UNITED STATES
INTERNATIONAL TRADE COMMISSION

In the Matter of:	**) Investigation Nos.:**
SILICON METAL FROM AUSTRALIA, BRAZIL,	**) 701-TA-567-569 AND 731-TA-1343-1345**
KAZAKHSTAN, AND NORWAY	**) (FINAL)**

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UNITED STATES OF AMERICA

BEFORE THE

INTERNATIONAL TRADE COMMISSION

IN THE MATTER OF:	) Investigation Nos.:
SILICON METAL FROM AUSTRALIA,	) 701-TA-567-569 AND
BRAZIL, KAZAKHSTAN, AND NORWAY	) 731-TA-1343-1345 (FINAL)

Main Hearing Room (Room 101)
U.S. International Trade
Commission
500 E Street, SW
Washington, DC
Thursday, February 15, 2018

The meeting commenced pursuant to notice at 9:30 a.m., before the Commissioners of the United States International Trade Commission, the Honorable David S. Johanson, Vice Chairman, presiding.

APPEARANCES:

On behalf of the International Trade Commission:

Commissioners:

Vice Chairman David S. Johanson (presiding)

Commissioner Irving A. Williamson

Commissioner Meredith M. Broadbent

Staff:

William R. Bishop, Supervisory Hearings and Information Officer

Tyrell Burch, Program Support Specialist

Sharon Bellamy, Records Management Specialist

Lawrence Jones, Investigator

David Guberman, International Trade Analyst

Jonathan Ruder, International Economist

David Boyland, Accountant/Auditor

Heng Loke, Attorney/Advisor

Mary Messer, Supervisory Investigator

APPEARANCES:

Congressional Appearance:

The Honorable Scott DesJarlais, M.D., U.S. Representative, 4th District, Tennessee

The Honorable John Moolenaar, U.S. Representative, 4th District, Michigan

Opening Remarks:

Petitioners (William D. Kramer, DLA Piper LLP (US))

Respondents (Stephen J. Orava, King & Spalding LLP; and Jonathan T. Stoel, Hogan Lovells US LLP)

In Support of the Imposition of Antidumping and Countervailing Duty Orders:

DLA Piper LLP (US)

Washington, DC

on behalf of

Specialty Metals, Inc. ("GSM")

J. Marlin Perkins, Vice President - Sales, Globe Metallurgical Inc.

Duane Huck, Corporate Manager, IT & Business Information Systems, Globe Metallurgical Inc.

Antonio Williams, President, Local 83693, Industrial Division of the Communication Workers of America(IUE-CWA)

APPEARANCES (Continued):

Jennifer Lutz, Senior Economist, Economic Consulting Services, LLC

William D. Kramer, Mary E. Gately and Martin Schaefermeier - Of Counsel

In Opposition to the Imposition of Antidumping and Countervailing Duty Orders:

Hogan Lovells US LLP

Washington, DC

on behalf of

Wacker Polysilicon North America

Wacker Chemicals Norway

Wacker Chemie AG

Simcoa Operations Pty Ltd.

Shintech Inc.

Oliver Majumdar, Director, Raw Materials Procurement, Wacker Chemie AG

Mary Beth Hudson, Vice President, Wacker Polysilicon North America

Tom Walters, Vice President for Trading, Service Aluminum Corporation

David Miles, Vice President, Simcoa Operations Pty Ltd.

Tiago Borges, Procurement Sourcing Manager, Alcoa Corporation

APPEARANCES (Continued):

Dr. Thomas J. Prusa, Professor and Chair, Department of Economics, Rutgers University

Jonathan T. Stoel, Craig A. Lewis, Jared R. Wessel and Michael G. Jacobson - Of Counsel

King & Spalding LLP
Washington, DC
on behalf of
Dow Silicones Corporation ("Dow Silicones")

Agustin G. Argibay, Global Business Director, Feedstocks, Basics and Intermediates, Dow Silicones

Craig S. Brown, Product Director, Strategic Feedstocks, Dow Silicones

Michael P. Searcy, Commercial Director, Strategic Feedstocks, Dow Silicones

Bonnie B. Byers, Senior International Trade Consultant, King and Spalding LLP

Stephen J. Orava and Benjamin J. Bay - Of Counsel

APPEARANCES (Continued):

Cassidy Levy Kent (USA) LLP
Washington, DC
on behalf of
Elkem AS ("Elkem")
Bjornar Ovesen, Vice President of Sales and Marketing Silicon Division, Elkem
Nils Dybwad, Director of Sales and Marketing Silicon Division, Elkem
Jonathan M. Zielinski and Jack A. Levy - Of Counsel

Brinks Gilson & Lione
Washington, DC
on behalf of
Ligas de Aluminio S.A. Ligas ("Liasa")
Cia. Ferroligas Minas Gerais ("Minasligas")
Jay Armstrong, President, TriALco Inc.
Lyle B. Vander Schaaf - Of Counsel

APPEARANCES (Continued):

Mayer Brown LLP
Washington, DC
on behalf of
MPM Holdings Inc.
Eric Thaler, Senior Vice President and General Manager, MPM Silicones
Sydney H. Mintzer - Of Counsel

Smirnow Law
Washington, DC
on behalf of
REC Silicon, Inc.
REC Solar Grade Materials LLC
REC Advanced Silicon Materials LLC
Chris Bowes, Director for Investor Relations and Global Sourcing, REC Silicon, Inc.
John P. Smirnow - Of Counsel

Interested Party In Opposition:
Mitsubishi Polysilicon
Theodore, AL
Matt Wilson, President

APPEARANCES (Continued)

Rebuttal/Closing Remarks:

Petitioners (William D. Kramer, DLA Piper LLP(US))

Respondents (Stephen J. Orava, King & Spalding LLP; and

Jonathan T. Stoel and Craig A. Lewis, Hogan Lovells US LLP)

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P R O C E E D I N G S

(9:30 a.m.)

VICE CHAIRMAN JOHANSON: Good morning. On behalf of the U.S. International Trade Commission I welcome you to this hearing on the final phase of Investigation Nos. 701-TA-567 to 569 and 731-TA-1343 to 1345 involving Silicon Metal from Australia, Brazil, Kazakhstan and Norway.

The purpose of these final investigations is to determine whether an industry in the United States is materially injured or threatened with material injury or the establishment of an industry in the United States is materially retarded by reason of imports of silicon metal from Australia, Brazil, Kazakhstan and Norway.

Schedule setting forth the presentation of this hearing, notices of investigation and transcript order forms are available at the Public Distribution Table. All prepared testimony should be given to the Secretary. Please do not place testimony directly on the Public Distribution Table. All witnesses must be sworn in by the Secretary before presenting testimony.

I understand that the parties are aware of the time allocations. Any questions regarding the time allocations should be directed to the Secretary. Speakers are reminded not to refer in their remarks or answers to questions to business proprietary information. Please speak

clearly into the microphones and state your name for the record for the benefit of the court reporter.

If you will be submitting documents that contain information you wish classified as business confidential your request should comply with commission rule 201.6.

Mr. Secretary, are there any preliminary matters?

MR. BISHOP: Mr. Chairman, I would note that all witnesses for today's hearing have been sworn in. There are no other preliminary matters.

VICE CHAIRMAN JOHANSON: Very well. Will you please announce our Congressional Witnesses?

MR. BISHOP: Our first Congressional Witness is the Honorable Scott DesJarlais United States Representative from the 4th district of Tennessee.

STATEMENT OF REPRESENTATIVE SCOTT DESJARLAIS

REPRESENTATIVE DESJARLAIS: Good morning, gentlemen. My name is Scot DesJarlais and I am the Congressional Representative for the 4th Congressional District of Tennessee. The 4th District, just to get you situated, is below Nashville to the Alabama Border, wraps around Chattanooga and contains Bradley County. It is the home to the famous Jack Daniels Distillery and I have had the privilege to represent there since 2011.

While we are mostly a rural district, we are proud to host a world class, high tech manufacturing

facility producing polysilicon in Bradley County. In 2011, Wacker Polysilicon North America began construction of the new 550-acre Greenfield site for the manufacture of polysilicon.

As I'm sure you know, polysilicon is the raw material driving some of the world's leading technologies including solar power and semiconductors. Wacker has invested over 2.5 billion to build this state-of-the-art facility and recently broke ground on an HBK pyrogenic silica plant adjacent to the polysilicon plant. This was the largest single private investment ever made in the State of Tennessee.

I know that Wacker could have selected other locations for this investment but I'm incredibly proud that they chose our state and our district. At full operation, Wacker facility in Charleston employs approximately 700 workers and supports their families. At full capacity the plant will be providing upwards to 20,000 tons of polysilicon a year. The company has also recently embarked on another 150 million dollar expansion to be completed in 2019 that will bring an additional 50 new manufacturing jobs which are projected to pay between 50 and 70 thousand dollars annually. These are valuable family-sustaining jobs particularly for a rural area like my District.

The Wacker plant has also generated and

indirectly sustains hundreds of additional jobs for suppliers and service companies throughout the region. These stable, good paying jobs depend on the continued viability of Wacker operation in Charleston, Tennessee.

Wacker has also taken steps to enhance workforce development in the region by partnering with Chattanooga State Community College Engineering Technology Division to create the Wacker Institute. Graduates are prepared to enter the workplace as chemical processing engineering technicians for the region's diverse chemical manufacturing companies.

Ultimately this partnership will include a new apprenticeship model in three academic areas: Chemical operations, electrical and instrumentation and mechanical systems maintenance. For selective students the apprenticeship of academic and practical experiences with paid on the job training over a course of 5 semesters.

While all of these benefits of Wacker's investment are good and very real, the continued viability of Wacker polysilicon operations require that the company continue to have access to a reliable supply of high quality silicon metal as its principle raw material.

Wacker has predominantly purchased domestically in the past and would prefer to continue to purchase from U.S. Domestic sources if the product is commercially

available. With an estimated 22,000 tons of silicon metal consumed every year Wacker has provided a huge incremental sales opportunity for the U.S. Industry and we welcome that development in my district. However, it is also my understanding that U.S. Producers do not have the capacity to supply the entire market. Having access to commercially adequate supplies including imports is therefore essential to the continuation and further development of operations at the Charleston Plant. I am concerned that these proposed tariffs can raise the cost of U.S. manufacturing providing a further competitive advantage to foreign competitors and cost the U.S. jobs.

It is for these reasons that I'm here today asking the Commission to carefully consider the potentially devastating impact that these tariff measures may have on the availability of silicon metal to Wacker and other U.S. businesses such as Dow. Closing the door to competitive suppliers of silicon metal at reasonable market prices will only hurt our Domestic Industries that rely on these inputs and are working so hard to rebuild our U.S. manufacturing infrastructure.

On behalf of the many hundreds of hardworking Americans at Wacker facility and the thousands of locally employed workers and their families that rely on the Wacker Plant, I therefore urge you to take these effects into

account as you consider your votes in this important case.

The continued progress that has been made in my district with the help of Wacker depends directly on the outcome of this case. Thank you for your time and your consideration in this matter.

VICE CHAIRMAN JOHANSON: Thank you, Congressman. I visited your District just last year. It's a very pretty place.

REPRESENTATIVE JARLAIS: We welcome you to come often.

VICE CHAIRMAN JOHANSON: Certainly and do you have any questions, Commissioner? Okay, with no questions we appreciate you being here.

MR. BISHOP: Our next Congressional Witness is the Honorable John Moolenaar, United States Representative from the 4th District of Michigan.

STATEMENT OF REPRESENTATIVE JOHN MOOLENAAR

REPRESENTATIVE MOOLENAAR: Good morning vice Chairman Johanson and Members of the Commission. I want to thank you for the opportunity to appear before you today to speak about the impact of silicon metal from Brazil and three other countries on our silicon metal industry.

The Petitioners asking the Commission and the Commerce Department to impose punitive duties on imports from Brazil. If this happens, it will adversely affect the

complex supply chain that supports advanced U.S. manufacturing and thousands of local jobs in Michigan.

As you know Dow Chemical is a major U.S. Producer of silicon metal and the largest consumer of silicon metal in the world. The vast majority of imports from Brazil are from Dow's wholly-owned facilities in Brazil. Dow internally consumes 100 percent of its imports to make over 3,000 products in U.S. manufacturing across Michigan, Kentucky and Indiana. In fact, one of Dow's facilities that uses imported silicon metal, Hemlock Semiconductor is located in my Congressional district.

I'm asking the Commission to carefully consider several important characteristics of the U.S. Silicon Metal Market. First, the U.S. Industry has historically not been able to satisfy demand in the U.S. Market. Because of this, imports have always played a significant role in supplying silicon metal to the U.S.

Second, more than half of the imports covered by your investigation consists of a specialty silicon metal that has low boron content. This metal is necessary to produce the high-quality polysilicon that is the starting point for U.S. production of solar cells and semiconductors. It is not however produced in the United States.

The U.S. polysilicon industry including Hemlock Semiconductor is already highly vulnerable as a result of

the continuing trade conflict between the United States and China. Imposition of higher duties on the industry's supply chain will threaten the U.S. polysilicon production and productivity of the solar and semiconductor sectors.

Third, I would note that Dow owns D.C. Alabama a significant U.S. Producer of silicon metal. It also owns 49 percent of a West Virginia joint venture with the Petitioner that also produces silicon metal. Dow sources silicon metal from these U.S. operations and purchases significant volumes of silicon metal from other U.S. Producer Mississippi Silicon.

Obviously, Dow would not import silicon metal from Brazil if by doing so it would adversely affect the certainty and security of its substantial U.S. operations and other U.S. sources of silicon metal.

Finally, imposing duties on imports of silicon metal from Brazil would adversely affect employment and corporate investment levels in Michigan and throughout the rest of the United States. Dow relies on three thousand, four hundred and forty-three people in its silicon metal value chain in Michigan to make products for the U.S. Market and for export markets around the world.

Dow also owns a number of facilities in Michigan that use imported and domestic silicon metal in the production of downstream silicon products. Additionally

since 2011 Dow has made substantial capital improvements in its facilities in Michigan, investing more than 1.8 billion dollars. Moreover, throughout the United States Dow relies on 4,340 people in its silicon metal value chain who earn approximately 451 million dollars per year.

These new duties would have a tremendous negative impact on Dow's workforce and its production operations. In the end, I believe that imposing the duties sought by the Petitioner would deny Dow access to raw materials necessary to maintain its advanced U.S. silicon manufacturing operations and also deny its ability to employ thousands of hardworking Americans in Michigan and across the country.

I respectfully encourage the Commission to carefully consider the balance of overall U.S. Interests and the adverse effects on Michigan of any duties when evaluating the relevant facts in these investigations. I hope you will continue to encourage a level playing field for all companies and not impose the punitive measures that will hurt American jobs. Thank you for the opportunity to testify today.

VICE CHAIRMAN JOHANSON: Thank you Congressman Moolenaar for appearing here today. Do you have any questions Commissioner Williamson? Okay, thank you. We appreciate it.

MR. BISHOP: Mr. Chairman that concludes

Congressional testimony at this time. We will now proceed with opening remarks. Opening remarks on behalf of Petitioners will be given by William D. Kramer of DLA Piper, U.S. Mr. Kramer, you have five minutes.

OPENING STATEMENT OF WILLIAM D. KRAMER

MR. KRAMER: Good morning, Mr. Vice Chairman and Commission Williamson. The product involved in these investigations silicon metal is a globally-traded commodity. The Commission is familiar with this product from numerous prior investigations and reviews. The nature of this product and the conditions of competition in the U.S. Market make the Domestic Industry particularly susceptible to import injury.

Silicon metal is a product composed almost entirely of elemental silicon. The imports from the Subject Countries and the Domestic Product meet the specifications of customers in all segments of the market and are sold in all segments. Silicon metal consumers do not distinguish between foreign and domestic suppliers. They do not care where the silicon metal was produced if it meets their specifications or can be used in their process.

The U.S. Market is highly competitive. Silicon metal normally is sold through negotiations and competitive bidding in which many competing domestic and import suppliers participate. Extremely small differences in price

can determine who gets a sale. Consumers frequently change suppliers on the basis of price or obtain price concessions by threatening to change suppliers.

Published spot prices are used as benchmarks for both spot and contract sales. Even with a contract in place the contract price is often indexed or periodically adjusted based on the published spot price. In addition, the production of silicon metal is very capital intensive. For that reason a producer must maintain the highest possible level of capacity utilization to remain viable and can be forced to lower its price or risk losing sales critical to its continued operations.

The imports from Australia, Brazil, Kazakhstan and Norway satisfy each of the Commission's criteria for determining if Subject Imports compete with each other and the domestic like product in the U.S. Market. Accordingly, the Commission should assess the volume and effect of the imports from all four Subject Countries on a combined basis.

There are three Domestic Producers: Globe, by far the largest Domestic Producer and two related parties. DC Alabama is a subsidiary of Dow Corning the largest consumer of silicone metal and is related to a Brazilian producer through common ownership by Dow Corning. Mississippi Silicon is a new entrant that is majority owned by a Brazilian silicon metal producer. Globe and

Mississippi Silicon are Merchant Market Producers. DC Alabama provides silicon metal to Dow Corning for use in its production operations. As a captive supplier, DC Alabama is sheltered from the impact of the unfairly traded imports.

As the witnesses here today will testify the U.S. Industry is being injured by the dumped and subsidized imports from the Subject Countries. Over the period of investigation these unfairly traded imports captured a large share of the U.S. silicon metal market. From 2015 to 2016 the volume of imports from the Subject Countries increased by more than 22 percent and their average unit value fell by more than 19 percent.

During 2017 during the 2017 part-year period the Subject Import volume continued to increase. The imports average unit value further declined and the imports continued to injure the Domestic Industry. While declines in production and shipments have been important factors in the injuries suffered by U.S. Producers, the impact of unfairly traded imports on prices has been a primary source of injury to the Domestic Industry. The imports have been sold at very low prices that have undercut the prices of the U.S. Producers and have caused lost sales, lost revenue, price depression and suppression and declining market prices.

The imports forced Globe to shut down its Selma,

Alabama plant. Employment at Globe Silicon Metal Operations increased significantly from 2014 to 2015 but then fell steeply in 2016 when the volume of Subject Imports increased and their average unit values fell. Without relief from the dumped and subsidized imports there is no prospect of the kind of sustained price and volume recovery necessary to end the severe damage that has been inflicted on the Domestic Industry. Thank you.

MR. BISHOP: Opening remarks on behalf of Respondents will be given by Stephen J. Orara of King and Spalding and Jonathan T. Stoel of Hogan Lovells, U.S. Gentlemen, you have five minutes.

OPENING STATEMENT OF JONATHAN STOEL

MR. STOEL: Good morning, Vice Chairman Johanson and Commissioner Williamson. My name is Jonathan Stoel of Hogan Lovells. On behalf of the Respondents I urge you to render a negative file determinations in these investigations.

The Domestic Industry has not suffered material injury nor has there been any threat of material injury from Subject Imports. Instead, this case is about opportunism. Specifically, Petitioner alleges there is injury stemming from when Subject Imports began in 2016 but the volume of Subject Imports was flat between 2014 and 2016.

In 2015 saw the start of a global price decline

for silicon metal that impacted all major markets including the United States. Two actors central to the Commission's investigation are absent today. First, Mississippi Silicon has elected not to participate and second, the behemoth Ferroglobe, LLC the product of the 2015 merger between Globe Specialty Metal and Ferro Atlantica has never been acknowledged by the Petitioner in this proceeding.

Mississippi Silicon is the first new U.S. Producer of silicon metal in more than 40 years. The company successfully established manufacturing operations in Burnsville, Mississippi. During the Period of Investigation, Commissioners and that's notwithstanding attacks by Ferroglobe, Mississippi Silicon stated in Federal Court that Ferroglobe had sought to "maintain its monopoly status as the only merchant manufacturer of silicon in the United States" and to "delay or completely prevent Mississippi Silicon from becoming operational".

Mississippi Silicon's successful operations and efforts to obtain customers to qualify in the high end segments of the market and to compete with Ferroglobe reshaped the landscape for silicon metal in the United States.

Second, my opponents claim that Ferroglobe is the victim of Subject Imports but nothing could be further from the truth. Let me highlight a few facts as our opponents

testify this morning. One, the Ferroglobe merger created a combined company with twice the silicon metal capacity of its nearest western competitor.

Ferroglobe's own financials boast of controlling nearly one-third of the global merchant market and over 80 percent of the North American merchant market for silicon metal. Two, seeking to cement its control over the global silicon metal market Ferroglobe has also filed AD/CVD cases on silicon metal in both Canada and Europe.

Importantly Commissioners, Canadian International Trade Tribunal found that Ferroglobe was not, let me reemphasize, not harmed by Subject Imports. Rather, the CITT concluded that Ferroglobe's injuries were caused by the global pricing downturn I mentioned earlier. The pricing chart in your slides confirm the CITT finding.

Three, your staff found that Ferroglobe is the price leader and dominant presence in the U.S. Market. As a consequence, major U.S. consumers are strongly opposed to this Petition and these duties. As a consequence, major U.S. consumers are going to testify this afternoon, they contribute thousands of jobs to the U.S. Economy. They are deeply concerned about the Ferroglobe merger and their limited purchasing options. You will also hear that Ferroglobe has repeatedly not been a reliable supplier.

Last, Ferroglobe's own behavior in 2016 belies

its claims of injury due to Subject Imports. In that very same year Commissioners, Ferroglobe elected to provide a 28.9 Million dollar golden parachute 28.9 million Commissioners, to its former Executive Chairman.

Moreover in 2016 Ferroglobe chose to export approximately 25 thousand tons of silicon metal to the U.S. Market from South Africa. These exports occurred even as Ferroglobe curtailed its U.S. Production operations. For all these reasons I ask you to look skeptically on Ferroglobe's injury claims. Thank you.

OPENING STATEMENT OF STEVE ORAVA

MR. ORAVA: Good morning. My name is Steve Orava with King Spalding on behalf of Dow Silicon Corporation which is a wholly owned subsidiary of the Dow Chemical Company. Dow fully supports the opening statement by joint Respondents Counsel.

As our witnesses will explain in more detail this afternoon, Dow has developed highly integrated silicons and polysilicon value chains in which thousands of American workers use silicon metal to produce over three thousand products at manufacturing sites around the United States.

These value changes include our own U.S. silicon metal production, joint ventures with the Petitioner in West Virginia and in Canada and two silicon metal facilities in Brazil, including one that we purchased from the Petitioner.

Dow uses its Domestic production and all of its imports internally for its U.S. manufacturing operations. It also purchases additional silicon metal from the merchant market including from the Petitioner and from Mississippi Silicon.

As a result, Dow is in a unique position in these investigations as a U.S. Producer, a U.S. purchaser, a U.S. Importer and a Foreign Producer. We also know the Petitioner well and the market well and our witnesses look forward to providing our unique insight later today.

In addition to reflect Dow's place in the market we also ask that you consider Dow as part of the U.S. Domestic Industry and that you consider imports from Brazil separately. Doing so would appropriately consider the unique nature of Dow's integrated silicons and polysilicon value chains and its importance in preserving American manufacturing. Thank you very much.

MR. BISHOP: Would the Panel in support of the imposition of antidumping and countervailing duties please come forward and be seated? Mr. Chairman, this Panel has 60 minutes for their direct testimony.

MR. KRAMER: Our first witness is Marlin Perkins.

STATEMENT OF MARLIN PERKINS

MR. PERKINS: Good morning, commissioners. My name is Marlin Perkins. I'm vice president of sales at

Globe. Since 1989, I have supervised the marketing and sales of Globe's entire product line including silicon metal. Globe is the largest domestic silicon metal producer with plants in Selma, Alabama; Niagara Falls, New York; Beverly, Ohio; and Alloy, West Virginia.

I am here today to testify about this product silicon metal, the nature of the U.S. silicon metal market, and the severe negative impact of the dumped and subsidized imports from Australia, Brazil, Kazakhstan, and Norway on the domestic silicon metal industry.

Silicon metal is a product composed almost entirely of elemental silicon with very small amounts of impurities such as iron, calcium and aluminum. Silicon metal is a commodity product. Customer specifications establish a minimum amount of silicon and a max amount of the other elements that silicon metal sold to these customers may contain.

For any given specification, domestic and imported silicon metal are completely interchangeable. Furthermore, so-called higher grade silicon metal can be and often is sold to lower grade applications.

Most silicon metal is purchased by, chemical manufacturers and aluminum producers. In the chemical sector, silicon metal is the primary raw material used in producing silicones and super high purity forms of silicon

such as polysilicon. Primary and secondary aluminum producers use silicon metal as an alloying agent.

As an -- excuse me, as a commodity, silicon metal is sold primarily on the basis of price. In the marketplace, you can talk to customers about sales and technical service, about quality or reliability of supply in an effort to differentiate your product from the competition. But what the customer always comes back to is price, how much per pound of silicon.

The U.S. silicon metal market is highly competitive. In addition to the two domestic merchant market producers, Globe and Mississippi Silicon, there are many other sources of imported silicon metal competing for sales. Publications such as CRU Monitor and Platts Metals Week regularly publish information regarding silicon metal spot prices. Buyers and sellers use these published prices as benchmarks in negotiating prices for both spot and contract sales.

In addition, the published prices are used as a basis for prices in contracts with formulas and price provisions. For example, a contract may provide that deliveries during a given month are priced at the average of metals' week's prices for silicon metal published in the previous -- preceding month.

In buying silicon metal, purchasers typically

receive offers or bids from at least four to six suppliers and in many cases, as many as 10 suppliers. Purchasers often will communicate these prices to competing suppliers in an effort to obtain the best price possible. The availability of published price data and the multiple offers received by purchasers ensure that prices are quickly communicated throughout the market.

Domestic and import suppliers compete for sales on the basis of price. A price difference of a half a penny per pound or less can determine who gets the sale. This is true even where the purchaser has an established relationship with a supplier. If we are giving -- given a second look. Because we're the existing supplier, we are normally expected to meet the lowest bid in order to maintain our relationship with the customer.

The silicon metal that Globe produces competes directly with the silicon metal imported from all of the subject countries for sales to U.S. customers. There is nothing special about the imports from any of the subject countries or about customer requirements that prevents our silicon metal from competing effectively with the imports. It's simply a matter of price.

Specifically, I understand that the claim is being made that Brazilian silicon metal is special because of its low boron content. First of all, it is important to

understand that there is no such recognized commercial product as low boron content silicon metal. No customer has ever called and asked whether Globe can supply such a product. Most customers do not specify a maximum boron content because they don't care about how much boron is in the material.

Furthermore, the silicon metal produced by Globe meets the boron specifications of those customers that do specify a maximum boron level. Globe has never been told by a customer that its silicon metal contains too much boron and no customer has ever rejected any silicon metal supplied by Globe because of boron content.

Even those purchasers that do specify a maximum boron content do not specify a level as low as that identified in the commissioner's questionnaires.

The largest domestic consumers of silicon metal are the chemical producers such as Dow, Corning, Momentive Performance Materials, and REC Silicon. These companies purchase large quantities of silicon metal by soliciting bids or offers from competing import and domestic suppliers.

As a result of the commodity product nature of the silicon metal, the size of these purchasers, and the competitive purchasing process, these purchasers have a great deal of pricing leverage. All these factors combine to make the U.S. silicon metal market extremely competitive

and price driven.

The silicon metal producers in Australia, Brazil, Kazakhstan, and Norway are highly export oriented because they have small or non-existent home markets, producers in these countries are forced to export and the U.S. market is a key export destination for all four countries.

Kazakhstan is a new entrant into the market that quickly established a significant market presence by selling at low prices. From no volume at all in 2014, imports from Kazakhstan increased to about 11,000 short tons in 2016. During the 2017 part-year period, imports from Kazakhstan increased by an additional 30 percent as compared to the 2016 part-year period.

Imports from all four countries combined grew more than 20 percent from 2015 to 2016, to a total volume of more than 110,000 short tons. Furthermore, not only was there a large increase in volume, but the average unit value of the imports fell significantly over the same period. In part-year 2017, the average unit values of subject imports either continued to decline or remained at very low, depressed levels.

These dumped and subsidized imports have severely injured Globe. Our silicon metal operations which had been profitable, have suffered very serious financial

harm. In addition as Mr. Huck will describe, we were forced to shut down our Selma plant to idle furnaces at other locations and to layoff workers.

I would like to explain how the subject imports have inflicted this injury based on my experience in the market. As vice president of sales for Globe, I've seen the aggressive pricing of silicon metal from the four countries firsthand. I am directly involved in our sales to domestic customers and serve as their primary point of contact.

In dealing with customers, I have seen silicon metal from Australia, Brazil, Kazakhstan, and Norway offered at rock bottom prices that under cut our prices. Virtually all of our sales are made pursuant to contracts. Most silicon metal contracts are negotiated or competitively bid during the so-called mating season in the fourth quarter of the calendar year for shipments during the following year. In the negotiation and bidding in the fourth quarter of 2015, Globe in many cases unable to meet the extremely low prices offered by the subject import suppliers and as a result, lost large volume of 2016 sales to primary and secondary aluminum producers.

In addition to the imports low prices, another significant factor contributing to the sales losses in 2016 is a particular type of pricing mechanism used by the subject import suppliers. These suppliers frequently offer

to sell silicon metal at index prices discounted from the published benchmark prices with no floor, limiting the level to which the discounted index prices could fall.

For example, they might offer a silicon metal under an annual contract for a price five cents per pound below the average metals week price during the month preceding the month of delivery with no floor. For sales in 2016, subject import suppliers offered silicon metal at index prices discounted as much as 8 cents per pound, below the published benchmarks with no floor. While index pricing is not a new phenomenon in the silicon metal market, such large discounts below published price were unprecedented. Excuse me.

In an effort to avoid being forced to sell at prices below our cost of production, Globe resisted making sales at index prices below the published benchmarks and also would not agree to index pricing with no floor. By resisting such provisions, Globe lost sales to the subject import suppliers.

Globe not only was hurt by the loss of these sales volumes, but also by the reduced prices at which we were forced to make sales because the very low competing subject import prices. Many of these price drops occurred during the fourth quarter of 2015 purchasing cycle. In addition, one major chemical industry customer forced us to

reduce our long-term contract price for the year 2016. And a major chemical producer customer, we have agreed to reduce prices for the second half of 2016. And finally, even though Globe resisted to agreeing to index price arrangements and sold predominantly on a fixed price basis in 2016, Globe was forced to make a few sales on an index price basis in order to avoid losing the business altogether.

As a result, Globe suffered significant injury when the prices under these contracts were driven down by the subject imports to below cost levels in 2016.

In 2017, we sold most of our volume pursuant to annual or long-term contracts. Our annual contract for 2017 were negotiated during the mating season in 2016, which began in October of that year.

October was the very month when published prices hit bottom after dropping throughout the year. Like in 2015, we were facing competition from subject import suppliers who were offering to sell silicon metal on an indexed basis at discounts from the published price with no floor. Globe made no sales on an indexed price basis.

We also resisted making sales at prices below the published benchmark, so as not to be compelled to sell at prices even further below our cost of production than in 2016.

In addition, in 2017, we were forced to reduce our long-term contract price to a major customer in order to keep the contract. As a result of the aggressive subject import pricing, our financial performance continued to suffer in 2017.

We at Globe are proud of our silicon metal manufacturing operations and are confident that we can compete effectively with trade -- fairly-traded imports. In filing this case, we are asking our government to provide relief from the very serious harm that dumped and subsidized imports have inflicted on our company and its workers and to allow us to compete with the imports on a level playing field. Thank you.

MR. KRAMER: Our next witness is Mr. Huck.

STATEMENT OF DUANE HUCK

MR. HUCK: Good morning, my name is Duane Huck. I have been employed by Globe since 1992. I began my career on the production floor operating and tapping the silicon metal furnaces and have been involved with the silicon metal operations ever since.

For 10 years, I was plant manager at three of Globe's silicon metal plants and was directly responsible for the day-to-day operations of the facilities. For six years, I was Globe's vice president of operations. In that position, I was responsible for the operations of all our

silicon metal plants.

In my testimony, I will briefly describe the silicon metal production process, including the fact that Globe produces silicon metal, meeting the specifications of customers in all segments of the silicon metal market, as well as the devastating injury the imports from Australia, Brazil, Kazakhstan, and Norway have inflicted on Globe and its workers.

I will also discuss Globe's decision to restart its Selma, Alabama plant and the significant capital expenditures incurred to restart the plant.

As the Commission knows, silicon metal is manufactured by smelting high purity quartzite in a submerged electric arc furnace. The production process is highly energy intensive. In the furnace, the high purity quartz is combined with a carbon-containing reductant such as low ash coal, charcoal, or petroleum coke and a bulking agent, usually wood chips.

These raw materials are heated to a very high temperature. The resulting chemical reaction in the furnace produces molten silicon metal, which is removed from the furnace and poured into large flat-iron molds or on to beds of silicon metal fines.

After the silicon metal has cooled and solidified, it is crushed to the desired size to meet

customer specifications. For certain chemical industry customers, the silicon metal is ground into powder.

To operate efficiently and reduce per unit fixed costs, the submerged arc furnaces used to produce silicon metal must run continuously 24 hours a day, seven days per week. I understand that Brazilian producers are claiming that their silicon metal is unlike silicon metal produced in the United States because of its low boron content. Contrary to these claims, the silicon metal that we regularly produce meets the boron specifications of all the customers whose specifications contain a boron limit.

We produce such silicon metal without any changes to our normal production process. In its questionnaires, the Commission defined low boron content silicon metal as silicon metal containing 20 parts per million or less boron, a level well below the lowest boron content limit specified by any customer.

Nevertheless, as Globe has reported in its questionnaire, throughout most of the period of investigation, Globe produced significant volumes of silicon metal containing 20 parts per million boron or less.

Furthermore, through raw material selection and preparation, Globe is capable of consistently producing silicon metal that contains 20 parts per million or less boron. It is important to understand that boron is a -- is

only of concern to purchasers that use silicon metal to produce polysilicon. As Mr. Perkins explained, most customers do not care about boron content and therefore their specifications do not contain a boron limit.

For that reason in most cases, we do not test for boron content. Because we only reported shipments as low boron content material when the boron content had been determined by testing, the volumes of low boron content silicon metal we reported to the Commission are significantly understated.

Silicon metal metal production is a highly capital intensive manufacturing process. Globe's largest assets are its four silicon metal plants and in particular the furnaces at the plants. Globe has made large investments in its silicon metal production operations to create state-of-the-art facilities capable of producing silicon metal as efficiently as possible. Such investments require the company to be profitable and to generate adequate cash flow.

Silicon metal production involves high fixed cost. To be able to recover these costs, we need to run the furnaces at the highest rate of capacity utilization possible so that we can spread these costs over a sufficiently large volume of silicon metal sales.

If we are forced to compete with imports sold at

dumped and subsidized prices, we have two choices: either lower our prices to the level of the imports so that we can maintain an adequate level of production or lose the sales to the imports and end up having to shut down capacity. Either way, our financial performance suffers.

As Mr. Perkins explained, in 2016, a large volume of low-priced imports from Australia, Brazil, Kazakhstan, and Norway surged into the U.S. market, taking sales away from Globe and forcing down our prices.

In order to lower our costs, we were forced to reduce capacity. We had to shut down our Selma, Alabama plant for 18 months from February 2016 until July 2017, which resulted in the loss of a large number of jobs.

In addition, we had to idle furnaces at other plants, which led to additional layoffs and to convert a furnace to fair silicon production at another plant. Between 2015 and 2016, more than 18 percent of our production-related workers lost their jobs.

For the company, shutting down capacity increases the per unit cost of the remaining production because, as I explained, fix costs are spread over a smaller volume of production and sales.

As prices collapsed and Globe lost sales volume to the imports, we were forced to curtail capital investments including furnace upgrades and to postpone

necessary maintenance expenditures.

After Globe filed its petition and the Commission and the Commerce Department issued their affirmative preliminary determinations, we began to see improving conditions in the domestic silicon metal market. Spot prices in the market increased significantly. We also began to see an increase in the level of orders from our customers. Because we wanted to be in a position to supply increased volumes of silicon metal to meet the needs of our customers if conditions continued to improve, Globe undertook the risk of restarting the Selma plant in the summer of 2017 after an 18-month shutdown.

Globe spent a total of about $4 million to bring the plant's two furnaces back online. These expenditures include the cost of cleaning and repairing the furnace linings, the water cooling and hydraulic systems, repairs to the electrical equipment, and repairs to or replacements of mobile equipment.

These expenditures reflect Globe's commitment to the Selma plant, its workers, and its customers in the southeastern United States that are served by the Selma plant.

I devoted my entire career to Globe. We have world class equipment and workforce to -- required to be a highly efficient silicon metal producer. We have proven

that we are able to compete successfully with large volumes of fairly traded imports. However, we cannot compete with dumped and subsidized imports sold at unfairly low and declining prices that take away sales to our customers and force us to shut down production capacity.

I ask that you provide the relief from these unfair imports that the domestic industry needs to continue to operate and to provide jobs to its workers. As you can see in the financial data we reported without such relief, the continued viability of the industry would be severely at risk. Thank you.

MR. KRAMER: Our next witness is Mr. Williams.

STATEMENT OF ANTONIO WILLIAMS

MR. WILLIAMS: Good morning. I would like to thank the Commission for letting me testify today. I am Antonio Williams. I'm the president of Local 83693 of the Industrial Division of Communications Workers of America, which represents the workers at Globe silicon plant in Selma. Alabama. The IUE-CWA supports the petition in the unfair trade case. The IUE-CWA represents 150,000 manufacturing workers across the country.

I am speaking today on behalf of the union and the workers at the Selma plant, who will be directly impacted by the Commission's decision on these investigations. My union and our members are extremely

concerned about the harm that the import of silicon metal from Australia, Brazil, Kazakhstan and Norway has inflicted on Globe and its workers.

I have worked at the plant for 13 years as a furnace operator. My job enables me to support my family. My wife and I have two daughters. Selma is one of the most poorest communities in Alabama. Over 40 percent of the people in Salem live below the poverty line. The Selma plant is an important employer for the surrounding area, as a source of long-term, good union manufacturing jobs.

For 50 years, it has provided generations of work with the opportunity to earn a good livelihood and to support their family. In some cases, my co-workers have worked at the plant for more than 20 or 30 years. Many of my co-workers have fathers who have worked at the plant and other family members who are currently employed there. In addition to our good wages, a worker like me receives medical insurance for us and our family, as well as matching contributions to our 401 account under our union contract.

Globe also provides life insurance, at least two weeks' paid vacation and ten paid holidays. We receive monthly bonuses that are tied to the production of the plant. All workers at the Selma plant are required to participate in continuing training. We have mandatory

safety training once a month. In addition, I am provided with furnace training at the plant and sometimes at other Globe plants in the United States.

We strive to be open, operating as efficiently as well as we can and safely as we can. We are very proud of the work we do, our record of accomplishment and what it means for the company customer in the community where we live. I can tell you based on my experience how important my employment at Selma plant is to me and my family.

The Selma plant was shut down from February 2016 through July 2017, and I was laid off. During that period, I had to find two jobs. While working those two jobs, I had to work 60 hours per week and I made one-third of the amount I made working at the Selma plant, where I worked 40 hours. I also had no benefits from those two jobs. The shutdown also was very difficult for my co-workers at the plant. More than 80 were laid off during the shutdown.

Unemployment benefits were not enough to support them and their families. Most workers could not find jobs in the area, and some were forced to find work outside of Alabama. I and all the other workers were very happy to return to our jobs when we was hired back in July of 2017. The Selma plant is also important for the rest of the community. It buys raw materials, supplies, equipment,

machinery and services from contractors and subcontractors in Alabama.

This benefits not only more than 100 businesses but also their workers. We are very proud of the work we do and the contributions that we make to our community. We work very hard to be efficient and safe, but we cannot compete with imports that are dumped and unfairly subsidized. We suffered when the Selma plant was shut down for over a year.

Please help us keep our jobs and the Selma plant open. We need the support of our government to make sure we are able to compete on a level playing field. Thank you.

MR. KRAMER: Our next witness is Jennifer Lutz.

STATEMENT OF JENNIFER LUTZ

MS. LUTZ: Good morning. I'm Jennifer Lutz from Economic Consulting Services. There are a number of conditions of competition that are distinctive to the U.S. silicon metal market. Silicon metal is a commodity product used in the production of primary and secondary aluminum ending chemical applications, namely the production of silicones and polysilicon.

Customers generally require suppliers to meet certain specifications. The differences in these

specifications, although important to purchasers, tend to be minor and can be met by both domestic and import suppliers. The Commission has conducted a number of silicon metal investigation and has found that although silicon metal is described in terms of grades, there is no uniformly accepted grade classification system.

These grades instead refer to ranges of specifications that are generally sold to different groups of customers such as chemical grade material. These specifications establish the minimum amounts of silicon and maximum amounts of impurities such as iron, calcium, aluminum and titanium that may be contained in the product.

Silicon metal meeting particular specifications is completely interchangeable with other silicon metal meeting the same specifications, whether from a domestic or import source. With respect to substitutability, the Commission's prehearing report states that "the elasticity of substitution depends upon the extent of product differentiation between the domestic and imported products." The report goes on to conclude that "based on available information, the elasticity of substitution between U.S.-produced silicon metal and imported silicon metal is high."

Production of silicon metal for various types of customers is not separate from production for other types

of customers. Silicon metal producers, with few exceptions, produce silicon metal for all customers using the same equipment, the same employees and the same raw materials. Because silicon metal is a commodity product with domestic and import suppliers producing silicon metal that meets the specifications of purchasers in all market segments, competition among suppliers is based on price and small differences in price can cause purchasers to switch suppliers.

The prehearing report notes that of 29 responding purchasers, 22 found price to be a very important factor, purchase factor, six found it to be somewhat important, and only one reported that price was not important. Price and cost were identified as among the top three factors used in purchasing decisions by 27 of 29 reporting purchasers.

Information regarding spot prices in the U.S. market is readily available. A number of industry publications publish information on spot prices. Platt's Metals Week, for example, surveys producers, traders and consumers as to prevailing spot market prices and publishes the results weekly. While the published silicon metal prices reflect specifications typical for the secondary aluminum segment, those prices affect all segments of the silicon metal market.

As I mentioned, silicon metal is used in the production of primary and secondary aluminum, silicones and polysilicon. There are no substitutes for silicon metal in these applications. Demand for silicon metal therefore follows demand for these downstream products. Demand for silicon metal is price-inelastic, meaning that a decrease in the price of silicon metal does not lead to significantly higher consumption.

In the prehearing report, the Commission estimated that demand elasticity for silicon metal to be in the range of negative .025 to negative .5. Many domestic and import suppliers compete in the U.S. silicon metal market. These include three U.S. producers and multiple import sources. Dow is a long-time commercial producer or Globe is a long-time commercial producer of silicon metal.

Dow Corning Alabama was originally a commercial producer, but was purchased by Dow Corning and is now primarily a captive producer for its chemical business. Mississippi silicon is a more recent addition to the domestic industry, starting commercial production in late 2015. While the startup of Mississippi silicon masks some of the downward volume trends in the domestic industry, it is notable that the company announced plans to build the facility in January of 2014, a month in which U.S. spot prices rose from $1.25 per pound to $1.34 per pound, well

before the steep and sustained drop in U.S. spot prices that occurred in 2015.

The $200 million plant opened in October 2015, when published prices were well into their decline, at only $1.14 per pound, 22 percent below the 2014 high level of $1.46 per pound. With respect to imports of silicon metal, in 2016 and part-year 2017, 14 countries supplied the U.S. market. The domestic product and subject imports compete in all segments of the market, and no segment is insulated from subject import competition.

Respondents make many arguments with respect to attenuation of competition in the U.S. market. Respondents, however, fail to explain how such attenuation is consistent with the record collected by the Commission, and which facts support a change from the Commission's previous determinations with respect to silicon metal.

The record assembled by the Commission in this investigation does not support any assertions of attenuation. Data compiled from the purchasers' questionnaires indicate that the U.S. produced product is comparable to the subject imports. One factor for which U.S. product was most often found to be inferior to the subject imports is price, indicating that subject import prices are largely lower than U.S. producer prices, but that quality differences are not meaningful.

The prehearing report also notes that 26 of the 29 responding purchasers purchased domestic silicon metal, 25 purchased imports of silicon metal from the subject countries, and 20 purchased silicon metal imported from other sources. This large overlap further demonstrates the practical interchangeability of domestic silicon metal and silicon metal from the subject countries, as well as other import sources.

While I will not be covering all of the cumulation factors, I would like to address fungibility. The prehearing report discusses only the shipment data collected with respect to so-called low boron content, high purity and metallurgical grade silicon, product categories created for the purpose of the questionnaires that are not recognized in the market.

This discussion ignores the bulk of the record evidence with respect to fungibility. In considering Respondents' claims with respect to the importance of boron content and the resulting issues of fungibility, the Commission must evaluate first, how important boron content is to the market and second, whether there is any meaningful difference between the domestic product and subject imports in their ability to meet boron requirements.

It is interesting that with all of the argument with respect to the importance of low boron silicon

metal, no party has stated on the record what constitutes low boron levels. In order to bid on sales and supply various purchasers, Globe has documents outlining the specifications required by its customers. Mr. Perkins testified that Globe can meet all of these specifications.

The record evidence, particularly as provided in the purchaser questionnaires, completely contradicts Respondents' arguments with respect to low boron material. Fourteen of the responding purchasers indicated that low boron content is not important at all, and eight noted that it was only somewhat important.

While half of responding purchasers did indicate that low boron content was either very important or somewhat important, a large majority of purchasers indicated that the U.S. product and subject imports are comparable with respect to low boron content. Of responding purchasers, 11 of 12 indicated that U.S. product is comparable to imports from Australia. For Brazil, it was 12 of 13 purchasers. For Kazakhstan, it was 8 of 9 purchasers, and for Norway it was 4 of 5 purchasers.

If U.S. product is comparable to imports from each of the subject countries with respect to this factor, it follows that subject imports from each country are comparable to imports from the other subject countries. In fact, the questionnaire data show that importers and

purchasers generally find that imports from each of the subject countries are always or frequently interchangeable with imports from the other subject countries.

The record shows that Respondents' repeated references to boron content are an effort to create distinctions where none exist. While certain purchasers do provide maximum boron levels in their product specifications, Globe is unaware of any purchaser with boron specifications as low as those defined in the questionnaire, and the limited information with respect to actual specifications on the record is consistent with Globe's understanding.

Globe has also never been asked to lower boron content of its material or failed to met a customer's boron specification.

Furthermore, the relative volumes by so-called product type reported in the questionnaires are not meaningful. First, in order to report shipments as meeting the low boron specification, the producer or importer would have to test for boron content in that shipment, and Globe does not test most of its shipment for boron content because most purchasers do not have a specification for it. Globe's product meets the specs of its purchasers that do care about boron content.

Second, just because a producer or importer

shipped material meeting the low boron specs, it does not follow that the purchaser required silicon metal meeting that spec. As the Commission has found in multiple investigations, it is common for producers to sell down higher grade silicon metal to purchasers with less stringent specifications. Competition is certainly not attenuated by low boron content if the purchaser does not require that content.

It's interesting to me how much Respondents have focused on boron content in this injury investigation. The Commission has never been asked to consider this before, despite the long history of silicon metal proceedings. No Brazilian producer mentions boron content on its website.

At the Department of Commerce, parties are required to identify product characteristics that need to be taken into account in appropriately matching home market sales to U.S. sales in determining the margin of dumping. Not a single respondent cited boron content as a relevant characteristic.

Moreover, in its case brief in the Department of Commerce anti-dumping investigation on silicon metal from Brazil, Dow Corning stated "silicon metal from various sources, including Brazil, is co-mingled and treated as fungible within the inventory system." Thus, Dow Corning certified to the Department that it treats Brazilian silicon

metal and silicon metal from other countries as fungible in its own operations.

It is also notable that of the hundreds of pages of third party on silicon metal available, I have seen no mention of boron.

Turning to the volume of subject imports, the volumes have been significant. In this investigation, the Commission has relied on official import statistics using general imports. Subject imports declined overall from 2014 to 2015, as did the volume of total imports, due largely to declines in volumes from Brazil, which suffered power shortages during that period. Imports from the other three subject countries increased from 2014 to 2015.

In 2016, as total imports declined again, subject imports increased in volume by more than 20 percent. Subject imports accounted for roughly half of total imports in 2015, but the combination of declining total imports and increasing subject imports caused subject imports to increase their share of total of imports in 2016 to 67 percent.

The volume of subject imports continued to increase in 2017. After the 22 percent increase from 2015 to 2016, it increased further by over 25 percent from part-year 2016 to part-year 2017. In part-year 2017, subject imports accounted for over 76 percent of total

import volumes.

As subject imports increased significantly in volume from 2015 to 2016, the average unit value of such imports fell by 19 percent, falling from $1.33 per pound in 2015 to only $1.08 in 2016. In part-year 2017, the average unit value of subject imports fell below 2016 levels to only $1.07 per pound.

During the Period of Investigation, subject import volumes were significant and increased from 2015 to 2016 and into 2017, absolutely and as a percent of total imports as a percent of domestic production and as a percent of apparent consumption. How did the subject imports increase their presence in the U.S. market? By selling at low prices.

As I noted, the volume of subject imports increased significantly from 2015 to 2016, while the AUV of such imports fell by 19 percent. While it is true that that domestic industry does not have the capacity to supply all of U.S. demand, if subject imports were drawn into the U.S. market due to any supply shortages, silicon prices should not have fallen so much.

Instead, published prices increased overall in 2014, but started to decline steadily in 2015. Globe was relatively lucky in 2015 in that it had negotiated fixed price contracts in late 2014 before the precipitous decline

in prices. In 2016 however, it was forced to face the low prices prevailing in the market.

The record shows that subject imports undersold domestic product in 66 of 88 comparisons over the Period of Investigation, with the majority of the import volume underselling domestic product. The underselling reported in the prehearing report is consistent with the injury experienced by the domestic industry.

As the Commission noted in its preliminary determination, the margins of underselling increased in 2016, when the domestic industry experienced serious injury. The low prices of the subject imports had a significant impact on domestic industry operations.

Ten purchasers have confirmed switching purchases from domestic product to subject imports on the basis of price, and these purchasers confirmed that the domestic industry lost sales to each of the subject countries, with several purchasers indicating that they purchased subject imports from more than one subject country instead of domestic product on the basis of price.

The number of purchasers indicating that they purchased subject imports instead of domestic product because of price was highest for Brazil, followed by Kazakhstan, Australia and Norway. The prehearing report understates the actual volume of lost sales, as at least one

purchaser confirmed that lower prices were a primary reason for purchasing subject imports, but failed to specify the quantity of that purchase.

The Commission likewise confirmed that domestic producers lowered prices in competition with the subject imports, with confirmed price reductions of 30 percent. These data strongly contradict the many assertions that competition is attenuated. While the availability of published market prices and contract prices based on such published prices is not a new phenomenon, subject imports increasingly entered into contracts setting price formulas at significant discounts to the published prices, and without setting minimum prices below which the contract prices could not fall.

Globe was unwilling to enter into such contracts, and therefore lost significant volumes to the subject imports. Had Globe entered into such contracts and been required to sell at a discount to the published price, Globe's financial deterioration in 2016 would have been even worse than what it reported.

In competition with the unfairly traded imports, the domestic industry suffered a cost-price squeeze, with cost of goods sold as a percent of net sales values increasing steadily throughout the period. The members of the domestic industry suffered the impact of the

subject imports in different ways. D.C. Alabama is a captive producer and generally is sheltered from import competition.

As I noted earlier, Mississippi Silicon announced plans and broke ground on its new plant at a time when domestic silicon metal prices were relatively high, but started production after prices fell to very low levels. It is hard to imagine that the company was reaping any rewards from its U.S. investment during the Period of Investigation, given that change in prices.

The clearest data with respect to domestic industry injury come from Globe, which had the option of selling larger volumes in 2016 at uneconomically low prices or losing significant volume. By refusing to offer significant discounts to the published prices, it suffered reductions in production, shipments and sales volumes.

Despite its efforts to keep prices high enough to cover its costs by sacrificing volume it suffered declining prices in 2016 along with the declining volumes. It closed one of its facilities entirely, idled two furnaces and other facilities, and switched another furnace from silicon metal to ferrosilicon production.

Silicon metal production has high fixed costs, and the volume reductions and furnace shutdowns caused Globe's fixed costs to be spread out over a smaller and

smaller volume of production. As production fell and plants and furnaces were shut down, employment indicators fell significantly in 2016, with a number of PRWs falling by more than 18 percent.

The Commission collected financial data in two different formats, total market operations and open market operations, that is excluding internal consumption and transfers to related companies. In both cases, the industry's financial indicators fell significantly. The industry reported declines in gross profit, operating profit, net profit and cash flow.

Indicators considered by the Commission, such as gross operating and net profit as a percent of sales fell sharply. The industry experienced a cost-price squeeze. While spot prices have increased steadily since the filing of the petition, press reports attribute these increases to this proceeding.

While the data collected by the Commission show clear evidence of continued injury to the domestic industry following filing of the petition, the petition was filed in the first quarter of 2017 after negotiations for 2017 business had already occurred. If relief is not granted, injury is likely to continue, and it is hard to say how long the industry can continue to operate under such conditions.

That concludes my testimony, and I'd be happy to answer any questions.

MR. KRAMER: That concludes our presentation.

VICE CHAIRMAN JOHANSON: Thank you for your presentation. We will now commence Commissioner questions, and we will begin with Commissioner Broadbent.

COMMISSIONER BROADBENT: Good morning. Thank you for participating today. I had some just general overview questions on Globe's strategy and its interaction with Dow. Can you tell me about the history of Globe's -- of Globe as a U.S. company, its acquisition of Globe Specialty Metals in 2006, and the growth of the Globe Specialty Metals over time, and then the merger with FerroAtlantica to form Ferroglobe?

MR. KRAMER: Yeah. I'm not sure exactly what information is of interest to you, but Globe was created or brought back to life by having, being brought out of bankruptcy following import injury, and Globe then acquired a couple of other domestic producers. You know, Globe Specialty Metals is a domestic company that owns both of the -- both the Globe Metallurgical operations and the majority interest in the joint venture with Dow Corning.

At the end of 2015, Globe Specialty Metals merged with FerroAtlantica, which is a producer based in Spain, that also has operations in South Africa and France,

silicon metal production. So that at that point, there was created a global company which is a large western producer, not large in relation to the massive production capacity in China.

And so it's a producer that can now supply customers in a number of countries in different parts of the world.

COMMISSIONER BROADBENT: Okay.

MR. KRAMER: Does that respond to your question?

COMMISSIONER BROADBENT: Yeah. No, that's very helpful. That's kind of a big overview, and then sort of what happened to the operations related to the production of this product through all of those mergers? I mean what was the impact on production levels and so forth?

MR. KRAMER: What -- mainly a lot was invested in improving the facilities and making them highly efficient and competitive, and there was no, no capacity was shut down during the formation of the larger company. You know, efforts to extend best practices to all of the plants, and there also is some vertical integration.

There is a quartz manufacturing mining operation in Alabama that supplies high purity quartz to the facilities, and there's a coal mining operation that supplies very high purity metallurgical coal to Globe's

operations. So there was -- they also worked to improve the quality of the operations through vertical integration being to control their own, the quality of their own raw materials.

COMMISSIONER BROADBENT: Okay.

MR. SCHAEFERMEIER: If I -- can I just add one point? I apologize.

COMMISSIONER BROADBENT: Sure.

MR. SCHAEFERMEIER: It may be of interest --

COMMISSIONER BROADBENT: Just identify yourself for the record.

MR. SCHAEFERMEIER: Martin Schaefermeier. My apologies again for interrupting you. Globe acquired the alloy plant from the Elkem Company. It was formerly operated by Elkem, and it had been in declining condition, and Globe invested a significant amount to bring that facility up to par.

COMMISSIONER BROADBENT: Okay, and then how does Globe interact with Ferroglobe's various affiliates around the world?

MR. KRAMER: You know, for the most part Globe operates as a domestic producer. The Globe Specialty Metals owns the Canadian operation, you know, the most of the -- that operation, in terms of Globe's sales, almost entirely supplies Canadian customers. The imports from Canada are

Dow Corning imports from that facility, in which they're also a joint venture partner, a minority owner, and there's --

I mean there's a management structure obviously on a global basis. It's now a subsidiary and actually management decisions. There is involvement of a global company, but I'm not sure beyond that. The operations in the United States are not, as I understand it and the witnesses, other witnesses can speak to it, have not changed as a consequence of the fact that it's now part of a global operation.

COMMISSIONER BROADBENT: Okay. Well, I guess the Respondents are kind of making the case that you've pursued a series of trade remedy cases in Canada and Europe, in addition to this one here in the U.S.

MR. KRAMER: Well, Ferroglobe, the parent. Well, the Canadian subsidiary of Globe Specialty Metals, you know, did pursue a case in which the imports were found to be dumped and subsidized. You know, there's a negative final injury determination which has been appealed, and there's a recent case brought by the European operations, which has nothing to do with Globe Specialty Metals, recently filed in Europe covering two countries, Bosnia, which is not part of this case and Brazil.

COMMISSIONER BROADBENT: So you're filing

against the Brazilians in Europe, not you but Ferroglobe?

MR. KRAMER: Well no. The European operations have filed against imports from Brazil and Bosnia in Europe.

COMMISSIONER BROADBENT: That's it like to be pursuing a trade remedy case that's going to really disaffect your joint venture partner? I mean you have several joint ventures with Dow?

MR. KRAMER: Well, it's really not a situation in which Globe has a choice whether to pursue trade relief. I mean if you want that joint venture to continue to operate, the parent company has to be economically viable. If the company no longer exists, you know, however strongly you feel about maintaining a good relationship with your joint venture partner and your customer, that you have no choice but to seek relief.

COMMISSIONER BROADBENT: Can you talk about the joint venture?

MR. KRAMER: I assume that they're not happy to have -- neither party is happy to be in a position in which they're adverse to each other in the case.

COMMISSIONER BROADBENT: Yeah, I would suspect. Can you explain the terms of the joint venture with Dow, both in Elway, West Virginia and then in Quebec? Are these joint ventures in which most decisions are made jointly with Dow, or are these plants that Globe owns and

operates, but in which Dow just has the minority ownership interest?

MR. KRAMER: I mean the details of the joint venture arrangement are not public. I'd be happy to, you know, fully respond to that in our post-hearing submission.

COMMISSIONER BROADBENT: Okay, all right. Can Globe provide a U.S. producer questionnaire for the West Virginia joint venture or otherwise provide detailed comment on the accuracy of information concerning this joint venture provided in Dow's U.S. producer questionnaire?

MR. KRAMER: I'm not sure I understood your question. Globe submitted a questionnaire covering all of its production operations, including in West Virginia.

COMMISSIONER BROADBENT: Oh you have?

MR. KRAMER: Yes, yeah.

COMMISSIONER BROADBENT: Okay. Not just for the joint venture -- I guess they're missing some information about the joint venture.

MR. KRAMER: I'm not aware of anything. I'd be happy to provide whatever information the Commission would like us to.

COMMISSIONER BROADBENT: I mean we have all these, you know. We have to figure out related parties, captive production, conditions of competition. It's pretty detailed, and we need your participation.

MR. KRAMER: I'm not sure what information the Commission lacks, but we'd be happy to -- if that's identified, to provide it.

COMMISSIONER BROADBENT: Okay. Dow asserts that Globe fold the Brazilian affiliate that Globe now asserts is engaging in injurious pricing behavior. It's just hard for us, I guess, to understand how you would sell a plant and then file an unfair trade case against it?

MR. KRAMER: Well, if many years later the product's being unfairly traded and you're being driven out of business, I think you have a need to file such an action.

COMMISSIONER BROADBENT: Globe is -- is Globe engaged in any downstream chemical polysilicon or aluminum manufacturing that might compete with your downstream purchasers?

MR. KRAMER: Globe did some developmental work on a high purity form of metallurgical grade silicon metal. That had never gone beyond the development stage. So the answer is no, at this point there are no such downstream operations.

COMMISSIONER BROADBENT: Okay. Did any of the industry reps want to comment on any of that? Okay, all right. Thank you very much.

VICE CHAIRMAN JOHANSON: I would like to thank you all for appearing here today. I'm a little

unclear on Globe's overall position with regard to Mississippi Silicon. The prehearing brief notes at page five that Mississippi Silicon shares common ownership with the producer Rima in Brazil, and Polymer Alloys, an importer of Brazilian product. But your brief also states that Mississippi Silicon should not be excluded from the domestic industry, and you state this on page eight of your brief.

On the other hand, numerous references in the brief seem to request exclusion for certain data considerations. For example, on page 17 the brief talks about Mississippi Silicon facing different circumstances than Globe. Page 18 then refers to data industry "without the inclusion of Mississippi Silicon's data." Two sentences on page 20 start "Excluding Mississippi Silicon's data," and page 20 notes that "Including Mississippi Silicon in this analysis skews the data in multiple ways."

Under what circumstances are allowed to pull Mississippi Silicon's data out of the domestic industry data set?

MS. LUTZ: Vice Chairman Johanson, this is Jennifer Lutz with ECS. The point of those distinctions was not that you shouldn't consider Mississippi Silicon part of the industry, but that the circumstances of its start-up mask the volume. It, you know, production capacity and

shipments increased. And you see that sometimes in other cases, where some producers will make a decision to lower their prices to keep volume, and others will lose volume to keep their prices higher.

This is simply showing that while we don't think that the increasing volume trends indicate that the domestic industry is not injured once you look at the financial data, we just wanted to point out that especially with respect to Globe, it has suffered volume injury, it has reduced employment. It has reduced capacity, and we didn't want that to be lost in the aggregate data.

VICE CHAIRMAN JOHANSON: Thank you, Ms. Lutz. How can the inclusion of Mississippi Silicon's data ever be considered to skew the domestic industry's data, as noted at page 20 of your brief? Isn't its performance part of the domestic industry as a whole?

MS. LUTZ: This is Jennifer Lutz again. It is part of the domestic industry as a whole. Our position is that you should not take these increasing volume trends as sign of health of the industry, and the reason that -- my guess is if Mississippi Silicon had known what would happen to prices, it would not have planned to start when it did.

But it's a plant in startup. It needs to get up to full production. So that increase in volumes and production and capacity is not a sign of health of the

domestic industry.

VICE CHAIRMAN JOHANSON: Thanks, Ms. Lutz. How can the entry of Mississippi Silicon into the domestic industry mask, and that's mask is a word that you use in your brief at page 38. How can it mask injury to the domestic industry, as Globe has argued? Are we supposed to ask ourselves whether but for Mississippi Silicon's entry the industry would have been injured? Does this suggest that Mississippi Silicon's entry, that with Mississippi Silicon's entry the industry as a whole was not injured?

MS. LUTZ: I do not think that that is the case. Clearly from the financial data collected by the Commission, the industry is not healthy. In general, the addition of capacity to an industry may be seen as a sign of strength of the industry. But that decision to add capacity as made at a time before prices fell so sharply.

VICE CHAIRMAN JOHANSON: Thanks. How do you respond to the Respondents' argument that any loss in Globe's merchant market share during the Period of Investigation was due to the entrance of Mississippi Silicon rather than subject imports, and this can be seen at page 83 of Wacker Simcoa's brief?

MS. LUTZ: There have been a lot of claims in the briefs about the entrance of Mississippi Silicon, and how basically Globe and Mississippi Silicon were competing

and driving prices down.

That does not explain a number of factors. First, the underselling data in which underselling margins by the subject imports increased in 2016, as Mississippi Silicon ramped up its production, and you have a significant volume of lost sales and lost revenues that don't say oh, we stopped buying from Globe because we bought from Mississippi Silicon. They say we bought subject imports because they were less expensive than domestic product.

VICE CHAIRMAN JOHANSON: Respondents also refer to aggressive pricing by Mississippi Silicon at Globe's expense, and this is at page 83 of the Wacker Simcoa brief and the Elkem brief at page four, and the Dow Corning brief at page 47. To what extent has industry competition with Mississippi Silicon impacted prices and Globe's performance?

MS. LUTZ: Again, the record shows that subject imports continue to undersell the domestic industry in 2016, and at increasing margins over prior years. Could Mississippi Silicon be responsible for some portion of the price decline in the market? Yes, but subject imports do not need to be the only source of injury for the Commission to make an affirmative determination, and the record evidence shows clearly that they are a large cause of injury to the domestic industry.

VICE CHAIRMAN JOHANSON: Thank you, Ms. Lutz. Petitioner has highlighted that subject imports increased by volume and market share from 2015 to 2016, the year in which it says that the domestic industry was most severely hurt, as you all note at page one of your brief. But did not the domestic industry's production and market share increase from 2015 to 2016?

MS. LUTZ: Yes it did, and that was due to the startup of Mississippi Silicon, which again the decision to build the plant and sell into the U.S. market was made well before the decline in prices.

VICE CHAIRMAN JOHANSON: So where in this part of the Period of Investigation is the volume-based injury caused by subject imports that Petitioner alleges?

MS. LUTZ: In 2016, Globe shut down a plant. That is -- they consider that to be volume injury, and there are -- there's a considerable volume of lost sales, confirmed lost sales showing that the subject imports took sales away from the domestic industry because of lower prices. They also gained market share at the expense of non-subject imports as well.

VICE CHAIRMAN JOHANSON: Thank you, Ms. Lutz. If Petitioner is alleging post-petition effects, how do you explain the increase in subject imports by volume and market share interim 2017 compared to interim 2016, as show in the

C table? Where are any post-petition effects if the volume indicia are going up?

MR. KRAMER: As Mr. Perkins explained, in this industry there's a mating season in the fourth quarter of the year preceding the year in which merchandise is delivered. So the sales during 2017 reflect conditions in the market in fourth quarter '16. So both the volume and pricing reflect those conditions.

VICE CHAIRMAN JOHANSON: Okay, and talking about 2017, Respondents note that prices rebounded in 2017, but they take the position that this price rebound had nothing to do with the initiation of the anti-dumping countervailing duty case, because prices had been increasing for five months at the time the case was initiated, and this is discussed at page 55 of the Wacker Simcoa brief. Do you agree that prices started to increase before the petition's filing?

MS. LUTZ: Prices had, spot prices had started to increase before the petition was filed, but they were still at very low, very depressed prices. The pace of increase in prices increased after the filing of the petition, after the Commission's preliminary determination. They continued to increase after preliminary Department of Commerce determinations, and there are numerous press articles that cite the case as the reason for the

improvement in prices in the U.S. market.

VICE CHAIRMAN JOHANSON: Okay. Thank you, Ms. Lutz. The yellow light's on, so I'm going to stop there. Commissioner Williamson.

COMMISSIONER WILLIAMSON: Okay, thank you Mr. Chairman, and too I express my appreciation to the witnesses for coming today and presenting your testimony. I'm going to continue along the line that Vice Chairman Johanson, and the price trends and the Petitioner's gave in their submission this morning charts showing how U.S. prices have followed similar line as domestic -- as global prices. I guess that gets to the question of if that's the case, how -- why would it be that the imports that the cause of the pricing changes here?

MS. LUTZ: I think the Commission has seen a number of cases where certainly published spot -- I mean prices follow trends, global trends. You see that in the steel industry, you see that in the paper industry. It's not uncommon. But just the -- and in general it has to do with supply and demand.

Well, increasing supply to the U.S. market at a time when demand is lower and selling at low prices just because global prices have fallen doesn't mean that it doesn't injure the domestic industry. They're still selling at dumped and subsidized prices. So the global prices,

while they provide some evidence as to why prices, that prices are falling elsewhere, it does not mean that subject import sales do not affect the domestic industry.

COMMISSIONER WILLIAMSON: Well here we are particularly challenged in trying to sort out the impact of the imports from the global trends, and in that case with that in mind, what relevance does the determination made by the CIDT in Canada about the ^^^^ when they gave the negative determining in saying that and pointing to global price trends as being important there?

MS. GATELY: Mary Gately. Mr. Commissioner, a simple answer is it involves a different regulatory scheme and different facts, and we can cover this more extensively in our post-hearing brief but --

COMMISSIONER WILLIAMSON: You know, because what I've found in international meetings is a lot of times the Canadians, at least in this area, think a lot like we do.

MS. GATELY: Well, I mean it's a different -- first, there are different facts. There were only two end users in Canada. It's a much smaller market. No polysilicon use. The Canadian price index, they don't have a separate index. It's tied to U.S. prices, and it's not sold in the same way. In the United States, as the Commission has heard, it's very price sensitive and it's

sold differently in Canada.

That case is also under appeal, as Mr. Kramer noted. So you have different countries involved, different producers involved, different end users. So you have different facts and a different, frankly a different regulatory system.

COMMISSIONER WILLIAMSON: Okay. Post-hearing if you could --

MR. KRAMER: Sure.

COMMISSIONER WILLIAMSON: Mr. Kramer, go ahead.

MS. GATELY: No, go ahead.

MR. KRAMER: I mean I just wanted to add one point, which is the Canadian -- one element in the Canadian tribunal decision was its finding that prices in Canada were based on U.S. benchmark prices. So they found the same price declines. So we are talking about in the United States, you know, we're causing what was happening in Canada, and that basis found lack of causation as one basis.

So I mean it's the same -- it's the same decline in benchmark prices that we're talking about here that they found was a reason not to find causation, U.S. prices.

COMMISSIONER WILLIAMSON: Okay. So have to figure out whether the imports were the causation -- U.S.

MR. KRAMER: Right.

COMMISSIONER WILLIAMSON: So post-hearing, I would appreciate it or, you know, explain all the situation in Canada. The elements that you point to should lead us to reach a different conclusion.

MR. KRAMER: Very happy to do that.

COMMISSIONER WILLIAMSON: Good. By the way, who filed -- was Ferroglobe the complainant in the EU petition?

MR. KRAMER: Ferroglobe is the global parent company.

COMMISSIONER WILLIAMSON: Yeah.

MR. KRAMER: And it's the -- in the United States, it's the U.S. Company that filed the case. In Canada, it's the Canadian producer that filed the case, which is owned by Globe Specialty Metals.

COMMISSIONER WILLIAMSON: So who filed it in the EU? Is there a similar relationship?

MR. KRAMER: It's the -- I'm not sure the exact entity, but it would the European subsidiary.

COMMISSIONER WILLIAMSON: Is there a related party -- is it a related entity the Ferroglobe conglomerate?

MR. KRAMER: Yes, yes. These are parts of Ferroglobe.

COMMISSIONER WILLIAMSON: Okay. That's what I was asking.

MR. KRAMER: Yes.

COMMISSIONER WILLIAMSON: Were there any non-Ferroglobe complainants in that by the way?

MR. KRAMER: Well, in Canada the --

COMMISSIONER WILLIAMSON: I mean in the EU.

MR. KRAMER: In the EU? I think there are only -- I believe there are only two producers in the EU, and the other producer is a related party. We can spell that out more fully in the post-hearing.

COMMISSIONER WILLIAMSON: Okay, thank you. I was just wondering about that.

MR. KRAMER: Sure, sure.

COMMISSIONER WILLIAMSON: Let's see. Commissioner Broadbent had asked about Ferroglobal's operation and their market strategy, and I was particularly wondering how does Ferroglobal utilize imports from its non-U.S. affiliates in the U.S. market? Some of it may have to be post-hearing but ^^^^

(Pause.)

MR. KRAMER: I mean there are, you know, many of the imports in 2016 were product from South Africa that was sold by FerroAtlantica before FerroGlobe existed, okay. So that's really a flow that predates the --

COMMISSIONER WILLIAMSON: You said 2016.

MR. KRAMER: '16 right, because they're --

COMMISSIONER WILLIAMSON: Now when was the merger again?

MR. KRAMER: The end of '15. But sales are made in the end of '15 for '16.

COMMISSIONER WILLIAMSON: Yeah, okay.

MR. KRAMER: And you know, the market has been so depressed that, you know, there have been only a small volume of imports from sources other than the subject imports, you know, since then.

COMMISSIONER WILLIAMSON: Okay, sorry.

(Pause.)

COMMISSIONER WILLIAMSON: Yeah. Mr. Perkins, can you help us clarify this?

MR. PERKINS: Yes sir. At the end of 2015 before the merger, FerroAtlantica had an entity here in the U.S. that was selling their product out of South Africa. So they had committed, you know, to volumes to bring into the U.S. in 2016. We honored those commitments, but that was -- I think those numbers you'll see severely curtailed from years before.

And then throughout '16 as the market declined, they started shutting down capacity even in South Africa. So you know, our strategy is we want to sell U.S. product to U.S. customers. That's our number one goal at this point. It's not to bring in material from other

locations. We want to sell domestically produced product to domestic customers.

COMMISSIONER WILLIAMSON: Okay.

MR. KRAMER: And that commitment is reflected in the fact that the company has invested in restarting the U.S. operations.

COMMISSIONER WILLIAMSON: Okay, yeah. Thank you for that clarification. Maybe post-hearing, the Respondents have made some allegations regarding the subject, if you can address those. Thank you.

Post-hearing also, I think Commissioner Broadbent had asked some questions about the impact of Mississippi Silicon and their entry into the U.S. market, and I mean Ms. Lutz acknowledged that that entry could have had some impact on the price in the U.S. market and all. But you sort of said it's really more the imports.

So post-hearing, maybe you can go -- give a little bit more weight -- how much weight should be given to each of those factors, and that's something you may want to think about and address post-hearing.

Mr. Williams, I was just wondering whether or not the plants in D.C. Alabama and Mississippi Silicon, are they also unionized, either with your union or other unions?

MR. WILLIAMS: Not that I know of.

COMMISSIONER WILLIAMSON: Okay.

MR. SCHAEFERMEIER: Martin Schaefermeier for Petitioner. We looked at that information and we looked at and I think it was a Department of Labor report that said I think in the third quarter or fourth quarter of -- I believe it was the third quarter of 2017 at that point, DC Alabama was not unionized. There was no union there.

COMMISSIONER WILLIAMSON: Okay, and what about Mississippi Silicon?

MR. SCHAEFERMEIER: We did not look at Mississippi Silicon. I'm sorry. I just don't know.

COMMISSIONER WILLIAMSON: Okay. No, I was just wondering. I realize with the shutdown for a year that it's really been very difficult for the workers. I was just wondering, is there anything that the unions and the company have done to try to keep or make Globe more competitive in this market?

MR. WILLIAMS: I mean -- well I mean we came back ^^^^ oh, Antonio Williams. They came back and they invested into the plant and training and other stuff to get us back where we was.

COMMISSIONER WILLIAMSON: Okay, thank you.

MR. HUCK: Duane Huck, one further comment. As we've done over the years, any time there's training needs amongst the Globe plants, we share those resources to help support, you know, a plant such as Selma coming back

online, to make them, you know, efficient right off the bat. Especially if you don't get all the workers back that were laid off originally, there's additional training that's required.

So we send qualified trained resources from the other plants. We also invested, you know, capital money to make the plant operate efficiently at a highly, a high utilization rate, to maximize capacity. So those are things that we do.

COMMISSIONER WILLIAMSON: Okay. Thank you for those answers. My time has expired.

VICE CHAIRMAN JOHANSON: Commissioner Broadbent.

COMMISSIONER BROADBENT: Yeah. Mr. Williams, thanks for being here. It means a lot to have you here. How has the change in the ownership a couple of times since 2006 affected the operations at the Selma plant, from your perspective?

MR. WILLIAMS: Antonio Williams. Since we came back, you know, you could see a lot of improvements with equipment and other stuff that -- some of the stuff we didn't have, and getting everybody back to work and we hired some more men than what we had since we came back.

COMMISSIONER BROADBENT: So it's been -- it's been basically positive and upward improvements?

MR. WILLIAMS: Yes.

COMMISSIONER BROADBENT: Okay. I had some questions about this domestic supply coming online, probably for the two industry witnesses from Global, I mean yeah, from Globe. I'd like to understand the role of other U.S. producers in this market. When Mississippi Silicon decided to enter the U.S. market as a producer, was there insufficient supply in the U.S. market?

MS. LUTZ: For as long as I've been working on silicon metal cases, the domestic industry has never been able to supply 100 percent of demand. However, there have always been adequate -- more than adequate import supplies to make up for any shortfall.

COMMISSIONER BROADBENT: Can you discuss the reasons why the company Hightest is planning to start production of silicon metal in Newport, Washington, given current market conditions in the U.S. silicon metal markets? Probably Mr. Perkins, I think.

MR. PERKINS: No, ma'am, I don't know.

COMMISSIONER BROADBENT: Did you have any views on that Mr. Huck? Okay. What advantages might Hightest have in starting production the Pacific Northwest, if you had to speculate?

MR. PERKINS: I don't know, maybe other than power rate. It would be a guess. I just don't know.

COMMISSIONER BROADBENT: Yes. I mean they're seeing opportunity in this market, no doubt, not the dire conditions you're portraying.

MR. KRAMER: I mean I think it's fair to assume that they are aware not only of current conditions, but of the fact that effort is being made to obtain relief you know to address the collapse in prices that occurred.

COMMISSIONER BROADBENT: Has anybody from Globe talked to them?

MR. KRAMER: I have no knowledge.

MR. PERKINS: I spoke to one gentleman this morning, but no, as far as substantive discussion, no ma'am.

COMMISSIONER BROADBENT: Okay, thank you. How do you respond to joint Respondents' argument on page 53 of their brief that Ferroglobe responded pretty aggressively to thwart Mississippi Silicon's entry into the U.S. market? I think they mounted an environmental challenge and then there were some other tactics that were bracketed on page 54.

MR. KRAMER: Not Ferroglobe, but a party affiliated with Globe filed an environmental action challenging the approval of the construction of the plant, which Globe believed was -- you know did not follow proper procedures and whether there was political influence on the authorization. And Globe continues to think that the claims filed had merit, the District Court found against Globe.

The case has been appealed to the United States Court of Appeals.

COMMISSIONER BROADBENT: What were the allegations? What criteria didn't the construction meet?

MR. KRAMER: I'm not sure I'm going to give you or remember the precise details. I'd be happy to put in the post-hearing brief, but it concerned such things as notice and comment and giving interested parties a fair opportunity to put evidence into the record to comment on studies regarding the impact of emissions from the plant. You know whether it followed proper procedure under state law and federal law and so that goes -- following proper procedures and taking into account evidence with respect the environmental impact of the facility.

COMMISSIONER BROADBENT: Okay. I mean it seems like you're pretty aggressive all the way around in a lot of different arenas against the competition.

MR. KRAMER: I will agree with you that if the company is confronted with unfairly traded imports it has acted to --

COMMISSIONER BROADBENT: But I mean using different avenues to go against the same competition.

MR. KRAMER: Well, I will agree that they filed a lawsuit, which they believe is well founded concerning whether the environmental impact of that plant was properly

-- a proper opportunity was provided to evaluate that.

COMMISSIONER BROADBENT: Okay.

MR. KRAMER: But I don't agree with the wide-ranging characterization that they were not properly addressing the -- the new company.

COMMISSIONER BROADBENT: Okay. Well, there's some other tactics I think that are discussed there. I think are bracketed on page 54, so if you could just address the totality of your efforts to deal with the competition here.

MR. KRAMER: We'd be happy to address the allegations.

COMMISSIONER BROADBENT: That'd be great. Thank you.

Mr. Kramer, within your impact analysis, you frequently perform an analysis with and without Mississippi Silicon and we've been discussing that. Just to summarize, and maybe Ms. Lutz, you could say it once more just so I get my arms around it, why is the industry's performance relevant without Mississippi included, given that we have to look at the industry as a whole.

MS. LUTZ: As I stated earlier, the Commission often sees industries where when faced with unfairly traded imports producers have to respond either by lowering prices or by losing sales. And in cases where you have both of

these factors going on with respect to different companies, it can mask some of the trends. So for example, if you were -- and the Commission doesn't do this, but if you were just to look at the volume trends you might say, well, this industry is doing great. But while these factors look positive, there are reasons that they are positive dealing with timing issues, but that the totality of the record shows that the domestic industry is pretty severely injured by the subject imports.

COMMISSIONER BROADBENT: Okay. And then what affect do you think the entry of Mississippi Silicon had on U.S. prices?

MS. LUTZ: There are some confidential data that I'd be glad to discuss in the brief, but I think that from our discussions with Globe when they were competing in the market they were finding competition against subject imports. They weren't finding the same level of competition against Mississippi Silicon. There is also a confirmed loss revenues allegations, but again, there's some confidential information that we'd be glad to discuss post-hearing.

COMMISSIONER BROADBENT: Okay. I didn't get what you were saying. You can put it in a brief, I guess. Okay.

Why do you think Mississippi Silicon has decided not to participate in the petition or provide briefs in this

investigation?

MR. KRAMER: Mississippi Silicon is owned by a Brazilian producer that is subject to investigation and so I can't speak for them, but they have an interest as a domestic producer and then they're also subject to the case. So in those circumstances, they haven't participated in this part of the process. The Commission did visit their facility and has obtained information, both to the questionnaire process and in that visit bearing on the merits of the case.

COMMISSIONER BROADBENT: Okay.

MR. SCHAEFERMEIR: I'd like particularly to point the Commission to very pertinent statements in the -- by Mississippi Silicon in the verification notes and the plan verification notes. Yes, I'm sorry; it was the plant visit actually.

COMMISSIONER BROADBENT: Point the Commission to comments at the plant visit?

MR. SCHAEFERMEIR: The record reflects the Commission's notes, the staff's notes of the plant visit to Mississippi Silicon.

COMMISSIONER BROADBENT: Right.

MR. SCHAEFERMEIR: And when you read those notes are very relevant statements to your question right now with respect to -- I don't want to go further just to protect the

proprietary information and we can identify it and even quote those notes -- the staff's notes from the plant visit.

COMMISSIONER BROADBENT: Okay.

MR. SCHAEFERMEIR: Again, I don't what to -- they were statements by Mississippi Silicon itself very relevant to your question.

COMMISSIONER BROADBENT: Okay, thank you very much.

VICE-CHAIRMAN JOHANSON: Respondents take the position that at its core this case is about Ferroglobe's efforts to reinforce its control of the U.S. silicon market, and this can be seen at page 7 of the Wacker/Simcoa brief. How do you all respond to this allegation?

MR. KRAMER: I think the most direct response is that if Ferroglobe controlled the U.S. market we would not have seen the conditions and the results of -- they wouldn't have seen the downturn in terms of the severe price decline and we wouldn't have seen the severe adverse impact of that on its operations. And in truth, they don't control the market. It's a highly competitive market as we've described in our testimony. You know there is no global power that some how controls things in the U.S. or has the ability to do that.

MS. LUTZ: I think it's one of many contradictions in Respondents' arguments in their briefs

where you're supposed to accept that Globe, Ferroglobe now controls so much of the market that they control prices. Well, the merger took place in late 2015 and in 2016 prices fell very low. But also, nobody has control over the market because it's global prices. Well, which is it? Is it we're all following global price trends? Ferroglobe is ruling the market and controlling these prices? I suspect that if Ferroglobe were controlling the prices, prices would not have fallen so low in 2016.

VICE CHAIRMAN JOHANSON: Thank you, Ms. Lutz and Mr. Kramer.

How do you respond to the testimony at the conference from Wacker Silicon North America official, which Respondents highlighted in their brief that "Ferroglobe failed to timely supply the contracted amount and repeatedly pushed us to consider other supplies, including specifically Mississippi Silicon and Simcoa in Australia," and this is at page 58 of the Wacker/Simcoa brief.

MR. KRAMER: We don't have a witness here that has direct knowledge, but we'd be very happy to respond in full to that in the post-hearing.

VICE CHAIRMAN JOHANSON: Okay, thank you, Mr. Kramer.

And I have a similar question to the one I just posed. Respondents refer in their brief to purchasers'

declarations alleging multiple problems experienced by Ferroglobe's customers, including missing delivery windows, supplying substandard product, and abandoning aluminum producers when higher margin contract sales in the chemical sector became available, and this is seen at page 11 of the Wacker/Simcoa brief. Is there a reliability issue with Ferroglobe's products and services?

MR. PERKINS: No, sir, not to my knowledge. I would like to see the factual basis behind that.

VICE CHAIRMAN JOHANSON: Okay, thanks, Mr. Perkins.

Respondents have made arguments that several of Globe's key inputs are not in line with the same costs reported by the other two U.S. producers, and you can see this at page 10 of the Wacker/Simcoa brief. How does Globe respond and/or what facts explain this pattern?

MS. LUTZ: I suspect we will have to address this, at least, in part, in the post-hearing brief because it deals with confidential information. But certainly, a lot has publicly been said about the coal prices. Globe does source coal from a related party. It records that in its books at transfer prices, which are part of the audit when they are in their annual audits and the auditors have signed off on it.

In general, when the Commission is faced with

arguments regarding -- asked to compare domestic producers in terms of their cost structure the Commission generally says we take the industry as we find it. In fact, I think that comment was made earlier when we were discussing the Mississippi Silicon -- some of our calculations excluding them. And I think this is a case where you take the industry as you find it, but I think their arguments are without merits and we will address it further in the post-hearing brief.

VICE CHAIRMAN JOHANSON: Thank you, Ms. Lutz.

When imports are internally consumed by a vertically integrated supply chain and never sold on the merchant market is there a price effect of these subject imports on merchant market silicon metal prices?

MS. LUTZ: There certainly can be, especially, in the case of Dow Corning, which, as they said they're the largest consumer of silicon metal. I believe that's what they said. They internally consume and they purchase on the open market. Every pound that they internally consume is a pound that they do not buy on the open market. And to the extent that they're benefiting from subsidies and are below costs sale or dumped sales that affects their other suppliers.

Furthermore, the companies that compete with them -- so Dow Corning is gaining the advantages of

subsidies and dumped imports. Well, their competitors in the silicones and polysilicon market presumably face a lot of pressure in competing with them and will demand lower prices as well. So yes, I think the internal consumption is relevant and does affect the domestic market.

VICE CHAIRMAN JOHANSON: Thank you, Ms. Lutz.

I now have two questions regarding threat. How do you square the construction of the new Mississippi Silicon plant in 2015, the first built in the United States since the 1970s, and the new silicon metal production facility in Washington State proposed during the period of investigation with conditions in the U.S. market that threaten material injury by subject imports? Do these investments and plans demonstrate confidence that marketing conditions are favorable for growth and profitability in the U.S. silicon metal industry at this time?

MS. LUTZ: In general, I think that we've certainly placed much more emphasis on current material injury in this case based on the performance of the domestic industry.

With respect to the addition of Mississippi Silicon, as we've said, they made their decision to enter the market and started building their plant at a time when prices were high. And while prices have improved since the filing of the petition, we expect that if a negative

determination is made prices will fall right back down again as subject imports feel free to do whatever they want in the U.S. market. That Mississippi Silicon will have a very hard time operating in the U.S. market.

With respect to the new plant being considered, I'm not sure we've looked at that all that much, but it still seems that it is in a fairly theoretical stage.

MR. KRAMER: Over the years there have been many reports of parties considering investment in new facilities and Mississippi Silicon is an exception in that actually came to fruition, so I think that not too much weight should be placed on initial reports about possible construction or an additional plant.

VICE CHAIRMAN JOHANSON: Okay, thank you Mr. Kramer and Ms. Lutz.

And I have a one more question regarding threat. Dow Corning has argued that Rema, the Brazilian producer, plans to replace all of its imports of silicon metal from Brazil to the U.S. market with domestically-produced silicon metal from its new facility in Mississippi. This is at page 50 to 51 of Dow Corning brief. How does the stated exits from the U.S. market of Rema's Brazilian-produced silicon metal imports support finding a potential threat of material injury as regards Brazil?

MS. LUTZ: I think there are some proprietary

data that we would need to address in the post-hearing brief, but Rema is one of four, five suppliers in Brazil, so they certainly aren't the only party that can threaten to harm the domestic industry.

VICE CHAIRMAN JOHANSON: Okay, thank you, Ms. Lutz. My time is about to expire. Commissioner Williamson.

COMMISSIONER WILLIAMSON: Thank you, Vice-Chairman.

So kind of related to that prior question, Dow has argued that subject imports that are consumed by affiliates to make downstream products cannot be causes of injury and I wanted you to respond to that. I think you already said a few things on that.

MS. LUTZ: Right. As I said before, Dow Corning is also the largest purchaser of silicon metal and every pound that they consume internally is a pound that they are not purchasing on the open market and benefiting from subsidies and dumped product presumably causes them to put pressure on their other supplies. And at a level of competition among silicones and polysilicon producers, if one party is benefiting from dumped and subsidized imports, that places pressures on the other producers of these downstream products to lower their costs in order to compete.

COMMISSIONER WILLIAMSON: Okay, thank you.

Is it your position that the captive production provisions apply in this case? I don't think you specifically stated it, so I wondered?

MR. SCHAEFERMEIR: We don't believe that the captive production provision applies because of the case law interpretation of the term "internal transfers."

COMMISSIONER WILLIAMSON: Do you want to elaborate or do you want to do that post-hearing?

MR. SCHAEFERMEIR: Internal transfers, as we read the case law, refers to transfers within the same legal entity and because that doesn't exist in this case we are not arguing for application of the captive production provision.

COMMISSIONER WILLIAMSON: Okay. Thank you.

What have been the major trends in silicon metal consumption in the United States during the past five years? Which end use sectors and applications have increased or decreased the most and why?

MR. PERKINS: I think over the last five years it's been relatively flat. I think automotive production has been relatively flat. The other sectors, once again, I think is relatively flat.

COMMISSIONER WILLIAMSON: Any shift among consuming sectors?

MR. PERKINS: Not of the top of my head that I

can think of any.

COMMISSIONER WILLIAMSON: What about going forward? I mean we keep hearing about more aluminum in the auto industry.

MR. PERKINS: Well, once again, I think the automotive industry is looking relatively flat and I think that most of the projections for 2018 mirror pretty much the 2017 level.

COMMISSIONER WILLIAMSON: Okay.

MR. PERKINS: Yes, sir, I think that would be for all sectors. I was looking at silicon metal in aggregate.

COMMISSIONER WILLIAMSON: Okay. Nothing exciting in the future, nothing hopeful for the future.

MS. LUTZ: I would also add that there have been a number of trade actions involving aluminum products recently and I suppose that could affect U.S. production of aluminum and therefore consumption of silicon metal in that production.

COMMISSIONER WILLIAMSON: Okay, thank you.

What are the differences in the specifications of silicon metal required by producers of chemicals versus producers of polysilicon?

MR. PERKINS: If you look at the basic silicon metal composition -- here's some right here -- the

differences are very, very -- I won't say minor, but they're very nuanced. I mean the difference in one -- like one sector would want .5 max iron and another sector it might be a .6 max iron and another one a little lower of .25, so the differences between the sectors are very small, the same thing with calcium.

Obviously, if you are selling silicon metal to an aluminum operation they're not worried about the aluminum content in it, but to a silicon chemical manufacturer he may be looking at aluminum. But even at that level, you're .4 or .5, something like that. It's a very, very small change within the specifications between the various sectors.

COMMISSIONER WILLIAMSON: What about the differences in comparative size of U.S. consumption of silicon metal and between the polysilicon and the chemicals sector?

MR. PERKINS: I'm not sure I understood the question, sir.

COMMISSIONER WILLIAMSON: Well, with the demand how is it allocated between polysilicon and chemicals?

MR. PERKINS: You're talking about the relative size of the market?

COMMISSIONER WILLIAMSON: Yes, exactly.

MR. PERKINS: Silicon's is much, much larger than the polysilicon industry.

COMMISSIONER WILLIAMSON: Okay. And going forward, it's probably going to stay that way?

MR. PERKINS: Yes, sir.

COMMISSIONER WILLIAMSON: Okay. Can you explain the differences in the production processes for silicon and ferrosilicon and how do you determine which product is made at a plant and explain the process for switching over?

MR. HUCK: Well, the main differences in silicon you're trying to keep iron contamination out of the process and make as high a content of silicon product as possible. With ferrosilicon you actually add iron units to the process to obtain a certain level of iron content in the metal.

Concerning changing over from one product to the other there is some proprietary information in doing that, but Globe has been able to do that successfully over the years.

COMMISSIONER WILLIAMSON: Okay. And maybe post-hearing you can --

MR. HUCK: Well, I think there was a question about which are going to produce. I think Globe we have proven or our financials have proven over the years that Globe performance is better when we're making silicon metal on every furnace that we can make silicon metal on. When we get to situations that we've seen over the last few years rather than shut down a furnace could we possibly make

ferrosilicon profitably? That's another discussion, but long term we would prefer to make silicon metal on every furnace that we can produce silicon metal on.

COMMISSIONER WILLIAMSON: Okay.

MR. HUCK: I might add the other factor in the two products, ferrosilicon and silicon, is the raw material selection and the vertical integration that Globe has is geared toward silicon metal production.

COMMISSIONER WILLIAMSON: Okay. And post-hearing maybe you can address whether or not Globe has made switches during the period of investigation from silicon to ferrosilicon.

Can you discuss the closing and idling of Globe facilities during the period of investigation and whether these were related to subject imports or to other factors?

MR. KRAMER: As reflected in our briefs, the extremely low levels to which prices were driven in the U.S. market forced Globe to reduce capacity and so that is the primary reason for those reductions. In one case, which is the Niagara Falls plant, there also was a strike at a major customer served by that plant. So at that furnace there were two factors that resulted in the shutdown.

COMMISSIONER WILLIAMSON: Okay. If there are any other details regarding factors that you want to address post-hearing it'll be helpful.

MR. KRAMER: Sure.

COMMISSIONER WILLIAMSON: Okay. This may have already been asked, but has Globe been able to meet its contractual commitments toward customers during the period of investigation and have there been periods when it has not and can you explain the circumstances?

MR. PERKINS: To my knowledge, we've met shipping schedules, contractual arrangements. That question from Commissioner Johanson a minute ago really caught me by surprise. I don't know of any that we've missed.

COMMISSIONER WILLIAMSON: Okay.

MR. PERKINS: That's a surprising allegation to me.

COMMISSIONER WILLIAMSON: Okay. Okay, thank you.

VICE CHAIRMAN JOHANSON: Commissioner Broadbent.

COMMISSIONER BROADBENT: Sure.

Mr. Kramer, can you discuss the extent to which trade conflict with China, particularly the Chinese decision to impose trade remedies on U.S. polysilicon producers has affected growth in production of U.S. polysilicon and demand for the silicon metal?

MR. KRAMER: I don't think I'm really the person to speak to that. Could you restate the question for us?

COMMISSIONER BROADBENT: Sure. Can you discuss

the extent to which trade conflict with China, particularly the Chinese decision to impose trade remedies on U.S. polysilicon producers has affected growth and production of U.S. polysilicon and demand for silicon?

MR. PERKINS: We do have a major customer that has been curtailed in the amount, basically solar silicon that they are producing because of that conflict.

COMMISSIONER BROADBENT: Okay. And so what effect has that had on demand in the U.S. market?

MR. PERKINS: Well, it's lessened it to some degree.

COMMISSIONER BROADBENT: Yeah. And then, have there been cutbacks in U.S. production as a result of that conflict?

MR. PERKINS: In the production of polysilicon?

COMMISSIONER BROADBENT: Yes.

MR. PERKINS: Yes, ma'am, I think so.

MS. LUTZ: I suspect that the afternoon panel will be better positioned to answer that question.

COMMISSIONER BROADBENT: Right. I just wanted your perspective on it. That would be helpful.

MR. SCHAEFERMEIER: One additional point, Martin Schaefermeier. During the same time, there was also a start of a Wacker facility in Tennessee. So whatever impact there may have been, with respect to one customer, was offset by

the new facility established in Tennessee by Wacker.

COMMISSIONER BROADBENT: Okay. This is for Mr. Perkins. You stated that you do not see purchasers requiring certain boron contents in your silicon metal sales, but you also stated that for those customers seeking maximum boron content, Globe was able to meet their needs. I'm just trying to get a clarification out -- which is it? Did they ask for particular boron contents or not?

MR. PERKINS: For those that have given us a specification where a line item is boron, yes, ma'am, we can hit that specification. We always have. We have not received a specification and told that customer we can't meet that. That has never happened.

COMMISSIONER BROADBENT: Okay, but certain customers do say they need maximum boron content?

MR. PERKINS: Yes, ma'am, there are specifications. But most of those fall around 40ppm, parts per million. And I think the Commission questionnaire was talking about 20 parts per million. I've never seen a spec requesting that low of boron and, you know, I just haven't seen it.

COMMISSIONER BROADBENT: In your production, how do you control the different levels of boron content?

MR. HUCK: Duane Huck here. We know, as Mr. Kramer mentioned, we had done some R&D work in the past and

so we know through raw material selection and different processing, we can affect the boron levels.

MR. KRAMER: I think it's very important to understand -- may I add to his answer?

COMMISSIONER BROADBENT: Mm-hmm.

MR. KRAMER: I think it's very important to understand the part of the testimony to explain that, for a large portion of the period, simply through, as a function of the process Globe was using in its day-to-day manufacturing, the inputs it was using, it was producing very low boron content material.

In fact, material meeting this 20 parts per million level, which is not a commercial standard, and the way we know that is because, for customers that have a maximum boron level, Globe tests the boron content. And it uniformly was finding that it was finding 20 parts per million, meeting the 20 parts per million threshold, so it's not that --

I mean, in order to consistently do that, Globe would have to be conscious of the raw materials and the process. But it was doing that simply in its normal process through much of the period.

COMMISSIONER BROADBENT: Okay.

MR. SCHAEFERMEIER: Martin Schaefermeier with one additional point. I think it's important to understand

that boron is only of relevance to the very small section of the market that consumes silicon metal in producing polysilicon. That's a minority share of the market. All other customers' silicons, primary and secondary aluminum, do not care and do not specify the boron content. And as Mr. Perkins testified, low lost sales, particularly in the primary and secondary aluminum segments, where boron just doesn't make a difference.

COMMISSIONER BROADBENT: Okay, great. Thank you. Mr. Perkins, what are the primary imports used in the production of silicon metal? And where do they come from?

MR. PERKINS: I'm sorry, would you repeat that, please?

COMMISSIONER BROADBENT: Sure. What are the primary inputs used in production of silicon metal and where do they come from?

MR. PERKINS: Maybe Mr. Huck. But it's -- yeah, I believe I covered this in my statement, but it's quartz sourced out of Alabama, North Carolina. It's low-ash coal sourced out of Kentucky mainly. Charcoal and wood chips, in some cases, metallurgical coke. Those are the main inputs.

COMMISSIONER BROADBENT: Okay. And then, what's been the price trend of those primary raw material inputs over the past five years?

MR. HUCK: It's not something I've looked at

real closely. But I think they've been relatively flat.

MR. KRAMER: Our questionnaire responded to that issue, and I think the answer given was that, in for some inputs, it went up and some it went down, but on an overall basis, it was relatively flat.

COMMISSIONER BROADBENT: Okay. Good, yeah, I think if you supplied that for the post-hearing, that'd be helpful. Ms. Lutz, when imports are internally consumed by vertically integrated supply chain and never sold on the merchant market, is there a price effect of the subject imports on merchant market silicon metal prices?

MS. LUTZ: There certainly can be. The main example of this internal consumption and vertical integration is Dow Corning, which is also the largest purchaser -- they claim they are the largest purchaser of silicon metal. They do consume some internally, but they also purchase a lot on the open market. Every pound that they do internally consume, they do not buy, and benefiting from subsidies and dumped product, presumably causes them to put pressure on other supplies to reduce their prices.

COMMISSIONER BROADBENT: Okay. I think I'll conclude my questions at that point. Thank you very much.

VICE CHAIRMAN JOHANSON: Respondents have argued that the Commission should not exclude Dow Corning from the domestic industry as a related party. They contend that Dow

Corning is a significant U.S. producer, that it does not import silicon metal from Brazil to benefit from dumping or subsidization, that the inclusion of this data does not skew the financial data for the industry and that the firm's primary interest is in domestic production rather than in importation. And they argue this at Pages 6 to 16 of the Dow brief. Should we include Dow Corning in the domestic industry under the circumstances presented on this final record?

MR. KRAMER: No, you should not. Dow Corning should be excluded from the domestic industry. Under the Commission's criteria, it would be properly excluded when you look at the relationship between its imports and its domestic production, it's very clear that Dow Corning is predominantly a consumer and an importer, not predominantly a producer. And despite their disclaimers, they do in fact benefit and choose to benefit from subsidies and unfair pricing.

VICE CHAIRMAN JOHANSON: Okay, thank you, Mr. Kramer. Ms. Lutz?

MS. LUTZ: I would just add that, while we have certainly made the argument that it should be excluded as the Commission did in its preliminary determination, from an injury point of view, there are still clear declines in the condition of the domestic industry.

And the Commission collected data on both open-market operations and total-market operations. So you can see the differences in results, including and excluding this captive consumption.

VICE CHAIRMAN JOHANSON: Thank you, Ms. Lutz. Respondents have argued that Globe was the price leader throughout the period of investigation and increased its pricing power with the merger creating Ferroglobe and this is argued in the Dow Corning brief at Page 25. Could y'all please respond?

MS. LUTZ: I can start with saying that the merger took place in late 2015, so presumably Globe was exercising this enormous market power in 2016 when prices from about $1.10 to $.86 a pound. So I do not think that, if Globe had such power that it would have used that power to cause prices to decline.

VICE CHAIRMAN JOHANSON: Thanks, Ms. Lutz. Respondents claim that rather than fulfilling robust demand in the secondary aluminum market, the U.S. industry has made a business decision to focus on the polysilicon and chemicals market. This is argued on Page 41 of the Wacker Simcoa brief. Do you all agree? And to what extent does the industry compete in all parts of the market and facing competition in the various parts of the market?

MR. PERKINS: We supply all sectors of the

market. I think right now we're probably holding more inventory than we would like to and if we could sell it, we would sell it. I mean, we sell to the polysilicon industry. We sell to the chemical industry. We sell to the primary and to the secondary aluminum industry. And large volumes in all of them.

MS. LUTZ: So the Commission has done a number of investigations on silicon metal. And what it has found since the very first investigation in 1990 was that, as new suppliers, particularly imports, come into the market, they tend to penetrate the secondary aluminum market first, because it has the most lenient specs and the shortest qualification times.

So as subject imports increase in volume, they took over a larger share of that segment, pushing the domestic industry out. If Globe wanted to maintain share in that market, it would've had to lower its prices even further, which is -- their prices have already been pushed low enough.

MR. PERKINS: Yes, and most of the production out of the Selma, Alabama, operation was destined for the secondary industry. So as Ms. Lutz was pointing out, as we were under greater and greater threat from the subject imports, unfortunately, Selma, Alabama was the most vulnerable plant at that point.

MR. KRAMER: I just want to clarify that Mr. Perkins used the word threat, but the record shows that Globe was being aggressively undersold in those sectors during that period, which resulted in not being able to continue to supply material from that facility.

VICE CHAIRMAN JOHANSON: Okay, thank you, Mr. Kramer. Thanks to all the witnesses today. That concludes my questions. Commissioner Williamson?

COMMISSIONER WILLIAMSON: Thank you. Just a couple of questions. Wacker argues that U.S. prices began--and actually you've touched on this before, but I just wanna make sure I understand your answer--Wacker argues that U.S. prices began to rebound five months before this case was filed, so on Page 55 of their brief. Can you comment on this?

MS. LUTZ: Spot prices had begun to rebound somewhat prior to the filing of the case, but they were still at extremely low depressed prices. And in fact, and are reflected in the 2017 results for the domestic industry, that while prices had started to improve, they were still very low.

COMMISSIONER WILLIAMSON: Okay.

MS. LUTZ: And the continuing improvement is largely attributable to this case. And that's not our opinion -- well, it is our opinion, but it's also reflected

in many of the industry press articles that we have read.

COMMISSIONER WILLIAMSON: Okay. What may have contributed to the improvement in the period five months before the petition was filed? Are there other underlying trends that also are present?

MS. LUTZ: Published prices fell below $.86 a pound when earlier in the POI they had been significantly higher. I suspect that more and more suppliers to the market just didn't wanna supply at that price. And causing prices to start to increase.

COMMISSIONER WILLIAMSON: Okay, thank you. Anything you could add post-hearing that the relationship -- we're doing a lot of trying to see how much of this, how much of that was this after -- thank you. My last question. In post-hearing, please discuss any prior Commission determinations that address subject imports captively consumed by an importer. How do we deal with this issue?

MS. LUTZ: Are you referring to captive consumption of imports? Or -- because we have captive consumption with respect to domestic production, too, so I just wanted to make sure I understand what you're asking.

COMMISSIONER WILLIAMSON: Yes, imports.

MS. LUTZ: Imports. Okay.

COMMISSIONER WILLIAMSON: Okay. Thank you. I have no further questions.

VICE CHAIRMAN JOHANSON: Commissioner Broadbent?

COMMISSIONER BROADBENT: Yeah, this is just for Globe. I think most of this you can put on the record. Beginning on Page 76 of their pre-hearing brief, joint respondents placed your financial performance in 2016 in the context of four events or decisions by Globe.

During that year, 2016, they state that Globe decided to pay the outgoing executive chairman a large sum, as whatever, golden parachute, I guess they call it -- they state that the idling of Globe's Niagara, New York, facility was related to an event independent of subject import competition.

They make assertions with respect to Globe's raw material sourcing strategy. And finally, they assert that Globe is itself to blame for behavior in the U.S. market, given its market dominance. So please respond to these assertions, either here or in your post-hearing brief.

MR. KRAMER: We'd be happy to respond comprehensively. I'd like to point out that the payment that you're referring to, you know, was a severance payment by the global company to the global executive chairman. That was not a payment by the U.S. company, is not reflected in its financial performance, is not reflected in the data reported to the Commission, and the Commission has verified that fact.

COMMISSIONER BROADBENT: Okay. Good. I thank all the witnesses for coming.

VICE CHAIRMAN JOHANSON: Thank you again for your testimony. Do staff have any questions for this panel?

MS. MESSER: Mary Messer, Office of Investigations. No, staff has no questions.

VICE CHAIRMAN JOHANSON: Do respondents have any questions for this panel?

MR. STOEL: Respondents have no questions.

VICE CHAIRMAN JOHANSON: Okay. Thank you. With that, we will take a break for lunch until 1:15. I would like to remind staff and parties not to leave any confidential business information in this room as it is not secure. And we will see you back here at 1:15. Thank you.

(Whereupon a lunch recess was taken to reconvene at 1:15 this same day.)

A F T E R N O O N S E S S I O N

MR. BISHOP: Will the room please come to order?

VICE CHAIRMAN JOHANSON: Welcome back to this hearing. You all may proceed.

STATEMENT OF BONNIE BYERS

MS. BYERS: Good afternoon. My name is Bonnie Byers and I'm a consultant at King & Spalding representing Dow Silicones. Before turning to our witnesses, I will provide a brief summary of what you will be hearing this afternoon.

Let me begin by saying what this case is not about. This is not a case about material injury or remedying material injury. The record clearly shows that there isn't any. The petitioner filed this case for one reason, to implement the global strategy of its U.K.-owned and Spanish-controlled parent company.

The strategy has involved coordinated actions to prevent the opening of a new U.S. producer, segmenting the market which its affiliate -- into which its affiliates can, sell, exercising its price leadership through price signaling at public conferences and targeting trade actions at countries where it does not have production.

They've done that to restrict imports that are necessary to supply the significant excess demand in the U.S. market and are also needed to meet technical

specifications for U.S. manufacturing of polysilicon.

In November of last year, Canada's CITT soundly rejected Globe's Canadian trade action, finding first that silicon metal is not a fungible commodity that trades principally on the basis of price.

To the contrary, the CITT concluded that silicon metal is treating purchasers more like a capital good than a commodity. The CITT also rejected the claim that subject imports cause price declines, notwithstanding evidence of underselling.

Instead, the CITT concluded that any injury suffered by petitioner was "due to unrelated factors including the global pricing down turn, Ferroglobe's strategic decision with respect to imports from non-subject affiliates, and the petitioner's high raw material costs.

The Commission should reach the same result here, not because the CITT made these factual findings, but because the ample record evidence before you compels the same result.

The witnesses you're about to hear from represent decades of experience in the U.S. and global silicon metal markets. You will hear from purchasers in the polysilicon segment, in the chemical segment, and in the aluminum segment, as well as foreign producers and importers. Their collective testimony will flatly dispel

the notion that silicon metal competes principally on the basis of price. Supply security, quality, and reliability count for far more than price in this industry.

You will also hear from our economist, Dr. Prusa that this is not a volume case as the domestic industry successfully maintained its market share during the POI. You will also hear that the decline in U.S. silicon metal prices during 2016 was very short-lived.

Importantly, the evidence shows that the decline in 2016 pricing principally reflected global pricing trends itself caused by a temporary imbalance in global supply and demand.

It was not caused by local import competition. In fact, to the extent that local competition had any significant impact on domestic prices, it was there emergence of Mississippi Silicon and Globe's aggressive efforts to thwart that company's entry into the market.

Now let me turn it over to our industry witnesses.

STATEMENT OF AGUSTIN ARGIBAY

MR. ARGIBAY: Good afternoon. My name is Agustin Garcia Argibay, and I am a global business director at Dow Silicone Corporation. Dow Silicones until recently known as Dow Corning Corporation, is a U.S. corporation and a wholly-owned subsidiary of the Dow Chemical Company.

I have worked for the Dow Chemical Company for 18 years. In my current position, I am responsible for the management of the strategy feedstocks, basics and intermediate products at Dow Silicones. I have spent my entire career in the chemical industry.

As the Commission is aware, Dow is a champion for the revitalization of American manufacturing and the country's highly skilled force -- highly skilled work force. Dow works tirelessly on behalf of its over 24,000 U.S. workers to build supply chains that make the U.S. production the most competitive in the world.

We also support free and fair trade and the strong enforcement of U.S. trade laws. Unfortunately, this case is not about protecting U.S. domestic industry from an unfair trade, but this case is entirely about the dominant global producer of silicon metal seeking to tighten its control over the U.S. market at the expense of the U.S. interest.

Ferroglobe, the U.K. owner of the petitioner, has orchestrated its commercial operations to fit its publicly-declared commercial strategy of using trade cases like this to exclude from the U.S. market any source of supply that we do not control.

Despite high levels of imports, Ferroglobe excluded South Africa, France, and Spain from all of its

trade cases. And now these Ferroglobe facilities are primed and ready to fill the substantial excess demand in the U.S. market and capitalize on Ferroglobe's exclusionary behavior.

To implement its strategy, Ferroglobe as engaged in highly unusual and inexplicable commercial behavior, which the Canadian international trade tribunal called self-injury. For example, according to its CEO, Ferroglobe idle facilities will lower costs. It also segmented the markets where their affiliates are allowed to sell and manipulate their cost in a shellgame to hide profits with their affiliated suppliers.

Other indicators of their intent include the petitioner's concerted activities to undermine and prevent new U.S. production in Mississippi. These highly aggressive and self-serving actions continue with the filing of another anti-dumping case in Europe in late 2017.

I urge you to look at, you know, closely at the data and arguments that the petitioner has made and consider all of the testimony today. The record in this case simply does not support a finding that imports are costing or threatening injury to the domestic industry.

We consider that the law, the facts, and the critical interests of our U.S. manufacturing and American workforce compel the Commission to issue a negative determination. Thank you.

STATEMENT OF CRAIG S. BROWN

MR. BROWN: Thank you. My name is Craig Brown and I am the product director for strategic feedstocks at Dow Silicones. I have worked for Dow for nearly 30 years. In my current position, I am responsible for the supply of strategic raw materials, including silicon metal. Today, I want to provide you to additional background on Dow's operations, and then address the issues of domestic --

MR. BISHOP: Craig?

MR. BROWN: Yes.

MR. BISHOP: I need you to talk directly into the mike as your --

MR. BROWN: Okay.

MR. BISHOP: -- face is down. It's not picking up.

MR. BROWN: Okay. Sorry, is that better?

MR. BISHOP: Perfect, thank you.

MR. BROWN: All right. First, let's see, I was on the conditions of competition, volume, price, impacted threat. Is that better?

MR. BISHOP: Yes, great, thank you.

MR. BROWN: Okay. First, Dow Silicones is the largest U.S. and global consumer of silicon metal. Dow Silicones refine silicon metal at major facilities in Michigan and Kentucky to make intermediates used in the

production of over 3,000 products at numerous further manufacturing sites in Michigan, Kentucky, Indiana, and North Carolina.

The products we manufacture at this sites include advanced silicones that are further manufactured into products for virtually every industry, including automotive, beauty, health care, textiles, and many others.

These silicones are the building blocks of the majority of what we all use and consume every day. Our products also generate over $1.2 billion annually in U.S. exports. We have brought samples, which you can see on the exhibit table in front of you of products forming our value chain from silicon metal, to silicon fluids, to examples of the final consumer products.

Much of the success today of our company can be attributed to the thousands of skilled and loyal employees. Dow Silicones has 625 United Steel Worker employees at our facility in Midland, Michigan and their 193 USW employees at our joint venture facility in Alloy, West Virginia.

Dow Silicone's affiliate Hemlock Semiconductor also relies on silicon metal as a starting point for its U.S. manufacturing of high purity polysilicon, which is a critical input into the production of solar panels and semiconductors.

High quality polysilicon requires high purity,

low boron silicon metal, which we source from our wholly owned facilities in Brazil. U.S. producers do not produce low boron silicon metal. As you already from the recent solar Section 201 proceeding, the U.S. polysilicon industry is already highly vulnerable as a result of ongoing trade conflicts with China that caused Hemlock to make significant layoffs and permanently close and demolish its brand new state-of-the-art $1.2 billion facility in Tennessee even before the facility started operations.

The imposition of duties on critical silicon metal supply that is unavailable from U.S. sources will only accelerate the harm to the U.S. polysilicon sector and its highly skilled manufacturing jobs.

In order to ensure the security and reliability of supply, and the necessary technical specifications, Dow Silicone sources its silicon metal from a variety of suppliers, its wholly owned U.S. silicon metal producer, DC Alabama, and its U.S. and Canadian joint ventures with Globe. We also purchased from Globe and the other U.S. producer Mississippi Silicon. And we source from our two affiliated facilities in Brazil, one of which we purchased from Globe in 2009.

More importantly, we consume 100 percent of our imports from both Canada and Brazil. None of Dow's imports of silicon metal enter the U.S. merchant market.

Second, Dow is an American company. And as an American company, the Commission should not exclude DC Alabama's subsidiary from the domestic industry as a related party. The record in this case demonstrates that the interest of our company lie primarily in domestic production rather than in the importation of subject silicon metal.

We have production at both our DC Alabama facility and in our joint venture with Globe in West Virginia, which should be considered together in order to assess whether imports exceed our domestic production.

Moreover, to improve the reliability of supply, Dow Silicone switched from buying imports from Globe's South African affiliate to buy domestic production from Mississippi Silicon to support its new U.S. facility. We do not import from Brazil to benefit from dumping or subsidization, but to source specific high purity silicon metal that we cannot source domestically as well as maintain diversity of supply for our downstream production facilities. When the Commission analyzes our interests in domestic production, we ask that you consider both our own production and our purchases from U.S. manufacturers.

Third, the Commission evaluate the unique conditions of competition in this industry when considering the impact of subject imports on the domestic industry. I will make five points on this topic.

Point A, domestic production and capacity in the United States is unable to satisfy total U.S. demand which necessitates imports. Globe does not deny this.

Point B, the entry of Mississippi Silicon in the market had a significant downward impact on prices. Globe tried very hard to prevent Mississippi Silicon from coming online. And when they finally did, the resulting price war between the two caused domestic prices to fall. As your staff report confirms, Globe was the price leader in the U.S. market throughout the period of investigation. Our brief provides several examples of this price leadership, including clear price signaling to the market by Globe.

Point D, the downstream producers are very concerned with ensuring the stability and reliability of supply. Globe has often proven itself to be an unreliable source of supply and for this reason purchasers put a premium on ensuring a diversity of supply.

Point E, the market for silicon metal is cyclical. Demand began to fall in 2015, hit a low in 2016, and began to recover in 2017. Prices are widely forecasted to continue their recovery into 2018 and beyond.

Fourth, in terms of the condition of the domestic industry, in Dow's view, much of this can be attributed to Dow's own pricing and input practices as detailed confidentially in our brief. The Canadian dumping

authority, for example, examined the pricing practices of Globe's U.K. parent Ferroglobe with respect to Globe's purchases of a key input, coal, from another Ferroglobe company Alding. The CITT concluded that Globe's overpriced purchases of coal from Alding hurt Quebec Silicon's margins and profits by forcing it to pay more for coal than it otherwise could have sourced from an unrelated supplier.

Practices like these and others raised in our brief highlight that Globe's poor financial condition is due to its own business strategies.

Fifth, the Commission should not cumulate imports from Brazil with other subject imports. Dow Silicones accounts for a large portion of imports from Brazil and all of these imports are consumed internally by Dow Silicones to produce downstream intermediate products. We do not participate in the merchant market. Thus Brazilian silicon metal moves in a very different channel of distribution from domestic product and other subject imports.

There is also a limited degree of interchangeability between Brazil Silicon metal and what is produced by the domestic industry due to the low boron content of Brazil Silicon metal. Low boron content metal is a prerequisite of the production of high purity polysilicon to meet the needs of Dow's polysilicon production.

Sixth, in terms of import volumes, imports from Brazil are not injuring the domestic industry. Public data demonstrates that imports from Brazil fell over the period of investigation. This public data actually overstates imports levels as they include imports from Dow's free trade zones that are incorporated into exported products and thus never enter the customs territory of the United States.

Seventh, imports from Brazil did not adversely affect domestic prices during the period of investigation. There is limited head to head competition between imports from Brazil and domestic product due to product differences and differing channels of distribution.

Moreover, the record demonstrates that there were other factors at work that resulted in the observed price declines, including declining demand, which has since recovered, the entry of Mississippi Silicon into the market, and the general decline in global prices which domestic prices closely track.

Finally, Globe is not threatened with material injury from subject imports from Brazil. This is not a vulnerable industry. Demand is strong and growing. Prices are on the rise and a brand new 60,000 ton per year production facility should start construction soon in Washington State.

Brazil is unlikely to increase exports to the

U.S. due to strong demand in other markets and due to Dow's high operating rates. Rima has also announced that it will switch supplying the U.S. market from its production at Mississippi Silicon. Thank you.

STATEMENT OF MARY BETH HUDSON

MS. HUDSON: Good afternoon and thank you for the opportunity to testify today. My name is Mary Beth Hudson. I am the vice president of Wacker Polysilicon North America and the site manager for Wacker's polysilicon facility in Charleston, Tennessee.

Our Tennessee polysilicon facility began production in 2016 and provided a $2.5 billion commitment to state-of-the-art high value added manufacturing here in the United States. Our Tennessee facility employs nearly 700 workers who depend on WPNA's continued operations at this site for their livelihoods. Our polysilicon operations require a reliable supply of high quality polysilicon metal -- I mean, silicon metal.

WPNA uses silicon metal as the see raw material to produce a hyper pure polysilicon. Only specialized silicon metal allows polysilicon to meet the demanding specifications required to be used in applications like solar panels.

We consume roughly 22,000 metric tons of silicon metal per year at full capacity and we expect our

requirements to grow. We are building a new $150 million dollar pyrogenics silica plant in Charleston that will require approximately 8,000 more metric tons of silicon metal per year and will add another 50 high paying and high skilled jobs to our Tennessee operations.

Globe has claimed that silicon metal in all grades, regardless of the manufacturer, is entirely interchangeable and thus competes only the basis of price. This assertion does not reflect my experience in the market place.

The quantity -- quality of silicon metal that we need at WPNA is of a higher purity than other grades, such as those used in secondary aluminum production. As I described to the Commission last year, the level of contaminants we can tolerate in our polysilicon is equivalent to a single sugar packet dissolved in a body of water two and a half times the Tidal Basin. The purity of silicon metal drives the quality and purity of the finished product.

Before price is even considered, our suppliers must pass a rigorous three-step qualification process and subsequent continuous monitoring without changes to manufacturing location, process conditions, or raw materials.

Another important factor is the supplier's

ability to provide a consistent and stable supply. Any variance in the quality of the silicon metal or supply could severely disrupt our manufacturing operations.

We prefer to buy our silicon metal from the United States. Unfortunately, U.S. supply is well short of U.S. demand, even with the addition of Mississippi Silicon to the U.S. industry in 2015.

Imports are therefore an essential part of the U.S. silicon metal market and having diversity of supply is critical to our business. Both U.S. suppliers have dropped the ball, including significant issues related to qualification in meeting timely delivery requirements. These issues have further increased our need to ensure supply diversity.

Ferroglobe's facility in Beverly, Ohio initially failed our qualification requirements due to high aluminum content. Even after we overcame these qualification issues and we initially contracted with Ferroglobe to supply 100 percent of our silicon metal demand during our critical ramp up in 2016, Ferroglobe failed to fulfill our contracted orders on time.

Ferroglobe's solution was to repeatedly push us to consider other suppliers, including Simcoa. Unfortunately, we have found that Ferroglobe is not as committed to the U.S. polysilicon industry as we are to U.S.

manufacturing.

In a search for other suppliers, we reached out to Mississippi Silicon, which also could not supply the quantities meeting our requirements and failed the qualification process due to deficiencies with physical characteristics of their product. This forced us to abandon its product and seek alternative suppliers.

And so despite Mississippi Silicon coming online in late 2015, we are unable to purchase from them until 2017. Only as a last resort, we reached out to Simcoa to diversify a portion of our supply to make up for the failure by the U.S. industry to supply our needs. For these reasons, we ask that the Commission make a negative determination. Thank you.

STATEMENT OF OLIVER MAJUMDAR

MR. MAJUMDAR: Good afternoon and thank you for the opportunity to testify today. My name is Oliver Majumdar. I am the director of Raw Materials Procurement at Wacker Chemie AG, WPNA's parent company in Germany, where I've worked for 17 years.

As the director of raw materials procurement at Wacker, I'm directly involved in all of Wacker Group's purchases of silicon metal worldwide. As a result, I'm very familiar with silicon metal production in the United States and in other countries under investigation.

I have worked to qualify a number of the subject suppliers involved in this case and to negotiate purchases with them, including Ferroglobe.

I would like to briefly address three points for you. First, silicon metal is not a commodity product. Second, the Globe FerroAtlantica merger in 2015 made it even more necessary to diversify supply. And third, the 2016 price declined for silicon metal is at the heart of this investigation, was not specific to the United States market. It was a temporary global event that has run its course.

To start, I would like to confirm the testimony of my colleague Mary Beth that silicon metal is not a fungible commodity. For example, WPNA cannot even use silicon metal from the Wacker silicon metal production plant in Norway. Our Norwegian high quality silicon metal has specifications suitable for the production silicones, but not polysilicon.

Similarly, we are unable to use silicon metal from marginal suppliers such as they produce in Kazakhstan because of quality concerns.

Maintaining a diverse supply became even more challenging after the Ferroglobe merger in 2015. As WPNA was preparing to come online in Tennessee in 2015, we expected to have at least two established suppliers in Globe and Ferro Atlantica. Due to the merger, we were left with a

sole supplier, Ferroglobe, which composed the majority of the silicon metal production capacity in the United States and Europe, the full production capacity in South Africa, and half the Canadian capacity.

To make matters worse, Globe has a history of switching to producing ferrosilicon. We cannot rely on a single supplier, particularly Globe.

I would also like to share my perspective on the short-term price declines experienced in the U.S. market starting in late 2015. These price declines were not isolated to the United States. Nearly identical price declines occurred globally including Europe and Asia. As widely confirmed by market research firms, demand for silicon metal has generally experienced steady growth, driven to a large degree by consistent growth in downstream industries such as polysilicon and silicones.

However, the silicon metal is also subject to global business cycles. In late 2015, global supply temporarily exceeded global demand, placing downward pressure on silicon metal prices worldwide. The United States was not immune to these global developments.

The entry of Mississippi Silicon in late 2015 further depressed U.S. prices during this brief period. As a purchaser of silicon metal, I witnessed firsthand price competition between Ferroglobe and Mississippi Silicon in

the merchant market, resulting in even further reductions to prices on the U.S. market.

Continued growth and demand, particularly in the chemical and polysilicon segments soon absorbed the excess supply. Silicon metal prices were fully recovered by the end of 2016 and are continuing to increase. All projections show increases in demand, supporting strong prices in 2018 and beyond. Thank you.

STATEMENT OF ERIC THALER

MR. THALER: Good afternoon, my name's Eric Thaler. I'm a senior vice precedent at Momentive Performance Materials, where I've worked for 18 years. Momentive is a global manufacturer of silicones and employs approximately 2400 people in the United States, including over 700 IUECWA union members, who are dependent on our ability to reliably source silicon metal

Momentive is the only silicones manufacturer in the United States that is entirely rely on the merchant market to source silicon metal.

I would like to make three points today. First, Ferroglobe Is an uncertain supplier of silicon metal despite being the dominant U.S. supplier, Ferroglobe regularly communicates to the market its ability to switch between Ferroglobe silicon and silicon metal. In 2013, Ferroglobe even told the ITC in a different investigation that it could

produce Ferroglobe silicon at its plants in Niagara Falls and so on.

It also produces Ferroglobe silicon at its -- and silicon metal at its Beverly plant, where it can switch between base -- switch production based on market conditions, making Ferroglobe an uncertain supplier.

Momentive cannot switch suppliers easily. Our specifications are extremely tight and not interchangeable with other chemical manufacturers. While the price may not vary between different specifications within the chemical sector, physical and chemical characteristics do. Qualifying a supplier takes up to 12 months. Even Mississippi Silicon is yet to qualify to supply Momentive. Therefore in a market where a single U.S. manufacturer dominates, diversification requires sourcing imported silicon metal.

The second factor to consider is that import competition did not impact Globe's closure during the POI. While prices declined in 2016, that was due to a decline in U.S. demand for silicon metal from the aluminum sector. And during the crucial period from the fourth quarter of 2015 to the first quarter of 2016, import prices remained stable, yet it was during that period that Globe closed its Selma plant. That closure was not due to import competition, but to aluminum sector demand and new supply from Mississippi

Silicon.

Moreover because Momentive is Ferroglobe's largest customer at its Niagara Falls plant, Ferroglobe partially closed it in November of 2016 due a strike at Momentive. Coincidentally, when Momentive restarted operations in April of 2017, the Niagara plant reopened. Therefore, Ferroglobe's financial condition has not been impacted by import competition.

Finally, Momentive's ability to diversify its sources of silicon metal is all the more difficult since the creation of Ferroglobe. The combined company now accounts for approximately 75 percent of the non-captive production in the U.S. silicon metal market. Prior to that merger, Momentive would have been able to negotiate separately with Globe, as well as silicon metal plants in France, Spain, or South Africa. Today, those plants are under -- all under Ferroglobe Control. Ferroglobe has assigned a single sales manager to negotiate our supply agreements regardless of which plant supplies silicon.

We are no longer able to obtain competitive bids from these plants separately. In light of these facts, Momentive does not believe that an anti-dumping or countervailing duty order is warranted. Thank you.

STATEMENT OF CHRISTOPHER BOWES

MR. BOWES: Good afternoon, my name is

Christopher Bowes and I am the director of investor relations and global sourcing for REC Silicon. During my 15 years at REC, I've had principal responsibility for sourcing silicon metal, including developing the corporate sourcing strategy, developing new sources, maintaining existing sources, and negotiating supply contracts.

REC is the leading producer of advanced silicon materials supplying high purity polysilicon and silicon gases to the solar and electronics industries worldwide. We are the world's largest producer of -- gas and currently employ over 530 people in or Washington and Montana locations.

Access to global markets is important to us as we export over 95 percent of our products. In addition, our ability to compete globally and the fate of our U.S. employees would be severely impaired if we were not able to access global sources of silicon metal.

There are several important aspects of REC's sourcing strategy that focus on factors other than price, including the need to maintain multiple qualified silicon metal suppliers to ensure security of supply. There's a myriad of different factors that could adversely impact our supply chain.

For example, we've seen port slowdowns and strikes, floods and fires at processing facilities, and

domestic rail car shortages. Diversity of supply is thus particularly important to maintaining a continuous supply of silicon metal.

Before the merger of FerroAtlantica and Globe, we purchased silicon metal from both of these companies. Once the merger of these two companies took place, we made the conscious decision to buy less from Ferroglobe than we previously did from FerroAtlantica and Globe combined simply because we viewed Ferroglobe as one source and we wanted to maintained a diversified supply base.

It should also be recognized that the silicon metal we purchase is a specialized high quality product. This is not a commodity product. Indeed REC has a qualification process that can take up to two years to complete. And there are only a few sources in the world that are qualified to supply REC.

And even with these qualified suppliers, there are only specific plants that are qualified from each supplier. In addition, our manufacturing process requires ground or sized silicon otherwise referred to as powder. But not every supplier of silicon metal has the capability to grind silicon. Ferroglobe, for example, only has fine sizing at one of its U.S.-based plants and that capacity is limited.

Further, we're concerned about Ferroglobe's

desire to compete against polysilicon with their announced upgraded metallurgical facility in Spain called FerroSolar. In conclusion and recognizing that there are several important factors other than price which influence our silicon metal purchasing decisions, petitioner's injuries or claims are without merit. Thank you.

STATEMENT OF MATT WILSON

MR. WILSON: I'm Matt Wilson, president of Mitsubishi Polysilicon in Mobile, Alabama. We are a polysilicon producer for the semiconductor business. Our industry supplies the raw material that makes semiconductors possible. In this day and time, semiconductors power our world just as much as gas, oil, or electricity.

Innovations in today's world require semiconductors, be it for cloud computer, autonomous cars, advanced event systems, the Internet of things, or even the huge data analysis necessary for medical breakthroughs.

This is an extremely quality oriented industry measuring impurities in our products at the parts per trillion level. As such, it is a very difficult, time consuming, and expensive process to qualify suppliers of our main raw material metallic silicon.

Over our 20 year history, we've been in contact with most of the suppliers represented here today and have at least run lab scale trials with most of them. We've also

run full and partial scale plant trials with several of them. In our process, some of these trials are successful and some are not for both quality and plant efficiency reasons.

We only have access to two domestic suppliers. The material from one of these suppliers, Globe, creates quality problems which has not allowed us to fully qualify this material for our customers and the jury is still out as to whether the other supplier, Mississippi Silicon, creates efficiency of operations problems.

For business continuity reasons, this then creates an absolute necessity to utilize foreign material. We operate in a global business environment. We sell our product in the U.S., Europe, and Asia. We compete with other suppliers from around the world. The polysilicon industry is a highly competitive market. Any price increases from our suppliers or through tariffs and duties puts an additional strain on our global competitiveness.

I'm here to represent the 250 people in Alabama that are part of this industry to tell you that this action is detrimental to our ongoing viability. Thank you.

STATEMENT OF TIAGO BORGES

MR. BORGES: Good afternoon, my name is Tiago Borges. I've been employed at Alcoa Corporation since 2005 and have been the procurement sourcing manager since 2012.

As the manager for Alcoa Silicon Metal Sourcing Strategies, I will address three points in my testimony. First, the importance of supply diversity; second, the global market for silicon metal; and third, the silicon metal decision issued by the Canadian international trade tribunal, CITT

Alcoa purchases silicon for its U.S. operations from multiple suppliers to ensure a diverse supply base. This is mission critical for us because in the event of a supply chain disruption such as a facility shutdown, Alcoa must have backup suppliers and even ready to be shipped.

As a primary aluminum producer, we simply cannot turn our smelters on and off to adjust to silicon supplies. Regarding the global market for silicon metal, prices were high in 2014 and into the first half of 2015.

Prices declined sharply in the second half of 2015 and through the first three-quarters of 2016. But as I noted in my declaration, which is included in the pre-hearing brief that Simcoa and Wacker filed, those declines were not related to the presence of subject imports. Rather they result from first global market trends. Second, the addition of significant U.S. production capacity, including from Mississippi Silicon. And third, the resulting price war between Mississippi Silicon and Ferroglobe.

The Commission also should note that the 2015, 2016 price declines were only temporary. We saw prices increasing significantly from the end of 2016 through 2017. And today, they are at pre-2015 levels.

The CITT's decision in the recently completed Canadian investigation into the impact of imports of silicon metal into Canada is highly relevant to the Commission's analysis here. Specifically, the CITT made a number of findings about the dynamics of the Canadian market that are equally true for the U.S. market.

First, there was global supply and demand imbalance in 2015 and 2016. Second, silicon metal is procured almost as though it is a capital good. And third, security and reliability of supply are paramount for purchasers' procurement strategies.

In closing, I want to emphasize that if the U.S. imposes ADCBD duties on silicon metal from the subject countries, Alcoa's sole remaining sources of supply will be Ferroglobe, its foreign affiliates to the extent that they are allowed to bid, and Mississippi Silicon. Unfortunately, U.S. production of silicon remains insufficient to meet the U.S. demand. The imposition of ADCBD duties therefore would needlessly threaten the competitiveness of U.S. aluminum with melting and casting facilities.

The impact of such a result on thousands of U.S.

workers employed by those facilities could be profound. Thank you for your time.

STATEMENT OF JAY ARMSTRONG

MR. ARMSTRONG: My name is Jay Armstrong. I'm president of TriALco Aluminum. We produce aluminum ingot primarily from scrap and our other and other members of the industry produce about 300 million pounds of metal each month that goes into the casting industry.

Silicon added to aluminum allows the aluminum to flow into complex molds. You're going to find 300 pounds in every car produced out there. You'll find it in engine blocks, transmission housings, and throughout the car in many part of the castings. It goes into motorcycles. It goes into house appliances. It's part of the fabric of American industry.

We need silicon and we need alternative supplies. I personally buy the bulk of our silicon from the Ferroglobe complex. However, I cannot rely on one company to be my supplier. In the American metal market, they just published that Mississippi Silicon was sold out and is considering expanding. Well, if Globe Can't supply the entire U.S. market, I need a silicon to run. I run 24 hours a day, 7 days a week, and I need a dependable supply and somebody I can depend on. And it can't be one single company.

The other point I would like to raise is we face considerable foreign competition. If we cannot make the product here, it can be made over sees with silicon much cheaper, up to 40 percent cheaper than it is now, and a product can be brought in and put right into our own exchanges, the NASDAQ -- are sold directly to customers. That puts out thousands of people's jobs in jeopardy. I really want to beg the Commission to think about the other industries involved and the smaller ones down the road. Thank you.

STATEMENT OF TOM WALTERS

MR. WALTERS: Good afternoon. My name is Tom Walters. Since 2001, I have been the senior vice president for Trading and Service Aluminum Corporation, which today is one of the largest scrap aluminum brokers in the United States. Thank you for the opportunity to testify.

As a major buyer of silicon metal, I would like to share my perspectives on the U.S. market. I will focus on three points. One, demand for silicon metal from the secondary aluminum market is strong and growing. Two, service aluminum does not buy silicon metal solely based on price. And three, Ferroglobe is not a reliable supplier to the secondary aluminum market.

U.S. silicon metal prices declined from the middle of 2015 to the first three quarters of 2016 as a part

of a broader global price decline due to Mississippi Silicon's market entry, but the price they are now paying to my suppliers are rising. I can gladly report that today, U.S. demand for silicon in the aluminum alloying segment is strong.

For example, service aluminum actually participates in the automotive sector and 2017 or early 2018 silicon metal demand is robust due to the increased use of aluminum in that segment.

More broadly, the secondary aluminum sector in the United States is experiencing significant growth due to inherited advantages in U.S. production, including one, the high volume of scrap generation, two, recycling, and three, access to downstream customers.

Next I'd like to tell you a little about how we typically buy silicon metal. We rely on long-term partners such as Simcoa to deliver silicon to us. These arrangements are not conducted on the basis of spot market prices. Rather, we source our silicon through contracts, typically one year long and the prices are either fixed or based on the Platts index.

It's very important to my company that our suppliers honor our contracts. That is, if the spot market declines, then I will still pay the higher contract price. And if the spot market rises, I expect our suppliers to

honor the lower contract price.

It is evident from these arrangements that neither service aluminum nor Simcoa is a price maker as to silicon metal. Rather on a yearly basis, we assess prices in the market and reach an agreement about what the price should be in the coming year.

Finally, I'd like to contrast or other current suppliers with Ferroglobe. Ferroglobe Is the largest supplier of silicon metal in the world and generally able to dictate prices to its customers. However, I've not found Ferroglobe to be a reliable supplier of silicon metal. Notwithstanding my company's significant place in the secondary aluminum segment, the truth is that Globe has only approached my company once in the last 10 years to purchase silicon. I've long understood that is because Globe is profitably selling its silicon to other customers in the higher value segments of the market. Thank you for your time.

STATEMENT OF DAVID MILES

MR. MILES: Good afternoon, my name is David Miles. I'm the vice president of Site Citizen Marketing at Simcoa and I work at all smeltering in Western Australia. I am familiar with both Simcoa's sales strategies and its processes for producing high quality silicon.

I'm here today to explain certain key aspects of

Simcoa's business. As the Commission as noted, we are Australia's only silicon producer. The Commission should note three factors that define our business. One, we have a reputation for producing a uniquely high quality product and our customers who value this quality overwhelmingly do business with us by means of long-term contracts.

Two, Simcoa has participated in the U.S. market for more than 20 years, but has neither the plans nor the means to increase our exports to the United States.

And three, Simcoa Is the price takes in the United States.

To start, I'd like to note that Simcoa has a strong reputation in the United States, Australia, Europe, scrap and other markets for producer high quality, silicon metal, delivering shipments on time, and strictly adhering to contracts. We typically silicon metal to our long-term customers on a spot, not contract basis. Our contract -- our customers view Simcoa as uniquely capable of providing high purity silicon metal, which is absolutely essential for their production needs.

In this context, high purity means that the product has low levels of impurities such as iron, calcium and phosphorous. Such specifications are very difficult to achieve and few other suppliers are able to consistently meet them.

I would also like to update the Commission on our current operations we're currently sold out for 2018 and quite likely for 2019. We will have excess capacity to manufacture additional silicon metal, nor do we have infantries from which to ship silicon metal to the United States.

The primary reason for our limited ability to ship silicon metal to the United States over the next two years includes, one, rising demand for silicon metal in Asia on the part of our parent company Shin-Etsu; and two, long-term contracts with other suppliers outside the United States.

Additionally, high logistical costs and a weak U.S. dollar make it far less attractive for us to export products here than to other markets.

Finally, we are only a small part of the U.S. market. As you heard from others today, Ferroglobe is the dominant global and U.S. silicon metal producer. Based on my experience, I can confirm that Ferroglobe exerts market and pricing power in the United States whereas Simcoa is just a price taker. Thank you.

STATEMENT OF BJORNAR OVESEN

MR. OVESEN: Good afternoon. My name is Bjornar Ovesen and I am vice president of sales and marketing of silicon in Elkem and I'm accompanied here today by Nils

Dybwad, director of sales and marketing.

Elkem is the largest Norwegian producer and exporter of silicon metal. Since this case was filed, we have failed understand why Ferroglobe has decided to include Norwegian imports of silicon in this investigation.

Unlike most of the countries under investigation, Ferroglobe did not allege subsidies in Norway. And while our company preliminary dumping margin was 3.74 percent, we believe that a fair calculation of our final dumping margin is zero.

Elkem is a responsible corporate citizen. We compete by offering a high quality product, having a reliable supply chain, and exceeding customers' technical and service requirements.

We do not engage in unfair trade.

In fact, as you already heard, this is exactly what the Canadian investigation confirmed. The Canadian investigative bodies found that Elkem was not dumping and found that Ferroglobe's injury case was unfounded.

In our view, Ferroglobe is abusing the world's trade remedy laws, having lodged its cases in the U.S. and Canada, Ferroglobe has now also brought the third case in the space of a year this time in EU against Brazil and Bosnia.

The Commission should not allow Ferroglobe to

cement their dominant position in the U.S. in this manner. Their causation case is simply unfounded.

MR. PRUSHA: Good afternoon. Excuse me.

MR. OVESEN: I'm sorry. I have a bit left. In the United States, we witnessed a sharp decline in prices in 2016 and that obviously had a negative impact on income statements of all silicon metal producers, both in the United States and subject countries.

For more perspective, this decline in prices occurred at exactly the same time as a new U.S. producer, Mississippi Silicon entered the U.S. market.

What we witnessed in the months that followed was that U.S. producers were under cutting one another on price and leading prices lower. The majority of the domestic industry sales tend to be in the chemical segment. So the impact of their self-destructive behavior should be easiest to observe in that segment.

The injury they claim is not attributable to imports. And Norway is definitely not to blame. Our export volumes have been stable since 2014 and we have no plans to increase exports to the United States.

Our capacity to produce increased quantity is limited and any incremental shipment volumes would be logically directed to the continue -- to serve the EU market because of our proximity and preferential market access.

Our brief lays our case clearly. Thank you.

STATEMENT OF TOM PRUSHA

MR. PRUSHA: Good afternoon, my name is Tom Prusha. I'm professor and chair of the department of economics at Rutgers University. I want to discuss several important incites about the economics of the silicon metal industry because so much of the information in this case is confidential, many of the slides I'm going to project will be blank or scrubbed of key information. The Commission and its staff have copies of the confidential versions of the slides. In addition, my verbal discussion of the slides will be deliberately vague.

The first point I want to make is that the U.S. silicon metal production falls far short of satisfying U.S. demand. Understanding this fact had important ramifications for the Commission's causality analysis. There is no basis for the domestic industry's argument that there's a volume issue in this case. As documented in the staff report, the quantity of U.S. producer shipments over the period look quite robust.

This trend is a clear sign of a strong industry. The trend in domestic producer's shipments stands in contrast with a decrease in subject imports. Over the full year POI, the quantity of subject imports fell by 5.8 percent.

Taking these two trends along with the decline in non-subject imports it should come as no surprise that the staff report depicts a strong and health industry. For instance, consider the domestic producer's share of apparent domestic consumption for the total U.S. silicon market.

This is commonly used by the Commission as a metric of the domestic industry's health. In this case, the conclusions are clear. The industry is not injured. In fact, the industry evidence is strength, not weakness.

One additional comment on the domestic producer's share of apparent home domestic consumption. The Commission should pay attention to the modest fraction of U.S. demand that can be met by U.S. producers. It is quite clear that the U.S. market is seriously under supplied by domestic production.

The inability of U.S. producers to meet domestic demand is widely known and is reported by CRU as seen in this table, CRU reports domestic production alone would mean massive undersupply for U.S. purchasers. I point out that in the table, CRU reports a very solid trend for domestic production. Yet even with Mississippi Silicon, the U.S. industry remains very much under supplied by domestic production.

Despite what Ferroglobe argues about injury and capacity issues, the data showed that capacity utilization

in the United States has been strong throughout the period. In the left hand side of this table in this chart, I present the domestic industry's capacity utilization as given in the staff report. Even with Mississippi Silicon's reported 35,000 tons of new capacity, the domestic industry's capacity utilization had remained strong.

On the right hand side, I present CRU's report on capacity utilization around the globe. When one compares the two figures, it is clear that U.S. capacity utilization is comparable or even higher than the average global producer. This again shows the domestic industry is not injured. The CRU table also depicts its forecast for the next several years. CRU is predicting a strong out look into the future. In other words, there's no injury and no threat of injury.

The bottom line, even with its high rates of capacity utilization, the U.S. industry's production could only meet a fraction of demand. The imports are vitally needed if downstream consumers are to remain in business consequently is it economically possible for U.S. silicon metal prices to be insulated from over all global trends. Imports have been and remain essential to meeting U.S. demand.

Visually, we can see that the U.S. industry is part of the global silicon metal industry in this particular

chart. As seen, price. As seen, prices in various markets move together and importantly, as seen over the long run, silicon metal has long evidenced a business cycle. This highlights how critical the Commission's causation analysis is in this case.

Let me now discuss pricing during the period. As seen in this chart, it's the pricing chart, but we've overlaid markers for the important events that have occurred during the period.

At the beginning of the period, the first new U.S. plant in 40 years was announced. And by late 2015, Mississippi Silicon was open for business. Two important developments occurred between the announcement and the opening. First, silicon metal demand fell below expectations and weakened prices. As was depicted in the previous slide, silicon metal has historically been subject to business cycle swings.

Second, Globe and Ferroglobe Atlantica announced their intention to merge. That merger received anti-trust approval after the conclusion of the 2016 mating season. Mississippi Silicon began producing in late 2015 and needed customers. However, it was not qualified to serve the primary aluminum and silicon producers -- purchasers. This meant that in its first year of operations, Mississippi Silicon competed hard for the customers it could serve,

which were primarily product to customers. However, Globe did not yield this volume easily. This competition pushed prices down until mid-2016.

Mississippi Silicon discovered competing with the 900 pound gorilla of the silicon metal industry was tough. In late 2016, prices turned up sharply. They have continued to rise ever since. The question is why. One answer is obvious. Demand growth picked up and drove prices up. Once again, this is evidence of a business cycle.

The other important reason is Ferroglobe's price leadership. All parties, even the petitioner, recognize that Ferroglobe is the price leader in global markets. The staff report and purchasers here today agree that Ferroglobe is the price leader. And importantly, that the 2015 merger gave the conglomerate even greater influence over pricing.

Ferroglobe regularly stresses its pricing power at public events. As seen in this slide, Ferroglobe loves to emphasize to its investors how much larger it is than its competition.

It is a well-established -- it's well-established in economics that market size conveys pricing power and nobody has more pricing power than Ferroglobe.

But size is not the only way Ferroglobe displays price leadership. Ferroglobe unabashedly tells it's much

smaller competitors how it plans to price. For example, at a large silicon metal conference in November 2016, Ferroglobe's CEO, Mr. Pedro Larrea told the gathering of industry professionals how Ferroglobe intended to start pricing.

As seen in this slide, taken from his talk, Mr. Larrea announced that Ferroglobe would no longer offer discounts. He also said that Ferroglobe would seek fixed priced contract. God bless you. The staff report confirms that prices changed after this conference.

Mr. Larrea's Powerpoint slide is not the only evidence of Ferroglobe's price leadership. Questionnaire responses confirm that the market responded. On this slide, I give one example of what a competitor said about prices following Ferroglobe's announcement.

I have read a number of Ferroglobe's quarterly earning calls. Since the merger, Ferroglobe company officials often publicly talk about how the company is pricing and how it plans on pricing. And time after time, market prices have responded to Ferroglobe's announcements.

One key reason why Ferroglobe has so much pricing power it is that is by -- it is by far the biggest producer in the world. As seen in this slide, it controls production around the globe. This is critical for the Commission to understand.

Ferroglobe controls the prices not just for its U.S. facilities, but around the globe. If the Commission wants to understand price, it should look at how Ferroglobe prices from all of its affiliates.

In my report, I detail how the standard economic measure of market power, the Herfindahl-Hirschman Index, or HHI, reveals the merger gave Ferroglobe a huge increase in market power. I also detail how Ferroglobe's attempt to use Mississippi Silicon's entry to leverage an anti-dumping countervailing duty case creates a real chance for an even larger increase in market power. Ferroglobe publicly brags about its massive size and the market power that its size creates is reflected in the HHI metric.

Now one problem is the HHI metric is not terribly intuitive. In order to address that issue in my report, I use a standard model of oligopoly competition to convert the HHI metric into increases in Ferroglobe's pricing. The figure on the slide gives my estimates of how much greater pricing power Ferroglobe has. In the case of its merger, I estimate its pricing power increased by 28 percent.

This case coming on the heels of this controversial merger could result in exclusion of the subject countries. As a result, Ferroglobe's pricing power would increase by another 67 percent.

These results suggest that the case is not really about unfair competition. It's an attempt by Ferroglobe to gain immense market power. The Canadian tribunal saw the same thing and rejected Ferroglobe's anti-dumping countervailing duty request to Canada.

Finally, two comments on threats. CRU reports are incredibly bullish on the demand outlook for silicon metal. As seen here, comments like double-digit growth, rising U.S. production, and rising prices are found commonly in the CRU reports.

As shown in this next figure, CRU stresses how demand growth is quite strong and projected to be strong into the future. CRU projects demand growth exceeding the growth in supply. Therefore, a key cause for falling prices in 2015 is now a distant memory and is not expected to reoccur for the foreseeable future. Thank you.

MR. ORAVA: That concludes our testimony, Commissioner.

VICE CHAIRMAN JOHANSON: Thank you for your testimony. I congratulate you. You had 1 minute and 25 seconds left, so your timing was very good. I'm going to begin the questioning today, and I'm going to talk about the issue of underselling. The pricing data show that subject imports undersold the domestic like product in 66 out of 88 comparisons, and this is -- can be seen in the staff report

at page 524.

Why shouldn't we find significant underselling on this record, and Mr. Levy, I see you want to speak. You wrote on this at some length in fact. That is what brought about my question.

MR. LEVY: Yeah, thank you Commissioner Johanson. The underselling data to which you refer relate to Products 1, 2 and 3, merchant market transactions. If you take a step back and ask yourself where are the U.S. industry's sales concentrated, and the answer is it's one particular segment. If you then look at I believe it's Table V-6 at page V-20, what you see there is a comparison of direct import prices.

These are purchases for internal consumption, as compared with U.S. producer prices. And what you see on that table we think is highly probative if not dispositive of the causation issue, at least on the issue of adverse price effects and what's happening in particular in 2016 and interim 2017. You know, Commissioner Williamson asked sort of earlier of Petitioner's panel, you know, what is this -- what are we to make of significant internal consumption of subject imports on this record?

And the short answer that we provide is that you need to give probative weight to what you use in Table V-6 in order to understand the quarterly pricing data, and

we think that information's highly probative, and it bespeaks a record of self-inflicted injury, at least with regard to price degradation in 2016 and interim 2017.

VICE CHAIRMAN JOHANSON: Thank you, Mr. Levy.

MR. PRUSA: This is Tom Prusa. I'd like to add one more comment to that. We also presented in the Wacker-Simcoa brief an analysis of this issue. I want to echo what Mr. Levy just said, which is if you look across the three different product types, a lot of this underselling are in the products where there is very little volume.

In the product where the domestic industry's emphasis is, not only is there not much underselling period, there is almost no underselling during the period of time that they are claiming injury. That is 2016 onwards. So it's really important to look at the underselling analysis. You need to look at the individual products and look at the question of whether there's pricing -- a relationship between imports in the areas that the domestic industry is competing.

VICE CHAIRMAN JOHANSON: Thank you, Dr. Prusa. Yes, Mr. Lewis.

MR. LEWIS: Yeah. Craig Lewis with Hogan Lovells. I concur with the comments that were just made, but I'd just like to also add, and this discussion's on page

98 of the Wacker-Simcoa brief, that the Commission needs to be, I think in this case, particularly cautious in viewing the underselling data. I think the presumption behind the quarterly pricing comparisons is that you're getting a sort of head to head comparison of pricing offers or pricing decisions in the market.

But as the Commission staff report shows, this is an industry where there's a significant amount, and these figures are confidential pricing that's made pursuant to long-term and annual contracts, and there's a significant difference in the proportion of them as between imports and domestic products. I think it's somewhat misleading to assume that each of these quarterly price points actually is comparing price to price competition.

VICE CHAIRMAN JOHANSON: Thank you, Mr. Lewis and others. And if you all wouldn't mind trying to follow this up some in your post-hearing briefs. An issue we have here is this data is confidential, or at least a great deal of it is, and so it's hard to discuss it here. But I think it's an important matter to address. Mr. Levy, thanks for talking about it in your brief, which was the last one I read, which is probably why I remember it, that issue sticking out so well.

Do Respondents dispute that the domestic industry experienced a cost-price squeeze during the Period

of Investigation as Globe argues, and you can see this at page 25 of their brief, and also in the C table. I realize again this is proprietary information, but if you could discuss it to the extent you can. If not, follow up in your post-hearing brief.

MR. STOEL: Vice Chairman Johanson, Jonathan Stoel for the record. So there is you say a lot of confidential information. I think I would just make a couple of statements that I can state publicly. One is, as we've talked about, we think when you look at pricing, you need to think about two primary things. One is the global cycle that we've talked about, and the second is obviously the entry of Mississippi Silicon and then its competition with FerroGlobe.

So that obviously when you talk about a price squeeze, you're talking about two different things, cost-price squeeze. One is the pricing and two is the cost. When you talk about the cost, particularly of the Petitioner, leaving aside the others in the domestic industry, we've already heard from the Dow witness and you've read about publicly that there are some issues around its cost structure, including key raw materials and there's more on the confidential record, Mr. Vice Chairman, that goes into how its cost structure appears to be different than others in the market.

And so if you're going to look at a price-cost squeeze, you have the wonder, as the Canadian tribunal found, whether this is a self-inflicted injury. This is nothing to do with subject imports. If they are pricing their raw materials in ways that I don't quite understand why they might be doing it, they're doing it in ways the tribunal found to be self-inflicting, and that obviously impacts the question you're asking.

MR. PRUSA: One more comment on this. This is Tom Prusa. One thing about FerroGlobe is they are a conglomerate not just in the silicon metals market; they're vertically integrated.

So you may ask yourself why are they talking self injury? Why would a company -- this is a company that controls operations up and down the line, and in the sense that we talk about self-injury, there's a question at least in my mind and it's discussed in the briefs, about the extent that they have interest in other parts of this vast operation and not so much interest in certain operations here in the United States. That's what we're talking about in self injury.

MR. ORAVA: This is Steve Orava with King and Spalding. One last comment, I don't think I need to pile on. But I would just point out Dow has obviously two joint ventures with Globe. We are very familiar with cost

structure, and we refer you to our briefs and confidential information as to how that affects that cost-price squeeze.

VICE CHAIRMAN JOHANSON: Okay.

MR. LEVY: Commissioner Johanson, if you'll indulge me, I'd like to pile on too. When I think of a cost-price squeeze, I typically think of a situation where COGS are increasing, and the ability of the domestic industry to raise prices to preserve its gross margin is being impaired. Their prices are being suppressed by subject imports, that subject imports are effectively imposing a price ceiling on the price they can charge.

I'd respectfully submit that on this record what we see is a different fact pattern. If you look at unit COGS, by and large the trend over the POI is one of stability, and what drives the deterioration in financial performance, particularly during the 2016 period onward, is depression in prices.

You know, in a situation where I suppose you have price depression, you can have a fortiori price suppression. But it begs the question of what's causing the decline in prices. It's essentially a case of who done it, and this takes us back to the earlier question, which is who's the low price leader, particularly in the segment that matters? We respectfully submit that the domestic industry is responsible for the price decline and therefore its own

injury during this Period of Investigation.

VICE CHAIRMAN JOHANSON: Thanks, Mr. Levy. Now Mr. Levy, you and several others have talked about the self-inflicted injury caused by Globe to itself. You all address this in your briefs. Could you maybe expand upon this a bit in your post-hearing? I think that would be helpful, because I'm curious. Once again, what exactly causes this cost-price squeeze as pointed out by Globe? It's a very important issue in this investigation.

The Brazilian respondents have argued that subject imports from Brazil should not be cumulated because among other reasons, these subject imports complement and enable the use and purchase of domestic product, and this can be seen in the Liasa brief at page 13. Could you all please explain this a bit further, exactly how Brazilian product is complimentary to U.S. producers' products, and how they should factor into our cumulation analysis?

MR. VANDER SCHAAF: This is Lyle Vander Schaaf from Liasa. I think most of my information was bracketed as confidential, and so I'll give Dow a chance to address that issue first, and then I'll see if I can add some points.

VICE CHAIRMAN JOHANSON: Okay. If you can't address it adequately here, since it's proprietary, then feel free to do so in the post-hearing, and then also Mr. Brown, you wanted to speak I see.

MR. BROWN: Yes. This is Craig Brown, and I would offer that the way it complements itself, it goes back to the low boron content, where we are able to import the silicon metal which contains low boron content and blend that with domestic material here in the U.S., which is a higher boron-containing material.

Just to be clear, maybe to explain this real simply for the Commission, think of the U.S. industry as coal-based, and Brazil for example as being charcoal-based. And so inherently when you're using charcoal, you have a lower boron content than when you're using coal. So by importing that to the United States, we're able to blend that and then meet our polysilicon specifications.

VICE CHAIRMAN JOHANSON: Okay, thank you for your responses, and I'll look forward to reading further on this in the post-hearing brief if you all can do that. Also, I see these exhibits up here, and about probably a quarter them are sunscreen. Does this product, does it like deflect the light or something or the UV rays? Is that what it is?

MR. SEARCY: Yeah. My name's Mike Searcy. I'm with Dow. I've been with Dow for over 30 years. I've worked in Research and Development, Operations, Engineering and for the last over a decade I've done, purchased all of our silicon metal for the corporation globally, and we're

the largest consumer and buyer of silicon metal globally.

So let me just relate a little bit to those products. I just happen to grab a bunch off of Walmart's store shelf. There are a lot of other products. This is just a sampling of them. Silicone has unique properties. It basically has a nice texture. You all use it every day. If you use waterproof makeup, it has silicone in it. When you put your deodorant on, it has silicone in it.

There are so many products that contain silicone. It's a basic building block of many of the products that we use in our every day lives, and you just don't know about.

VICE CHAIRMAN JOHANSON: What does it do to sunscreen? I'm rather curious about it.

MR. SEARCY: So in terms of the sunscreen, it basically when you -- if you use like a spray sunscreen, it doesn't evaporate quickly. So it doesn't get cold when you spray it on. It has a nice texture when you put it on your skin. It goes on smoothly and absorbs slightly into your skin, so that when you're done you don't stick to the sand.

VICE CHAIRMAN JOHANSON: Okay. Well thank you. It's very interesting. I've always wondered how that stuff works. Commissioner Williamson.

COMMISSIONER WILLIAMSON: Thank you Mr. Vice Chairman. That is an important question coming from --

(Laughter.)

COMMISSIONER WILLIAMSON: I do want to thank all the witnesses for their testimony today. It's almost like where do we start, but okay. On the -- Globe argues that of course low boron silicon metal is not a concept used in the industry, and I think I just heard you explain why you said it was important, because -- silicon metal from a non-coal source. Is that the reason?

MR. BROWN: This is Craig Brown. And again, we use the low boron content and we blend that with domestic sources. So again, the low boron content coming from Brazil, which is made with charcoal. The domestic industry making silicon metal with coal. So by blending those two together, we're able to meet the specification, the high purity requirements for polysilicon.

COMMISSIONER WILLIAMSON: Let me ask you, you heard what the Petitioner said this morning.

MR. BROWN: Yes. I was holding back, thank you.

COMMISSIONER WILLIAMSON: Okay. So I guess the question for post-hearing is can you provide purchase documents in the ordinary course of business that specify the low boron content?

MR. BROWN: Let me speak to that specifically. Yes, we can provide some emails which speak to the boron

specification. In fact, where they requested waivers to meet our boron specification out of their Quebec location, which supplies our polysilicon facility.

So frankly I was a bit surprised this morning when they said they'd never heard of a boron spec, because they are the ones that asked for a boron waiver, which we granted to them. We're able to accommodate that by bringing in more silicon metal from Brazil, in order to offset that higher boron level that they have struggling to meet from their Quebec facility.

COMMISSIONER WILLIAMSON: So are you saying that basically no U.S. producer that's getting its raw material here is going to be able to meet your boron content?

MR. BROWN: That is correct.

COMMISSIONER WILLIAMSON: Okay. I was just wondering, because I was thinking about the Alabama facility.

(Simultaneous speaking.)

MR. SEARCY: Let me add to that.

COMMISSIONER WILLIAMSON: Mr. Searcy.

MR. SEARCY: Yes. My name is Mr. Searcy, Mike Searcy. We do take a small amount of silicon from our DC Alabama facility to our Midland facility. Again, blending it with silicon that we bring out of Brazil that has much

less lower boron contents. We're very familiar with the boron levels that you can get from various supplies around the world, and we have to manage this very carefully.

COMMISSIONER WILLIAMSON: Okay, because my other question was going to be in Table II-10 of the staff report indicates a significant majority of the purchasers rated U.S. and Brazilian silicon metals as always or frequently interchangeable, and how does it affect the argument about low boron? So you see, we're trying to document this clear conflict between Petitioners, and I see someone in the back. Lyle?

MR. VANDER SCHAAF: Yeah. Why don't you go ahead and I'll go after you.

MR. MAJUMDAR: This is Oliver Majumdar from Wacker. We buy low boron material from Globe in our facility in Tennessee, or we used to buy. There's a point where -- so we hate boron in the process because that shouldn't be in the finished product, so we try to avoid putting it into the process. The 40 PPM level that we require is sort of the commercial optimum, where a supplier can still supply material without having too high costs, which in the end we have to pay. So we try to limit the amount of boron introduced into the system.

Globe can make a low boron product, but they have higher costs. So they have to use a different mix of

coal ingredients in order to achieve that level. So that's why I was very surprised this morning. I think one statement from Marlin or the economist was that we don't know about boron, our customers don't specify boron and boron is boron, that doesn't affect us. It was very surprising.

COMMISSIONER WILLIAMSON: Okay.

MS. HUDSON: And excuse me. This is Mary Beth Hudson from Wacker. Just to add, the reason why the boron is so important is for our finished product quality, because again we are producing polysilicon with boron in the single digit parts per trillion range. So it's extremely important to have low boron.

MR. VANDER SCHAAF: Commissioner Williamson, this is Lyle Vander Schaaf for Liasa and Minasligas. In this morning's panel, you heard the witnesses say that 20 parts per million is not a commercial standard. That's entirely our point. It's more of a proprietary standard, and it suggests that this product at the very least is not a commodity product.

They've said that basically my point is the reason why this product is so different is the reason why the Brazilian imports should be not cumulated with other subject imports, and the reason why there is attenuated competition with most of the domestic like product, they

said it's only relevant for polysilicon and it's not relevant for silicones, primary aluminum or secondary aluminum.

Well that's -- that just points to the data. Where are the imports from Brazil going? What products are being made by their -- by the imports from Brazil? The vast majority, very vast majority goes to polysilicon, and that supports our reasons for why the Brazilian product has attenuated competition with the domestic like product, and attenuated competition with the other imports, and why the Brazilian imports should be not cumulated with the other imports.

COMMISSIONER WILLIAMSON: Okay, I'm sorry. Go ahead.

MR. DYBWAD: Yes. My name is Nils Dybwad. I'm with Elkem. I've been with Elkem for more than 30 years, working with silicon and ferrous. I would say definitely silicon is not a commodity in my view, but there's been a lot of focus here today on boron, which is an important element especially for the polysilicon industry. But there are other elements that are equally important in --

COMMISSIONER WILLIAMSON: It's an important element for or is not having it important?

MR. DYBWAD: Not having it.

COMMISSIONER WILLIAMSON: Okay, thanks.

MR. DYBWAD: It's an important element that is not wanted in polysilicon. However, there are other elements that are not wanted in various production processes such as, for example, phosphorous, and an interesting fact is that silicon is not created equal, and whereas Brazilian silicon is low in boron, it is not particularly low in phosphorous. For Norwegian product it's the other way or it's -- our focus is on very low phosphorous combined with a relatively low boron.

So we're talking not one element here; we're talking many elements. You also have elements that are positive to customer's processes. This can be, for example, copper or iron. So silicon is different, and I think what we're trying to say here is Brazilian silicon is low on boron, which is positive. Norwegian silicon is low on phosphorous, which is also positive, and there are many other elements that come into play when you're talking about silicon.

You're also talking about size, the size distribution, even the shape and geometry of individual silicon grains. So this is -- I think it's important that for silicon, we're talking about not a commodity, and I think that different producers in the world and in the U.S., they have different good points and bad points.

For the U.S. industry, I would say it would be very positive for the U.S. customers to have access to different silicons, because they are not created equal and not produced in an equal and similar way. Thank you.

COMMISSIONER WILLIAMSON: I'm always interested in questions on diversity and inclusion, but I did not expect that I was going to get it today. But so I guess for post-hearing, to help staff, how large is the actual demand for the product that has the low boron?

How significant a part of the U.S. consumption is that, and I guess that goes for any other significant product or content that would be relevant for our consideration today, because these questions are -- what's the magnitude and how much difference does it make in the end is something that we always have to wrestle with.

MR. DYBWAD: Yeah, it does make a difference, and also it provides the possibility of blending products if you have low products and high products, whatever you want. So blending is also a part of this.

COMMISSIONER WILLIAMSON: Ahh, even more complicated.

MR. ORAVA: And this is Steve Orava from King and Spalding. But just to highlight, if you just look at the products, you get a sense for how pure and how much specifications matter, you know. The Petitioners this

morning had said that yeah, everything's a commodity provided it meets the specifications that you ask for and can be used in the process that you use it for. Well, that means it's not a commodity product, and I think that helps to highlight that fact.

COMMISSIONER WILLIAMSON: Okay, thank you. Okay. What is your position on the captive production provision, whether the captive production provisions apply in this case?

MR. BAY: This is Ben Bay from King and Spalding. We agree with the Petitioners that the captive production provision does not apply, but we would like to add, if you were to apply the captive production in this case to the test, it would fail the second prong of the test. We found that there is an error in the staff report on page III-16.

The staff report says that the silicon metal takes, is a large portion of the final downstream products. We find that that's not correct. In the Commerce investigation, it is publicly on the record that the downstream article has about 95 percent of added value to the silicon metal. So the silicon metal only takes up about five percent, and therefore it would fail the second prong.

COMMISSIONER WILLIAMSON: Okay. Thank you for those answers, and my time has expired.

VICE CHAIRMAN JOHANSON: Commissioner Broadbent.

COMMISSIONER BROADBENT: Thank you, Commissioner Johanson. Mr. Brown, can you explain the merger of Dow and DuPont and Dow-DuPont's plans to split the company within 18 months into three publicly traded companies? Does this affect DC Alabama's operation or your joint venture with Globe?

MR. BROWN: Sure. This is Craig Brown. I can answer that question. Yes, we're in the midst of a significant merger with DuPont, Dow and DuPont, and the intent is to go into three independent spins some time in 2019 or early 2019, and the silicones, the Dow Silicones portion of that business will be in one of the three spins, which is known as the materials company or materialco internally, and the intent is that Dow Silicones or the primary portion of that, including our strategic feedstocks which DC Alabama and West Virginia are part of, would remain part of Dow Materials Company, which in the way we look at it in the future, I'll just add onto that, we call that the future Dow, because there's again three companies, two of them more led by DuPont heritage folks, and in this case materials company will be led by primarily traditional or heritage Dow Chemical people.

COMMISSIONER BROADBENT: Okay. So that will

include Dow Silicone and the feedstock production?

MR. BROWN: Correct, yep.

COMMISSIONER BROADBENT: Okay. Mr. Brown again, Dow sources silicon, excuse me, metal from multiple sources. For each of the suppliers that Dow sourced from over the Period of Investigation, can you provide information in your post-hearing brief about -- and I'll list about three things here. The existing commercial arrangements that govern your purchasing behavior from these suppliers; whether you are obligated or incentivized to offtake a fixed quantity of silicon metal from each supplier; and three, how prices or transfer prices are set between Dow and each supplier.

MR. BROWN: Yes, we can do that.

COMMISSIONER BROADBENT: Okay, thanks. This would be for Dow and REC Silicon. Is silicon metal the predominant raw material input in the production of silicones and polysilicons within your operations?

MR. BROWN: This is Craig Brown with Dow, and yes, I would answer that silicon metal is the key raw material for both polysilicon and for silicones production. It makes up a significant portion of the cost.

MR. BOWES: So this is Chris Bowes, REC Silicon. Silicon metal is the major raw material for polysilicon and silicon gases for our operations.

COMMISSIONER BROADBENT: Great, thank you.

MS. HUDSON: And this is Mary Beth Hudson from Wacker Polysilicon. Of course, it is also the main raw material for our polysilicon operations in Charleston, Tennessee.

MR. STOEL: Commissioner Broadbent, this is Jonathan Stoel from Hogan Lovells. I wanted to add one key point that's relevant to your question, and that is you heard this morning talk about how there have been many cases against silicon metal. Obviously we're all aware of that, and some of the companies in the room have participated in those, in addition to the Petitioner.

There's a key market difference that the Commission needs to take into account in this case. In the past, aluminum and metallurgical demand has been the number one driver for silicon. That is no longer the case. We all know today if you look at the record, public and confidential, where the demand is.

You just heard from the key companies in the room what they're using silicon metal for. So where in the past we were talking about what happened in the metallurgical segment of the market, and that was what drove many of the Commission's findings, we think you need to revisit those findings, things such as whether silicon metal is considered a commodity.

In the past, maybe that would have been agreed upon, maybe not. Our friends from Alcoa probably would disagree. But clearly today, looking at silicon metal the way you did 5, 10 or certainly 20 years ago, you can't do that. This is a fundamentally different product in terms of its application.

COMMISSIONER BROADBENT: Okay. This is for the witness from Mitsubishi. Can you discuss the extent to which trade conflict with China; particularly, the Chinese decision to impose trade remedies on U.S. polysilicon producers has affected growth in production of U.S. polysilicon and demand for silicon metal?

MR. WILSON: In Japan?

COMMISSIONER BROADBENT: No, with China with the conflict.

MR. WILSON: We provide semiconductor grade almost exclusively -- about 98 percent, not material for solar. And it's my understanding that -- and we do not ship to China at this point, but it's my understanding that the semiconductor polysilicon is not included in the action towards the duties that China's imposing, that semiconductor grade can still be shipped to China, although it has nothing to do with us. We do not ship anything to China.

MS. HUDSON: From our perspective, certainly, we do not sell our product from the Charleston, Tennessee plant

into China, but we compete on the quality of our product. So because of the superior quality of our polysilicon, we are able to find customers outside of China.

MR. BOWES: So our Moses Lake facility targets solar-grade polysilicon primarily and most of that market is in China. And because of the trade dispute we have been impacted and as a result we've had layoffs at our facilities for eight year in the last three years and we have shut down capacity and we're currently running at half capacity at the Moses Lake facility and that is primarily due to that trade conflict.

COMMISSIONER BROADBENT: How much have your sales fallen?

MR. BOWES: Well, by over half.

MR. ORAVA: Just from the Hemlock perspective, just reiterating what everyone has said, I think from Hemlock's perspective, we had in our testimony that we never even got a chance to operate our $1.2 billion facility in Tennessee. We dismantled it and sold it. We have had significant layoffs as well, including as recently as December. And the impact across the industry has been in the hundreds of millions of dollars in terms of export opportunities that have been lost due to that conflict. So there's been a lot of impact, both on ability to make sales, but also the amount of production and capacity devoted to

producing polysilicon.

COMMISSIONER BROADBENT: Okay. This would be for any industry witness that wanted to comment. What has been the major trends in silicon metal consumption during the past five years with sectors and applications, silicon, silicon-based alloys, silicon for polysilicon production, semiconductor and electronics have an increase the most during that time period and why? Which applications have declined or remain unchanged? I know we spoke of this earlier, but maybe someone could sum it up for me.

MR. MAJUADAR: If I may. The chemical business has grown very much. The silicon production worldwide is growing because, as you can see, it's connected to consumer goods and growing with the average GDP, so there's a very strong demand in silicon application.

While the silicon outside the U.S. has exploded exponentially, there's a tremendous consumption of silicon metal for polysilicon. In the aluminum field, I'll bow to my colleagues here from Alcoa and others, but in general, the consumption of aluminum in the automotive sector has increased very much, especially, in the U.S. since you have fuel directives that require lighter cars. So again, in the morning the Petitioner said that the market is growing or shrinking and polysilicon is nothing. Just to a reference to the U.S., we put up a plant in 2015 for $2.5 billion that

consumes 20 to 23,000 tons of silicon metal when operational and the U.S. market size is 310, 320,000 tons, so we had consumption capacity to the extent of more than 7 to 10 percent.

MR. ARMSTRONG: We are seeing a large demand growth in the use of silicon and the use of aluminum in cars. We expect it to continue and grow, whether we go to electric cars or stay with gas it's going to call for lighter cars and the aluminum will be in demand.

COMMISSIONER BROADBENT: Okay, great.

Let's see, for the Joint Respondents, you argue within your briefs that the consolidation of several global production facilities under the umbrella of Ferroglobe has caused purchasers to seek alternative sources of supply independent from that conglomerate. However, you also note that the entry of the new U.S. producer, Mississippi Silicon, served to create additional competition. Wouldn't the Ferroglobe merger and the Mississippi Silicon market entry cancel each other out or balance each other as far as purchasers' concerns about supply reliability?

MR. PRUSA: I'll start and the short answer is no. I think you need to take a look at -- so again, the Globe FerroAtlantica merger as large as Globe was here in North America they were small compared to FerroAtlantica and the ability for U.S. purchasers to independently seek bids

from France, South Africa, and Spain independently of their North American options that went away as of the mating season in 2016, so that volume makes Mississippi Silicon look small.

Now domestically, agree with you that there are, especially, for purchasers located in the South, Mississippi Silicon is an attractive alternative, but to think that Mississippi Silicon could offset the competitive affects of the FerroAtlantica/Globe merger they're just -- we're comparing just two different sizes.

MR. MAJUMDAR: When we set up our project, which is now called -- our plant in Charleston called Poly-11 back then we looked to various options with whom to source, so one was Globe because they were in close proximity. Mississippi Silicon was planning to do something and then there was FerroAtlantica, who had qualified plants in South Africa. They were supplying us from France and they were planning to build a 100,000 ton plant in Port Cartier in Canada. And then by the time we had started our plant in 2015, they announced the merger and they cancelled the plant in Canada, so we were left with no options.

MR. STOEL: Just one comparison I think gives you a perspective on this. If you looked at Slide 6 from my deck this morning, you'll see that in 2014 and 2015 South Africa alone was more than 40,000 tons and that was

FerroAtlantica. And just remember Globe controlled and does today South Africa, Canada, Spain, France, so a number of places. The Mississippi Silicon plant, looking at the public information, that's included in our brief, Exhibit 10, you'll see Mississippi Silicon is 36,000 tons, so right there from one country you can see that they control more than the Mississippi Silicon could produce.

And just one comment about Mississippi Silicon, there were some comments earlier today about how they wouldn't have entered the market if they knew what pricing was going to do. They spent $200,000 million on that plant. I don't think you make that decision on the basis of a spot price in a particular month. You make that on a long-term basis. And they tried to enter the U.S. market several years ago. We know, as we documented in our briefs and I said this morning, we know who most opposed their entry, their own U.S. friend, Ferroglobe. They're the ones who opposed them. There's been adequate demand for them. Ferroglobe was the one that tried to prevent them from entering the market.

MR. THALER: As I mentioned earlier, the consolidation of the plants in France, Spain, and South Africa, with the inclusion of the Globe U.S. plants is far greater in scale and ability to serve the market overall and to serve our needs than Mississippi Silicon. Mississippi

Silicon is obviously looking to diversify their customer base as well and as such has limited ability to supply and as a result we have yet to qualify Mississippi Silicon, so very different in scale and very different in scope and ability to support the industry.

MR. BROWN: I would just like to add on here for the record that we have been very supportive of Mississippi Silicon as they entered the market and initially have been buying from them and continue to buy from them in lieu of buying from the Globe location in South Africa and one of the reasons we did make that move is not only to support domestic industry here in the U.S., but also was due to some unreliable supply issues that we had out of the South Africa location and the chance to diversify our supply base as well.

COMMISSIONER BROADBENT: Okay, thank you very much. I appreciate it.

MR. SEARCY: I just want to add to that comment. We very much want to source domestically in the U.S. And in fact, in 2015, we dramatically tried to increase our domestic sourcing of silicon metal and signed a much larger contract than we had previous years. Unfortunately, the Petitioner could not meet their contractual commitment and requested that we delay shipments of some of that material into 2016, which we did.

In order to make room for additional domestic supply, we had reduced our Brazilian imports into the U.S. during 2016, but as a result of the unreliability of supply we had to go back to our previous sourcing and increase our Brazilian supply and reduce our domestic sourcing until Mississippi Silicon came online. Again, we had an opportunity to increase our domestic supply and we took that and we are a major customer of Mississippi Silicon.

VICE CHAIRMAN JOHANSON: Mr. Searcy, do you have any written documentation to that effect of when that occurred?

MR. SEARCY: We can provide that.

VICE CHAIRMAN JOHANSON: If you wouldn't mind, that might be helpful in the post-hearing. Thank you.

Globe cites the antidotal information gathered in the preliminary and final phases of these investigations regarding lost sales and lost revenue as supporting its claim that subject imports have had adverse price affects on the domestic industry, and this can be seen in the Petitioners' brief at page 44. Could you all please respond, post-hearing, to their specific allegations regarding confirmed lost sales and revenue?

I see some nodding heads, so I assume that's yes. Thank you. I look forward to seeing that.

Following up on the topic of the Globe and

FerroAtlantica merger, what impact did this merger have on purchasing patterns in the United States and globally? Could you please explain how it affected customer perceptions regarding diversity of supply and why would it drive customers to seek alternative sources of supply as Respondents have argued, for example, at the Liasa/Minasligas brief at page 28?

MR. SEARCY: Let me go ahead and take a first pass at that. As the largest consumer certainly in the Western world, we must have diversity of supply because of the significant amount of silicon that we're buying, especially in the U.S. and simply relying on one supplier is not something that we can do or two suppliers. And that's one of the reasons we've made such significant investments in silicon metal, both in the U.S. and outside of the U.S.

You know we've talked about the fact that we are leveraging that silicon metal and adding 95 percent value to the cost of the silicon to produce the products that we're selling to our customers here in the U.S. and that we're exporting from the U.S. The most expensive silicon metal I will ever buy is the silicon metal I don't have to make the products where I can get a significant return on those products, so security of supply is the number one thing of importance to us and we go to great lengths to work with suppliers all over the world and every supplier that's

producing in North America to maintain that complex supply chain to make sure that we have all the silicon we need to make all of the products that we make.

MR. ORAVA: Mike, you might want to talk just a bit about the commercial practice that you follow in terms of how much you can share.

It's not a situation as Petitioners kind of alleged this morning that if you don't make it in Brazil and consume internally then suddenly you're going to go to the merchant market and when you go to that merchant market, necessarily, it's going to be Globe and Mississippi Silicon receiving that sale. It's much more complicated than that.

MR. SEARCY: Yes, I mean there's the complex process of qualifying plants. In fact, in North America the only Globe-related plants we have qualified right now are the two joint ventures we own with Globe. None of their other facilities are even qualified to supply us currently. They haven't gone through the qualification process recently to maintain their qualification.

In addition, we have limits in terms of how much silicon we will buy from any one plant. Even though we're a large consumer in the market, if we're buying a significant portion of a plant's output, then basically if they have problems then the first people that are going to observe that issue is us. We're going to get shorted. So we try to

diversify our supply to make sure that if any one company or any one plant has a problem we have other options for sourcing to maintain 100 percent silicon sourcing to our highly valuable downstream processing.

MR. MAJUMDAR: If I may add to that, 2016 was very interesting. I didn't know the story about Dow having to defer deliveries in 2015. In summer of 2016, we suddenly realized that it was a mistake to trust Globe completely to supply all our needs in Tennessee. Of course, being a startup plant, we had back and forths on the demand and supply. Sometime in the summer of 2016 Globe informed us that they had to rededicate some capacity in -- to make ferrosilicon and as a result didn't have enough capacity available to supply us.

This, as Mike mentioned earlier, if you put all your eggs in one basket, you face the trouble and we made the mistake of doing that in the United States and we suffered from that.

MS. HUDSON: So our polysilicon operation is an interconnected series of operating units on site with recycle streams going back and forth. So if you lose one piece of the operation at the beginning where we're getting our silicon metal it shuts down the entire operation and it can have devastating affects on quality and we can have to essentially scrap all of the material that are in the

reactors, as well as having the outages that are associated with not having raw material supply.

MR. BOWES: We have a similar sourcing strategy, as Mr. Searcy described, for surety of supply and having multiple sources and that's -- I just want to echo what he said and that's to ensure constant flow of material to help support our operations that have to run 24/7 because of the number of different things that can happen and that we have seen happen that will delay shipments or delay production at various facilities from suppliers. So we view that strategy as critically important in order to ensure continued operations at our facilities.

VICE CHAIRMAN JOHANSON: Thanks for your responses.

Mr. Searcy, I'm going to come back to you, and you mentioned a qualification process. Do most customers, as far as you know, require qualification of silicon metal before purchasing and if so, how is this done?

MR. SEARCY: I can only speak for my own company. I'm not familiar with others' qualification process, but what I can tell you is that even for example Mississippi Silicon the first time we took through our process they failed. We had to work very closely with them in terms of how they were producing product to get them producing to a point where they could actually meet our

qualification process. Other suppliers around the world have either been qualified or not qualified based on their performance and their ability to supply. It's a very complex process. It can take anywhere from six months to a year for us to qualify a supplier.

MR. THALER: I'd like to address that as well, if you mind. We have a very rigorous qualification process and a continuous monitoring process as well, and I think you've heard that from some of the other Respondents here, so same thing. It's an extremely long process and, as I mentioned earlier, can take up to 12 months to qualify a new supplier. So again, we always qualify. Nobody simply comes in. And I think somebody mentioned earlier it's even by site, by asset, by process, so we monitor that continuously. Thank you.

MR. BOWES: On our purchasing strategy, we cannot purchase from a non-qualified site. Qualification process typically takes one to two years, starts with lab samples, lab processes, and eventually, works its way up to production qualification. Even after a site is qualified, they have to undergo continuous audits to remain qualified.

Another aspect of the qualification process for us is their ability to meet sizing specifications as well, as we have a unique specification on our sizing.

MR. SEARCY: I want to add one more thing to

this. We don't make these qualification processes up. We certainly define them. They are there because our customers demand them. Our customers require that we qualify our raw materials and that we monitor our raw materials in order for them to buy our products, so this is something that's driven by our customers, not only by ourselves, but by our customers as well.

VICE CHAIRMAN JOHANSON: I'm wondering with Elstrem correct? That's the name of your company, right?

MR. OVESEN: Elkem.

VICE CHAIRMAN JOHANSON: Elkem, I'm sorry about that. Do you all customers who require qualifications before they will purchase your product?

MR. MILES: We have many customers that require qualification and almost all customers that we supply in the chemical segment and polysilicon segment do require qualification.

VICE CHAIRMAN JOHANSON: Okay, thank you all for your responses. Anybody else want to comment on that?

MR. BOWES: I verify that we regularly have, over the years, gone through qualification processes with all these companies and we regularly have to undergo audits to maintain that qualification.

MR. MAJUMDAR: If I may add, what we do is if somebody calls me up and says I want to do something with

you, at first we get literally two buckets of silicon metal to run lab-scale trials. And then if that is good, we do three trials of about 150 metric tons each, then we run the material in our plants and study the before and after affects for eight weeks, so we do three trials of eight weeks each and then somebody's qualified with us. During the time we buy material from them, we monitor constantly what are they reporting, what are we measuring. There is a quality feedback process, which is every six months or one year that they get feedback from us. The moment they change something in their process we notice immediately. We even stop deliveries or claim them and say this is not what we asked for.

In Tennessee we had the further complication that we didn't have milling and grinding plants. We bought powder directly and Mary Beth can comment on that.

MS. HUDSON: Not only do we have the technical qualification based on the chemical characteristics of the silicon metal, but also the physical characteristics, so we do the trials in the plant where we're unloading. And I can assure you if you had been in a plant working along side some of our workers that were covered from head to foot in this what looked like black soot trying to unload some material and get into our process and could not because of the particle size distribution you would understand

directly how important the physical characteristics are as well as the qualification of the chemical characteristics.

Just to add, every batch that we receive of silicon metal we send a sample over to our labs in Germany for chemical qualification or certification tests, validating the certificate of analysis that we receive from our supplier, so it is ongoing.

MR. ARMSTRONG: On the metallurgical end, not only do we pre-qualify customers, but we follow every truckload through production to make sure that it delivered up to 31 different chemical analyses as far as elements.

I might add we do have boron also, but it's not a crucial element to us.

MR. BORGES: Just to add that Alcoa's qualification process is very similar as to what has been described so far in terms of the complexity and how long the process can take. In our case, it can take at least three months and go up to six months. We had several occasions where a producer didn't pass the first step of the qualification, which would be a lab test and in that case we don't go ahead with any trials in the plant and we can't buy from that specific producer independently of how low the price offer is. So the qualification is an important process for Alcoa as well.

VICE CHAIRMAN JOHANSON: Okay, thank you. My

time's expired, so I'm going to turn it over to Commissioner Williamson.

COMMISSIONER WILLIAMSON: thank you. For post-hearing, Mr. Thaler from Momentive on page 2 of your testimony at the bottom you mention that Selma plant was not closed due to the import competition, but to aluminum sector demand -- and new supply from Mississippi Silicon. I was wondering to what extent you can document that to support that statement.

MR. THALER: We'll comment on that, yes.

COMMISSIONER WILLIAMSON: Okay, thank you.

And Mr. Majumdar, I think you talked about the problem of Globe not meeting your demands for the new facility and again what documentation you can provide post-hearing on that would be helpful.

MR. MAJUMDAR: Yes, I have exact emails and I can provide that.

VICE CHAIRMAN JOHANSON: Good, thank you.

To what extent do prices in the chemical and aluminum market segments move together? How significant are the formula prices in the different segments, and are each based on the same spot price? Do I need to repeat that?

MR. SEARCY: Let me make an initial comment. My understanding is, is that the purchasing mechanisms are somewhat different. For example, generally, Dow purchases

fixed volumes for a year. We do those negotiations in the fourth quarter and the volume and price is fixed for the following year.

COMMISSIONER WILLIAMSON: Is that the chemical segment we're talking about now?

MR. SEARCY: That's the chemical segment. That's correct. My understanding is the aluminum purchases are somewhat different than that, but I'll let someone speak with more knowledge of that that does those purchases directly.

MR. BROGES: So the negotiation period takes place during typically the last quarter of one year and prices can be fixed for 12 months, which would mean the following year or for six months. Typically, in the case of Alcoa the preference is for a 12-month price negotiation during the previous quarter of the coming year.

COMMISSIONER WILLIAMSON: -- can both of you can address whether or not the formulas that are used in fixing those prices are different and if you have to do it post-hearing that's fine.

MR. SEARCY: My understanding is it's more of a secondary aluminum industry that purchases material more on a spot basis, truckload basis, and they tend to follow the index pricing. That's my understanding.

MR. PRUSA: You know one thing that's important,

and I had it up there, there's both at the -- maybe you could go back to the slide of the Ferroglobe statement at the conference. There's a variety of different ways people can price and here's Ferroglobe basically saying we're no longer using index. So I think you're getting an idea that everybody's going back to an index. Here's an example of a major industry guy saying that that's not going forward. There's a diversity of how different price. Some people historically have used the index, especially, I think in Product 2.

COMMISSIONER WILLIAMSON: What I'm trying to find out is between the different segments of industry could you say the chemical sector does this, the aluminum sector does this, and somebody else does something else.

MR. PRUSA: I don't know if you can be that clear, but this is the -- again, we have to look at the data confidentially, but this is a guy saying that he doesn't use the index.

COMMISSIONER WILLIAMSON: Yes, I understand that, but that was a change in the shift. I'm talking about what's been the pattern.

MR. MAJUNDAR: If I may comment on that, Dow is the largest silicon metal consumer in the world, that's clear, but because we are not as backward integrated we consider ourselves the largest buyer in the merchant market,

so we sort of split our risks and we have some suppliers whom we ask to quote on fixed prices. We try to close a number of contracts in index-based flexible pricing and we do some others that we do a floor and ceiling, depending on the market conditions. It basically depends upon the supplier's willingness to talk about the future and how he or they see the future. And if we both agree, then we can do a fixed prices where they will be always certain that they will get a certain margin on their product because they know their costs, but some don't agree with us and say, well, the market will increase and they we say, okay, then let's do an index-based price. If the market increases, you profit. If the market reduces, we benefit. The problem with the index is that there's no liquidity in the market for the chemical consumers because we don't do these spot, truckload purchases, so we have to use an index which is run by -- run, so to speak, in inverted commerce by the aluminum industry who buys on the spot market, which we consider an inferior product because it's not suitable for our processes. So it's sort of a Catch-22 situation that if we agree on an index we have to use an index that has more liquidity and that's the aluminum market.

-- if that answers your question, I don't know.

COMMISSIONER WILLIAMSON: Which tells me how complicated it is.

MR. MAJUMDAR: Why should it be simple?

COMMISSIONER WILLIAMSON: Someone else want to shed some light and maybe simplify it? Okay, we're just trying to get an understanding of how prices could set in this -- in these markets or segments.

MR. ARMSTRONG: From the secondary aluminum --

COMMISSIONER WILLIAMSON: Yeah, sure.

MR. ARMSTRONG: You were talking about different ways of buying and I tend to buy 40 percent either for the quarter or for the year on a fixed price, but since I don't know what's going to happen with the aluminum market or the silicon market, I buy 40 percent on a formula basis also. Tends to keep me more leveled out and not exposed to spikes.

And then the other 20 percent, I wait and see what becomes available and what happens to the market.

COMMISSIONER WILLIAMSON: Okay. There's a formula. Okay, thank you, okay.

Okay, respondents argue that the drop in U.S. prices in 2015 and 2016 was due largely to the falling global prices over the same period. Even if this is true, could it not also be true that subject imports were the mechanism by which global prices were transmitted into an otherwise higher priced U.S. market?

MR. PRUSA: This is Tom Prusa. Is it possible in theory? Again, we know that there's a relatively by most

cases that you hear, a relatively small share of U.S. consumption is being met by domestic production. Import are in the market. They've always been in the market. That's a reality.

COMMISSIONER WILLIAMSON: Yeah.

MR. PRUSA: So now the question is is that what you just said possible? I think you need to look at the fact pattern. Don't go back to the slide with all the events. Right? So we understand -- I understand as powerful as FerroAtlantica was pre-merger, Ferro -- there -- they don't control a business cycle. We understand that -- they're a powerful company. There's still nonetheless things beyond Ferroglobe's control. They are still subject to the business cycle, as powerful as they are.

Now the question is when this merger happened, and this also the time when prices when going down, when Mississippi Silicon enters and needs to sell in the market. So you have to make a decision. We believe that this 30 -- again, public reports, they vary somewhere around 35-, 36,000 tons of new product in the U.S. market destined for U.S. customers.

Okay, the direct impact of that was the driving force and led not just Globe, but other companies to respond in terms of the market dynamics as Mississippi Silicon was ramping up.

So I think you're correct that it's possible imports are in the market, but whether they're leading the prices down, that's not supported, right? There's prices coming in from a lot of different sources, included non-subject countries controlled by FerroAtlantica, now Ferroglobe. And they're playing a major role in how the pricing people see in the market.

MR. STOEL: Commissioner Williamson?

COMMISSIONER WILLIAMSON: Yeah.

MR. STOEL: Jonathan Stoel for the respondents. I think one point ties on to the very good question was asked recently about qualification. You heard from several of the folks here that Mississippi Silicon couldn't qualify in the chemical and polysilicon market. Why? Because as some of the witnesses testified, it takes time, up to one year, two years, even longer. And second, unfortunately, in several instances, MISSISSIPPI SILICON failed to be able to qualify.

So that means they're coming online and they have fairly substantial production being developed. They can't put it in what I told you earlier is now the big part of the market, the chemical and also in the polysilicon.

If you're trying to sell your product and you can't put it in one place, of course, you're going to put it somewhere else. So they put it in the other segments of the

market. And that obviously has an impact. That's not a huge capacity, but it's still 36,000 new tons. It obviously has a tremendous impact on price.

So when you look at the real driver of pricing in certain segments, particularly in 2015 and into 2016 when the petitioner's alleging harm, clearly that new 36,000 tons going into that aluminum part of the market, that had a very significant impact on price.

COMMISSIONER WILLIAMSON: Okay. To the post-hearing to help us understand, if you want to point to places in the record that substantiate that, it would be helpful.

MR. STOEL: We'll do that, Commissioner. Thank you.

COMMISSIONER WILLIAMSON: Okay, and again, I always talk about this question of allocation. How much of that was the driving -- driving the prices down? What role did imports play, given that the U.S. price is above the world market price and is there -- the question that I ask, is there any --

MR. PRUSA: So --

COMMISSIONER WILLIAMSON: Is that totally irrelevant or is it -- or does it have some bearing?

MR. PRUSA: No, I think there's -- I think we tried to -- if you look in the Wacker Simcoa brief, we think

it's important that you look at pricing from Mississippi Silicon. We also think it's important you look at pricing from non-subject imports controlled by Ferroglobe. Again, we have -- this is a --

COMMISSIONER WILLIAMSON: Okay.

MR. PRUSA: -- very difficult case we can talk about specifics of the hearing.

COMMISSIONER WILLIAMSON: Yeah.

MR. PRUSA: I think --

COMMISSIONER WILLIAMSON: Post-hearing, if you can --

MR. PRUSA: -- there is important price information that you have that give a sense of what's happening in the market.

COMMISSIONER WILLIAMSON: Okay. Just so in post-hearing, just kind of point to the record to make that point. Thank you.

VICE CHAIRMAN JOHANSON: Commissioner Broadbent?

COMMISSIONER BROADBENT: Yes. What impact will the new high test sands 60,000 metric ton per year silicon plant in Washington have on the domestic silicon market if it is built?

MR. BROWN: This is Craig Brown with Dow. I can -- we can speak to that in our post-hearing brief, but I can say that the COO there, the chief operating officer, is an

ex Dow Corning employee. We know them well and I think we can provide some good details in a post-hearing brief on that.

COMMISSIONER BROADBENT: Okay, terrific, thank you.

This is one thing I'm a little confused about for -- and I would say all right, this was for REC Silicon and Dow. You both argue that silicon producers require extremely pure grades of silicon metal in their production process. However, the scope of these investigations does not include ultra-high purity semiconductor or solar grades of silicon metal with silicon content of 99.99 percent or greater. To what extent do polysilicon producers actually purchase silicon metal subject to these investigations?

MR. SEARCY: It's Mr. Searcy here. So polysilicon is being made from the silicon under investigation. And so there's no polysilicon that's used as a feedstock to make siloxane or polysilicon.

COMMISSIONER BROADBENT: Anyway --

MR. SEARCY: Does that answer your question?

COMMISSIONER BROADBENT: Okay, to what extent do polysilicon producers actually purchase silicon metal subject to the investigation?

MR. ORAVA: So --

COMMISSIONER BROADBENT: In the scope?

MR. ORAVA: Yeah, this is Steve Orava with King & Spalding. Maybe just to help you guide you a bit, Mike, I think we've had this conversation before that the silicon metal is made into a -- an intermediate product that fits the scope. And that intermediate product is then sold to polysilicon producers, or in our case, transferred to Hemlock, which is then further refined into the high grade polysilicon that then is not in the scope.

MR. SEARCY: Yeah. So Dow -- and yeah, the processes are different. Dow's process is we take silicon metal and we produce it -- we produce a chemical that we then sell to Hemlock Semiconductor, which uses that chemical to produce the polysilicon.

Other polysilicon producers may have all of that operation on a single site and I'll REC or Wacker talk about that.

MR. MAJUMDAR: Yes, if I may say, okay, you didn't ask us specifically, but --

COMMISSIONER BROADBENT: Oh, please.

MR. MAJUMDAR: -- anyway, so I'll leave for Wacker here. So what we do is we react the silicon metal with chlorine to get trichlorosilane or TCS as we call it and we then purify that before they position into polysilicon. So we need about 110 percent of metallurgical grade silicon metal to make the final silicon metal product.

That's polysilicon product, which then goes into the solar industry or the electronic industry.

MR. BOWES: So this is Chris from REC Silicon. I'll jump in since you called us out. Our process is even different from Wacker's or Dow's in that purchase the silicon metal and we turn it into a gas. We can sell that gas. Most of the gas we turn back into polysilicon that we sell.

This is one area that we find interesting with petitioner in that their announced project with FerroSolar is an attempt to -- another process that would compete with ours in the polysilicon market.

COMMISSIONER BROADBENT: Okay, great. Ms. Byers, if the Commission determines that injuries suffered by the domestic industry in 2016 was self-inflicted, but also caused by increased pressure from low-priced subject imports, doesn't this mean that the Commission should vote affirmative? Could subject imports be a cause of material injury, but not the only cause?

MS. BYERS: Bonnie Byers from King & Spalding. I think if you look at the totality of the evidence in this case, it's one of those situations where the impact of subject imports is really relatively so small compared to the other things that are stacked up against it. I think you have the leeway to make that judgment. I think you

don't need to necessarily determine the amount of injury from each source. But clearly, all the other sources of injury outweigh anything that could be caused by subject imports.

COMMISSIONER BROADBENT: Okay.

MR. STOEL: Commissioner Broadbent?

COMMISSIONER BROADBENT: Uh-huh.

MR. STOEL: Jonathan Stoel. I think if you look at Jengzao Trina and then also at Swift Train, you know, your question is obviously directly on point, but I think here as Ms. Byers said, subject imports are not causing material injury to this industry. And we think that the Canadian tribunal made several findings that are key here, because they were looking at very similar conditions of competition. They said it's about cyclical pricing and also about self-inflicted injury.

We've talked a lot about that today and of course, we'll provide more details in our post-hearing submissions. As an aside, I'd like to apologize for the length of our briefs already, but we'll try to keep it short and succinct, but I think it's clear that this is not a situation where subject imports are causing the injury.

I'd also like to submit, and the others here should testify to it, this is a situation where the domestic consumers desperate for product. They've been testifying

again and again. This is not a reliable supplier.

Petitioner is not giving them what they need. That's not subject import's fault. That's the fault of the petitioner. When a domestic supplier came online, Mississippi Silicon, what happened? They were sold out. They just announced again they're sold out.

So if a U.S. supplier's doing a great job, they're going to get bought out first. But when they're not, these customers here today are telling you they need product and they're not getting it. So that's not about subject imports. That's about faults with the petition with all due respect.

COMMISSIONER BROADBENT: You said Swift Train and what was the other case?

MR. STOEL: Sorry, Jengzao Trina was decided just last month, Commissioner.

COMMISSIONER BROADBENT: Okay. All right. For either Dow or Wacker or Simcoa, the argument has been made that Globe's costs for specific inputs are unusually high. Is the argument that Globe would have been profitable had these inputs been more online with other U.S. producers or that the directional pattern of financial results would have been less severe?

MR. BROWN: This is Mr. Brown with Dow. I can't -- all I can speak to is you've seen in some of the

briefings is that we do, and we know this because of the joint ventures that we're in with them, where we're a 49 percent owner and actively involved and engaged in key strategic decisions there.

But at the end of the day, they -- we have found and we can probably follow up with this in post-hearing briefs, that they have used self-supplied coal at higher than market prices, which does inflate their cost. Now whether or not that would make them profitable or unprofitable, I'm not an expert and can't speak to that.

MR. ORAVA: Yeah, this is Steve Orava from King & Spalding. We'll follow up with that at post-hearing, but there's a lot going on here and we'll try to be as clear as possible as where this might lead them to land that they've been doing things on more of a market basis rather than a self-serving basis.

MR. MAJUMDAR: Yeah, if I may Oliver from Wacker. We have a silicon metal smelter of our own in Norway. So we buy coal from the open market. And since the coal we buy is based on steam coal, which is used in power plants, the prices of that has fallen significantly since 2012 to 2017, which lowered costs for smelters that were using this particular kind of coal.

Globe acquired Alden in Kentucky in 2012 and has been trying to sell that coal to many people, including us.

And I think Elkem has also more confidential details on that, which we showed in the Canadian case.

That coal was priced similarly in 2012, 2014. But since the other coal has significantly dropped in prices recently, the Alden coal is just -- although it has some nicer benefits, including lower boron, it's not suitable or not price competitive to us. So Globe would be better suited to buy coal in the open market, but they're stuck with this company they're associated with and vertically integrated with and so on. So they're buying higher priced coal unnecessarily.

COMMISSIONER BROADBENT: Okay. Thank you.

Yeah, Mr. Brown, just maybe I'd love to have your perspective on this. I'm just trying to understand how a company that you have joint ventures with is filing all these cases against you?

MR. BROWN: How much time do you have? Yeah, I struggle with that as well. I mean, we've had a long historic relationship with them that goes back to Mr. Searcy for the last 15 years, but I think it's fair to say we do have and we have this two joint ventures with them, where we're 49 percent owned. We have historically bought significant amounts of silicon metal from them in the tens of millions of dollars range in Europe as well as the U.S. So the fact that you would go after one of your customers

captive assets and -- is bizarre to me at best.

COMMISSIONER BROADBENT: Okay.

MR. BROWN: That's my perspective.

COMMISSIONER BROADBENT: All right, on that note, I will end my questions.

VICE CHAIRMAN JOHANSON: Okay, thank you, Commissioner.

MR. SEARCY: Mr. Searcy here. I just want to make one more comment.

COMMISSIONER BROADBENT: Yeah.

MR. SEARCY: I think it's very telling where the customers are in this case. They're all here right now on this side of the table. Notice there were no customers when Globe testified earlier this morning.

VICE CHAIRMAN JOHANSON: Okay. This is another question for Dow Corning. The Commissioner excluded Dow Corning as a related party in the preliminary phase of these investigations. How has your record in the final phase developed in support of the opposite conclusion under the related party provision?

MR. ORAVA: This is Steve Orava from King & Spalding. I think from our perspective, it's just -- the record's very clear in terms of the factors that you look at. And even if those factors weren't -- even if you were to not include West Virginia, which we think you should

given that that's our production, and maybe Mike can speak to that in a second, there really, you know, first of all, DC Alabama is a significant producer. They're the second largest producer in the U.S. And so clearly, that's where their interests lie.

Second, Dow Corning -- Dow Silicone obviously has a strong interest in domestic production. We make a DC Alabama silicon metal. We source as our witnesses have said substantially from Mississippi Silicon and from Globe. And therefore, again, you know, our interests as American company is in the silicon metal that we produce here and are able to source here from U.S. companies.

Third, it's been said I think I counted five times that Dow Silicone benefits from dumped and subsidized imports. And on that point, I think I have to go into a little more detail because I think we need the public record to be absolutely clear. You know, after receiving more information, we think Commerce is going to look at from our subsidy rate perspective at the prelim. It was a tiny subsidy rate. And we think when they get more information about how the Brazilian bat system works, that's going to go down to zero.

From a dumping perspective, Commerce really just pulled a number out of thin air because it was still grappling with the complexities of the case in dealing with

data that we provided on further manufacturing.

As we've stated repeatedly, you know, Dow consumes 100 percent of what it brings in from Brazil. It then takes that product and adds 95 percent value and sells it around the country and exports it.

In those circumstances where we're making 3,000 products, adding 95 percent value added to the subject imports, we just think that any dumping margin that is created is going to be artificial.

So on that specific factor of whether we're benefiting from dumping and subsidies, I think the clear position for us and I think the facts demonstrate it at Commerce is that we're not in a position where we're benefiting from that.

Rather as indicated in our opening, we've got very significant and integrated value chains that go from the silicon metal all the way through to the products you see here in the table.

And then finally, in terms of whether we skew the data or not, you know, if you look at the trends and we can get into this in post-hearing brief, but if you look at the trends, it's not surprising that our trends follow the rest of the industry and that, you know, some differences in how different companies' financial health may be somewhat different, but follow the same trends, isn't a reason to

exclude us from the domestic industry.

MR. SEARCY: Yes, Mr. Searcy here. I just want to make the point that the WVA manufacturing facility, which is the largest silicon producing facility in the United States, we own 49 percent of that. We consider 49 percent of that product to be our own. We have supermajority rights at that facility, which I won't talk about here, but we can go into at the break.

VICE CHAIRMAN JOHANSON: Okay, thank you for your responses. This question is probably for Mr. Vander Schaaf. You represent the Brazilian producers, is that correct?

MR. VANDER SCHAAF: Yeah, we also Ligas and Minasligas we do not -- I do not represent Rima, the other producer, or Curacao's related operations.

VICE CHAIRMAN JOHANSON: Okay, well, this is for anybody who has an interest in Brazilian production. The Brazilian respondents note shutdowns in Brazil by Ligas Minasligas during the period of investigation as shown in their brief at page 16. What were the circumstances surrounding these shutdowns? And please apprise us of current conditions and the status of production by these firms?

MR. VANDER SCHAAF: I might have to get into some of that in the post-hearing brief, but essentially,

there was an energy crisis in Brazil that caused first Liasa and then Minasligas to shut down. Liasa shut down in 2014 and then Minasligas shut down in 2015.

They've also had other shutdowns because of other complications and I can get into more of that in the brief. They did mention some of that in their questionnaire responses.

Minasligas has not returned to the U.S. market. It left the U.S. market in 2014 when it shut down, has not sold anything in the United States since then.

Liasa sold very small quantities in 2014 and 2015 and then sold a little bit higher quantities in 2016, but still very small, you know, around probably less than 1 percent of the current consumption.

So they've really never come back to the U.S. market since those shutdowns. But I can provide more detail in our post-hearing brief on those issues.

VICE CHAIRMAN JOHANSON: Okay, thank you, Mr. Vander Schaaf.

Mr. Searcy?

MR. SEARCY: Yes, I just want to add to that. You know, certainly these electric shortages did affect other members of the Brazilian industry. I want to point out it did not affect Dow. We ran our facilities flat out because we didn't have those power issues. We need the

production from our Brazil facilities to maintain our own production and all of that material we produced running flat out, we used internally for our own use.

VICE CHAIRMAN JOHANSON: Okay, thank you, Mr. Searcy. And this is another question for Dow Corning. Globe points out that Dow Corning represented in a brief to the Commerce Department in the anti-dumping investigation on silicon metal from Brazil that "silicon metal for various sources, including from Brazil, is co-mingled and treated as fungible within the inventory systems." And this is -- can be seen in the petition brief at page 30.

Does this not suggest that Brazil considers silicon metal from Brazil -- pardon me, does this not suggest that Dow Corning considers silicon metal from Brazil and other sources as fungible?

MR. ORAVA: Steve Orava from King & Spalding. We'll get into this a little more in our post-hearing just to give the exact excerpts from the various submissions, but you know, it's another bit if misdirection, because it's taken out of context. You know, Dow stated that silicon metal from Brazil has low boron needed to make high purity quality silicon and this often not interchangeable with silicon metal from other sources.

What Globe fails to say is that they made their own statements to Commerce that silicon metal from Brazil

has a different chemical composition to that of non-Brazilian silicon metal, and so much so that any non-Brazilian silicon metal used in downstream production process with Brazilian silicon metal constitutes an additional material.

So essentially, they've taken the opposite position and have just not bothered to disclose that and we'll make that clear in our post-hearing submission.

VICE CHAIRMAN JOHANSON: Okay, thank you, Mr. Orava.

And as a follow up respecting low boron content silicon metal and whether it is a recognized commercial product, are there any international standards for this product? We spoke about trying to qualify the product, but are there international standards for it?

MR. SEARCY: Yeah, it's Mike Searcy here. We use that material in our Midland facility in Michigan. And because that material is the low boron material is so important to us, we source the majority of the silicone we use in that facility from either captive assets or controlled assets. So it's not a specification that would be out of the market place because it's so important to us that we control that internally.

MS. BYERS: This is Bonnie Byers. Mike, why don't you explain --

VICE CHAIRMAN JOHANSON: If you could move the microphone a bit closer?

MS. BYERS: Oh, sorry.

VICE CHAIRMAN JOHANSON: Thanks.

MS. BYERS: Why don't you explain to them why it is so important to have this high purity level for purposes of polysilicon production?

MR. SEARCY: Sure. I'm sure some of my peers here that produce polysilicon can talk more to this, but you need to recognize that some of the gains that we're seeing in the world in terms of computers running faster have to do with the fact that silicon is being more and more pure.

You know, the way you can think about it is these atoms that don't belong in a silicon are kind of like stop signs. So when the electricity is flowing through the semiconductor chips, if it hits these atoms that aren't supposed to be there like boron or other things that it kind of slows down the signal going through.

So what we're seeing is our customers are demanding higher and higher and higher purity. The way to think about the purity, I think, our friends at Wacker have talked about this in one of their briefs, but you know, maybe the way you can imagine it is like a dollar bill on a stack of dollar bills 10 feet tall, in a whole football field full of the stack of $10 bills 10 feet high in one

atom. One dollar bill represent one atom. That's the type of purity that the polysilicon is trying to get to in terms of meeting our downstream customers' needs.

So there's great pressure on us to continue to try to reduce the impurities in the feedstocks that we're providing to the Hemlock polysilicon plant and our competitors are dealing with the same pressures from their downstream competitors -- downstream customers as well.

VICE CHAIRMAN JOHANSON: Thank you, Mr. Searcy. My time has expired. Commissioner Williamson?

COMMISSIONER WILLIAMSON: Okay, just some follow up questions. What are the differences in the specifications of silicon metal required by producers of chemicals versus of producers of polysilicon? And also, what is the comparative size of U.S. consumption of silicon metal in these two product areas?

MR. MAJUMDAR: If I may?

COMMISSIONER WILLIAMSON: Go ahead. If you want to do it now post-hearing, whatever is easiest.

MR. MAJUMDAR: In our questionnaire responses, I think we referenced complex or very long quality response what we said what is required for silicones and what is required for polysilicon. I think that's on the record, right?

So simply said is that the requirements for

polysilicon are quite different than for silicone. Silicones, for example, heats -- the process heats heavy metals, which you could impart to the silicon metal by using petroleum coke instead of charcoal or instead of coal, because that poisons the catalyst that do the magic inside the process.

In terms of competitive size in the U.S., I think that's also CRU data. I think we've got that in the record. Silicones in 2017 require worldwide 900,000 tons of material. Solar is about 650,000 tons of material. And so chemical is 1500 or 1.5 million tons of material is required for polysilicon and chemical applications. And aluminum is 1.1 million.

COMMISSIONER WILLIAMSON: Okay. Does --

MR. MAJUMDAR: Yeah.

COMMISSIONER WILLIAMSON: Okay. Okay, thank you. Okay, thank you. And if anybody wants to add anything further post-hearing. Okay. Wacker and Simcoa's brief at pages 89 and 90 cite CRU as the source showing a global supply surplus in 2016 and 2017. In your post-hearing brief, please detail how you arrived at those figures from the CRU attachments and also provide comparable figures for 2014 and 2015. So that's for post-hearing. And with that, I have no further questions.

Commissioner Broadbent, any more questions?

Okay, okay. Sorry. Okay, yeah. If there are no further Commissioner questions, does staff have any questions for this panel?

MS. MESSER: Staff has no questions.

COMMISSIONER WILLIAMSON: I'm assuming that Commissioner Johanson doesn't have any more. But if he does, he can ask when he comes in. Staff says they have no questions.

Let's just make sure that Commissioner Johanson doesn't have any more questions. Yeah, I'll get to Petitioners next. Okay. Do Petitioners have any questions for this panel? No?

MR. KRAMER: We have no questions.

COMMISSIONER WILLIAMSON: Okay, thank you. Okay. Come on, David.

(Pause.)

COMMISSIONER WILLIAMSON: Just an issue, I just want to make sure there are no further questions for you. Okay.

(Pause.)

VICE CHAIRMAN JOHANSON: Okay. Thank you all for being here today. This panel is dismissed, and this will be followed by the closing arguments of the Petitioners and the Respondents. Petitioners have 17 minutes, that is 12 minutes of direct and five minutes of closing, and

Respondents have six minutes, a total of six minutes, one minute of direct and five minutes closing.

MS. LUTZ: Can we have a five minute break to put our notes together?

VICE CHAIRMAN JOHANSON: That would be fine.

MS. LUTZ: Thank you.

(Whereupon, a short recess was taken.)

MR. BISHOP: Will the room please come to order. Closing remarks and rebuttal on behalf of Petitioners will be given by William D. Kramer of DLA Piper US, and Jennifer Lutz of Economic Consulting Services. Folks, you have 17 minutes.

CLOSING STATEMENT OF WILLIAM D. KRAMER

MR. KRAMER: Thank you. We're going to address first some rebuttal points, and after we've done that I will deliver my closing statement. The witness for Dow Corning, Mr. Brown, flatly testified that U.S. producers do not produce low boron silicon metal. You know, for the reasons -- as our witnesses testified, Globe can and does produce low boron content silicon metal.

Furthermore, Globe's domestically produce silicon metal meets Dow Corning's silicon metal specifications, including Dow Corning's boron content limits. Dow Corning has not provided any evidence indicating otherwise. I also want to point out that three

other polysilicon producers testified here today. REC Silicon testified that they buy -- the silicon metal that they purchase is a specialized, high quality product, but in their testimony, they made no reference whatsoever to boron content.

Similarly, Mitsubishi made no mention of Globe failing to meet or being unable to meet its boron specification. Furthermore, they did not claim that Globe has not qualified in the United States. Instead, what they said is that Globe's product creates some unspecified quality problem, which has prevented it from qualifying by their customers, not Mitsubishi itself.

Wacker first described itself as a producer of hyper-pure polysilicon, and in that testimony it made no mention of a need to purchase low boron content silicon metal.

Later during the hearing, a Wacker witness testified that Wacker buys low boron material from Globe, that Globe can make low boron but it is higher cost. So I mean the bottom line is that, you know, this is a -- this is a not true this claim regarding low boron content silicon metal and its alleged effect on the market, something that the Commission has never heard in all the years of prior silicon metal proceedings.

The second point I'd like to make is that

Respondent's expert, Dr. Prusa, flatly testified that the U.S. industry is not experiencing material injury, but in his analysis made no reference whatsoever to the financial condition of the industry. Finally, at the Vice Chairman's request, Mr. Levy explained his analysis, that purports to demonstrate that the Commission should not give way to the underselling data.

I want to point out that the comparisons on which that analysis relies are not comparisons between actual prices during particular periods. Instead, what that analysis entails is a comparison of import unit values which in his case consist in substantial part of intra-company transfer prices, transfer prices that do not reflect market price and do not reflect the period concerned, comparison of those to the actual prices of the U.S. product. So we'll elaborate further on that, but that's not a valid comparison. Ms. Lutz is going to continue.

CLOSING STATEMENT OF JENNIFER LUTZ

MS. LUTZ: I promise I won't talk as long as I did earlier. But I wanted to respond to a couple of the slides from Dr. Prusa's testimony. You heard a lot about the cyclical nature of silicon metal prices and global prices, but you also heard product isn't comparable. It's the farthest thing from a commodity you have. Prices don't transfer from one segment to another, but global prices do.

Surprising, and their annotated slides showing prices in different markets and different events. 2015, Ferroglobe merger announced. Well, this supposedly signaled the impending market concentration of a megalith and prices in the U.S. market fell. That doesn't seem to follow in my mind, and presumably such an announcement would comparably affect European prices, and yet European prices were flat after the announcement.

Where they note that Mississippi Silicon begins production and prices continue falling, prices fall in Europe as well and fall further than they do in the U.S. market. In falling to the bottom of the market in 2016, Petitioners or Respondents claim that prices started to improve, so the improvement has nothing to do with the case.

But if you look at the timing here, prices bump up a little bit, start to flatten out. The petition is filed and prices increase sharply and continue up. It's just not consistent with their story. And then with respect to the slide, there Herfindahl-Hirschman index, which I haven't had to say since grad school, talking about how highly concentrated the market will be if the orders are imposed.

Well, this isn't a 337 case. The Commission does not issue exclusion orders. Imports can still enter the market if they're sold at fair prices. But they don't

want to talk about prices for a number of reasons. There was some interesting testimony, I hope my notes are correct on who said it. I believe it was Dow Corning had a very nice quote about how purchasers put a premium on diversity of supply.

That may be true figuratively, but the pricing data certainly show that it is not literal. If non-price factors accounted for the purchase of the subject imports, you would not expect consistent underselling. In fact, some of the statements with respect to supply diversity had already seen talking about reasons why it needed to diversify supply. Port strikes, transportation problems, plant issues. Well, none of those reasons would provide any basis for not buying from both Globe and an overseas.

But MPM gave the real reason why they wouldn't want to buy from both, because you can't get competitive bids from both plants if they're not competing against each other. So again, it comes down to price. Thank you.

CLOSING STATEMENT OF WILLIAM D. KRAMER (CONTINUED)

MR. KRAMER: I'll present a closing statement. The record in these investigations demonstrates that the domestic silicon metal industry is suffering very serious injury, and that the subject imports from Australia, Brazil, Kazakhstan and Norway are a primary cause of this injury.

Imports from each subject country satisfy the Commission's criteria for determining whether subject imports compete with each other and the domestic like product in the U.S. market. The Respondents' claims that subject imports from particular countries do not compete with the domestic product or other subject imports are contradicted by the record facts.

In particular, the record does not support the claim that silicon metal from Brazil does not compete with domestic product because of its low boron content, an assertion never made in any previous silicon metal proceeding. The record also does not support the claim that there is attenuated competition between the subject imports and domestic silicon metal. Accordingly, the Commission should reject these arguments. It should analyze the subject imports on a cumulated basis.

Silicon metal is a commodity product sold primarily on the basis of price. As the Commission found in its preliminary determination, "There is a high degree of substitutability between domestically produced silicon metal and the subject imports," and "Price is an important factor in purchasing decisions for silicon metal."

The record shows that there was a large increase in the volume of subject imports from 2015 to 2016, that continued into part-year 2017. While the volume of

subject imports increased, the imports average unit values declined. The imports were sold at very low prices that undersold the prices of the U.S. producers in 66 of 88 comparisons.

The low priced unfairly traded imports caused lost sales, lost revenues, price depression and suppression and declining market prices. The fact that the imports were often sold on an indexed price basis with steep discounts from published prices and no price floors contributed to the downward price spiral.

Wanting to diversify sources of supply or to achieve other business objectives does not justify purchasing dumped or subsidized imports at prices that undercut domestic producer prices. As a result of the influx of low-priced subject imports, the U.S. industry suffered very significant injury, particularly in 2016 and continuing into 2017.

This injury to the domestic industry can be seen in key injury indicia examined by the Commission, including sales revenue, cash flow, operating income, net income and employment. This harm cannot be explained away as a mere appearance of injury resulting from Globe's accounting policies. Nor is harm resulting from price undercutting by Globe or Mississippi Silicon.

As the Commission found in its preliminary

determination, "Intra-industry competition between Globe and Mississippi Silicon does not explain the significant underselling of the domestic industry by the subject imports, and thus does not explain the depression in U.S. producers' prices in 2016 and the decline in the domestic industry's revenues and financial performance."

More broadly, none of the arguments made by the parties opposing the petition at the hearing today and in their prehearing briefs undermine the record facts demonstrating that the domestic industry is suffering very serious injury, and that the subject imports are a primary cause of that injury. Thank you.

MR. BISHOP: Closing remarks on behalf of Respondents will be given by Stephen J. Orava of King and Spalding, Jonathan T. Stoel and Craig Lewis of Hogan Lovells US. Gentlemen, you have a total of six minutes. Scratch Craig Lewis.

CLOSING STATEMENT OF STEVE ORAVA

MR. ORAVA: Okay. Steve Orava with King and Spalding on behalf of Dow Silicones. I'd just like to make a couple of points on closing. First, Petitioners' counsel essentially states that Dow is not being truthful in relation to its low boron requirements. I would just say that our witnesses, as you heard testified under oath that Globe and Mississippi Silicon cannot Dow's proprietary

specification for low boron.

Dow must obtain this supply from its captive Brazilian facility, because the use of charcoal as a raw material rather than coal is necessary to achieve this level. Now Globe is well aware of Dow's high sensitivity to low boron specifications, as it requested a waiver to meeting them, which Dow granted. But as a consequence, Dow was required to bring more imports into its U.S. facilities from Brazil in order to meet the quality requirements of Hemlock's polysilicon.

The second I'd just like to say that in Dow's view, the Commission -- if the Commission makes an affirmative determination, the only impact will be that Dow will be succeeded in executing -- that Globe will have succeeded in executing its strategy using trade cases as documented in their many presentations, to force a switch from one foreign source of imports to another, in order to meet the significant excess demand in the U.S. market.

Essentially Globe wins, and will increase their U.S. market share beyond it's current level of 80 percent, but unfortunately the U.S. industry will lose. Absent offshoring of downstream industries, excess demand in the U.S. market will need to be satisfied. Instead of coming from Brazil, in Dow's view the supply will come from Globe's affiliate in South Africa, significantly increasing

concentrations of suppliers and reducing the security and diversity of supply that is critical to Dow's U.S. silicones and polysilicon value chain.

And finally the second panel didn't really talk about threat, and I guess from Dow's perspective we really view the U.S. market as providing a lot of opportunities. Dow's continuously looking and exploring expansion opportunities, but those expansion opportunities are contingent on having a secure and reliable source of raw material supply that meets its specification.

So we hope that you help to preserve both our existing billions of dollars of investment, both on the silicones and the polysilicon side of our value chains, as well as the opportunities that may be before us in the future. Thank you.

CLOSING STATEMENT OF JONATHAN STOEL

MR. STOEL: Good afternoon Commissioners. Jonathan Stoel. Thank you for the opportunity to close this area and for your attention today. You've heard from all the witnesses this afternoon that silicon metal is not a commodity, and it's not sold solely on the basis of price, as Petitioners have falsely alleged.

What is critical for the Commission to recall is that the U.S. industry cannot meet U.S. demand, and that Petitioner is not a reliable supplier. Petitioner testified

incorrectly that -- Petitioner's testimony as to their reliability is directly contradicted by all the witnesses this afternoon. They all said not so to Petitioner's claims that they could satisfy all of their needs.

There's been no material injury Commissioners, from subject merchandise. Subject import levels were flat during the Period of Investigation, and the introduction of Mississippi silicon into the market is a sign of optimism. Production and shipments are all rising. Regarding price, the key points are that silicon metal follows independent, long-term global trends.

These have been going on for years, Commissioners. This is not about a short-term cyclical industry. If you look up there, you'll see that EU prices were falling long before U.S. prices, and of course U.S. prices then followed. Second, Mississippi silicon entered the market and had a dramatic impact on pricing. We talked a lot about that today, and the 2015 and 2016 data confirm it.

Today though, as my friend Mr. Orava testified, prices are rising Commissioners. We're seeing rising prices and rising demand globally in the United States. Regarding impact. The entry of Mississippi Silicon produced some solid results for the industry as a whole. Ferroglobe has bellyached to you today about its financial

performance, Commissioners.

But I urge you to consider the following: Its costs from affiliated suppliers; its continued 2016 imports from South Africa, even as they shut down U.S. production; and the golden parachute that was provided to Ferroglobe's chief chairman. Last, as Mr. Orava said, there is no threat to the domestic industry. Prices are rising. U.S. demand for silicon metal is increasing and Ferroglobe itself is now operating all of its U.S. production facilities. The future is very bright.

In sum, this is not an industry needing your protection. Please don't jeopardize thousands of U.S. downstream jobs to protect the U.S. and global market leader in silicon metal. Thank you.

VICE CHAIRMAN JOHANSON: Thank you. I will now make the closing statement. Post-hearing briefs, statements responsive to questions and requests of the Commission and corrections to the transcript must be filed by February 22nd, 2018. Closing of the record and final release of data to parties is due on March 19th, 2018, and final comments are due on March 21st, 2018. This hearing is adjourned.

(Whereupon, the hearing was adjourned at 4:10 p.m..)

CERTIFICATE OF REPORTER

TITLE: In The Matter Of: Silicon Metal From Australia, Brazil, Kazakhstan, and Norway

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HEARING DATE: 02-15-18

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NATURE OF HEARING: Final

I hereby certify that the foregoing/attached transcript is a true, correct and complete record of the above-referenced proceeding(s) of the U.S. International Trade Commission.

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SIGNED: Mark A. Jagan

Signature of the Contractor or the Authorized Contractor's Representative

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I hereby certify that I reported the above-referenced proceedings of the U.S. International Trade Commission and caused to be prepared from my tapes and notes of the proceedings a true, correct and complete verbatim recording of the proceedings.

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