the SBPC's own generation units, we are effectively adding another six |
| 16 | | million ton taconite plant to our load profile. |
| 17 | | |
| 18 | | Moreover, through our agreements with Cliffs, we have secured additional strategic |
| 19 | | rights on the Cliffs-Erie mainline railroad and the Taconite Harbor dock. In addition, |
| 20 | | we have the opportunity to move some Cliffs-owned transmission assets onto our |
| 21 | | transmission grid that will allow us to more effectively operate and coordinate |
| 22 | | transmission operations. |
| 23 | | |
| 24 | | Finally, obtaining the rights for possible solar generation development at Cliffs' |
| 25 | | Northshore and United Taconite facilities gives Minnesota Power siting options for |
| 26 | | meeting our state mandates for providing solar power to our customers. While we |
| 27 | | have no immediate plans to develop solar projects at the Cliffs' sites, we are excited |
| 28 | | about the opportunity to consider these customer sites in planning for our future |
| 29 | | resource needs. |
| 30 | | |

Q. What did Minnesota Power receive for the \$31 million payment made to Cliffs as part of the Silver Bay Agreements?

- A. The majority of the \$31 million is tied to the power agreement with SBPC. In
 essence, the power agreement and the \$31 million is a pre-payment to Cliffs for
 agreeing to transition the SBPC units to a standby mode and the subsequent purchase
 of power by SBPC from Minnesota Power that will take the place of their selfgeneration. Minnesota Power plans to recover the \$31 million over the life of the
 power agreement through the energy charges to Cliffs.
- 9

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Q. Did Minnesota Power buy SBPC's two coal-fired generators?

11 A. No, SBPC retains ownership of the two generating units.

12

13 Q. What is the timing for idling the two generators at SBPC?

- 14 A. Cliffs idled one of the two SBPC generators in June of 2016 and began to purchase 15 some of the power required for Northshore Mining Company in Silver Bay from 16 Minnesota Power. SBPC will operate only one of the units, for the most part, through 17 the end of 2019. Beginning in 2020, both generators will be idled, except for when 18 they are needed for compliance testing, for generation required in emergency 19 situations, or to register the generating capacity with MISO. Consequently, from 20 2020 on, Minnesota Power will supply all power needs to SBPC, which will in turn 21 supply the power needs of Northshore Mining's Silver Bay taconite processing plant. 22 SBPC is required to keep the two generators in operable condition throughout the 15-23 year term of the power agreement in order to be available for MISO resource 24 adequacy needs.
- 25

26Q.What is Minnesota Power's role in the transition away from Silver Bay-27generated electricity that started with the signing of the Silver Bay Agreements?

A. The agreements with Cliffs require the formation of a coordinating committee of
 Minnesota Power and Cliffs personnel to collaborate and exchange information on
 operation and transition details. We expect that Minnesota Power will work closely

with Cliffs relating to the operation of the SBPC units, the power bought and sold by Minnesota Power and SBPC, the installation of new natural gas steam boilers for Northshore's taconite process needs, and the transition over the term of the power agreement.

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Q. What is the benefit to Minnesota Power of having strategic rights on the Cliffs-Erie mainline railroad and the Taconite Harbor dock?

A. Minnesota Power favors new economic development in our area, particularly
industrial development. As companies such as PolyMet look to site facilities in our
service area, we have learned that one of the differentiating factors between
competing sites is the availability of infrastructure. Having a transportation system in
place can favorably impact a project cost such that a determination is made to locate a
facility, plant, or process in our region, thereby benefitting the regional economically
and potentially further diversifying Minnesota Power's load.

15

16 In the case of the Cliffs-Erie mainline railroad and the Taconite Harbor dock, the 17 ability to move materials to and from the Great Lakes through the Taconite Harbor 18 port and the connected mainline railroad gives access to potential future activity in 19 the Duluth Mineral Complex in northeastern Minnesota. The PolyMet project is one 20 such customer that could potentially benefit from use of the robust transportation 21 structure and certainly other potential future customers could also benefit. 22 Additionally, the Cliffs-Erie mainline railroad is in close proximity to the Laskin 23 Energy Park and Laskin Energy Center. Potential future tenants or potential future 24 uses for the Laskin Energy Center could be made more feasible when combined with 25 a robust bulk transportation network.

26

Q. What is the benefit to Minnesota Power of having the opportunity to purchase some of Cliffs' transmission assets?

A. Cliffs owns transmission assets that comprise parts of our transmission system. The
large loads present at our LP customers often require Cliffs' main substations to be a

part of our network transmission system, with power both going to serve the customer load at the site and also flowing through the substation to other parts of our transmission grid. Having both ownership and control of these transmission assets allows Minnesota Power to realize better coordination, planning, and efficiency of operation, maintenance, construction, and necessary upgrading of the overall transmission system than can be realized as compared to when parts of the system are owned and operated by different parties.

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Q. How do the Silver Bay Agreements benefit Minnesota Power's other customers?

10 A. There are benefits to all customers from having these large customers on our system. 11 The very high capacity factors associated with these customers provide for efficient 12 use of our generating assets, which has translated into favorable electric costs for our 13 other rate classes. Long-term agreements provide a degree of certainty and stability 14 to these cyclical customer industries and allow us to better plan for our future needs. 15 Further, adding the Northshore load to our system without adding additional 16 resources to serve those requirements should help our other customers' rates over time by providing more MWh sales over which to spread our fixed costs. 17

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19 Q. Overall, what does the 2017 test year sales forecast reflect for the Cliffs'20 facilities?

- A. The 2017 test year sales forecast reflects the implementation of the ESA between
 United Taconite and Northshore Mining Babbitt. Additionally, the energy sales as
 part of the Silver Bay Agreements with SBPC have been included in the 2017 test
 year sales forecast.
- 25

Q. Cliffs recently announced commencement of the Project Mustang initiative. What is that initiative and what impacts, if any, have been reflected in the 2017 test year sales forecast?

A. Cliffs recently announced the commencement of a project at United Taconite called
 the Project Mustang initiative. As a result of this project, Cliffs will produce a

specialized grade of pellet that is customized for ArcelorMittal's use in its largest blast furnace, the #7 furnace at the Indiana Harbor Works. Exhibit ____(Perala), Schedule 14 contains a story from the Mesabi Daily News about the project. At the completion of the approximately \$65 million project in 2017, Cliffs will have the ability to produce both its current taconite pellet as well as the new "Mustang" pellet.

We have not included any expected load increase in our 2017 test year sales forecast 7 8 at this time because the anticipated load increase and timing are uncertain. Further, it 9 is our understanding, based on current discussions with Cliffs, that much of the new 10 equipment relating to the unloading, crushing, and material handling of the new 11 ingredients for the Mustang pellet will only run intermittently and that the operations 12 of this equipment will coincide with maintenance activities that would naturally result 13 in reduced load. As such, we do not currently expect to build additional facilities to 14 serve the new equipment and, at this time, we expect both energy consumption and 15 peak demand impacts from Project Mustang to be nominal as compared to their total 16 current production loads. We will monitor Cliffs' construction progress, as well as 17 the overall plant load, once this new process equipment starts up and will reflect any 18 changes in future load forecasts.

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3. Magnetation

21 Q. Describe Magnetation's operations in Minnesota.

22 A. Magnetation has four plants in northeastern Minnesota that produce iron concentrates 23 that are recovered from former natural ore processing sites. Their patented processes 24 recover iron from old waste "tailings" basins dating from Minnesota's natural ore 25 production era. This product is then used in the making of iron ore pellets. 26 Magnetation's concentrate Plant 1 does not receive electric service from Minnesota 27 Power, but its Plants 2, 3, and 4 do. Plant 3, otherwise known as Mining Resources, 28 is a joint venture between Steel Dynamics (80 percent) and Magnetation (20 percent). 29 Magnetation also owns and operates a rail car loading facility, the Jesse Mine Train

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2 3 Reynolds, Indiana.

Q. Can you provide an update on Magnetation's current operations?

5 A. The drop in global iron ore pricing that began in 2014 came at a time when 6 Magnetation was just finishing two large capital projects: (1) its Plant 4 facility near 7 Coleraine, Minnesota, and (2) its three million ton pellet plant located near Reynolds, 8 Indiana. The drop in iron pricing severely impacted Magnetation's profitability and 9 revenues, and as a result, Magnetation filed for bankruptcy protection under Chapter 10 11 of the Federal Bankruptcy Code on May 5, 2015. The adverse market conditions, 11 combined with the sunset and non-renewal of some of their off-take sales agreements, 12 led Magnetation to indefinitely idle its Plant 1 in late 2014 and its Plant 2 in early 13 2015. The Mining Resources Joint Venture (Plant 3), built primarily for supply of 14 iron concentrates to the Mesabi Nugget facility located near Hoyt Lakes, Minnesota, 15 idled operations in February 2015 due to Steel Dynamics' indefinite idling of its iron 16 nugget production facility in January 2015. At this time, Plant 3 remains idled with no timeline for restart. 17

Loading Facility, near Coleraine, Minnesota, and an iron pellet production facility in

18

19 Magnetation's bankruptcy negotiations with its main pellet supply customer, AK 20 Steel, continued for many months and led to the filing of a settlement agreement on 21 August 26, 2016. See Exhibit (Perala), Schedule 15. This global settlement 22 agreement was accepted by the bankruptcy judge on October 6, 2016. The nature of 23 this settlement agreement is such that, upon execution, Magnetation planned for and 24 began an orderly wind-down of its facilities in preparation for possible sale to other 25 entities. In accordance with their wind-down plans, Plant 4 ceased production on 26 October 8, 2016. Once all three facilities are completely secured, presumably by 27 year-end 2016, we have been told by Magnetation to expect no energy consumption.

- Q. What does the 2017 test year sales forecast reflect for the Magnetation facilities?
 A. The 2017 test year sales forecast reflects no energy sales to Plant 2 or Plant 4.
 Mining Resources (Plant 3) is forecast for levels appropriate for care and maintenance
 of the facilities, similar to their raw material customer Mesabi Nugget, which is also
 not currently operating.
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4. PolyMet and Essar Steel Projects

8 Q. Can you provide an update on the status of PolyMet NorthMet project?

9 A. The PolyMet NorthMet project is a non-ferrous mining operation that is Yes. 10 proposed to be located near the community of Hoyt Lakes. On March 3, 2016, the 11 Minnesota Department of Natural Resources determined that the Final Environmental 12 Impact Statement for the PolyMet NorthMet Project was adequate. This portion of 13 the federal and state environmental review process has spanned over 10 years. In 14 April 2016, the PolyMet NorthMet Project began the process of obtaining the more 15 than 20 permits that will be required to build and operate the mine. No construction 16 start date has been announced for the project and its in-service date is unknown. Once in operation, Minnesota Power will supply power to the PolyMet NorthMet 17 18 Project via a 10-year ESA that has been approved by the Commission (Docket No. E-19 015/M-07-221).

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21

Q. Can you provide an update on the status of the Essar Steel project?

22 A. Essar Steel Minnesota has proposed a major taconite mine and processing plant in 23 Nashwauk, Minnesota. In July 2016, Essar Steel Minnesota filed for protection in 24 Federal Bankruptcy Court to allow for time and the opportunity to reorganize its debt 25 and to obtain financing to continue and to complete their project. Essar's bankruptcy 26 declaration came on the same day as an announcement by the State of Minnesota that 27 Essar's state mineral leases would be withdrawn for failure to satisfy the terms of the 28 lease. The timeline for completion of the bankruptcy process has not been defined 29 nor announced and the timeline of completion of the project is thought to be a part of 30 the plan for the emergence from bankruptcy and therefore very uncertain at this time.

1 Cliffs has publicly expressed interest in taking over the project if Cliffs is assigned 2 the state mining leases, as well as potentially pursuing a value-added DRI facility in 3 addition to a taconite operation.

Regardless of ownership, when this project commences operation it will obtain its electricity from the City of Nashwauk, through the Nashwauk Public Utilities Commission, which is a Minnesota Power wholesale municipal customer under a long-term agreement. As a result, the Essar Steel project will not result in additional Minnesota Power retail sales.

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O.

Did Minnesota Power include anticipated sales to PolyMet or Essar in the 2017 test year sales forecast?

A. The 2017 test year sales forecast reflects only minimal energy sales for use in office lighting and minor construction activities. There are no anticipated sales included with regard to the operation of these mining facilities because both the PolyMet and Essar projects have been in development for many years and still have not commenced operation. There is simply not enough certainty to include these projects in our budget, but Minnesota Power will provide updates in this proceeding if new information becomes available.

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5. Mining Downturn History and Effect on Forecasting

22 0. Has the mining industry experienced other major downturns in the recent past? 23 A. Yes. Prior to the current 2014 to present industry downturn, the taconite industry had 24 run at near-capacity levels for the 2010-2014 time period. However, there was 25 another previous industry downturn that began in late 2008 and continued through 26 2010. This downturn was very severe, with production ceasing very quickly and 27 then restarting rather quickly. Taconite production in 2009 reached a 50-year low 28 level of 17 million tons of pellets and, at the downturn's most severe level in May 29 2009, all six Minnesota taconite plants were simultaneously idled -a situation not 30 seen before or since. The facilities began restarting through the summer of 2009 and 1 were all fully operational again by late summer 2010. Table 2 below summarizes

Minnesota Power's taconite customers' productions from 2006 to 2015.

- 2
- 3

Table 2

| Year | Tons (Millions) | |
|--|-----------------|--|
| 2015 | 30 | |
| 2014 | 39 | |
| 2013 | 37 | |
| 2012 | 39 | |
| 2011 | 39 | |
| 2010 | 35 | |
| 2009 | 17 | |
| 2008 | 39 | |
| 2007 | 38 | |
| 2006 | 39 | |
| Source: Minnesota Department of Revenue 2015 Mining Tax Guide for years 2006-2016 | | |

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5 Q. Please compare the 2008-2010 downturn with the current downturn.

6 Α. Each industry downturn is a bit different. The 2008-2010 downturn was very abrupt 7 and very sudden and was relatively short in duration, lasting about 18 months overall. 8 By contrast the current downturn that began in 2014 started slowly but has continued 9 much longer. The 2008-2010 downturn featured all six taconite plants down at the 10 same time, whereas the current downturn has, to date, only seen three of the six 11 taconite plants down. However, the three facilities that have been down were idled 12 for a longer duration this time and we lack clear visibility as to either the timing or 13 nature of the restart of the facilities.

14

15 Q. How did the 2009 and 2010 sales forecasts align with the actual outcomes?

A. Our 2009 sales forecast was completed in late summer 2008. At that point in time, all
 taconite facilities were operating and were expected to continue to operate in 2009.
 As such, the 2009 sales forecast reflected full production levels of about 41 million
 tons of production. As facilities announced shutdowns, we modified our sales
 forecasts accordingly and worked with our Energy Supply group to identify the need

1 for off-system sales to attempt to mitigate the impacts of changed customer 2 operations, which ultimately produced 17 million tons in 2009. Our 2010 sales 3 forecast, completed in late summer 2009, had indicated a certain level of customer 4 operation at the beginning of 2010 equating to approximately 32 million tons of 5 production and a ramp up toward full production during the course of the year. 6 However, the speed of the customer restarts slightly outpaced our forecasted levels as 7 customers resumed operations more quickly than we anticipated, and actual 2010 8 production was about 35 million tons.

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What actions were taken when the customer operations changed during the 0. 11 vear?

12 A. Generally speaking, and as referenced in the testimony of Ms. Pierce, we will supply 13 additional customer requirements beyond what we have planned for by either 14 purchasing energy in the MISO market or by canceling off-system sales, or both. 15 Conversely, if customer requirements are reduced, we will sell energy in the MISO 16 market or operate our generation at lower levels, or both. However, our customer 17 concentration in the mining industry subjects the Company to significant revenue 18 volatility.

19

20 Q. What can be done to mitigate the impacts of this volatility?

21 While we continuously work with our customers to predict and manage costs, we A. 22 cannot change the nature of our mining customers' industry. Accordingly, as part of 23 this proceeding, the Company is proposing an Annual Rate Review Mechanism, as 24 described in more detail in the testimony of Company witness Marcia Podratz. This 25 mechanism will allow for a limited adjustment of customer electric rates. In stronger 26 operating times, rates could potentially be adjusted slightly downward and in poorer 27 operating times, rates could potentially be slightly higher. This new feature could 28 help insulate both Minnesota Power and its other customers from the impacts of the 29 operational decisions of a single LP customer.

B. <u>Pulp and Paper Customers</u>

2 Q. Describe Minnesota Power's LP paper customers.

A. Minnesota Power's LP paper customers operate four pulp and paper mills producing a
variety of paper grades and pulps to serve North American and global markets. These
four mills are: (1) Blandin Paper in Grand Rapids, Minnesota; (2) Verso in Duluth,
Minnesota; (3) Boise in International Falls, Minnesota; (4) Sappi in Cloquet,
Minnesota. Minnesota Power serves approximately 54 percent of the full production
of energy demand for these facilities with customers' on-site generation providing the
remainder.

10

Q. What are the global economic trends currently impacting the Minnesota paper industry?

- 13 The four paper mills served by Minnesota Power produce four grades of graphic A. 14 paper for a variety of end uses: office paper, magazines, catalogs, and print 15 The U.S. demand for these grades has been in decline since advertising. 16 approximately 2006. With the exception of the shutdown of the paper mill in Brainerd, Minnesota, previously owned by Potlatch, the paper mills that Minnesota 17 18 Power serves have remained operational. Over the past several years, two paper machines at Boise and two paper machines at Blandin have been retired, but the 19 20 balance of the region's papermaking capability currently remains intact and 21 operational.
- 22

23

Q. Do you expect these trends to continue into 2017?

- A. We do. Current projections, as referenced by RISI and as included in the graph in
 Exhibit ___(Perala), Schedule 16, reflect a consensus forecast of a continued decline
 of between two percent and 10 percent annually in paper demand.
- 27

28 Q. How do these trends impact Minnesota Power's paper customers?

A. In 2016, impacts to our paper customers were minimal. In 2017, we anticipate that
 our paper customers will largely retain consistent operation. Recent paper mill

shutdowns in other regions have served to reduce competition for the grades of paper
 produced by two of our LP customers, and as such the 2017 test year sales forecast
 reflects continued operation from our four paper customers.

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Q.

2. Are any changes to Minnesota Power's paper customers' energy needs reflected in the 2017 test year sales forecast?

7 Yes. We have reflected reduced energy sales to two paper customers as a result of A. 8 changes in their self-generation profile. One of them has recently completed 9 installation of a new turbine generator and subsequently has been nominating less 10 power and taking less energy from Minnesota Power. The other customer has 11 exercised an option to gain ownership of a generator previously owned by Minnesota 12 Power. In aggregate, these two customer actions result in reductions to our 2017 test year sales forecast of about 260,000 MWh from prior operating levels for these two 13 14 customers.

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C. <u>Other Large Power Customers</u>

17 Q. Describe the proposed Louisiana Pacific plant.

- A. In August 2016, Louisiana Pacific announced that it is considering the construction of
 a home siding manufacturing plant in northeastern Minnesota. Louisiana Pacific has
 yet to make a final decision on the site for this potential new plant. Even assuming
 that a site within Minnesota Power's service territory is selected as the final site, we
 understand that the plant would not begin production until late 2018.
- 23

Q. Did Minnesota Power include anticipated sales to the Louisiana Pacific Plant in the 2017 test year sales forecast?

A. We did not include sales to Louisiana Pacific in the 2017 test year sales forecast. We
do not yet have the certainty as to the final site selection for this new plant, nor do we
have an electric service agreement with this customer. By all accounts to date,
significant sales in 2017 from this new plant are unlikely.

D. <u>2017 Large Power Forecast</u>

| 2 | Q. | Have you reviewed Ms. Pierce's large industrial forecast for the 2017 test year? |
|----|----|---|
| 3 | A. | Yes. Ms. Pierce's forecast reflects the items that I have noted in my Direct |
| 4 | | Testimony related to our LP customers. The 2017 test year sales forecast was the |
| 5 | | result of collaborative discussions, consideration of the various potential outcomes |
| 6 | | and scenarios, and analysis of customer, industry, and global trends. Continued |
| 7 | | reduced operating levels for our mining customers resulting from the lack of demand |
| 8 | | and from softer iron pricing are reflected in the 2017 test year sales forecasts for |
| 9 | | Keetac, Mesabi Nugget, Mining Resources, and Magnetation's Plants 2, 3 and 4. The |
| 10 | | addition of the Cliffs' SBPC energy sales are included in the industrial forecast, as are |
| 11 | | continued operations for several of our taconite customers, combined with continued |
| 12 | | operation of our paper customers and delayed implementations of both PolyMet and |
| 13 | | Essar. All of these industry and individual customer outlooks are aligned with the |
| 14 | | global trends we have seen and with the customer timelines we have observed. |
| 15 | | |
| 16 | Q. | Do you agree with Ms. Pierce's large industrial sales forecast for 2017? |
| 17 | A. | Yes, I think it is reasonable and representative of the current data we have related to |
| 18 | | sales to this class for 2017. |
| 19 | | |
| 20 | | IV. CUSTOMER CONTRACT STATUS |
| 21 | Q. | Is Minnesota Power currently in contract negotiations with any LP customers? |
| 22 | A. | No. |
| 23 | | |
| 24 | Q. | Are there any changes of note in the status of any LP contracts? |
| 25 | A. | As previously described in my Direct Testimony, we filed a petition on October 10, |
| 26 | | 2016, for approval of an electric service agreement with U.S. Steel Corporation. We |
| 27 | | also have a Commission hearing scheduled for November 3, 2016, relating to the |
| 28 | | aforementioned ESA for Cliffs' United Taconite mining and processing operations |
| 29 | | located in Forbes and Eveleth, Minnesota, and for Cliffs' Northshore Mine located in |

| 1 | | Babbitt, Minnesota. The statuses of all ESAs are included as Exhibit(Perala), |
|----|----|---|
| 2 | | Schedule 17. |
| 3 | | |
| 4 | Q. | Is Minnesota Power currently in contract negotiations with any wholesale |
| 5 | | customers? |
| 6 | А. | No. |
| 7 | | |
| 8 | Q. | Are there any changes of note in the status of any wholesale customers? |
| 9 | А. | No. |
| 10 | | |
| 11 | | V. CONCLUSION |
| 12 | Q. | Does this complete your testimony? |
| 13 | A. | Yes. |
Table 1. Overview of the World Economic Outlook Projections

(Percent change unless noted otherwise)

| | | | Year | over Year | | | | | |
|---|------|-------|-----------|------------|-------------------|-----------|-------|-----------|---------|
| | | | | | Difference from A | pril 2016 | Q4 0\ | /er Q4 2/ | |
| | | _ | Projectio | | WEO Projection | | | Projectio | |
| | 2014 | 2015 | 2016 | 2017 | 2016 | 2017 | 2015 | 2016 | 2017 |
| World Output | 3.4 | 3.1 | 3.1 | 3.4 | -0.1 | -0.1 | 3.0 | 3.2 | 3.5 |
| Advanced Economies | 1.9 | 1.9 | 1.8 | 1.8 | -0.1 | -0.2 | 1.8 | 1.8 | 1.9 |
| United States | 2.4 | 2.4 | 2.2 | 2.5 | -0.2 | 0.0 | 2.0 | 2.5 | 2.3 |
| Euro Area | 0.9 | 1.7 | 1.6 | 1.4 | 0.1 | -0.2 | 1.7 | 1.4 | 1.5 |
| Germany | 1.6 | 1.5 | 1.6 | 1.2 | 0.1 | -0.4 | 1.3 | 1.5 | 1.3 |
| France | 0.6 | 1.3 | 1.5 | 1.2 | 0.4 | -0.1 | 1.4 | 1.3 | 1.4 |
| Italy | -0.3 | 0.8 | 0.9 | 1.0 | -0.1 | -0.1 | 1.1 | 1.0 | 1.0 |
| Spain | 1.4 | 3.2 | 2.6 | 2.1 | 0.0 | -0.2 | 3.5 | 1.8 | 2.5 |
| Japan | 0.0 | 0.5 | 0.3 | 0.1 | -0.2 | 0.2 | 0.8 | 0.6 | 0.2 |
| United Kingdom | 3.1 | 2.2 | 1.7 | 1.3 | -0.2 | -0.9 | 1.8 | 1.2 | 1.5 |
| Canada | 2.5 | 1.1 | 1.4 | 2.1 | -0.1 | 0.2 | 0.3 | 1.8 | 2.2 |
| Other Advanced Economies 3/ | 2.8 | 2.0 | 2.0 | 2.3 | -0.1 | -0.1 | 2.2 | 2.0 | 2.6 |
| Emerging Market and Developing Economies | 4.6 | 4.0 | 4.1 | 4.6 | 0.0 | 0.0 | 4.1 | 4.4 | 4.9 |
| Commonwealth of Independent States | 1.1 | -2.8 | -0.6 | 1.5 | 0.5 | 0.2 | -3.4 | -0.3 | 1.8 |
| Russia | 0.7 | -3.7 | -1.2 | 1.0 | 0.6 | 0.2 | -4.0 | -0.3 | 1.8 |
| Excluding Russia | 1.9 | -0.6 | 1.0 | 2.5 | 0.1 | 0.2 | | | |
| Emerging and Developing Asia | 6.8 | 6.6 | 6.4 | 6.3 | 0.0 | 0.0 | 6.8 | 6.3 | 6.3 |
| China | 7.3 | 6.9 | 6.6 | 6.2 | 0.1 | 0.0 | 6.8 | 6.5 | 6.1 |
| India 4/ | 7.2 | 7.6 | 7.4 | 7.4 | -0.1 | -0.1 | 8.1 | 7.4 | 7.4 |
| ASEAN-5 5/ | 4.6 | 4.8 | 4.8 | 5.1 | 0.0 | 0.0 | 4.8 | 4.5 | 5.3 |
| Emerging and Developing Europe | 2.8 | 3.6 | 3.5 | 3.2 | 0.0 | -0.1 | 4.1 | 3.3 | 3.0 |
| Latin America and the Caribbean | 1.3 | 0.0 | -0.4 | 1.6 | 0.1 | 0.1 | -1.4 | 0.0 | 2.1 |
| Brazil | 0.1 | -3.8 | -3.3 | 0.5 | 0.5 | 0.5 | -5.9 | -1.2 | 1.1 |
| Mexico | 2.2 | 2.5 | 2.5 | 2.6 | 0.1 | 0.0 | 2.4 | 2.4 | 2.8 |
| Middle East, North Africa, Afghanistan, and Pakistan | 2.7 | 2.3 | 3.4 | 3.3 | 0.3 | -0.2 | | | |
| Saudi Arabia | 3.6 | 3.5 | 1.2 | 2.0 | 0.0 | 0.1 | 1.8 | 1.0 | 2.4 |
| Sub-Saharan Africa | 5.1 | 3.3 | 1.6 | 3.3 | -1.4 | -0.7 | | | |
| Nigeria | 6.3 | 2.7 | -1.8 | 3.3 1.1 | -1.4 -4.1 | -2.4 | | | |
| South Africa | 1.6 | 1.3 | -1.8 | 1.0 | -4.1 | -2.4 | 0.2 | 0.4 | 1.1 |
| | 1.0 | 1.5 | 0.1 | 1.0 | -0.5 | -0.2 | 0.2 | 0.4 | 1.1 |
| Memorandum | | | | | | | | | |
| Low-Income Developing Countries | 6.0 | 4.5 | 3.8 | 5.1 | -0.9 | -0.4 | | | |
| World Growth Based on Market Exchange Rates | 2.7 | 2.5 | 2.5 | 2.8 | 0.0 | -0.1 | 2.3 | 2.6 | 2.8 |
| World Trade Volume (goods and services) 6/ | 3.7 | 2.6 | 2.7 | 3.9 | -0.4 | 0.1 | | | |
| Advanced Economies | 3.6 | 3.8 | 2.6 | 3.9 | -0.4 | 0.1 | | | |
| Emerging Market and Developing Economies | 3.9 | 0.6 | 2.9 | 3.9 | -0.5 | 0.1 | | | |
| | 5.7 | 0.0 | 2.7 | 5.7 | 0.5 | 0.1 | | | |
| Commodity Prices (U.S. dollars) | 7.5 | 47.0 | 45.5 | | | 4.5 | 10.1 | 40.7 | 5.0 |
| Oil 7/ | -7.5 | -47.2 | -15.5 | 16.4 | 16.1 | -1.5 | -43.4 | 13.7 | 5.2 |
| Nonfuel (average based on world commodity export weights) | -4.0 | -17.5 | -3.8 | -0.6 | 5.6 | 0.1 | -19.1 | 5.0 | -2.7 |
| Consumer Prices | | | | | | | | | |
| Advanced Economies | 1.4 | 0.3 | 0.7 | 1.6 | 0.0 | 0.1 | 0.4 | 1.0 | 1.7 |
| Emerging Market and Developing Economies 8/ | 4.7 | 4.7 | 4.6 | 4.4 | 0.1 | 0.2 | 4.6 | 4.3 | 4.0 |
| London Interbank Offered Rate (percent) | | | | | | | | | |
| On U.S. Dollar Deposits (six month) | 0.3 | 0.5 | 0.9 | 1.2 | 0.0 | -0.3 | | | |
| On Euro Deposits (three month) | 0.2 | 0.0 | -0.3 | -0.4 | 0.0 | 0.0 | | | |
| On Japanese Yen Deposits (six month) | 0.2 | 0.0 | -0.0 | -0.2 | 0.0 | 0.0 | | | |

Note: Real effective exchange rates are assumed to remain constant at the levels prevailing during June 24-June 28, 2016. Economies are listed on the basis of economic size. The aggregated quarterly data are seasonally adjusted.

1/ Difference based on rounded figures for both the current and April 2016 World Economic Outlook forecasts.

2/ Countries included in the calculation of quarterly estimates and projections account for approximately 90 percent of world GDP at purchasing power parities.

3/ Excludes the G7 (Canada, France, Germany, Italy, Japan, United Kingdom, United States) and euro area countries.

4/ For India, data and forecasts are presented on a fiscal year basis and GDP from 2011 onward is based on GDP at market prices with FY2011/12 as a base year.

5/ Indonesia, Malaysia, Philippines, Thailand, Vietnam.

6/ Simple average of growth rates for export and import volumes (goods and services).

7/ Simple average of prices of U.K. Brent, Dubai Fateh, and West Texas Intermediate crude oil. The average price of oil in U.S. dollars a barrel was \$50.79 in 2015; the assumed price based on futures markets (as of June 28, 2016) is \$42.9 in 2016 and \$50.0 in 2017.

8/ Excludes Argentina and Venezuela.

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the customer's realized price was approximately \$40 per ton higher than the U.S. Domestic Midwest Hot Rolled Coil Steel Index. In terms of sensitivity, for every \$50 per ton change in the customer's hot-rolled steel prices, our U.S. Iron Ore revenue realizations per ton would be expected to change by \$2.25 if steel prices increase, and \$1.75 if steel prices decrease.

The table below provides certain Platts IODEX averages for 2016 and the corresponding full-year realization for the U.S. Iron Ore and Asia Pacific Iron Ore segments.

| 2016 Full-Ye | ar Realized Revenues-Per-To | n Range Summary |
|------------------|-----------------------------|---------------------------|
| Platts IODEX (1) | U.S. Iron Ore (2) | Asia Pacific Iron Ore (3) |
| \$30 | \$71 - \$73 | \$19-\$21 |
| \$35 | \$71 - \$73 | \$23 - \$25 |
| \$40 | \$72 - \$74 | \$28 - \$30 |
| \$45 | \$73 - \$75 | \$32 - \$34 |
| \$50 | \$74 - \$76 | \$36 \$38 |
| \$55 | \$75 - \$77 | \$40 - \$42 |
| \$60 | \$76-\$78 | \$45 - \$47 |

(1) The Platts IODEX is the benchmark assessment based on a standard specification of iron ore fines with 62% iron content (C.F.R. China).

(2) U.S. Iron Ore tons are reported in long tons of pellets. This table assumes full-year hotrolled steel pricing of approximately \$450 per short ton, which is based on customer realizations and not a public index.

(3) Asia Pacific Iron Ore tons are reported in metric tons of lump and fines, F.O.B. the port.

U.S. Iron Ore Outlook (Long Tons)

For 2016, we expect full-year sales volume of approximately 17.5 million tons from our U.S. Iron Ore business. In order to reduce pellet inventory levels and generate cash flow from working capital, we currently plan to produce approximately 16 million tons of iron ore pellets during 2016.

Our full-year 2016 U.S. Iron Ore cash production cost per ton expectation is \$50 - \$55. Our cash cost of goods sold per ton expectation is \$55 - \$60, representing a reduction of \$5 from the previously disclosed 2016 cash costs of goods sold per ton expectation of \$60 - \$65.

We anticipate depreciation, depletion and amortization to be approximately \$7 per ton for full-year 2016.

Labor Update

We remain in active negotiations with the United Steelworkers and are committed to reaching a fair and equitable agreement. The current contract has been extended by mutual agreement of both parties. The contract extension covers approximately 2,000 USW-represented workers at our Empire and Tilden mines in Michigan, and our United Taconite and Hibbing Taconite mines in Minnesota.

Asia Pacific Iron Ore Outlook (Metric Tons, F.O.B. the port)

Our full-year 2016 Asia Pacific Iron Ore expected sales and production volume is approximately 11.5 million tons. The product mix is expected to contain 50 percent lump and 50 percent fines.

Based on a full-year average exchange rate of \$0.69 U.S. Dollar to Australian Dollar, we are expecting a full-year 2016 Asia Pacific Iron Ore cash production cost per ton of \$25 - \$30. Our cash cost of goods sold per ton expectation is expected to be \$30 - \$35. We indicated that for every \$0.01 change in this exchange rate on a full-year basis, our cash cost of goods sold is impacted by approximately \$6 million.

We anticipate depreciation, depletion and amortization to be approximately \$2 per ton for full-year 2016.



FOR IMMEDIATE RELEASE January 27, 2016

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IMPORTS CAPTURED A RECORD 29% OF THE U.S. MARKET IN 2015 Preliminary Steel Imports Decrease 5% in December

Washington, D.C. – Based on preliminary Census Bureau data, the American Iron and Steel Institute (AISI) reported today that the U.S. imported a total of 2,323,000 net tons (NT) of steel in December 2015, including 2,017,000 net tons (NT) of finished steel (down 5.3% and up 3.2%, respectively, vs. November final data). Full Year 2015 total and finished steel imports were 38,718,000 and 31,425,000 net tons (NT), respectively, down 13% and 7% respectively, vs. 2014. Finished steel import market share was an estimated 26% in December and is estimated at 29% for the full year.

Key finished steel products with a significant import increase in December compared to November are wire rods (up 77%), tin plate (up 71%), cut lengths plates (up 65%), heavy structural shapes (up 46%), hot rolled bars (up 20%) and cold rolled sheets (19%). Major products with significant import increases in 2015 vs. the prior year include reinforcing bar (up 38%) and standard pipe (up 13%).

| | | | % var | | | % var | | | % var |
|----------------------------------|-----------|-----------|----------|------------|------------|--------------|------------|------------|---------|
| | Dec. | Nov. | Dec. vs. | 2015 | 2014 | 2015 | 2015 | 2014 | 2015 |
| Steel Mill Product | (prelim.) | final | Nov. | Full Year | Full Year | vs. 2014 | Full Year | Full Year | vs 2014 |
| Ingots and Billets and Slabs | 303,355 | 496,562 | -38.9% | 7,262,224 | 10,536,570 | -31.1% | 7,262,224 | 10,536,570 | -31.1% |
| Sheets Hot Rolled | 236,268 | 240,714 | -1.8% | 3,876,800 | 4,340,132 | -10.7% | 3,876,800 | 4,340,132 | -10.7% |
| Sheets & Strip Galv Hot Dipped | 207,230 | 215,567 | -3.9% | 3,359,687 | 3,313,269 | 1.4% | 3,359,687 | 3,313,269 | 1.4% |
| Sheets Cold Rolled | 191,058 | 161,208 | 18.5% | 2,684,010 | 2,953,658 | -9.1% | 2,684,010 | 2,953,658 | -9.1% |
| Line Pipe | 88,627 | 118,088 | -24.9% | 2,545,702 | 2,356,506 | 8.0% | 2,545,702 | 2,356,506 | 8.0% |
| Oil Country Goods | 47,254 | 87,375 | -45.9% | 2,245,430 | 4,014,588 | -44.1% | 2,245,430 | 4,014,588 | -44.1% |
| Plates in Coils | 128,157 | 137,550 | -6.8% | 2,005,396 | 2,229,722 | -10.1% | 2,005,396 | 2,229,722 | -10.1% |
| Bars - Reinforcing | 111,620 | 124,059 | -10.0% | 1,992,567 | 1,447,948 | 37.6% | 1,992,567 | 1,447,948 | 37.6% |
| Wire Rods | 170,742 | 96,286 | 77.3% | 1,589,901 | 1,624,760 | -2.1% | 1,589,901 | 1,624,760 | -2.1% |
| Plates Cut Lengths | 139,080 | 84,261 | 65.1% | 1,549,248 | 1,863,232 | -16.9% | 1,549,248 | 1,863,232 | -16.9% |
| Bars - Hot Rolled | 125,403 | 104,225 | 20.3% | 1,488,733 | 1,643,807 | -9.4% | 1,488,733 | 1,643,807 | -9.4% |
| Sheets & Strip All Other Metalci | 60,004 | 64,019 | -6.3% | 1,055,495 | 1,020,914 | 3.4% | 1,055,495 | 1,020,914 | 3.4% |
| Standard Pipe | 52,432 | 69,534 | -24.6% | 1,024,875 | 907,217 | 13.0% | 1,024,875 | 907,217 | 13.0% |
| Structural Shapes Heavy | 88,797 | 60,813 | 46.0% | 908,898 | 913,488 | -0.5% | 908,898 | 913,488 | -0.5% |
| Wire Drawn | 63,396 | 71,179 | -10.9% | 889,118 | 811,510 | 9.6% | 889,118 | 811,510 | 9.6% |
| Tin Plate | 80,350 | 47,069 | 70.7% | 770,527 | 698,162 | 10.4% | 770,527 | 698,162 | 10.4% |
| Mechanical Tubing | 34,605 | 37,889 | -8.7% | 578,193 | 747,539 | -22.7% | 578,193 | 747,539 | -22.7% |
| All Other | 194,416 | 237,200 | -18.0% | 2,891,562 | 2,914,947 | -0.8% | 2,891,562 | 2,914,947 | -0.8% |
| TOTAL | 2,322,793 | 2,453,597 | -5.3% | 38,718,366 | 44,337,970 | -12.7% | 38,718,366 | 44,337,970 | -12.7% |
| SUBTOTAL Finished Imports | 2,017,175 | 1,954,209 | 3.2% | 31,425,234 | 33,750,625 | -6.9% | 31,425,234 | 33,750,625 | -6.9% |

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In December, the largest volumes of finished steel imports from offshore were from South Korea (235,000 NT, down 25% vs. November final), Turkey (167,000 NT, up 8%), Japan (144,000 NT, down 13%), China (135,000 NT, up 111%) and Germany (122,000 NT, up 42%). For full year 2015, the largest offshore suppliers were South Korea (4,854,000 NT, down 11%), Turkey (2,808,000 NT, up 28%), China (2,374,000 NT, down 25%), Japan (2,259,000 NT, up 7%) and Germany (1,515,000 NT, up 19%). Below are charts on estimated steel import market share in recent months and on finished steel imports from offshore by country.



Estimated Finished Steel Import Market Share for the Past 12 Months

U.S. IMPORTS OF FINISHED STEEL MILL PRODUCTS

BY COUNTRY OF ORIGIN

| | | | | (thousands o | of net tons) | | | | |
|-------------|-----------|-------|----------|--------------|--------------|---------|-----------|-----------|---------|
| | Dec | Nov | % incr. | | | % incr. | | | % incr. |
| COUNTRY | 2015 | 2015 | Dec. | 2015 | 2014 | '15 YTD | 2015 | 2014 | 2015 |
| | (Prelim.) | final | vs. Nov. | Full Year | Full Year | vs. '14 | Full Year | Full Year | vs. '14 |
| South Korea | 235 | 315 | -25.4% | 4,854 | 5,449 | -10.9% | 4,854 | 5,449 | -10.9% |
| Turkey | 167 | 156 | 7.6% | 2,808 | 2,199 | 27.7% | 2,808 | 2,199 | 27.7% |
| China | 136 | 64 | 111.0% | 2,374 | 3,189 | -25.5% | 2,374 | 3,189 | -25.5% |
| Japan | 144 | 165 | -13.1% | 2,259 | 2,105 | 7.3% | 2,259 | 2,105 | 7.3% |
| Germany | 122 | 86 | 41.5% | 1,515 | 1,278 | 18.5% | 1,515 | 1,278 | 18.5% |
| Brazil | 69 | 126 | -45.4% | 1,437 | 810 | 77.4% | 1,437 | 810 | 77.4% |
| Taiwan | 48 | 60 | -20.2% | 1,205 | 1,188 | 1.4% | 1,205 | 1,188 | 1.4% |
| All Other | 1,097 | 983 | 11.7% | 14,973 | 17,532 | -14.6% | 14,973 | 17,532 | -14.6% |
| Total | 2,017 | 1,954 | 3.2% | 31,425 | 33,751 | -6.9% | 31,425 | 33,751 | -6.9% |

| U.S. IMPORTS OF FINISHED STEEL MILL PRODUCTS 3 MONTHS ROLLING AVERAGE (thousands of net tons) | | | | | | | | | |
|---|---|---|---|--|--|--|--|--|--|
| Product | Preliminary 3 Mos. Rolling Avg. Dec. '15 - Oct. '15 | Actual 3 Mos. Prior Sep. '15 - Jul. '15 | Current 3 Months vs 3 Months Prior % Change | | | | | | |
| Sheets Hot Rolled | 276 | 321 | -13.9% | | | | | | |
| Sheets & Strip Galv Hot Dipped | 222 | 283 | -21.6% | | | | | | |
| Sheets Cold Rolled | 180 | 229 | -21.4% | | | | | | |
| Bars - Reinforcing | 155 | 163 | -4.6% | | | | | | |
| Wire Rods | 148 | 130 | 13.8% | | | | | | |
| Plates in Coils | 128 | 148 | -13.4% | | | | | | |
| Line Pipe | 113 | 175 | -35.4% | | | | | | |
| Bars - Hot Rolled | 112 | 114 | -2.4% | | | | | | |
| Plates Cut Lengths | 94 | 118 | -19.9% | | | | | | |
| Sheets & Strip All Other Met CTD. | 80 | 87 | -8.7% | | | | | | |
| All Other | 574 | 672 | -14.5% | | | | | | |
| Total | 2,082 | 2,439 | -14.6% | | | | | | |

| U.S. IMPORTS OF FINISHED STEEL MILL PRODUCTS 3 MONTHS ROLLING AVERAGE (thousands of net tons) | | | | | | | | | |
|---|---|---|---|--|--|--|--|--|--|
| Country | Preliminary 3 Mos. Rolling Avg. Dec. '15 - Oct. '15 | Actual 3 Mos. Prior Sep. '15 - Jul. '15 | Current 3 Months vs 3 Months Prior % Change | | | | | | |
| South Korea | 316 | 308 | 2.5% | | | | | | |
| Turkey | 201 | 197 | 2.0% | | | | | | |
| Japan | 163 | 192 | -15.3% | | | | | | |
| Brazil | 126 | 126 | 0.3% | | | | | | |
| Germany | 114 | 126 | -9.9% | | | | | | |
| China | 92 | 210 | -56.1% | | | | | | |
| Taiwan | 86 | 100 | -13.6% | | | | | | |
| Netherlands | 64 | 73 | -11.7% | | | | | | |
| United Kingdom | 48 | 49 | -1.6% | | | | | | |
| France | 36 | 35 | 1.6% | | | | | | |
| All Other | 835 | 1,022 | -18.2% | | | | | | |
| Total | 2,082 | 2,439 | -14.6% | | | | | | |



% change finished imports December 2015 vs December 2014 = -31.8%

3 Month Rolling Averages and 2015 vs. 2014



% change finished imports 3 Mos. Rolling Avg. vs. 3 Mos. Prior = -14.6%

% change semi-finished imports 2015 vs 2014 = -31.1%

% change finished imports 2015 vs 2014 = -6.9%

* annualized

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AISI serves as the voice of the North American steel industry in the public policy arena and advances the case for steel in the marketplace as the preferred material of choice. AISI also plays a lead role in the development and application of new steels and steelmaking technology. AISI is comprised of 19 member companies, including integrated and electric furnace steelmakers, and approximately 125 associate members who are suppliers to or customers of the steel industry. For more news about steel and its applications, view AISI's website at www.steel.org.

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Table 1. Steel Demand Forecasts

SRO April 2016, finished steel products

| | | mi | | y-o-y growth rates, % | | | | |
|------------------------------------|---------|----------|----------|-----------------------|----------|----------|--|--|
| Regions | 2015 | 2016 (f) | 2017 (f) | 2015 | 2016 (f) | 2017 (f) | | |
| European Union (28) | 153.3 | 155.4 | 158.1 | 2.8 | 1.4 | 1.7 | | |
| Other Europe | 40.1 | 41.3 | 42.6 | 8.1 | 3.0 | 3.0 | | |
| CIS | 50.0 | 46.3 | 48.4 | -10.8 | -7.4 | 4.6 | | |
| NAFTA | 134.5 | 138.8 | 142.3 | -8.4 | 3.2 | 2.6 | | |
| Central and South America | 45.4 | 42.6 | 44.0 | -7.3 | -6.0 | 3.2 | | |
| Africa | 39.0 | 40.5 | 43.1 | 4.3 | 3.8 | 6.5 | | |
| Middle East | 53.0 | 54.3 | 56.4 | -1.0 | 2.4 | 4.0 | | |
| Asia and Oceania | 984.8 | 968.5 | 958.7 | -3.3 | -1.7 | -1.0 | | |
| World | 1 500.1 | 1 487.7 | 1 493.6 | -3.0 | -0.8 | 0.4 | | |
| Developed Economies | 399.1 | 405.9 | 410.4 | -4.0 | 1.7 | 1.1 | | |
| Emerging and Developing Economies | 1 101.0 | 1 081.8 | 1 083.2 | -2.7 | -1.7 | 0.1 | | |
| China | 672.3 | 645.4 | 626.1 | -5.4 | -4.0 | -3.0 | | |
| MENA | 72.1 | 74.4 | 78.0 | -0.6 | 3.1 | 4.9 | | |
| Em. and Dev. Economies excl. China | 428.6 | 436.3 | 457.1 | 2.0 | 1.8 | 4.8 | | |
| World excl. China | 827.7 | 842.2 | 867.6 | -1.0 | 1.8 | 3.0 | | |

f - forecast

Table 2. Top 10 Steel Using Countries 2015 SRO April 2016, finished steel products

| | | mi | y-o-y growth rates, % | | | |
|---------------|-------|----------|-----------------------|-------|----------|----------|
| Countries | 2015 | 2016 (f) | 2017 (f) | 2015 | 2016 (f) | 2017 (f) |
| China | 672.3 | 645.4 | 626.1 | -5.4 | -4.0 | -3.0 |
| United States | 95.7 | 98.8 | 101.5 | -10.6 | 3.2 | 2.7 |
| India | 79.5 | 83.8 | 88.3 | 4.5 | 5.4 | 5.4 |
| Japan | 62.9 | 64.4 | 63.6 | -7.0 | 2.3 | -1.2 |
| South Korea | 56.0 | 56.3 | 56.4 | 0.9 | 0.6 | 0.2 |
| Russia | 39.4 | 35.9 | 37.4 | -8.4 | -8.8 | 4.3 |
| Germany | 39.0 | 39.5 | 39.9 | -1.5 | 1.2 | 1.0 |
| Turkey | 34.4 | 35.5 | 36.7 | 11.7 | 3.3 | 3.2 |
| Mexico | 24.2 | 25.0 | 26.2 | 5.8 | 3.4 | 4.7 |
| Brazil | 21.3 | 19.4 | 20.1 | -16.7 | -8.8 | 3.1 |

f - forecast

Quarterly Segment Analysis - Shipment by product

| (000'kt) | 1Q 14 | 2Q 14 | 3Q 14 | 4Q 14 | 1Q 15 | 2Q 15 | 3Q 15 | 4Q 15 | 1Q 16 | 2Q 16 | 2012 | 2013 | 2014 | 2015 |
|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Flat | 4,528 | 4,699 | 4,836 | 4,844 | 4,459 | 4,560 | 4,701 | 3,782 | 4,567 | 4,641 | 18,110 | 18,198 | 18,907 | 17,502 |
| Long | 1,212 | 1,193 | 1,171 | 1,094 | 1,158 | 1,217 | 1,068 | 929 | 1,037 | 964 | 4,577 | 4,661 | 4,670 | 4,372 |
| NAFTA | 5,613 | 5,790 | 5,866 | 5,805 | 5,463 | 5,642 | 5,620 | 4,581 | 5,463 | 5,443 | 22,394 | 22,500 | 23,074 | 21,306 |
| Flat | 899 | 948 | 1,452 | 1,643 | 1,514 | 1,604 | 1,844 | 1,760 | 1,455 | 1,627 | 4,246 | 4,214 | 4,942 | 6,722 |
| Long | 1,419 | 1,336 | 1,379 | 1,229 | 1,169 | 1,179 | 1,254 | 1,085 | 1,009 | 1,065 | 5,332 | 5,534 | 5,363 | 4,687 |
| Brazil | 2,325 | 2,312 | 2,844 | 2,895 | 2,707 | 2,835 | 3,125 | 2,873 | 2,472 | 2,689 | 9,654 | 9,797 | 10,376 | 11,540 |
| Flat | 6,992 | 7,039 | 6,881 | 6,680 | 7,544 | 7,470 | 6,749 | 6,447 | 7,332 | 7,536 | 25,704 | 26,918 | 27,592 | 28,210 |
| Long | 2,997 | 3,123 | 2,938 | 2,890 | 3,074 | 3,373 | 2,847 | 2,983 | 3,064 | 3,316 | 11,684 | 11,247 | 11,948 | 12,277 |
| Europe | 10,009 | 10,191 | 9,829 | 9,610 | 10,662 | 10,895 | 9,646 | 9,473 | 10,444 | 10,886 | 37,531 | 38,269 | 39,639 | 40,676 |
| ACIS | 3,187 | 3,306 | 3,229 | 3,111 | 3,006 | 3,205 | 3,196 | 3,078 | 3,315 | 3,453 | 12,921 | 12,422 | 12,833 | 12,485 |
| Total | 20,968 | 21,457 | 21,523 | 21,177 | 21,605 | 22,179 | 21,065 | 19,737 | 21,472 | 22,101 | 82,182 | 82,610 | 85,125 | 84,586 |

Note: Others and eliminations line are not presented in the table

***Highlights Added

MP Exhibit _____ (Perala) Direct Schedule 6 Docket No. E015/GR-16-664 Page 1 of 2

UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM 10-Q

(Mark One)

[X] QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the Quarterly Period Ended June 30, 2016

Or

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

For the transition period from

to



(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation) <u>1-16811</u> (Commission File Number) 25-1897152 (IRS Employer Identification No.)

600 Grant Street, Pittsburgh, PA (Address of principal executive offices) <u>15219-2800</u> (Zip Code)

(412) 433-1121 (Registrant's telephone number, including area code)

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 $\sqrt{2}$ 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 (\S 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes $[\checkmark]$ No $[_]$

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 definition 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 ____ (Do not check if a smaller reporting company) 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_ \checkmark _

Common stock outstanding at July 21, 2016 - 146,730,634 shares

Earnings (loss) before interest and income taxes by segment for the three and six months ended June 30, 2016 and 2015 is set forth in the following table:

| | Three Months Ended June 30, | | | % | onths ded e 30, | % | | |
|--|-----------------------------------|------|----------|--------|-----------------------|-------|----------|--------|
| (Dollars in millions) | 20 | 16 | 2015 | Change | 2016 | | 2015 | Change |
| Flat-Rolled | \$ | 6 | \$ (64) | (109)% | \$ | (182) | \$ (131) | 39 % |
| USSE | | 55 | 20 | 175 % | | 41 | 57 | (28)% |
| Tubular | | (78) | (66) | 18 % | | (142) | (65) | 118 % |
| Total loss from reportable segments | | (17) | (110) | (85)% | | (283) | (139) | 104 % |
| Other Businesses | | 10 | 6 | 67 % | | 24 | 14 | 71 % |
| Segment loss before interest and income taxes | | (7) | (104) | (93)% | | (259) | (125) | 107 % |
| Items not allocated to segments: | | | | | | | | |
| Postretirement benefit expense | | 12 | (14) | (186)% | | 28 | (27) | (204)% |
| Other items not allocated to segments: | | | | | | | | |
| Loss on write-down of retained interest in USSC | | _ | (255) | (100)% | | _ | (255) | (100)% |
| Restructuring and other charges and related adjustments | | 23 | (19) | (221)% | | (2) | (19) | (89)% |
| Loss on shutdown of coke production facilities | _ | _ | _ | — % | | _ | (153) | (100)% |
| Total earnings (loss) before interest and income taxes | \$ | 28 | \$ (392) | (107)% | \$ | (233) | \$ (579) | (60)% |

Segment results for Flat-Rolled

| | TI | hree Mon Jun | | Six Months Ended % June 30, | | | | | . % | |
|--|----|-----------------|------------|--------------------------------|----|-------|----|-------|--------|--|
| | | 2016 | 2015 | Change | | 2016 | | 2015 | Change | |
| Earnings (loss) before interest and income taxes (\$ millions) | \$ | 6 | \$ (64) | (109)% | \$ | (182) | \$ | (131) | 39 % | |
| Gross margin | | 5% | 3% | 2 % | | 1% | | 4% | (3)% | |
| Raw steel production (mnt) | | 2,735 | 2,808 | (3)% | | 5,514 | | 5,676 | (3)% | |
| Capability utilization | | 65% | 58% | 7 % | | 65% | | 59% | 6 % | |
| Steel shipments (mnt) | | 2,692 | 2,712 | (1)% | | 5,188 | | 5,329 | (3)% | |
| Average realized steel price per ton | \$ | 642 | \$ 695 | (8)% | \$ | 625 | \$ | 731 | (15)% | |

The increase in Flat-Rolled results for the three months ended June 30, 2016 compared to the same period in 2015 primarily resulted from reduced losses in 2016 after the shutdown of the blast furnace and associated steelmaking operations and most of the finishing operations at Fairfield Works in the third quarter of 2015 and lower overhead costs (approximately \$95 million), lower raw materials costs (approximately \$90 million) and lower energy costs (approximately \$20 million). These changes were partially offset by lower average realized prices (approximately \$135 million). While we experienced an increase in spot prices during the three months ended June 30, 2016 due to a more balanced supply and demand relationship in the North American flat-rolled market, our lower average contract prices year over year on both fixed price agreements and quarterly adjustable contracts more than offset the increase realized in spot market prices.

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

FORM 10-Q

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 Т For the quarterly period ended June 30, 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 No. 1-13696

AK STEEL HOLDING CORPORATION

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

9227 Centre Pointe Drive, West Chester, Ohio

(Address of principal executive offices)

(513) 425-5000

(Registrant's telephone number, including area code)

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, and (2) has been subject to filing requirements for the past 90 days. Yes T 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. Yes T No £

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company.

| Large accelerated filer | Т | Accelerated filer | £ |
|-------------------------|---|---------------------------|---|
| Non-accelerated filer | £ | Smaller reporting company | £ |

Indicate by check mark whether the registrant is a shell company. Yes £ No T

There were 238,196,189 shares of common stock outstanding as of July 27, 2016.

Source: AK STEEL HOLDING CORP, 10-Q, July 29, 2016 The information contained herein may not be copied, adapted or distributed and is not warranted to be accurate, complete or timely. The user assumes all risks for any damages or losses arising from any use of this information, except to the extent such damages or losses cannot be limited or excluded by applicable law. Past financial performance is no guarantee of future results.

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31-1401455 (I.R.S. Employer Identification No.)

45069

(Zip Code)

respectively. That same month, the DOC announced similarly favorable final affirmative determinations against China and Japan for imports of cold-rolled carbon steel. For stainless steel, in July the DOC announced its preliminary affirmative determination that imports of Chinese stainless steel are benefiting from government subsidies and assessed preliminary duties ranging from 57.30% to 193.12%.

In July, the ITC determined that the domestic steel industry is materially injured by reason of imports of corrosion-resistant steel products, delivering a favorable conclusion to that case. Each of the remaining trade cases is progressing through ITC and DOC investigations of foreign producers. In the cold-rolled and hot-rolled carbon steel cases, we expect the DOC to issue final determinations in the third quarter of 2016. In the stainless steel case, the DOC has made a preliminary determination countervailing rates and we anticipate the DOC to make a preliminary anti-dumping duty determination in the third quarter of 2016. For further discussion on the trade cases, see Note 7 to the condensed consolidated financial statements.

Steel Shipments

Total shipments were 1,555,500 tons and 1,811,700 tons for the three months ended June 30, 2016, and 2015. Total shipments were 3,213,700 tons and 3,562,200 tons for the six months ended June 30, 2016, and 2015.

For the three months ended June 30, 2016, value-added products comprised 85.8% of total shipments, an increase from 77.8% of total shipments in the three months ended June 30, 2015. For the six months ended June 30, 2016, value-added products comprised 84.8% of total shipments, an increase from 77.9% of total shipments in the six months ended June 30, 2015. Our intentional 41% reduction in shipments to the carbon, electrical and stainless steel commodity spot markets was significantly offset by our 11% growth of higher value-added product shipments to the automotive market in the six months ended June 30, 2016. This resulted in a decrease in total shipments and the increase in the proportion of value-added shipments from the prior year. The following table shows net shipments by product:

| | Th | ee Months E | nded June 30, | , | Six | Months End | ded June 30, | |
|------------------------------------|---------|--------------|---------------|--------|---------|--------------|--------------|--------|
| | 201 | 6 | 2015 | 5 | 2016 | | 2015 | |
| Value-added Shipments | | (tons in the | ousands) | | | (tons in tho | ousands) | |
| Stainless/electrical | 227.1 | 14.6% | 223.4 | 12.3% | 450.9 | 14.0% | 450.9 | 12.7% |
| Coated | 819.4 | 52.7 | 823.8 | 45.5 | 1,656.5 | 51.5 | 1,609.8 | 45.2 |
| Cold-rolled | 256.7 | 16.5 | 332.6 | 18.4 | 558.6 | 17.4 | 653.6 | 18.3 |
| Tubular | 31.3 | 2.0 | 29.7 | 1.6 | 60.7 | 1.9 | 59.1 | 1.7 |
| Subtotal value-added shipments | 1,334.5 | 85.8 | 1,409.5 | 77.8 | 2,726.7 | 84.8 | 2,773.4 | 77.9 |
| Non Value-added Shipments | | | | | | | | |
| Hot-rolled | 183.9 | 11.8 | 359.1 | 19.8 | 404.3 | 12.6 | 692.1 | 19.4 |
| Secondary | 37.1 | 2.4 | 43.1 | 2.4 | 82.7 | 2.6 | 96.7 | 2.7 |
| Subtotal non value-added shipments | 221.0 | 14.2 | 402.2 | 22.2 | 487.0 | 15.2 | 788.8 | 22.1 |
| Total shipments | 1,555.5 | 100.0% | 1,811.7 | 100.0% | 3,213.7 | 100.0% | 3,562.2 | 100.0% |

Net Sales

Net sales for the three months ended June 30, 2016 of \$1,492.2 were 12% lower than net sales of \$1,689.4 for the three months ended June 30, 2015. Net sales for the six months ended June 30, 2016 of \$3,011.0 were also 12% lower than net sales of \$3,440.3 for the six months ended June 30, 2015. Our strategic decision to reduce sales of commodity products was partially offset by increased sales to the automotive market. An improved product mix resulted in average selling prices that increased 3% to \$957 in the second quarter of 2016 from \$931 in the second quarter of 2015. However, our average selling prices for the six months ended June 30, 2015 of \$935 were lower than our average selling prices of \$965 for the six months ended June 30, 2015. The lingering effects from what the company believes were unfairly traded foreign steel imports kept market prices lower in the first quarter of 2016. We shipped approximately 91% of our flat-rolled steel products in the six months ended June 30, 2016 to contract customers, with the balance to customers in the spot market. We have contracts with all of our major automotive and most of our infrastructure and manufacturing market customers. These contracts include prices for each product during contract periods, which are generally one year or less. In the three and six months ended June 30, 2016, approximately half of our shipments to contract customers were fixed price contracts and the other half allowed price adjustments during the contract period. For shipments under contracts period, which are generally one steel spot market prices, while the other half are based on input cost changes. When adjustments occur, the resulting adjustments typically occur at three- or six-month intervals.

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MP Exhibit ____ (Perala) Direct Schedule 8

Docket No. E015/GR-16-664

Page 1 of 1 Crude Steel

| Table B-6 | | 0 | Crude Steel | Productio | on by Process | | | Year: | Year: | 199 |
|----------------------|---------|---------|---|------------------|---------------|--------|--------|---------|-------|-------|
| | OBC | EF | OHF | Other | Total | OBC | EF | OHF | Other | Tota |
| | | | | | | | % tota | product | tion | |
| Austria | 4 536 | 454 | | | 4 990 | 90.9 | 9.1 | | | 100. |
| Belgium | 9 860 | 1 746 | | | 11 606 | 85.0 | 15.0 | | | 100. |
| Denmark | | 654 | | | 654 | | 100.0 | | | 100. |
| Finland | 2 427 | 749 | | | 3 176 | 76.4 | 23.6 | | | 100. |
| France | 11 559 | 6 541 | | | 18 100 | 63.9 | 36.1 | | | 100. |
| F.R. Germany | 31 908 | 10 143 | | | 42 051 | 75.9 | 24.1 | | | 100. |
| Greece | | 939 | | | 939 | | 100.0 | | | 100. |
| Ireland | | 310 | | | 310 | | 100.0 | | | 100. |
| Italy | 11 733 | 16 026 | | 8 | 27 767 | 42.3 | 57.7 | | 0.0 | 100. |
| Luxembourg | 1 410 | 1 203 | | | 2 613 | 54.0 | 46.0 | | | 100. |
| Netherlands | 6 147 | 262 | | | 6 409 | 95.9 | 4.1 | | | 100. |
| Portugal | 445 | 383 | | | 828 | 53.7 | 46.3 | | | 100. |
| Spain | 5 158 | 8 644 | | | 13 802 | 37.4 | 62.6 | | | 100. |
| Sweden | 3 100 | 1 853 | | | 4 953 | 62.6 | 37.4 | | | 100. |
| United Kingdom | 13 083 | 4 521 | | | 17 604 | 74.3 | 25.7 | | | 100.0 |
| European Union (15) | 101 365 | 54 428 | | | 155 802 | 65.1 | 34.9 | | 0.0 | 100. |
| European Union (12) | 91 302 | 51 372 | _ | 8 | 142 682 | 64.0 | 36.0 | | 0.0 | 100.0 |
| Croatia | | 45 | | | 45 | | 100.0 | | | 100.0 |
| Macedonia | | 33 | | | 33 | | 100.0 | | | 100.0 |
| Norway | | 505 | | | 505 | | 100.0 | | | 100. |
| Slovenia | | 407 | | | 407 | | 100.0 | | | 100. |
| Switzerland | | 739 | | | 739 | | 100.0 | | | 100. |
| Turkey | 3 687 | 8 501 | 609 | | 12 797 | 28.8 | 66.4 | 4.8 | | 100. |
| F.R. Yugoslavia | 93 | 89 | | | 182 | 51.3 | 48.7 | | | 100.0 |
| Other Western Europe | 3 780 | 10 318 | 609 | | 14 708 | 25.7 | 70.2 | 4.1 | | 100.0 |
| Western Europe | 105 145 | 64 747 | 609 | 8 | 170 509 | 61.7 | 38.0 | 0.4 | 0.0 | 100.0 |
| Albania | | 22 | | | 22 | | 100.0 | | 82 | 100.0 |
| Bulgaria | 1 764 | 960 | | | 2 724 | 64.8 | 35.2 | | | 100.0 |
| Czech Republic | 5 914 | 942 | 328 | | 7 184 | 82.3 | 13.1 | 4.6 | | 100.0 |
| Hungary | 1 752 | 109 | | | 1 861 | 94.1 | 5.9 | | | 100.0 |
| Poland | 7 685 | 2 676 | 1 526 | 3 | 11 890 | 64.6 | 22.5 | 12.8 | 0.0 | 100.0 |
| Romania | 4 086 | 1 499 | 970 | | 6 555 | 62.3 | 22.9 | 14.8 | | 100.0 |
| Slovak Republic | 3 709 | 212 | - | | 3 921 | 94.6 | 5.4 | | | 100.0 |
| Eastern Europe | 24 911 | 6 420 | 2 824 | 3 | 34 157 | 72.9 | 18.8 | 8.3 | 0.0 | 100.0 |
| Byelorussia | | 744 | | | 744 | | 100.0 | | | 100 / |
| Kazakhstan | 2 581 | 73 | 375 | | 3 029 | 85.2 | 2.4 | 12.4 | | 100.0 |
| Russia | 23 317 | 6 6 1 9 | 21 652 | 3 | 51 591 | 45.2 | 12.8 | 42.0 | 0.0 | 100.0 |
| Ukraine | 9 524 | 1 268 | 11 516 | - - - | 22 308 | 42.7 | 5.7 | 51.6 | 0.0 | 100.0 |
| Uzbekistan (E) | | 250 | 100 | | 350 | | 71.4 | 28.6 | | 100.0 |
| 2.1. S . | 35 422 | 8 954 | 33 643 | 3 | 78 022 | 45.4 | 11.5 | 43.1 | 0.0 | 100.0 |
| Estonia | | 3 | | 51 | 3 | | 100.0 | | 0.0 | 100.0 |
| atvia | | 4 | 276 | | 280 | | 1.4 | 98.6 | | 100.0 |
| Baltic States | | 7 | 276 | | 283 | | 2.5 | 97.5 | | 100.0 |
| Azerbaijan | | 1 | 20 | | 21 | | 4.8 | 95.2 | | 100.0 |
| Georgia | | | 84 | | 84 | | | 100.0 | | 100.0 |
| Voldova | | 663 | | | 663 | | 100.0 | | | 100.0 |
| ormer U.S.S.R. | 35 422 | 9 625 | 34 023 | 3 | 79 073 | 44.8 | 12.2 | 43.0 | 0.0 | 100.0 |
| Canada | 8 901 | 5 514 | | | 14 415 | 61.7 | 38.3 | | | 100.0 |
| Cuba | | 207 | | | 207 | | 100.0 | | | 100.0 |
| l Salvador | | 28 | | | 28 | | 100.0 | | | 100.0 |
| /lexico | 4 542 | 7 606 | | | 12 147 | 37.4 | 62.6 | | | 100.0 |
| rinidad and Tobago | | 738 | | | 738 | 629603 | 100.0 | | | 100.0 |
| Inited States | 56 719 | 38 470 | | | 95 189 | 59.6 | 40.4 | | | 100.0 |
| orth America | 70 162 | 52 563 | and the second se | | 122 724 | 57.2 | 42.8 | | | 100.0 |

MP Exhibit ____ (Perala) Direct Schedule 9 Docket No. E015/GR-16-664 Page 1 of 1

CONTINUOUSLY-CAST STEEL OUTPUT 2013 TO 2015

| | М | illion tonne | es | % Cr | ude steel o | output |
|---------------------------|---------|--------------|---------|-------|-------------|--------|
| | 2013 | 2014 | 2015 | 2013 | 2014 | 2015 |
| Austria | 7.7 | 7.6 | 7.4 | 96.4 | 96.3 | 96.6 |
| Belgium | 7.1 | 7.3 | 7.3 | 100.0 | 100.0 | 100.0 |
| Bulgaria | 0.5 | 0.6 | 0.5 | 100.0 | 100.0 | 100.0 |
| Croatia | 0.1 | 0.2 | 0.1 | 100.0 | 100.0 | 100.0 |
| Czech Republic | 4.7 | 4.9 | 4.8 | 91.1 | 91.6 | 91.2 |
| Finland | 3.5 | 3.8 | 4.0 | 99.5 | 99.5 | 99.6 |
| France | 15.1 | 15.5 | 14.4 | 96.3 | 96.2 | 96.1 |
| Germany | 41.3 | 41.6 | 41.4 | 96.9 | 96.8 | 97.0 |
| Greece | 1.0 | 1.0 | 0.9 | 100.0 | 100.0 | 100.0 |
| Hungary | 0.9 | 1.2 | 1.7 | 100.0 | 100.0 | 100.0 |
| Italy | 22.9 | 22.3 | 20.8 | 95.0 | 94.2 | 94.3 |
| Latvia (e) | 0.2 | - | - | 100.0 | - | - |
| Luxembourg | 2.1 | 2.2 | 2.1 | 100.0 | 100.0 | 100.0 |
| Netherlands | 6.6 | 6.8 | 6.9 | 98.0 | 98.2 | 98.5 |
| Poland | 7.8 | 8.4 | 9.0 | 97.9 | 98.1 | 98.3 |
| Portugal (e) | 2.0 | 2.1 | 2.0 | 99.5 | 99.2 | 98.8 |
| Romania | 2.9 | 3.1 | 3.3 | 97.2 | 98.2 | 97.9 |
| Slovak Republic | 4.5 | 4.7 | 4.6 | 99.7 | 99.8 | 99.8 |
| Slovenia | 0.5 | 0.5 | 0.5 | 82.3 | 80.2 | 80.1 |
| Spain | 13.9 | 13.9 | 14.6 | 97.8 | 97.8 | 98.2 |
| Sweden | 3.9 | 4.0 | 3.8 | 87.6 | 87.6 | 88.0 |
| United Kingdom | 11.7 | 11.9 | 10.8 | 98.7 | 98.6 | 98.6 |
| European Union (28) | 160.9 | 163.6 | 160.8 | 96.7 | 96.6 | 96.8 |
| Turkey | 34.7 | 34.0 | 31.5 | 100.0 | 100.0 | 100.0 |
| Others | 4.0 | 4.3 | 4.6 | 99.7 | 99.8 | 99.7 |
| Other Europe | 38.6 | 38.4 | 36.2 | 100.0 | 100.0 | 100.0 |
| Russia | 56.0 | 58.5 | 58.0 | 81.2 | 81.9 | 81.8 |
| Ukraine | 17.0 | 14.7 | 11.2 | 52.0 | 54.1 | 48.9 |
| Other CIS | 6.6 | 7.4 | 7.7 | 99.9 | 99.9 | 99.9 |
| CIS | 79.7 | 80.6 | 76.9 | 73.5 | 76.0 | 75.7 |
| Canada | 12.1 | 12.5 | 12.2 | 97.1 | 98.0 | 97.6 |
| Mexico | 18.2 | 18.9 | 18.2 | 99.7 | 99.9 | 99.9 |
| United States | 85.8 | 86.9 | 78.1 | 98.8 | 98.5 | 99.0 |
| NAFTA | 116.0 | 118.3 | 108.5 | 98.7 | 98.7 | 99.0 |
| Argentina | 5.2 | 5.5 | 5.0 | 99.7 | 99.7 | 99.7 |
| Brazil | 33.4 | 33.4 | 32.9 | 97.9 | 98.5 | 99.0 |
| Venezuela | 2.1 | 1.5 | 1.3 | 100.0 | 100.0 | 100.0 |
| Other Latin America | 5.1 | 5.0 | 5.0 | 94.0 | 100.0 | 94.7 |
| Central and South America | 45.8 | 45.4 | 44.3 | 97.7 | 98.8 | 98.6 |
| Egypt (e) | 6.8 | 6.5 | 5.5 | 100.0 | 100.0 | 100.0 |
| South Africa | 7.1 | 6.4 | 6.4 | 99.7 | 99.5 | 99.4 |
| Other Africa | 1.9 | 1.9 | 1.7 | 100.0 | 100.0 | 100.0 |
| Africa | 15.8 | 14.7 | 13.5 | 99.9 | 99.8 | 99.7 |
| Iran | 15.4 | 16.3 | 16.1 | 100.0 | 100.0 | 99.8 |
| Saudi Arabia | 5.5 | 6.3 | 5.2 | 100.0 | 100.0 | 100.0 |
| Other Middle East | 5.9 | 7.2 | 7.9 | 100.0 | 100.0 | 100.0 |
| Middle East | 26.8 | 29.8 | 29.2 | 100.0 | 100.0 | 99.9 |
| China | 808.2 | 809.0 | 790.0 | 98.3 | 98.3 | 98.3 |
| India (e) | 66.3 | 72.3 | 74.5 | 81.5 | 82.8 | 83.4 |
| Japan | 108.9 | 108.5 | 103.1 | 98.5 | 98.1 | 98.1 |
| South Korea | 65.0 | 70.4 | 68.7 | 98.4 | 98.4 | 98.6 |
| Taiwan, China | 22.2 | 23.0 | 21.3 | 99.6 | 99.6 | 99.6 |
| Other Asia | 12.7 | 14.7 | 13.7 | 100.0 | 100.0 | 100.0 |
| Asia | 1,083.4 | 1,097.9 | 1,071.3 | 97.2 | 97.2 | 97.1 |
| Australia | 4.6 | 4.6 | 4.9 | 98.7 | 99.4 | 99.5 |
| New Zealand | 0.9 | 0.9 | 0.8 | 100.0 | 100.0 | 100.0 |
| Total of above countries | 1,572.6 | 1,594.2 | 1,546.4 | 95.8 | 96.1 | 96.1 |

CRUDE STEEL PRODUCTION BY PROCESS, 2015

| Austria T, T 91.3 8.7 - - 100.0 Belgum 7.3 66.3 33.7 - 100.0 Bugaria 0.5 - 100.0 - 100.0 Cractia 0.1 - 100.0 - 100.0 Cractia 0.1 - 100.0 - 100.0 Cractia 0.1 - 100.0 - 100.0 Cracth Republic 5.3 93.2 6.8 4.4 - - 100.0 Financ 0.9 - 100.0 - - 100.0 Greece 0.9 - 100.0 - - 100.0 Luxembourg 2.1 - 100.0 - 100.0 Portuga (e) 2.0 - 100.0 - 100.0 Slowaik 7.0 9.2 7.8 42.2 - 100.0 Slowaik Republic 6.6 7.8 9.7 40 | | Million tonnes | Oxygen % | Electric % | Open hearth % | Other % | Total % |
|---|---------------------------|-------------------|----------|---------------|------------------|------------|------------|
| Belgium 7.3 66.3 33.7 100.0 Bulgaria 0.5 100.0 100.0 Croatia 0.1 - 100.0 100.0 Czech Republic 5.3 93.2 6.8 100.0 Finand 4.0 65.6 34.4 100.0 Greace 0.9 - 100.0 100.0 Greace 0.9 - 100.0 100.0 Hungary 1.7 90.0 10.0 100.0 Numbers 2.1 - 100.0 100.0 Partugal (e) 2.0 - 100.0 100.0 Portugal (e) 2.0 - 100.0 100.0 Sowak Republic 4.6 92.9 7.1 - 100.0 Sowak Republic 4.6 92.9 7.1 - 100.0 Sowak Republic </td <td>Austria</td> <td></td> <td>01.3</td> <td></td> <td>70</td> <td></td> <td></td> | Austria | | 01.3 | | 70 | | |
| Buigaria 0.5 - 100.0 - I 100.0 Crackin 0.1 - 100.0 - 100.0 Crackin Appublic 5.3 93.2 6.8 - 100.0 France 15.0 65.6 34.4 - - 100.0 Germany 42.7 70.4 29.6 - 100.0 Germany 42.7 70.4 29.6 - 100.0 Gereace 0.9 - 100.0 - - 100.0 Hungary 1.7 90.0 10.0 - - 100.0 Lay 22.0 21.8 7.8.2 - 100.0 - 100.0 Nutershands 7.0 98.5 1.5 - - 100.0 Stass 57.8 42.2 - - 100.0 Stass 50.7 40.3 - - 100.0 Stass 50.8 9.9 - | | | | | - | | |
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The countries in this table accounted for more than 99% of world crude steel production in 2015.

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Annual Minnesota Taconite Production 1995 - 2015

Taconite tons are from the MN Department of Revenue reports on taxable production.



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Seeking Alpha^{α}

United States Steel (X) Mario Longhi Filho on Q2 2016 Results -Earnings Call Transcript

Jul. 27, 2016 3:01 PM ET by: SA Transcripts

United States Steel Corp. (NYSE:X)

Q2 2016 Earnings Call

July 27, 2016 8:30 am ET

Executives

Dan Lesnak - General Manager-Investor Relations

Mario Longhi Filho - President, Chief Executive Officer & Director

David B. Burritt - Chief Financial Officer & Executive Vice President

Analysts

Curt Woodwort - Credit Suisse Securities (NYSE:USA) LLC (Broker)

Matthew J. Korn - Barclays Capital, Inc.

Gordon Johnson - Axiom Capital Management, Inc.

Evan L. Kurtz - Morgan Stanley & Co. LLC

David Francis Gagliano - BMO Capital Markets (United States)

Michael F. Gambardella - JPMorgan Securities LLC

Philip N. Gibbs - KeyBanc Capital Markets, Inc.

Timna Beth Tanners - Bank of America Merrill Lynch

Seth Rosenfeld - Jefferies International Ltd.

Jorge M. Beristain - Deutsche Bank Securities, Inc.

Anthony B. Rizzuto - Cowen & Co. LLC

Aldo Mazzaferro - Macquarie Capital (USA), Inc.

Brett M. Levy - Loop Capital

Operator

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Ladies and gentlemen, thank you for standing by. Welcome to the United States Steel Corporation 2016 Second Quarter Earnings Call and Webcast. During today's conference, all phone participants will be in a listen-only mode. Later, we will conduct a question-and-answer session. Instructions will be given at that time.

As a reminder, today's conference is being recorded. I would now like to turn the conference over to your host, Mr. Dan Lesnak. Please go ahead.

Dan Lesnak - General Manager-Investor Relations

Thank you, Shannon. Good morning, everyone, and we appreciate you joining us today for our second quarter 2016 earnings conference call and webcast. On the call for you today will be U.S. Steel President and CEO, Mario Longhi; and Executive Vice President and CFO, Dave Burritt. We posted our slide presentation and prepared remarks under the Investors section of our website when we released earnings after the market closed yesterday, to provide everyone with a better opportunity to prepare for our call. We will not be repeating the presentation or remarks on this morning's call. We will be begin with some brief introductory comments from Mario, and then proceed directly to the question-and-answer session.

Before we begin, I must caution you, today's conference call contains forward-looking statements and that future results may differ materially from statements or projections made on today's call. For your convenience, the forward-looking statements and risk factors that could affect those statements are referenced at the end of our release in the slide deck posted on our website, and are included in our most recent annual report on Form 10-K and updated in our quarterly reports on Form 10-Q in accordance with the Safe Harbor provisions.

Now, to start the call, I will turn over to our CEO, Mario Longhi.

Mario Longhi Filho - President, Chief Executive Officer & Director

Good morning, everyone, and thank you for joining us today. We are encouraged by the improvements we are currently seeing in our results as the significant changes we have made to our business model have greatly enhanced our earnings power by creating a lower cost structure, and by improving our commercial position.

We have seen a steady increase in our mix of value-added products, from 62% of our Flat-Rolled shipments in 2013 to 70% of our shipments, today. We are well-positioned to deliver strong results under current market conditions.

However, our Carnegie Way transformation is about more than just short-term results. Our aspiration to become sustainably profitable has not changed. As we keep our Carnegie Way strategy in action, we can unleash considerable value. Our commercial entities, and ultimately our employees are driving customer focus and value creation by succeeding in both product development and process improvements.

We have our employees focused on developing new ideas for process, system, method, service, product and technology that advances our operating performance, customer satisfaction and stockholder value.

Going forward, our ability to keep executing on and implementing these ideas will determine our ability to be able to differentiate ourselves on both processes and products, and to continue to drive structural cost improvements. Our many successes over the last two years have provided a platform that we'll use to become a true business partner and solutions provider to our customers, and create the sustainable earnings that will translate into value for our stockholders, employees and other stakeholders.

Dan Lesnak - General Manager-Investor Relations

Thank you, Mario. Shannon, can you please queue the line for questions?

Question-and-Answer Session

Operator

Thank you. And the first question comes from the line of Curt Woodwort with Credit Suisse. Please go ahead with your question.

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Curt Woodwort - Credit Suisse Securities (USA) LLC (Broker)

Yes. Thank you. Good morning.

Dan Lesnak - General Manager-Investor Relations

Good morning, Curt.

Mario Longhi Filho - President, Chief Executive Officer & Director

Good morning, Curt

Curt Woodwort - Credit Suisse Securities (USA) LLC (Broker)

Mario, when you look at your Flat-Rolled cost structure this quarter relative to a year ago, it fell roughly \$100 a ton despite the fact that you've got idle costs in there for Granite City, you've got obviously the Gary outage, and what I assume is a much more expensive product mix. So can you give us a sense of what the contribution was as the decline between say, raw materials and conversion, and do you feel like that's a sustainable unit cost number going forward?

Dan Lesnak - General Manager-Investor Relations

Hey, Curt. This is, Dan. When you look at that, the raw materials change year-over-year that you're looking at is probably in the range of about \$25 a ton. The rest of it is really going to be more of the structural and controllable costs for improvements we've made.

Mario Longhi Filho - President, Chief Executive Officer & Director

Yeah. And Curt, this progress is sustainable, and the Carnegie Way processes, we've trained about 10,000 people. The methodologies have been implemented. People continue to lure, and they continue to generate great ideas for improvement. So, we're not done yet.

Curt Woodwort - Credit Suisse Securities (USA) LLC (Broker)

Okay. And thank you for that. And then, just as a follow-up; you're one of the large unsecured creditors to the former Belco (05:36) assets you acquire, and I'm sure you're following the process up there; but KPS and Essar are no longer in the bidding process; and it looks liquidation of that asset is becoming more likely. I think that Gary is producing roughly 2 million tons, 2.5 million tons. I'm just wondering, are you seeing any evidence from the customer bay that's talking to you about potential eventualities of that outcome? And do you have any kind of color on how you see it playing out?

Mario Longhi Filho - President, Chief Executive Officer & Director

No. I mean, we've been a participant in this process as a creditor as of late. And we just keep watching and engage with the proper parties over there, and I think, we're getting close to a conclusion of that process.

Curt Woodwort - Credit Suisse Securities (USA) LLC (Broker)

Okay. Thank you very much.

Operator

The next question comes from the line of Matthew Korn with Barclays. Please proceed with your question.

Matthew J. Korn - Barclays Capital, Inc.

Hi. Good morning, everyone.

Mario Longhi Filho - President, Chief Executive Officer & Director

Good morning.

Matthew J. Korn - Barclays Capital, Inc.

So, we saw a substantial quarter-over-quarter turn over there at USS Europe, and its profitability. When you're looking at orders and the shipments so far this quarter, is that volume strength holding in the third quarter? And as you expect higher prices, you mentioned for the – going into the rest of the year, is there anything to make you think that, that profitability performance can continue in the second half?

Mario Longhi Filho - President, Chief Executive Officer & Director

Well, they're operating at a very good level, and we've seen a steady consistent level of improvement in the quality of their operations. They're really performing well, and I think that we can look forward to, everything else being maintained as such, to another great performance from Europe.

Matthew J. Korn - Barclays Capital, Inc.

Got it. Let me follow up, Dan, on the – on some of the issue of trade. I know you've been happy with the final terminations seen so far for sheet steel. And now, looking ahead at the hot-rolled case, the pricing that we've seen where Korea receives a substantially higher final duty rates in the preliminary numbers. What's your view on how meaningful a similar result could be on hot-rolled pricing as Korea still believe – I believe still supplies the plurality of HRC imports into the U.S.?

Mario Longhi Filho - President, Chief Executive Officer & Director

Well, we certainly are pleased to the outcomes that we've seen so far. And that's proof that the level-playing field is being established. And under those conditions, the industry should be able to benefit from everything that we do that's really good, but it gets undermined when the level-playing field is not leveled.

So, in the next couple of weeks, we're going to see the final determination on the last two cases, and the preliminary ones have been very positive. And with the ITC rectifying what we've seen, it should really create a much better playing field for us to be able to play in this environment. And we really do expect and look forward for significant results. America needs our country to enforce our laws..

Matthew J. Korn - Barclays Capital, Inc.

Oh, thanks very much, fellows. Have a great rest of quarter.

Mario Longhi Filho - President, Chief Executive Officer & Director

Thank you.

Dan Lesnak - General Manager-Investor Relations

Thank you.

Operator

The next question is from the line of Gordon Johnson with Axiom Capital Managment. Please go ahead with your question.

Gordon Johnson - Axiom Capital Management, Inc.

Hey, guys. Thanks for taking my question.

Dan Lesnak - General Manager-Investor Relations

Good morning, Gordon.

Mario Longhi Filho - President, Chief Executive Officer & Director

Good morning.

Gordon Johnson - Axiom Capital Management, Inc.

So, I'm just thinking about the OCTG case, and looking back on that case, it was filed against China; and China seemingly has dominated the U.S. market. It was blocked, and for a while, OCTG imports were down, and then they picked back up as South Korea kind of replaced China.

And when I look at U.S. Steel imports adjusted for July, the number was updated last night, it looks like they're going to be up roughly 9% month-over-month, and up for three straight months now, and looking like, July is going to be the highest month in over a year. So, it looks like imports are now starting to pour back into our shores.

And when I look at places like Vietnam, that went from nothing to something, and thinking maybe some other countries could do that, is there a risk in your view that we could get a flood of imports given the differentials between U.S. prices and international prices? And then I have a follow-up.

Mario Longhi Filho - President, Chief Executive Officer & Director

Well, I guess, on the OCTG case, you saw, the margins that were determined to – certainly it didn't reflect the nature of the situation that we had. And you can see that still being present and earnest today.

Now, one of the issues that we see, that can happen that we're trying to address is the problem of – you still have transshipment taking place, you still have false labeling taking place. So, the risks are real, but we've been working diligently to address them. And I think, if you look at the fact that he ENFORCE Act now being put into law, there are much better ways in which we can track and address some of these practices that have been inhibiting the true market forces to prevail in every case.

Dan Lesnak - General Manager-Investor Relations

Hey, Gordon. This is, Dan. One other thing to think about is, the tons you're seeing coming in now are based on lead times from orders from really before the big price movement started. And then the orders really dropped off. So, anybody who starts ordering now, the spread drought, you probably won't see those tons until mid to late fourth quarter at the earliest.

So, I think the current volumes are based on orders from early in the year, not what's actually happening right now. But certainly, those spreads are what we're watching. And if people do start ordering, it would show up, but it would not show up until late in the year.

Gordon Johnson - Axiom Capital Management, Inc.

Okay. That's helpful. And then just, looking at the EBITDA guidance; when I think about the Carnegie Way cost savings, which have been impressive, billions of dollars of cost savings, and I look back to 2014, when you did about \$1.4 billion in EBITDA. And in that year, HRC prices averaged \$658 per ton. So, fast-forwarding to the second half, assuming prices stay where they are at \$624 per ton, you're talking about on an annual basis, \$1.575 billion in EBITDA guidance.

So, I guess the question is, the differential in HRC prices in the second half of this year versus 2014 is just \$34 that you shipped 14 million net tons in 2014 versus roughly we're estimating 11 million net tons this year. So, I guess the point is it seems like the cost savings aren't flowing through to the EBITDA when just comparing 2014 versus the second half of this year. So could you maybe help me out understand that? Maybe, I'm missing something there.

Dan Lesnak - General Manager-Investor Relations

Actually, Gordon, actually there's a good presentation that's in our earnings call from a couple of quarters ago, and also in our 10-K. As the bridge structure shows you how you can find that by stripping out the big variable raw materials components and how they move.

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But I guess, the one thing that I'd point out is, when you think about our prices, what you're seeing now in terms of second quarter, our prices don't reflect the current market. Those really reflect the prices from a quarter ago before the change. So, if you think about our average realized prices, what you're seeing in our second quarter results is really based on pre-price run. If you flow through the changes of CRU into your model, you should for the second half of the year, get a price realization for our Flat-Rolled segment north of \$700 per ton.

Operator

The next question is from the line of Kevin Kurtz (sic) Evan Kurtz (13:10) with Morgan Stanley. Please proceed with your question.

Evan L. Kurtz - Morgan Stanley & Co. LLC

Oh, hey, good morning, guys.

Dan Lesnak - General Manager-Investor Relations

Good morning.

Mario Longhi Filho - President, Chief Executive Officer & Director

Good morning.

Dan Lesnak - General Manager-Investor Relations

How're you doing?

Evan L. Kurtz - Morgan Stanley & Co. LLC

Pretty good. So a question on Granite City. Is there a restart of Granite City included in the guide?

Mario Longhi Filho - President, Chief Executive Officer & Director

No. The Granite City sits idle until we see that market's really substantially and solidly evolved. So, we're keeping our eye on it and keeping our powder dry.

Evan L. Kurtz - Morgan Stanley & Co. LLC

Got it. Is there any way to quantify that a little bit? Just what is it – how close are you at this point, would you say, to making that decision?

Dan Lesnak - General Manager-Investor Relations

I see – I mean, demand has been pretty stable across all the markets. So, I mean, I don't think we've seen much demand change at all, so I don't think our position has changed very much in the last few months.

Evan L. Kurtz - Morgan Stanley & Co. LLC

Got it. Okay. And then just a question on your outlook for OCTG, we have seen the rig count at least show a little bit of signs of life. I imagine some of the inventories are starting to dwindle for some products. What's your view on the timing of a recovery potentially in OCTG, and maybe some thoughts on 2017, there?

Mario Longhi Filho - President, Chief Executive Officer & Director

Yeah. Nothing much more meaningful, I believe, can happen throughout the rest of this year. What it shows is probably we've hit bottom. Inventories in total are still very high. And you stated correctly, we're beginning to see some spots where there is weakness, so with very short lead times, we're – that's how we're operating. And rig counts came up just a little bit, but inventories in general are still very high.

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So, I think we're going to have to wait through next year and see what happens. Geopolitical forces in North America will still have the volatile environment, and the political environment. So, we don't know how the Fed is going to act. So, there are so many things up in the air that people are still going to be cautious as to how they bring more capacity to life.

Evan L. Kurtz - Morgan Stanley & Co. LLC

Understood. And then just one last one on maintenance; do you have anything scheduled for the second half?

Dan Lesnak - General Manager-Investor Relations

Yeah...

Mario Longhi Filho - President, Chief Executive Officer & Director

Yes, we do. We have some maintenance that is scheduled, I believe, for October at Granite City.

Dan Lesnak - General Manager-Investor Relations

That's Great Lakes.

Mario Longhi Filho - President, Chief Executive Officer & Director

Sorry, Great Lakes.

Dan Lesnak - General Manager-Investor Relations

Yeah. But we do have about a 25-day blast furnace outage set up for the fourth quarter in Great Lakes, right now.

Evan L. Kurtz - Morgan Stanley & Co. LLC

Got it. Okay. Thanks, guys.

Mario Longhi Filho - President, Chief Executive Officer & Director

Sure.

Operator

And the next question is from the line of Dave Gagliano with BMO Capital Markets. Please proceed with your question.

David Francis Gagliano - BMO Capital Markets (United States)

Great. Thanks for taking my question. And first of all, I want to thank you for providing the presentation and the prepared remarks ahead of time. I think, that was a great idea. And let's just cut to the chase, and love it for other companies to do the same. So along those lines, cutting to the chase; the question I have was related to volumes. I was wondering if you'd just give us a sense as to the volume expectations over the next couple of quarters, directionally? And along those lines as well, the utilization rates in Europe obviously phenomenal over 100% this quarter. What are your thoughts with regards to opportunities to grow that business further, most likely via capital investment and things like that? Thanks.

Mario Longhi Filho - President, Chief Executive Officer & Director

Well, we do have certainly several projects that we're contemplating going forward. But we haven't quite stopped doing it. There are so many investments that we're making, that are making us so much better, and there's still opportunity for improvement within what we have.

So, the opportunity for growth is real, it is happening. And what we are considering, it's really more value rather than just volume. And you're seeing that, as I referred to my initial remarks here, we continue to evolve into that chain. We're doing well, and that's sort of an important feature as we think about how we go forward.

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David Francis Gagliano - BMO Capital Markets (United States)

And that's – sorry, just – so two quick follow ups; that's specific to Europe or is that across the chain, number one? And then number two, can you talk a little bit about your volume expectations in the third quarter and the fourth quarter, specifically in the U.S.? Thank you.

Mario Longhi Filho - President, Chief Executive Officer & Director

Yeah. My comments are for the whole system. I think, we have a little more opportunities given the fact that we're not fully yet everywhere in North America. But I think, volumes for both are pretty consistent as we look forward for the rest of this year.

David Francis Gagliano - BMO Capital Markets (United States)

Okay. Great. Thank you very much.

Mario Longhi Filho - President, Chief Executive Officer & Director

Sure.

Operator

The next question is from the line of Michael Gambardella with JPMorgan. Please proceed with your question.

Michael F. Gambardella - JPMorgan Securities LLC

Yes. Good morning, Mario, and congratulations on all the hard work that shows some great results.

Mario Longhi Filho - President, Chief Executive Officer & Director

Good morning, Mike. Thank you.

Michael F. Gambardella - JPMorgan Securities LLC

You're welcome. Look, I have a couple of questions. On the guidance that you gave, at the current level of market activity, you're basically saying, you're at a run rate that was \$1.6 billion in EBITDA, with the way you expect this for the year, given that you are near breakeven for the first half, is that correct?

Dan Lesnak - General Manager-Investor Relations

That's right.

Mario Longhi Filho - President, Chief Executive Officer & Director

Yes, that's right, Mike.

Michael F. Gambardella - JPMorgan Securities LLC

Amazing. Now, how – at \$1.6 billion EBITDA run rate, what percent of your book is not getting any type of price increases? So, what percent of the book is locked up at low pricing and won't be renegotiated until the end of the year?

Dan Lesnak - General Manager-Investor Relations

Mike, as we said now, about 40% of our Flat-Rolled volumes are on those annual contracts that aren't moving. But like I said, these quarterly adjustables are about 20%, spot's about 25%, monthly adjustables are the difference. So, as I mentioned, you'll see that really flowing through, particularly when you look at the month – the quarterly adjustables, second quarter CRU was much, much higher than first quarter. And well, that's where we'll really the benefit on in the second half. So – but you're right, about 40% of our volumes, we don't get a change on those until we get to year-end, early next year price negotiations. And that will really be determined by where markets are when we get later in the year, here.

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Michael F. Gambardella - JPMorgan Securities LLC

Hopefully. And then, a question on trade. It seems like the market appears to be very concerned about trade flows increasing, particularly from Korea. With the hot-rolled's final determinations coming up, has Korea and particularly, POSCO gets a high number, my assumption and belief is that, a large percent, the vast majority of Korean hot-rolled exports to the U.S. are actually being sold through your operations, a joint venture that you have with POSCO in California and Pittsburgh, California, the UTI (20:42) facility. If POSCO gets hit with a very large task on hot-rolled, are you – do you have the supply of hot-rolled to the West Coast operations or is that still the responsibility of POSCO?

Mario Longhi Filho - President, Chief Executive Officer & Director

Well, the impact of the final determination should flow across every single business in the United States, period, Mike. And we certainly are capable of supplying – we still have capacity available. So, the answer would be, yes, I mean, we're still ready to support the market.

Dan Lesnak - General Manager-Investor Relations

So, Mike, to your point, we have the option, but we don't have the requirements. That JV is free to source their substrate wherever they want.

Operator

The next question is from the line of Phil Gibbs with KeyBanc Capital Markets. Please proceed with your question.

Philip N. Gibbs - KeyBanc Capital Markets, Inc.

Good morning.

Dan Lesnak - General Manager-Investor Relations

Good morning, Phil.

Mario Longhi Filho - President, Chief Executive Officer & Director

Good morning, Phil.

Philip N. Gibbs - KeyBanc Capital Markets, Inc.

Had a question, Mario, just on (21:43-22:55).

Mario Longhi Filho - President, Chief Executive Officer & Director

...would be lower at the end of the year. So, this is a GAAP requirement. So, certainly, the discount rate would be lower now, if we actually had to put it in place.

Philip N. Gibbs - KeyBanc Capital Markets, Inc.

Terrific. Mario, on the Section 337, I know there's been some back and forth thing with the government agencies looking at the case. Can you give us an update in terms of where that stands, and what we should be looking for moving forward; because obviously, not a lot of us have dealt with this in recent history? Thanks.

Mario Longhi Filho - President, Chief Executive Officer & Director

Yeah. The Section 337 had a little bit of a technicality, but I think it's being overcome, and we should see a continuation of the process going forward in earnest very, very soon. The ITC and the Department of Commerce are very supportive of our position. So, nothing in our view has changed, and we do have very high expectations that this is going to be a positive for the industry as a whole, not just for us.

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Operator

The next question comes from the line of Timna Tanners with BoA Merrill Lynch. Please proceed with your question.

Timna Beth Tanners - Bank of America Merrill Lynch

Okay. Hey, good morning, everyone.

Dan Lesnak - General Manager-Investor Relations

Good morning.

Mario Longhi Filho - President, Chief Executive Officer & Director

Good morning.

Timna Beth Tanners - Bank of America Merrill Lynch

So, I know that you've been doing this, and you clarify on the presentation of 2016 outlook, and what it contains, but I'm still little bit confused when you talk about today at current levels, spot prices cuts from an end, et cetera. Are you talking about the expected second half demand and expected second half – I know you're talking about today's spot prices, right. But are you doing any forward look at what you see seasonally or imports doing or rig counts doing or is it all precisely a snapshot today?

Dan Lesnak - General Manager-Investor Relations

Yeah. We're not speculating on what markets do. So we're just trying to give you a good benchmark to work from. So and now obviously, when you talk about spot prices today, there is a flow through into our contracts based on structure in place...

Timna Beth Tanners - Bank of America Merrill Lynch

Sure.

Dan Lesnak - General Manager-Investor Relations

...we certainly - that's certainly built in there.

David B. Burritt - Chief Financial Officer & Executive Vice President

But we tried to really take the speculation out just to give you a good starting point to work from.

Timna Beth Tanners - Bank of America Merrill Lynch

Okay. So do you expect seasonal demand in Europe as normal in the third quarter? It sounds like not. That was one question.

The other one is, if rig counts change in the second half, because you're saying at current levels; will that change your view much given the amount of inventory, is there much change in tubular as you can see it here; and now, even if rig counts continue their upward trajectory in U.S. land?

David B. Burritt - Chief Financial Officer & Executive Vice President

I think, at the slow pace they're moving; there's probably not a lot of change based on rig counts. As you might think, as Mario mentioned, that you might start seeing some bigger holes in the inventory out there, but that's about it.

Timna Beth Tanners - Bank of America Merrill Lynch

Okay. And then, on the Europe question?

David B. Burritt - Chief Financial Officer & Executive Vice President

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Well, I think - I don't think there's anything out there that says, the markets aren't going to behave like they have.

Mario Longhi Filho - President, Chief Executive Officer & Director

For example, especially where we are, Timna, the Big Four continues to be more resilient than many of the other areas in Europe, and we've seen virtually no impact from Brexit. Everybody still continues to operate fairly well. The flows in and out are still very solid. So we're looking forward to the rest of this year in Europe, too.

Timna Beth Tanners - Bank of America Merrill Lynch

Okay. That's helpful. Can you talk a little bit more and elaborate separately on your comment in the presentation about how you're working to strengthen the balance sheet and "constantly evaluating all options to improve your position?" What do you mean by that?

Mario Longhi Filho - President, Chief Executive Officer & Director

Well, that's an area of focus that we've had since day one. Cash and balance sheet are key components of our ability to be sustainably profitable to invest, and continue to develop.

Our team has done a superb job with issues that we've had last couple of months. We've expanded our obligations all the way now to 2020, 2021; which gives us a lot more flexibility not only to eventually deal with the volatility that we see in our markets, but it gives us a better condition, then, to position priority projects and keep moving forward on it.

David B. Burritt - Chief Financial Officer & Executive Vice President

Maybe I'll just add to that, we always say here, cash is king. We must keep strong liquidity. It's really important to us. It's just not for earning the right to grow, but also, when we do a pivot to growing the business. So, we feel more comfortable with more cash on the balance sheet. And so we're continuing to focus on that.

So you see our \$820 million in cash increased from before (27:47), and of course there are refinancing of our balance sheet. But we're not done yet. We believe we should carry enough cash to be very flexible no matter what the economic conditions will be. And that may mean going down or going up. We're going to make sure that we carry enough cash to be very responsive to the marketplace, and ultimately help us grow the business.

Operator

Next question is from the line of Seth Rosenfeld with Jefferies. Please proceed with your question.

Seth Rosenfeld - Jefferies International Ltd.

Good morning. Just couple of follow-up questions on your European business; you obviously saw very strong Q-over-Q volume growth in the region that seems to be outpacing perhaps what we've seen from the broader European market, and where apparent demand would be for the industry as a whole. Can you just comment to what extent that's driven by share gains, either versus your domestic peers or versus imports?

And then beyond that, there's obviously some major trade cases in hot-rolled coil in Europe, perhaps gradually moving them the same route as the U.S. market has seen over the past year. Given that you've had a very good experience in the U.S. with rising prices of imports drift lower, do you think that you're moving in that same direction as well or do you have a general view on where trade policy is projected in that area? Thank you.

Mario Longhi Filho - President, Chief Executive Officer & Director

Well, our European operations have been remarkably consistent in their ability to improve both from their operating performance, as well as the repositioning of their mix and bringing forward some innovation that is serving them well.

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I think we've performed like second to none. The customers are supporting every initiative that we've had with them. We believe, like I said, we're in a region of Europe that has performed better than the rest, and we see that continuing. The other part that is becoming very positive in Europe, if you look back up until last year, Europeans were much lower in recognizing that the level-playing field was unleveled for them, also.

While we were making a lot of progress here in United States, both form the excellent fielding of cases as well as the repositioning of the law. So, the level-playing field is now much more robust in terms of being preserved in United States than it has been in Europe. But we've been working in parallel with European Union to bring to their attention how critical the situation was for them.

And as of early this year, we began to see a shift. Trade cases are being put in place in there. There is an enormous amount of discussion on how damaging some of the abuses have been, and they are moving to enforce the law just like America is doing, it's beginning to take hold.

So, we really should have a condition in Europe where you're going to see the people that don't play by the rules are going to be barred from playing at all. So, it's very positive what is taking place.

Seth Rosenfeld - Jefferies International Ltd.

All right. Thank you.

Mario Longhi Filho - President, Chief Executive Officer & Director

Sure.

Operator

The next question is from the line of Jorge Beristain with Deutsche Bank. Please proceed with your question.

Jorge M. Beristain - Deutsche Bank Securities, Inc.

Hey, guys. Good morning and congrats on the results. My question just is, what were specifically the maintenance and outage costs in the second guarter for Flat-Rolled?

Dan Lesnak - General Manager-Investor Relations

All right. So we would just point out they were higher in the prior, but they were not – we'd say material. They were not – it was a normal planned blast furnace outage that we had. It wasn't a reline; so was the maintenance outage. So, I mean, it's just a change quarter-over-quarter, but it's starting on an unusual spend for us. It's just really – you can't really smooth it out across the quarter. It just gets lumpy. That's why we tend to call it out when there's a change quarter-to-quarter.

Jorge M. Beristain - Deutsche Bank Securities, Inc.

Okay. And then just, maybe following up on the questions in the – sorry, in the comment in the press release, where you said that your guidance on a go-forward basis could be subject to change, but then it seems from your earlier comments that a lot of – the oil and country tubular goods is not really not going change. Europe seems to be on pace. So, just trying to understand what kind of change you're in toning there? Is that the risk of a correction in HRC prices down or what did you mean by those comments?

Dan Lesnak - General Manager-Investor Relations

I mean, all we're saying is, we're giving you a one scenario, and we're acknowledging this. The markets do change. You should expect our numbers to change. We're not speculating – we don't have a theory out there on it. But we're just saying, if things stay the way they are and we stay at \$850, if you think prices are going to come off, then you will probably come up with lower number. If you think someone's going to go the other way, you'll come up with a higher number. It's just our outlook on what happens if you would dollarize where things stand today. So, what we're saying is, if things change you should expect our number to change.

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Jorge M. Beristain - Deutsche Bank Securities, Inc.

Okay. And then just last question, any plans you can comment on for your \$161 million of notes due 2018?

David B. Burritt - Chief Financial Officer & Executive Vice President

Well, I think we're still looking at – no, I think we have a very manageable maturities now. We understand that they'll be coming. If we see an opportunity there's no reason we wouldn't exercise that opportunity. But right now, we're pretty comfortable where we are. I don't think you'd want to go out and pay big premium to clean up some of that small of a number, particularly since we are building cash right now, and are clearly strong.

Jorge M. Beristain - Deutsche Bank Securities, Inc.

All right. Thank you.

Operator

The next question is from the line of Tony Rizzuto with Cowen & Company. Please proceed with your question.

Anthony B. Rizzuto - Cowen & Co. LLC

Thank you. And good morning, and thanks for taking my questions.

Mario Longhi Filho - President, Chief Executive Officer & Director

Good morning, Tony.

Anthony B. Rizzuto - Cowen & Co. LLC

Hi, Mario. In Europe, on the trade front, given the time line, when would you expect to begin benefiting there?

Mario Longhi Filho - President, Chief Executive Officer & Director

Well, it comes pretty quickly after the final determinations take place. The resolutions in Europe are – they take longer. I mean, if you see the complicated environment that we go through here in America, the European Union is significantly more complicated, but it will take at least a quarter before we begin to see that play in full.

Anthony B. Rizzuto - Cowen & Co. LLC

Okay. And in the past, Mario, and I think, David, you've also talked about rising import pressures in tin mill. And are there any trade cases underway there?

David B. Burritt - Chief Financial Officer & Executive Vice President

Look, Tony. We keep looking at this whole area that we participate in very carefully. And I believe, by now you've seen we will never hesitate taking action whenever the situation warrants it.

Anthony B. Rizzuto - Cowen & Co. LLC

Okay. And then are you seeing any green shoots of note in your industrial end markets?

Mario Longhi Filho - President, Chief Executive Officer & Director

We are with the exception of the areas of mining and agriculture. There is a lot of good work that we're doing with our customers in that arena. But those areas are still pretty slow.

Anthony B. Rizzuto - Cowen & Co. LLC

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Okay. And then one final question. I appreciate you taking all my questions. I'm wondering on iron ore; haven't heard any questions there, but what is the current balance for the Minntac facility? Are you guys in the merchant market right now? I'm just wondering how the competitive dynamics have changed. One of your competitors had some commercial successes recently. I'm just wondering what the status is there? Are you just a supplier to your own system right now? How does that dynamic play out?

David B. Burritt - Chief Financial Officer & Executive Vice President

Well, Minntac is operating extremely efficiently, and we're very, very comfortable with our current needs that Minntac can take care of that, and some more.

Now, Keetac will stay idle. We certainly have the capacity to seize the opportunity, the right opportunity if it comes by. And it will remain the source of supply just whenever we decide that Granite City is going to have to come back. So, we're really very flexible and for the right opportunity, we may sell some pellets.

Anthony B. Rizzuto - Cowen & Co. LLC

Mario, if Granite City were to restart; obviously, that's a big if, and I understand your comments that you made earlier. Would you be basically in balance and obviously with Keetac online too?

Mario Longhi Filho - President, Chief Executive Officer & Director

Oh, long-term, absolutely yes. We have flexibility, there's no issues with that.

Operator

The next question comes from the line of Aldo Mazzaferro with Macquarie. Please go ahead with your question.

Aldo Mazzaferro - Macquarie Capital (USA), Inc.

Hi, Mario. How are you?

Mario Longhi Filho - President, Chief Executive Officer & Director

Good morning, Aldo. I'm well. Thank you.

Aldo Mazzaferro - Macquarie Capital (USA), Inc.

Hey, I'm trying to get a little more comfort level on the guidance; and if you don't mind, I just want to ask a couple of questions about assumptions. I heard, Dan say, over \$700 of pricing, and I heard you say, relatively steady on the volume side. That leaves me with needing something like a \$40 a ton or \$50 a ton cost cut in the six month. And I'm wondering, without volume gains and productivity coming from that, can you give us some hints on what areas you're looking to cut out that much cost?

Dan Lesnak - General Manager-Investor Relations

Boy, I guess, Aldo, it's hard. I mean, I've lost sense on what you've got for the other segments too, because it's more than just Flat-Rolled that's flown through the numbers. But I mean, certainly, if you look at our – the pace and trajectory of our Carnegie Way progress, we keep on racking up additional savings quarter after quarter after quarter. So, I mean, that's – our assumptions of where we get to on the cost side, the things we control. That's what we control. That's built into our numbers. It's – what we're not speculating on is the market forces.

Aldo Mazzaferro - Macquarie Capital (USA), Inc.

Yeah. But I mean, what do you control other than labor costs?

David B. Burritt - Chief Financial Officer & Executive Vice President

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Well, we control an enormous amount of things inside of our process, Aldo. And it's a myriad of projects. I commented before, there are folks that are coming up with thousands of different initiatives that are contributing to the outcomes, and that's going to continue. So, I think the additional levels of utilization that we've seen coming out of the repositioning on the footprint is certainly helping, also.

Dan Lesnak - General Manager-Investor Relations

I mean, in operating efficiency, materials efficiencies, process improvements, those all create those kind of benefits. So there's a lot goes on rather than just the labor piece.

Aldo Mazzaferro - Macquarie Capital (USA), Inc.

And you can do that without a volume growth, you think?

Dan Lesnak - General Manager-Investor Relations

Yeah. You can make your facilities more productive.

David B. Burritt - Chief Financial Officer & Executive Vice President

Yeah, I would like to offer to you though that, our employees are a critical and very important source of where all of these improvements are coming from. So, they are source of value creation.

Aldo Mazzaferro - Macquarie Capital (USA), Inc.

All right. Can I ask a second question; it's good to hear you say, Mario, that you want to position yourself down the road to be liquid enough for growth, and I'm just wondering, if you were to look at a crystal ball in say two years or three years out, if you were to do say acquisitions to grow, would you be looking at products that are different than flat, like long products, maybe SBQ or is the EAF technology still in there? And can you comment on the likelihood of a equity offering over the next six months? Thank you.

Mario Longhi Filho - President, Chief Executive Officer & Director

Sure. I mean, you know that we're very clear that growth is a significant part of our strategy, and to do that you have some things that come out of the organic evolution of innovation and all of that, but the crystal ball has all of those elements you mentioned, plus some, and we have a very dedicated group of analysts that are helping with that very well integrated with our commercial entities.

So, the amount of knowledge that we're acquiring much more clarity on where our customers are going and what are the solutions that they're really looking for will eventually yield some new and interesting avenues for our growth. So, we're really very carefully looking at it, and that's why we really need to have the capability to do it, whenever the moment is right.

We can't and won't specifically get into details, but I just can tell you that, innovation is an important thing and market analysis and what is the world around it, and where the trends are taking it are guiding our thinking as to what we're going to be doing going forward.

Operator

Next question comes from the line of Brett Levy with Loop Capital. Please proceed with your question.

Brett M. Levy - Loop Capital

Hey, guys. As your contracts kind of shift here, kind of what percentage of them are third quarter shifts, fourth quarter shifts, first quarter shifts? Just as we start to look at the adjustments to the CRU pricing, a rough sense as to sort of what the approximate timing is as you look at...

Dan Lesnak - General Manager-Investor Relations

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Yeah, Brett.

Brett M. Levy - Loop Capital

...you said your contract book is about 40%. What's the timing over the next several quarters?

Dan Lesnak - General Manager-Investor Relations

Hello, Brett. There's a pie chart at the back of our slide deck that lays out about 40% of our contracts are annual fixed. Most of those are calendar year. But we do have the pieces that are quarterly adjustable. They adjust every single quarter where the monthly adjustables adjust every single month. So, in total, about 75% of our business is contracts, but about 35% of that contract business adjusts much more frequently than annual. And that breakdown we have in the back of the slide deck, will help you see the flow on that.

Brett M. Levy - Loop Capital

Yeah. And then, in terms of the import competition that you are seeing right now, the delta between the Chinese price and the U.S. price of sheet is starting; they are pretty big. Are you feeling like you're running into any competition? And then the other piece of the puzzle is, do you feel like the way the trade cases are written that the possibility that maybe Chinese steel goes through Vietnam or Korea or somewhere else and ends up landing on our shores is somewhat precluded.

Mario Longhi Filho - President, Chief Executive Officer & Director

The last part of your question is – the answer is yes, and if you go and you read a little bit about the Section 337 that we filed, it addresses that. The Section 337 case is about addressing not only the transshipments, but there is fraud in it. There is collusion. And we cannot allow for those countries to continue to operate in that way to the detriment of U.S. companies. And that the American people are also beginning to feel the impact of that, you can look at the campaign, and see all the comments that we get about unfairness in the trading world.

So, we have put the Section 337; it's really strong case. I think we will prevail in that matter. But coming out of the trade cases, you look at the margins that are being determined out there. And if you just like at the prices they've been quoting. You put those margins on it, it determines what the real honest price should be. Not the fraudulent prices they have been practiced before. So, if you just look at that, you're going to see what fairness of the market should be. And that's what we're beginning to see happen.

Brett M. Levy - Loop Capital

Thanks very much, guys.

David B. Burritt - Chief Financial Officer & Executive Vice President

Sure.

Dan Lesnak - General Manager-Investor Relations

All right. Well, thank you. We certainly appreciate everybody's interests. Mario, you have a final statement for us here, today?

Mario Longhi Filho - President, Chief Executive Officer & Director

Thanks, Dan. Before I'd sign off, I want to acknowledge and thanks our employees one more time. They have faced many challenges over the last couple of years, and they have taken on these challenges and delivered tremendous improvements to our business model. They have done so without compromising our core value of safety, which remains the foundation to the Carnegie Way, and we have demonstrated improved performance since the Carnegie Way journey began.

Our safety performance measured by global total reportable injury rate has improved by almost 15%, and our Days Away From Work Rate has improved by more than 18%. We certainly still have more work to do, but we recognize we're making progress. We have dedicated and talented employees that will continue to be a driving force behind our Carnegie Way transformation.

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Thank you very much, and I wish you a good day.

Dan Lesnak - General Manager-Investor Relations

All right. Thank you everybody for joining us and we will talk to you again next quarter.

Operator

Ladies and gentlemen, this conference will be available for playback beginning today at 10:30 a.m. Eastern running through Wednesday, August 3, 2016 at midnight Eastern Time. You may access the AT&T playback service time by dialing 1-320-365-3844, and entering the access code of 397560.

Again this conference will be available for playback beginning today at 10:30 a.m. Eastern running through Wednesday, August 3, 2016 at midnight Eastern Time. You may access the AT&T playback service time by dialing 1-320-365-3844 and entering the access code of 397560.

That does conclude your conference for today. Thank you for your participation and for using AT&T Teleconference. You may now disconnect.

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U.S. Steel (NYSE:X): Q2 EPS of -\$0.31 beats by \$0.18.

Revenue of \$2.6B (-10.3% Y/Y) misses by \$70M.

Shares +2.5%.

Press Release

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FEATURED TOP STORY

MUSTANG POWERED: CLIFFS BREAKS GROUND ON UTAC'S NEW LIFE

Jerry Burnes Managing Editor Aug 11, 2016

FORBES — When it was clear Cliffs Natural Resources would have to idle operations at United Taconite, CEO Lourenco Goncalves called together more than a handful of his top employees from the plant.

The message to them was even clearer — UTAC will be back.

Cliffs officially broke ground Thursday on the Mustang Pellet Project, giving UTAC a stable future built on a 10-year agreement with ArcelorMittal and the largest blast furnace in the United States. The project effectively ends idle status after the mine spent about a year on the shelf.

All 476 workers are back on the job as of this week, company officials said, and later this month the UTAC will resume producing its standard pellet.

"We are going to have business out at Cliffs for the next 100 years," Goncalves told a crowd of politicians, business leaders and workers at the company's processing plant in Forbes. "Your pellets are the best in the world, and because of that, I can displace competition at will."

Mustang pellets are custom-made for ArcelorMittal and will replace production from Cliffs' operations at the Empire Mine in Michigan, which was permanently closed last week after running out of usable iron ore.

Producing the Mustang is preceded by \$65 million of upgrades to the Forbes plant — \$25 million this year and \$40 million next — to allow the company to run trains to the site, build loading and storage units, and equipment to mix the concentrate and pelletize it.

A portion of the new pellets are destined for the automotive industry, Goncalves said, but will reach other markets as well. Mustang pellets differ from the so-called standard pellet because they contain a higher level of calcium added to dolomite and limestone.

The company expects to begin Mustang production in March 2017. When it does, the Mustang will be produced at a 40:60 percentage ratio to standard pellets.

"The union is ecstatic," said Brian Zarn, president of United Steelworkers Local 6860, representing UTAC employees. "Almost all of our people are going back to work ... our future looks a lot brighter than it used to."

Some employees did not return to work, instead opting to remain in or school, pursue other careers or retire.

Goncalves said those positions are bringing new residents to the Range in the form of about a dozen former Empire miners set to make Minnesota home. All the employees were offered jobs at United Taconite when the Michigan mine closed, and the company matched the skills with what remained opened in Eveleth and Forbes.

"We're going to have a resurgence of jobs on the Iron Range," said Gov. Mark Dayton, noting progress on PolyMet's project near Hoyt Lakes. "It's tremendous you're going back to work."

Local contractors on the site called the project a shot in the arm for business after narrowly avoiding large-scale layoffs.

Lakehead Constructors out of Virginia is the general contractor and expects about 200,000 construction hours to complete the Mustang updates.

"This is what we needed to get to feel the rebound," said DFL state Rep. Jason Metsa of Virginia, who represents a large portion of union miners.

Thursday's groundbreaking followed news Wednesday that Cliffs secured \$300 million in equity through a common shares offering.

That news is significant as Cliffs continues to climb out of debt and the recent industry downturn. The company said it plans to use the influx of cash toward general corporate purposes, including repayment of debt notes due in January 2018.

"New money, new shareholders and new investors, that's what moves things forward," Goncalves said.

It also shows a growing faith in a company once thought to be on the brink of bankruptcy, and now the favorite of the state to take over mineral leases for the Essar Steel Minnesota site in Nashwauk.

Cliffs plans to build a direct-reduced iron facility if the state is able to wrestle the leases away from bankruptcy court.

Goncalves said Thursday he would wait for legal proceedings to clear before moving forward. Legal hurdles surrounding the leases, Dayton hopes, will be resolved soon.

"We initiated legal action through the attorney general to extricate the leases from the bankruptcy," Dayton said in a press conference following the groundbreaking ceremony. "They filed for bankruptcy a half hour before the leases expired. It's pretty transparent what's going on there."

JERRY BURNES

http://www.virginiamn.com/news/local/mustang-powered-cliffs-breaks-ground-on-utac-s-new-life/article_a533...

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8/26/2016

Magnetation LLC Announces Potential Shutdown of its Minnesota and Indiana Facilities



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AUG 26,2016,17:30 ET

News provided by Magnetation LLC \rightarrow (http://www.prnewswire.com/news/magnetation+llc)



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Magnetation LLC Announces Potential Shutdown of its Minnesota and Indiana Facilities

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GRAND RAPIDS, Minn., Aug. 26, 2016 /PRNewswire/ -- Magnetation LLC (Magnetation) announced today that it may implement a shutdown of its Minnesota iron ore concentrate plant, rail loading facility and Pellet Plant located in Reynolds Indiana. If implemented, any shutdown would occur on or after September 30, 2016. The Company intends to continue operating in the normal course until such time.

The announcement initiates compliance with the U.S. Department of Labor's Worker Adjustment and Retraining Notification (WARN) Act by notifying local officials and the International Union of Operating Engineers Local 49 of production curtailments and employee reductions. WARN Act notification is required 60 days in advance under certain circumstances when there is a potential for layoffs of more than 50 employees for a period in excess of six months.

In connection with the potential shutdown, the Company has entered into an agreement with AK Steel Corporation, Magnetation Inc. and the Company's senior secured lenders to cease operations and implement a wind-down process. Absent securing additional financing and/or a http://www.printthis.dickability.com/pt/gt?expire=&title=Magnetation+LLC+Arrounces+Potential+Shutdown+of+its+Minnesda+and+Indana+Fadilities&ut D 1/3

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Magnetation LLC Announces Potential Shutdown of its Minnes da and Indiana Facilities

third party purchaser of its businesses, the Company will be seeking Bankruptcy Court approval of the agreement on or before September 30, 2016.

"While this was a difficult decision, the Company believes that, in light of current circumstances, preparing for a safe and orderly wind-down while we continue to seek an alternative to a shutdown is the best course of action to support what is in the best interests of our employees, creditors and other critical constituents," said Larry Lehtinen, CEO of Magnetation. "As a result, we are communicating the proper notifications to our employees and the communities. We will be working closely with the appropriate governmental agencies to assist any affected employees who would be laid off if this shutdown is implemented."

Magnetation LLC:

Magnetation LLC. is a joint venture between Magnetation, Inc. (50.1% owner) and AK Steel Corporation (49.9% owner). Magnetation LLC recovers high-quality iron ore concentrate from previously abandoned iron ore waste stockpiles and tailings basins. Magnetation LLC owns three iron ore concentrate plants located in Keewatin, MN, Bovey, MN and Grand Rapids, MN, and an iron ore pellet plant in Reynolds, IN. Additional information about the company is available at www.magnetation.com (http://www.magnetation.com/). (http://www.magnetation.com/)

Forward-Looking Statements

This press release contains statements that are forward-looking in nature and relate to our expectations, beliefs and intentions. All statements other than statements of historical fact are statements that could be deemed to be forward-looking, including, but not limited to, statements about the expected impact and timeframe of the shutdown and our ability to continue to fulfill customer needs. These statements are subject to risks, uncertainties and assumptions that could cause outcomes to differ from our expectations, including, but not limited to, continued depression or further decreases to iron ore prices, changes in demand for our products or steel, unforeseen operational difficulties with or costs relating to our plants or third-party suppliers, negotiations with collective bargaining units, and other factors described in the reports and information provided to our investors. We assume no obligation and do not intend to update any such forward-looking statements.

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8/26/2016 Magnetation LLC Announces Potential Shutdown of its Minnes da and Indiana Facilities
Media Contact: Matt Lehtinen
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To view the original version on PR Newswire, visit: http://www.prnewswire.com/news-releases/magnetation-llc-announces-potential-shutdown-of-its-minnesota-and-indiana-facilities-300318934.html (http://www.prnewswire.com/news-releases/magnetation-llc-announces-potential-shutdown-of-its-minnesota-and-indiana-facilities-300318934.html)

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http://www.magnetation.com (http://www.magnetation.com)

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Customer Contract Status Minnesota Power As of October 2016

| | | Contract Expiration |
|---|-----|---------------------|
| LP Tariff Customers | | |
| Hibbing Taconite Co. | [1] | 10/31/2020 |
| ArcelorMittal Steel USA - Minorca Mine | | 12/31/2025 |
| USS - Minnesota Ore (Minntac & Keetac) | [2] | 12/31/2021 |
| Cliffs Natural Resources (United Taconite LLC and Northshore Mining Company - Babbitt Mine) | [2] | 12/31/2026 |
| Magnetation LLC (Plants 2 and 4) | | 12/31/2025 |
| UPM, Blandin Paper Mill | [1] | 10/31/2020 |
| Verso Corporation | | 12/31/2022 |
| Sappi Cloquet, LLC | [4] | 10/31/2020 |
| Boise White Paper, LLC | | 12/31/2023 |
| LLP Tariff and Other Customers | | |
| Enbridge Energy Company, Limited Partnership | | 12/31/2020 |
| Minnesota Pipeline Company | [3] | |
| USG Interiors, Inc. | [3] | |
| ME Global | [3] | |
| Mesabi Nugget Delaware, LLC | [4] | 12/31/2023 |
| Mining Resources LLC (Plant 3) | | 12/31/2019 |
| Northshore Mining Co. (Silver Bay Power) | [2] | 12/31/2031 |
| PolyMet Mining, Corp. | [9] | 10/31/2026 |

These customers have contracts that are currently in the cancellation period. The contract termination date continues to roll forward unless notice of cancellation is provided by either party or new contracts are established.

Subject to MPUC approval (U.S. Steel, Docket No. E015/M-16-836 and Northshore, Docket No. E015/M-16-534)

The Minnesota Pipeline ESA includes a one-year termination notice. The USG and ME Global ESAs each include an evergreen clause that continues the contract unless either party provides a 30-day written termination notice. [3] [3] [6]

Effective January 1, 2016, Mesabi Nugget elected to be served under an LLP rate schedule.

Long-term power agreement between SBPC and MP executed in May 2016

PolyMet has a contract expiration date of 10 years from the date that they start taking power on the LP rate schedule.

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