UNITED STATES
INTERNATIONAL TRADE COMMISSION

In the Matter of:	)	**Investigation Nos.:**
CERTAIN CRYSTALLINE SILICON	)	**701-TA-511 AND**
PHOTOVOLTAIC PRODUCTS FROM	)	**731-TA-1246-1247**
CHINA AND TAIWAN	)	**(FINAL)**

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CHINA AND TAIWAN	) (FINAL)

Monday, December 8, 2014
Main Hearing Room (Room 101)
U.S. International Trade Commission
500 E Street, SW
Washington, DC

The meeting commenced pursuant to notice at 9:30 a.m., before the Commissioners of the United States International Trade Commission, the Honorable Meredith M. Broadbent, Chairman, presiding.

APPEARANCES:

On behalf of the International Trade Commission:

Commissioners:

Chairman Meredith M. Broadbent (presiding)

Vice Chairman Dean A. Pinkert

Commissioner Irving A. Williamson

Commissioner David S. Johanson

Commissioner Rhonda K. Schmidtlein

Staff:

William R. Bishop, Supervisory Hearings and Information Officer

Jennifer Rohrbach, Supervisory Attorney, Docket Services

Mikayla Kelley, Student Intern

Chris Cassise, Investigator

Andrew David, International Trade Analyst

Aimee Larsen, Economist

David Boyland, Accountant/Auditor

James McClure, Supervisory Investigator

Congressional Appearances:

The Honorable Ron Wyden, United States Senator, Oregon

The Honorable Richard M. Nolan, U.S. Representative, 8th District, Minnesota

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

Wiley Rein LLP, Washington, DC on behalf of SolarWorld Industries America, Inc. ("SolarWorld"):

Mukesh Dulani, President, SolarWorld

Ardes Johnson, Vice President Sales, SolarWorld

Gary Shaver, President, Silicon Energy, LLC

Erin Clark, President-Solar, PetersenDean

Mike McKechnie, President, Mountain View Solar

Dr. Seth T. Kaplan, Principal, Capital Trade Inc.

Timothy C. Brightbill, Laura El-Sabaawi and Usha Neelakantan, Wiley Rein LLP

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

Sidley Austin LLP, Washington, DC on behalf of China Chamber of Commerce for Import and Export of Machinery and Electronic Products:

Robert Petrina, Managing Director, Yingli Green Energy Americas, Inc.

Thomas Koerner, General Manager, Americas, Canadian Solar (USA) Inc.

Jeff Dorety, President Trina Solar (U.S.) Inc.

John Morrison, Senior Vice President, Strata Solar LLC

Polly Shaw, Vice President, SunEdison

Kenneth R. Button, Senior Vice President, Economic Consulting Services, LLC

Jennifer Lutz, Senior Economist, Economic Consulting Services, LLC

John P. Smirnow, Vice President of Trade & Competitiveness, Solar Energy Industries Association ("SEIA")

Neil R. Ellis, Richard L.A. Weiner, Brenda A. Jacobs, Rajib Pal, Shawn Higgins and Kelly Rosencrans, Sidley Austin

White & Case LLP, Washington, DC on behalf of Taiwan Photovoltaic Industry Association ("TPVIA"):

Austin Chiu, General Counsel, Neo Solar Power Corporation and Coordinator, TPVIA AD Task Force

Laylay Pan, Chief Financial Officer, Gintech Energy Corporation

Joyce Chen, Senior Associate Vice President of Procurement, Solartech Energy Corp.

Sascha Rossmann, Vice President of Global Sales, Winaico

Jing Yu, Vice President, Winaico USA

Barry Moore, President, Moore Energy LLC

Walter J. Spak, Jay C. Campbell and Adams Lee, White & Case LLP

Perkins Coie LLP, Washington, DC on behalf of SunEdison, Inc. ("SunEdison"):

Polly Shaw, Vice President, NAMR Government Affairs, SunEdison, Inc.

David S. Christy, Jr., Perkins Coie LLP

Trade Pacific PLLC, Washington, DC on behalf of tenKsolar, Inc.:

Joel Cannon, Chief Executive Officer, tenKsolar, Inc.

Arent Fox LLP, Washington, DC on behalf of Trina Solar (U.S.):

John M. Gurley, Arent Fox LLP

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P R O C E E D I N G S

CHAIRMAN BROADBENT: Good morning. On behalf of the U.S. International Trade Commission, I welcome you to this hearing on Investigation Nos. 701-511 and 731-1246, 1247, involving Certain Crystalline Silicon Photovoltaic Products from China and Taiwan.

The purpose of these investigations is to determine whether an industry in the United States is materially injured or threatened with material injury, by reason of less than fair value imports from China and Taiwan, and by reason of imports that are subsidized by the government of China.

Documents concerning this hearing are available at the public distribution table. Please give all prepared testimony to the Secretary. Do not place it on the public distribution table. All witnesses must be sworn in by the Secretary before presenting testimony.

I understand that parties are aware of the time allocations, but if you have any questions about time, please ask the Secretary. Speakers are reminded not to refer to business proprietary information in their remarks or in answers to questions. Please speak clearly into the microphones and state your name for the record, so that the court reporter knows who is speaking.

If you are submitting documents that contain

information you wish classified as Business Confidential, you're requested to comply with Commission Rule 201.6. Finally, I note that the Chinese respondents and the Taiwanese respondents ask that the Commission consider extending the deadline for filing post-hearing briefs, or give the parties an opportunity for supplemental briefing after Commerce releases its final determinations on the scope of these investigations.

We will not be revising the date for submitting post-hearing briefs, which are still due to be filed on December 15th, 2014. Once Commerce has issued its final determination, the Commission will consider your request for additional briefing opportunities. I would support additional briefing opportunities, and I think procedurally we could vote on that. Mr. Secretary, are there any preliminary matters?

MR. BISHOP: Madam Chairman, there are no preliminary matters.

CHAIRMAN BROADBENT: Very well. Let's now proceed with opening remarks.

MR. BISHOP: Opening remarks on behalf of Petitioner will be by Timothy C. Brightbill, Wiley Rein.

CHAIRMAN BROADBENT: Welcome, Mr. Brightbill.

OPENING REMARKS BY TIMOTHY C. BRIGHTBILL

MR. BRIGHTBILL: Good morning Chairman

Broadbent and Commissioners and staff. The U.S. industry is here today to finish a job that we started more than three years ago. As you are aware, SolarWorld first petitioned the ITC for relief in the fall of 2011, in response to the Government of China's systematic effort to dominate the global solar manufacturing industry, using a combination of state planning, billions of dollars of subsidies, massive capacity additions and dumping, in order to capture sales and market share.

In that case, the Commission unanimously found that massive volumes of subject imports that undersold the domestic like product produced product by substantial margins, caused layoffs, shutdowns, severe financial harm and other material injury to the U.S. industry.

The Commerce Department also found substantial dumping and subsidies, and imposed duties of 30 to 250 percent almost two years ago. Unfortunately, the Commerce Department's orders did not cover Chinese modules made with non-Chinese cells, leaving a hole in the relief for the domestic industry.

And even before the duties were imposed, Chinese producers, assisted in great measure by Taiwan, made minor changes to their production methods, exploited the loophole, and continued to ship dumped and subsidized product here to the United States. That meant the harm to

the U.S. industry continued.

The evidence that these subject imports are causing substantial harm to the U.S. solar cell and module industry is overwhelming. The injury is severe, and there is no doubt that subject imports are a cause. Chinese and Taiwanese module producers are pushing dumped and subsidized product into the United States in large volumes and at very substantial margins.

Imports of subject modules alone increased by more than 2,000 percent between 2011 and 2013, far outpacing U.S. demand. Subject producers' share of the U.S. module market jumped from a mere six percent to a staggering 85 percent earlier this year. At the same time, U.S. producers' share fell by 20 percentage points.

Pervasive under-selling has pushed U.S. prices to unsustainably low levels. U.S. prices fell by 60 percent, and these dumped and subsidized subject imports have caused material injury to the U.S. industry. Demand increased by more than 76 percent during the Period of Investigation, but domestic producers, far from benefitting, were harmed further. More than 1,000 additional workers were laid off during this period.

Numerous U.S. producers have been forced to shut down, declare bankruptcy or significantly cut production, all despite a growing market and existing trade

remedy orders. The cause of this injury is clear. Subject producers have massive and growing cell and module production capacity, estimated as high as 60 gigawatts in China, and another 10 gigawatts in Taiwan.

Together, these two countries represent about three-fourths of global solar production. Without trade relief, that excess capacity will be headed here. The dumping and subsidies taking place today have harmed the entire U.S. industry.

Today, you will hear from two senior officials of SolarWorld, as well the president of Silicon Energy, a smaller U.S. producer of high end solar modules, and two solar installers, PetersenDean and Mountain View Solar. All of them have seen firsthand the harm that these imports are causing in the marketplace.

Against this record of unmistakable injury and causation, Respondents today will offer you a set of alternative rationales that are flatly contradicted by the investigation record of these cases. These alternatives may sound familiar, and they are, because this Commission already properly reviewed and rejected them two years ago, and rejected them again in the preliminary determination earlier this year. You should reject them again today.

Chinese and Taiwanese imports have taken the U.S. market at precisely the time when U.S. producers should

have recovered and thrived. Instead, the U.S. industry is again fighting for its survival. For these reasons, we respectfully request relief from dumped and subsidized Chinese and Taiwanese imports and enforcement of our trade laws on behalf of the U.S. solar manufacturing industry and its thousands of workers. Thank you very much.

MR. BISHOP: Opening remarks on behalf of Respondents will be by Richard Weiner, Sidley Austin and Walter Spak, White and Case.

CHAIRMAN BROADBENT: Welcome, Mr. Weiner. You may begin.

OPENING REMARKS BY RICHARD L.A. WEINER

MR. WEINER: Madam Chairman, members of the Commission, good morning. I'm Richard Weiner, Sidley Austin, on behalf of the Chinese respondents. SolarWorld is before you again seeking duties on imported CSPV products that would bar all Chinese and Taiwanese CSPV cells and modules from the U.S. market.

If SolarWorld succeeds, the burgeoning U.S. solar industry will grind to a halt, because the domestic industry cannot satisfy U.S. solar demand, and because solar electricity would be uncompetitive at SolarWorld's desired prices.

SolarWorld places in peril U.S. climate change goals and 143,000 American solar jobs, all without

benefitting U.S. CSPV manufacturers. That is why the U.S. Solar Energy Industries Association and the major U.S. purchasers are united in opposition to SolarWorld's ongoing efforts to derail the growth of the U.S. solar industry.

The Commerce Department has left the Commission in the unenviable position of conducting these investigations, uncertain as to which imports are within scope. As the Commission recognized in its preliminary determinations, if Commerce's country of origin findings from CSPV-1 were applied to these investigations, there would be no subject imports from China.

Moreover, as the prehearing report recognizes, there is an apparent contradiction between Commerce's October 3 proposal that the country of origin of a module should be determined by the country of module assembly, and Commerce's previous rule that it should be determined by the origin of the cells.

The only logical outcome here is that all Chinese CSPV cells and modules are already covered by the prior orders. With no subject imports from China, a negative determination on China is compelled. Turning to the issue of current injury, SolarWorld is simply retelling the same tale it told in 2012 and earlier this year.

However, the present record departs in critical respects from the records in the earlier

investigations. Most importantly, the present record shows that the domestic industry has made a bad bet on monocrystalline technology, while the U.S. market has overwhelmingly demanded multicrystalline products, which subject imports supply.

Further, the record shows that the domestic industry, with its limited capacity, routinely failed to supply products that customers demanded, especially utilities, which are now the largest U.S. market segment; that meaningful price under-selling conclusions are not possible, particularly due to attenuated competition; that price depression is the result of raw material cost declines and constant improvements in technology; and that there is no evidence of a cost price squeeze and thus no indication of price suppression. These critical differences compel negative current injury determinations here.

Finally, with regard to threat, SolarWorld's claim that global demand is insufficient to absorb Chinese and Taiwanese capacities is flatly incorrect. Rather, global demand is forecast to be about 50 gigawatts in 2014, and over 60 gigawatts in 2015. The record shows Chinese and Taiwanese production capacities to be well below those figures. Thank you.

CHAIRMAN BROADBENT: Mr. Spak, you may begin.

OPENING REMARKS OF WALTER J. SPAK

MR. SPAK: Thank you. Good morning, Commissioners. My name is Walter Spak. I'm a partner with the law firm of White and Case. I'm here today on behalf of the Taiwan solar industry. Because my time is very limited, I think have 90 seconds, I have to just make one point, but I think it's the most important point for the Commission to consider.

Simply put, the Taiwan industry is a solar cell industry. In fact, the industry's worldwide leader in the production of commercial, high quality and high efficiency cells. Now why is this important? As a cell industry, Taiwan is very different from the Chinese and the U.S. industries. The Chinese and U.S. industries both focus on making modules and then selling those modules to installers and utilities.

In contrast, the Taiwanese industry focuses on producing cells and selling them to module producers throughout the world, including the United States. As a cell industry, the Taiwan producers do not injure or threaten to injure the U.S. industry.

In fact, the Taiwan industry benefits the domestic industry. Taiwan is a reliable partner and supplier of high quality cells to U.S. module assemblers. Cutting off the supply of Taiwan's cells can only disrupt the growth of the U.S. industry and undermine its

competitive position. Thank you very much.

MR. BISHOP: Would the first panel, those in support of the imposition of anti-dumping and countervailing duty orders, please come forward and be seated. Madam Chairman, all witnesses on this panel have been sworn in.

(Pause.)

CHAIRMAN BROADBENT: Welcome. You may begin.

MR. BRIGHTBILL: Good morning again Chairman Broadbent and Commission and staff. Tim Brightbill from Wiley Rein. Before we hear from the U.S. industry witnesses, I wanted to highlight some of the key facts and findings and market factors affecting this case.

We don't have it on screen at this point, but I believe you all have my presentation in front of you. So I'd like to go through that briefly, and then we'll turn to the testimony.

As you see on Slide 2, first I'd like to review briefly the first investigation, where you see that subject imports during the 2011-2012 investigation, increased by more than 1,000 percent. This was an incredibly surge of Chinese imports from the period 2008 to 2011, up to $3 billion in imports in 2011.

On Slide 3, you see that the underselling was pervasive and significant in the first investigation. China entered the market through a combination of state planning,

subsidies of billions of dollars, systematic underselling, all of which have continued to the present.

On Slide 4, you see the result of this surge of imports and underselling, which was that numerous U.S. producers closed their facilities, declared bankruptcy or laid off significant numbers of workers. More than 2,000 jobs were lost in the first investigation.

On Slide 5 you see the Commission made a unanimous affirmative material injury finding, and I just want to go over some of the findings that you made two years ago. These will sound familiar, given the investigation record before you. On capacity, the Commission found subject producers in China had substantial capacity and substantial unused capacity throughout the POI, and they continued to increase their capacity and unused capacity throughout this time.

The volume of imports. You found that subject imports maintained a substantial and growing presence in the U.S. market.

With regard to underselling, you found that subject imports of both lower and higher wattage products pervasively undersold the domestic like product at wide margins in sales to all segments, and that this prevented the domestic industry from pricing their product at levels that would permit it to recover its costs, and you found

that subject imports had a significant adverse impact on the domestic industry during the period.

The ITC conducted a very thorough investigation of supply and demand conditions, price formation, all the alternatives causes of injury, which were again confirmed in this investigation. On Slide 6, you see that duties were imposed of 30 to 250 percent.

But notwithstanding these significant margins, U.S. imports of solar cells and modules from China and Taiwan have continued to increase substantially, depressing prices and severely injuring the domestic industry.

On Slide 7, you see that even before preliminary duties were imposed in the prior case, Chinese and Taiwanese producers changed their production models to avoid paying duties, and you have quotes from some of the senior executives here today. According to CCME, also here today, 70 percent of the companies exporting to the U.S. market were using Taiwanese manufactured solar cells at the beginning of 2014.

So what have we seen in this investigation? On Slide 8 you see that U.S. imports in this Period of Investigation have increased more than 2,000 percent between 2011 and 2013, and more than doubled during the interim periods. It's remarkably how quickly subject imports grew and replaced U.S. market share.

On Slide 9, you see that the subject imports undersold U.S. producers throughout the Period of Investigation. Now this is AUV data. The actual under-selling data is confidential, but also shows a significant majority of under-selling by both China and Taiwan, that is even more pronounced by volume, and I would note that this is after the staff gathered additional data at the request of Respondents on mono versus multiproducts.

On Slide 10, you see that subject imports took significant market share, rising from six percent in 2011 to 82 percent in 2013, and 85 percent in 2014. I have never seen this before in 18 years as a trade attorney, market share rising from six percent to 85 percent.

I asked Dr. Kaplan if he's seen that before; I don't think he ever has, and I'm willing to bet that none of you have even seen a market share shift that rapid and that complete.

On Slides 11 and 12, we give you some of the continued offers of unfairly traded prices in the marketplace. Some of these are older, some of these are newer, and you see in particular Taiwan-made cells inside. There's no clearer evidence of how China avoided and evaded the first trade case by these advertisements from various solar trade shows.

Now what has happened as a result of the

dumping and the subsidies and the surge? On Slide 14, you see additional closures of U.S. manufacturers, and it's also laid out in detail in the staff report. One company, Helio SolarWorld, Helio Solar Works, testified here two years ago. They suspended operations in Wisconsin, and there are many others, including mono producers, multi-producers shut down since -- in this Period of Investigation.

On Slide 15, you see the operating margins of the U.S. industry, and the actual data is APO. But you can look for yourself in Part 6 of the staff report, and it is brutal, the operating results for this industry. The harm has continued in all of the other statutory factors that Dr. Kaplan will go through at the end of this presentation.

With that, I'd like to turn to the presentations of our witnesses, starting with Mukesh Dulani of SolarWorld.

STATEMENT OF MUKESH DULANI

MR. DULANI: Good morning. I'm Mukesh Dulani, president of SolarWorld America, Incorporated, located in Hillsboro, Oregon. I have worked for SolarWorld since 2009, and became president of the company in October 2013. On behalf of SolarWorld and its more than 700 U.S. employees, I would like to thank the Commission and staff for their hard work on this case.

I urge the Commission to find that imports

from China and Taiwan have injured our industry and present it with further injury. We have pursued our cases for 3-1/2 years, with support from the Coalition for American Solar Manufacturing.

The Coalition includes 250 U.S. companies with about 25,000 employees, mostly small and medium-sized installers. We are honored that some of these coalition members and supporters are here with us today.

SolarWorld is by far the largest crystalline silicon photovoltaic cell and module producer in the Americas. Worldwide, the company is entirely a vertically integrated producer. For the Period of Investigation, we grew the silicon crystalline, cut the crystals into wafers, converted the wafers into cells and assembled the cells into solar modules, all on U.S. soil.

Since 2007, we have invested more than $600 million to produce right here in the United States. We did so without the use of any federal loan guarantees or subsidies. We now produce both cells and modules in our Hillsboro, Oregon facility, where we also are researching and developing the solar technologies of tomorrow.

We employ more than 700 highly skilled people in our illustrative art facilities, in jobs ranging from Ph.D. scientists to production floor operators. We can compete with anyone in the world in any market that trades

fairly under international and U.S. law.

Unfortunately, we have been forced to compete against governments and unfairly-traded imports for the past five years. The Commission and staff are already well aware of the factors that have inflicted injury on the U.S. solar industry. As we have detailed in the two cases, the Chinese government has targeted the solar industry as a key industry of strategic importance, and has supported huge growth in solar capacities and exports far beyond demand.

China unfair trade practices caused the injury that brought us to petition you for help more than three years ago. In the first investigation, the Commission found a massive surge of Chinese solar cells and modules all over the United States at fairly low prices, substantially under-selling the domestic like product.

As a result, the U.S. industry and its workers suffered many forms of harm. Because of these unfair trade practices, we obtained anti-dumping and countervailing duty orders on Chinese solar cells and modules in December 2012. Unfortunately, we are back here today to tell you what has happened since those orders were imposed.

Initially, the orders in the first cases provided the domestic industry some benefit. However, even in the first cases it was clear that Chinese solar producers, with the help of Taiwanese producers, planned to

evade duties by using a loophole in the scope, which did not cover Chinese modules assembled from non-Chinese cells. China and Taiwan did in fact exploit this loophole.

Even before preliminary duties were imposed, Chinese producers began using third country cells, mostly from Taiwan, in the modules then assembled in China, either by buying cells from Taiwanese producers outright or shipping wafers to Taiwan for processing into cells, then shipping them back to China for assembly into modules.

The evidence in this case now makes clear just how complete this shift was. As a direct result, the same unfair trade practices, dumping and subsidies continue to injure domestic producers.

STATEMENT OF MR. MUKESH DULANI

MR. DULANI: I do not believe the Commission intended this outcome. What I can tell you that it profoundly disappointed SolarWorld and its workers.

Since the first cases, unfairly traded subject imports have continued to injure the U.S. industry. A few years ago SolarWorld testified that we were seeing subject modules being sold in the United States for less than $1 a watt.

Chinese and Taiwanese producers now have pushed prices down even further. It is common for us to face from subject module producers in the range of 60 cents per watt

and sometimes even lower.

These prices are not fairly traded or sustainable. Despite improvements to our production efficiencies, our substantial R&D investments and our significant cost-cutting measures we simply cannot keep pace with the pricing of dumped and illegally subsidized subject imports.

These unfairly prices subject imports have continued to injure the domestic industry. Most notably SolarWorld again reduced its production and workforce. In 2011 SolarWorld worked full speed at about 1350. Now our work force has dropped to about 700.

SolarWorld was forced to shut down all production with the Camarillo facility which had made solar products since the late 1970s. We have now closed even our sales marketing and other commercial activities there.

In Oregon we also had to lay off workers and curtail production on our 100-acre campus. In August 2013, we were forced to shut down our U.S. production of ingots and wafers. And our state-of-the-art crystal and wafer production equipment now sits idle in our facility despite rising demand for solar products and even after winning the first rate case, we were still forced to dismiss workers in our facilities.

We have suffered huge operating losses and lost

market share.

SolarWorld is not alone. Many U.S. solar producers have further curtailed production, laid off workers, shut down or filed for bankruptcy, even after the first cases.

Just this past spring Sharp Solar shut down its U.S. manufacturing in Memphis, Tennessee laying off 700 workers. You may recall the CEO of Helio Solar Works, a U.S. solar producer based in Milwaukee, Wisconsin testified to the Commission in the first case.

Since then Helios was forced to file for receivership and stop all operations in September of last year due to the damaging effects of subject imports on the U.S. market.

We and other surviving domestic producers have made significant investment in U.S. production with service to ongoing growth in the domestic market. But by continuing to overrun the U.S. industry dumped and subsidized imports from China and Taiwan have deprived the U.S. industry of fair competition in the U.S. market.

We are disappointed that we have had to file the second case. But the unfair trade practices have continued and their effects on the U.S. industry have worsened. The U.S. industry and its workers do not understand why the previous order did not adequately address the improper trade

practices and harms. This struggle to grasp why the domestic industry was forced to go to such extraordinary lengths and suffer so much injury for years merely to give them a chance to compete under fair conditions. The current cases are starting to make a difference. After preliminary duties were enforced earlier this year, SolarWorld's sales have improved.

U.S. producers have announced some manufacturing expansions in the near future and other companies are becoming interested in manufacturing in the United States. Yet these improvements depend on a positive outcome in this case. I have no doubt that the U.S. industry's condition would immediately worsen again if final duties are not imposed.

We believe that the Commission's task is clear. In the first cases you unanimously found in the first cases that subject imports trade practices materially injured the U.S. industry. Today we ask you to again find that the U.S. industry is materially injured by subject imports from China and Taiwan and certain, with even further injury. The future of the industry and the job depend on this.

Thank you and I'm happy to answer any questions that you have.

STATEMENT OF ARDES JOHNSON

MR. JOHNSON: Good morning and thank you for the

opportunity to testify today. I am Ardes Johnson, Vice President of Sales and Marketing for SolarWorld Americas.

In this capacity I am responsible for SolarWorld's sales and marketing operations throughout the Americas. I joined SolarWorld in June of 2013, part of that I worked for General Electric in various energy divisions for about 12 years and served five years as a naval officer prior to that.

As the company's top U.S.-based sales executive, I'm proud to say that in terms of quality, warranty, sustainability, and real value, SolarWorld has the best products in the market today. We continually innovate to improve our technology, increasing manufacturing efficiencies and lowering our costs. We have substantially increased the output of our solar panels in recent years to 280 watts on our 60-cell panel and 320 watts on our 72-cell panel.

In the expanding U.S. market we and others have made significant investments to supply growing demand for solar sales and modules in the United States using U.S. raw materials, U.S. suppliers, and U.S. workers. Since 2008 SolarWorld purchased more than $1.4 billion in equipment, parts and services supplies from all 50 states creating additional jobs and benefits nationwide.

The U.S. solar market is strong. Demand for

solar has increased and will continue to increase. SolarWorld as a leader in technology for decades should have been expanding and adding jobs throughout this time. We sell in all channels of the U.S. market and we manufacture both multi- and monochrystalline products. We sell in the commercial utility and residential sectors and we are strong in all of these sectors. In fact, over the period of investigation, the commercial segment was SolarWorld's largest market in terms of sales volume followed by utility, then residential. And, yet, instead of growing SolarWorld and U.S. manufacturing industry had been in a downward spiral. By flooding the U.S. market with unfairly priced product subject producers caused a collapse in pricing which crushed U.S. manufacturers' sales channels.

Chinese and Taiwanese imports have surged in the United States in huge quantities. The majority of these imports were 60-cell modules, the type that SolarWorld produces and by far the most commonly used module in the market.

SolarWorld competes head to head with all of these subject imports including 72-cell modules. Since 2012 Chinese and Taiwanese producers have used price to drive in large volumes of solar panels and supply and demand market principles simply do not apply to them.

I negotiate prices with potential customers all

the time and I know that the price per lot of solar products is the primary factor in customers' purchasing decisions. As the surge in subject imports have accelerated, we have seen lower and lower Chinese and Taiwanese price offerings which could not have been related to production costs.

We have been under constant pressure to drop our prices just so we would have a chance at competing and maintaining some sales volume.

For my job, my sales team and I travel around the country visiting customers and attending various trade shows. We have found Chinese and Taiwanese producers offering solar products at cut-throat prices. From one trade show to the next their prices continue to decline. They even advertise that their products are not subject to antidumping duties and are "tariff free".

In addition, I'm constantly confronted with Chinese and Taiwanese price offers. This year we are being harmed every day by subject imports and we are seeing them offer modules from 60 cents per watt and even less. That is one-third of where the prices were just three years ago.

No one should be forced to compete with these dumped and subsidized price levels. These imports cause module prices in the U.S. market to free fall over the past three years. Such a large drop in prices during a period of strong demand is a direct result of subject producers

overcapacity and unfairly priced imports that are directed at the U.S. market. These producers have shown that they will undercut the U.S. industry prices, no matter what they are, in order to take market share.

Chinese and Taiwanese dumped prices have frequently been so much lower than the U.S. market prices we have simply lost the chance to even participate in sales opportunities.

The filing of these petitions and the imposition of preliminary duties in this case this summer seems to have stemmed further price free fall, at least for now. But I have no doubt that prices will drop again right away if these duties are not imposed as a result of this case. In fact, many foreign producers have specifically told customers that they will immediately drop prices again if these cases go away. Similarly, SolarWorld has increased its sales in recent months with the trade duties in place. But if these duties go away, our sales agreements would be in jeopardy.

These imports have dramatically increased their U.S. market share at the U.S. industry's expense. By overwhelming the market Chinese and Taiwanese producers have forced many producers to shut down U.S. operations or declare bankruptcy and thousands of U.S. workers have already lost their jobs.

If this case is not successful, Chinese and Taiwanese producers will continue to take U.S. sales and jobs at any cost. These producers have crippled our industry and stand poised to inflict additional injury in the absence of effective trade relief.

I firmly believe that this case is vital to the growth, success, and indeed, viability of the U.S. solar manufacturing industry.

We hope that relief from this case we will finally be able to stop the harm to this industry and return to fair competition in the market. I urge the Commission to find that dumped and subsidized imports are materially injuring the domestic industry and threaten the domestic industry with further injury.

Thank you for your time and your hard work in that is case. I am happy to answer questions you may have.

STATEMENT OF GARY SHAVER

MR. SHAVER: Good morning. I am Gary Shaver, President of Silicon Energy, a small, U.S. IBEW solar module manufacturer in Minnesota and Washington state. I understand there are members of the IBEW represented in the crowd today and I would like to thank them for coming.

I have been with Silicon Energy since the company began in 2007 and have served as its president for the past five years. I have about 15 years of total experience in

the renewable energy sector.

Silicon Energy is a start-up solar company that set out to design a unique and superior photovoltaic module and installation system that would not only compete in a world economy, but also deliver a new paradigm for solar installations that moves beyond the present module frame of mind.

We started R&D in 2007 and began production in mid-2009. In August 2011, we opened a second multi-million dollar manufacturing plant in Northeastern Minnesota.

Silicon Energy produces a unique PV system composed of a glass on glass mono and multi-crystalline solar modules that are combined with an integrated installation system that gives a building integrated look.

While focused on commercial awnings, carports and other overhead structural solutions, this product can be successfully used in any market segment especially high durability applications such as hurricane areas and for military uses.

In addition to residential installations, Silicon Energy has supplied or been specified into commercial, remote telecom, remote villages, and high-durability military installations.

We believe that our modules are of unmatched quality, durability, and appearance. However, despite

Silicon Energy's intention to compete in a high-end niche solar market, we have been severely injured by dumped and subsidized subject imports. Silicon Energy entered the solar industry at what should have been a great time. The U.S. solar market has grown steadily in recent years and we were poised and ready to take advantage of this growing market.

Given this market, we should have been able to grow our business in the responsible, sustainable, and environmentally friendly manner we intended and also make a profit. But just as the market began to flourish, subject imports rushed into the U.S. market. In fact, soon after we opened our second manufacturing facility in 2011, Chinese imports surged into the United States at astonishing levels at unfairly traded prices. We started seeing dramatic price declines as a result in modules, module components used by U.S. competitors.

High import levels and rapidly falling prices continued after the trade cases in 2012 when Chinese producers continued shipping using Taiwanese solar cells. The severe pricing pressure caused by subject imports has made it extremely difficult to sell our products based on quality, durability, environmental sustainable manufacturing, local and U.S. content sourcing, and unique integrated differentiating factors.

Contractors and distributors buy solar products based primarily on price with virtually no discussion at all about quality or other factors. Furthermore the effects of dramatic price decreases have pervaded policy thinking at the U.S. and the state level policymaking levels.

This has led policymakers to undervalue the critical importance of manufacturing in the U.S. and to mistakenly believe that U.S. manufacturers are not competitive.

When we could not lower prices enough, we lost significant sales to subject producers. We have even lost sales to subject imports for the U.S. military which chose modules based solely on the lowest price available. Every sale is important to us especially as a small company trying to survive in this industry. Subject imports have hollowed out the entire supply chain for solar products forcing many U.S. companies to source aluminum, glass, and other materials from overseas.

The American solar industry including small producers like Silicon Energy, has been devastated by the unfair trade practices of Chinese and Taiwanese solar producers. Even our specialty modules have not been insulated from the negative effects of subject imports. Last year we had to lay off our entire floor production team at our Minnesota facility. Most recently we have been

forced to idle our production facility in Washington state.

Because of the effect of subject imports on the U.S. market, we also have been unable to make R&D investments that would further increase efficiencies, reduce costs, and provide critical product differentiation. Such investments are critical to the future viability and competitiveness of our company and our industry as a whole.

The solar cell and module industry was created here in the United States and our technology is world-class competitive. Silicon Energy is proud to be a high-tech efficient company that is positioned to be at the front of the renewable energy movement. We believe American manufacturers certainly can compete with fairly traded solar cell and module imports.

On behalf of Silicon Energy, I respectfully urge the Commission to give us an opportunity to do so by imposing AD and CVD duties against dumped and subsidized products.

Thank you. I'd be happy to take questions.

STATEMENT OF ERIN CLARK

MR. CLARK: Good morning. I am Erin Clark, President of PetersenDean's solar division, Solar for America.

PetersenDean is the largest privately-held and family-owned roofing contractor and solar-power installer in

the United States. The company has installed roofing and solar products since 1984, primarily for residential customers and home builders, but also for some commercial customers.

Over our 30-year history, we have installed more than one million roofs and solar systems. We operate in five states and have 3,000 employees. Prior to joining PetersenDean two years ago, I served as Vice President and General Manager for Real Good Solar, another residential and commercial solar installer.

I have about ten years of experience in the solar industry and I have seen first-hand the injury that dumped and subsidized imports from China and Taiwan have inflicted on U.S. solar manufacturers as well as installers like PetersenDean.

At PetersenDean and in my prior position I have purchased solar modules from a number of sources over the past several years, both from distributors and directly from manufacturers. We used to source from companies that manufactured modules in the United States like Sharp Electronics. In fact, I've owned two homes that were installed with Sharp modules made in Memphis, Tennessee. They're great products, but unfortunately they are no longer produced here.

A few years ago the U.S. solar market started

changing rapidly just as demand really began to take off, huge volumes of subject imports rushed into the United States. At first, these were largely Chinese imports. Since 2012, we understand that many of these imports are made from Taiwanese cells to evade duties. These large volumes of subject imports were priced at extremely low levels. They overwhelmed the U.S. market and drove down market prices for solar panels. A price war essentially broke out among manufacturers, distributors, and installers.

I would and still do receive daily e-mails from Chinese manufacturers and distributors offering solar modules well below 70 cents per watt. As a result we felt that we had no choice but to give in to the enormous price pressures and start buying subject imports ourselves if we were to stay in business.

On a quarterly or even monthly basis, we would buy the cheapest solar modules we could find which were always subject imports. We readily switched from supplier to supplier based on price. Eventually PetersenDean moved away from this model although most of our competitors have not. Our solar division -- Solar for America -- was born out of our desire to support American jobs, American manufacturing, and provide great products at competitive prices.

However, when we started to move away from

Chinese products, and find an American-made product to use we realized the extent of the damage that was caused by dumping. Sharp closed its factory in Memphis, Evergreen was bankrupt, and U.S. manufacturers were disappearing even though solar demand was growing strongly.

When we found a domestic product to buy, the price was more expensive than dumped subject imports. To stay competitive and keep our employees working, we have been unable to increase our prices to account for increased costs. The market which is still distorted by huge quantities of dumped and subsidized subject imports simply won't allow it. Instead, our profit margins have taken a major hit.

In this market customers buy solar modules based on price. Even though we believe that we have a higher quality, more reliable product, customers are only looking for the lowest priced product. Our customers are often quoted extremely low prices by installers that use Chinese and Taiwanese products and we continuously have to try to match these unfairly low prices.

Many of our competitors have business models that rely on dumped and subsidized subject imports and it is incredibly difficult to compete with that. PetersenDean, Solar for America, wants to be able to continue providing its customers with high-quality, domestic-made solar

modules. But, given the market conditions and the closure of so much U.S. solar manufacturing due to the unfair trade practices of subject imports, we are concerned that even our remaining U.S. suppliers will not be around much longer unless trade relief is granted. U.S. solar producers are among the best in the world and have no problem competing with fairly traded imports. However, they can't compete with dumped and subsidized Chinese and Taiwanese prices. The same is true for installers like us.

On behalf of PetersenDean, I would like to thank the Commission for the opportunity to appear here today. This case is critical for us. We believe in American-made solar modules and do not want to be forced into a position where we have to abandon our domestic supply base.

Thank you.

STATEMENT OF MIKE McKECHNIE

MR. MCKECHNIE: Good morning. Thank you for the opportunity to appear here today. I'm Mike McKechnie, President of Mountain View Solar in Berkley Springs, West Virginia. I testified before the Commission two years ago and I'm very appreciative of the Commission's work it was an affirmative determination in that case. However, because subject producers evaded the duties imposed by the last trade case, I am sorry to say that the condition of the U.S. solar manufacturing industry has not improved since I was

last here.

As background my company began as Mountain View Builders, a building contractor in 1996. We soon developed a specialty green building green buildings were especially designed to conserve energy. From there we wanted to design homes that no only conserved energy but also generated power. This led to our transition to renewable energy systems in 2006.

Mountain View started installing solar PV in 2008 and in 2011 we made the full transition from building contractor to solar installer. As I mentioned in my previous testimony, I attended the Solar Decathlon here in Washington, D.C., in 2005. The Solar Decathlon is a bi-annual event sponsored by the U.S. Department of Energy where college teams design and build energy efficient houses powered solely by the sun.

At the 2005 event, I bought one of these homes and the competition moved back to West Virginia, reassembled it there, my wife, daughter, son and I lived in that house that is fully solar powered since 2007. Mountain View now concentrates exclusively on installing solar panels in West Virginia, Pennsylvania, Maryland, Virginia, the District, Ohio, North and South Carolina and Tennessee.

More than half of our business is in the residential sector installing solar PV systems on homes.

The remainder of our work is in the commercial and utility sector. These systems are non-residential buildings. When Mountain View first entered the solar industry we were sourcing panels from a number of manufacturers, including U.S. sources like Sharp, Schott, BP Solar and SolarWorld, all good companies with excellent products.

Today of those U.S. companies only SolarWorld remains. The rest were driven out of business by dumped and subsidized imports first from China and then also from Taiwan. In this rapidly growing U.S. solar market, you would think a company like mine would be doing well. Unfortunately the subject producers are hurting me and many, many companies just like mine in this region.

Mountain View has to compete with companies that only install the dumped and subsidized subject imports. Over the past few years, the prices offered by Chinese and Taiwanese companies of these panels has gone lower and lower without any relationship to production costs.

Many distributors and installers have given into the pricing pressure. They have either left the business or now buy their panels from Chinese and Taiwanese producers. In fact these installers and developers have business models that quite simply depend on the use of the dumped and subsidized products. They often do not even identify the specific module manufacturer they wait to get the lowest

possible price at the date of the installation.

We compete with these companies every single day and we try to respond to the constant and increasing price pressures. For example, you have probably seen ads for companies like Solar City. It won't surprise you to learn that Solar City and many companies like them use dumped and subsidized subject solar panels in their installations.

They are extremely tough competitors. In fact since I first testified here 2 years ago, they have nearly driven us out of the market in Maryland altogether. We simply cannot compete with companies that base their business model on the unfairly traded products. It's become harder and harder for us to compete in the market overall as the Chinese and Taiwanese pricing caused the market to collapse. Because we have relationships with our customers in the areas that we live, they often want to work with us but they are quoted extremely low prices by companies that use the Chinese and Taiwanese panels.

Customers will often show us the quotes they received on these products and we try to come as close to the quoted prices as possible to get the sale. Sometimes we are successful but sometimes and increasingly we are not. As prices continue to decline it's become harder and harder to win that business.

On behalf of myself, my family and Mountain

View's employees, I would like to thank the Commission for its time. This case, like the last one, is very important to Mountain View Solar. Without relief I am concerned that China and Taiwan will complete the goal of eliminating all U.S. competition and I will be forced and we will be forced to start buying dumped and subsidized solar panels just to stay in business.

We don't want to abandon our domestic supply base but we may have no choice in the absence of relief. I appreciate the time thank you and I will be available for any questions you might have.

STATEMENT OF DR. SETH T. KAPLAN

DR. KAPLAN: Good morning I am Seth Kaplan of Capital Trade. I have been asked by Petitioner SolarWorld to examine the economic indicia regarding injury and threat in this investigation. Please just turn to my handout as the slideshow doesn't seem to be working but first I am going to look at changes since the prior investigation followed by injury to the subject imports, the conditions of competition and threat.

I am going to skip several of the slides which contain quotes from the previous investigations, they are there for your edification you could view the presentations as a takeaway. On page 4 you could look at the original investigation in 2011 when Chinese imports of over 1

gigabyte were found to be injuring the domestic industry.

Slide 5 shows that the Chinese imports were blocked by the Order in the sense that they now had to fit trade fairly. The next slide shows what happened since the initiation of the last Order. The Chinese imports continue but at a lower level and were replaced by more than 100% by Taiwanese subject imports over 2 gigabytes so the attempt by the Commission to offer relief to the domestic industry caused by injury was not successful due to the effects of the Taiwanese sells replacing Chinese cells and Chinese modules and an increase in imports.

The next slide 7 shows exactly what happened. China's what were called non-subject imports now from the first case fell from 2011 to 2012 to 2013 and were now replaced by the purple and red subject imports which were actually much greater than the Chinese imports you found to be injurious in the last investigation.

Note that between January and June of 2014 the imports are almost at the level of the full year of 2013. Let me now turn to the injury indicia starting on page 9 we look at the first test, the volume test, and see that subject imports are increasing absolutely.

The next slide shows that subject imports are increasing relative to U.S. consumption and yes those numbers are correct and those market shares are correct.

Tim and I have never seen anything like this. I have testified in over 100 investigations and follow staff reports regularly. I have been involved in trade actions as part of the Commission and as a consultant since the late 1980's. I have never seen imports go from single digits to over 80% in an investigation that I am aware of and when you look at the financial data and look for cells, I have never seen numbers like that in terms of the financial industry injury caused by such an increase.

We next turn to price --

CHAIRMAN BROADBENT: Mr. Kaplan I am so sorry if I could just interrupt you for just a minute we have got a couple of Congressional witnesses that would like to testify.

DR. KAPLAN: Absolutely.

CHAIRMAN BROADBENT: It's a little disruptive, I really apologize but if we get their message here and then you can resume we'll stop the time and you can resume your time as soon as they are finished.

MR. BISHOP: Our first Congressional witness is the Honorable Ron Wyden, United States Senator, Oregon.

CHAIRMAN BROADBENT: Welcome Senator Wyden I am very glad to have you here today.

STATEMENT OF THE HONORABLE SENATOR RON WYDEN

SENATOR WYDEN: Thank you very much and it's a

pleasure to have a chance to be with you and particularly to be able to testify in support of our domestic solar manufacturers. The Commission has given a considerable amount of time to these issues and we are very appreciative in Oregon because they are critically important to our workers and our families and our communities.

As Chairman of the Senate Finance Committee, I have made it a special priority to make sure that trade benefits our workers, our companies and our communities. As a key component of that strategy I have focused on making sure that our trade laws are in source and that are trading partners understand that we value playing by the rules.

The solar industry is an anchor of Oregon's manufacturing base and is a central driver of our innovation economy. It supports high skill, high wage jobs, jobs that are critical to attracting investment in new opportunities for the 21st Century economy. Yet our solar industry is now under siege by Chinese competitors and has been facing this for the last 5 years.

It is not that American solar can't compete and I want to emphasize that. We can beat the pants off anybody if the rules are applied fairly. The fact is China isn't playing by the rules. The Chinese solar producers were bankrolled by the Chinese government so they overproduce and they dump solar panels into our market at prices that were

below the cost of production.

China viewed SolarWorld, its critical Oregon company, as a threat and these jobs are so strategically important the Chinese used military computer hackers to steal sensitive documents from the company and this is not my opinion this is according to charges filed by our Justice Department. In short China cheated, and Oregon workers and Oregon families suffered. Jobs were lost, capacity diminished, opportunities were drying up. I visited SolarWorld about 3 years ago and made it clear that that was unacceptable, sounded the alarm and said that China taking America's manufacturing jobs was unacceptable and the trade laws had to be enforced.

After its own thorough inquiry this Commission found as you all know unanimously, just 2 years ago that Chinese companies were injuring our industry by inundating the U.S. market with dumped and subsidized solar products trade remedies were imposed and make no mistake about it we Oregonians are grateful to this Commission for its efforts in that original investigation to redress unfair solar trade.

So at that point it seemed that the trade laws were working. But even while the first case was going on the Chinese producers switched to a different tactic, keep dumping and keep subsidizing but source non-Chinese sales

through Taiwan and elsewhere to avoid paying the duties. Dumped and subsidized imports quickly returned this time through what we consider to be the Taiwan loophole. The hard-fought relief that the solar industry hoped to get from the original investigation was in jeopardy and its fragile recovery in doubt.

The domestic industry was forced to defend itself once again. Finally the trade case that you are reviewing this morning and this time with the loophole closed, some improvement has started. Prices are no longer in free fall and solar companies like SolarWorld are starting to rehire for jobs that had at once been lost. Just last month back in Oregon I highlighted the role of your investigation in sparking hope that the industry might finally climb back from the brink.

Today I wish to ask that this Commission secure the integrity of its original findings, secure the integrity of those original findings and conclude that Chinese and Taiwanese unfair trade has resulted in material injury to U.S. producers including those in Oregon.

My bottom line is once more this unfair trade threatens additional harm to U.S. producers if it is not addressed. A strong determination from the Commission, coupled with anti-dumping and countervailing duties covering the full scope of unfair trade will insure the growth and

the resurgence of the domestic industry. U.S. innovation and efficiency started the worldwide growth of solar and will continue to fuel that growth so long as, so long as unfair trade practices are fully addressed.

Let us not allow our innovation economy to be undermined by cheating on trade. Trade enforcement must keep pace with the times. This Commission plays a critical role in insuring that trade rules are enforced as intended and that unfair trade is checked and that American jobs and American workers can compete on a level playing field. Thank you all again on behalf of Oregonians for your hard work on this matter, we urge that you fairly look at the circumstances in this case and that you apply the nation's trade laws accordingly so that America's solar industry can finally obtain the lasting relief that is so urgently needed.

Thank you again for having me I understand I'm a bit of a recidivist here before all of you and it just reflects how important these issues are to the people of Oregon and we are very grateful for your consideration thank you very much.

CHAIRMAN BROADBENT: Thank you Senator. Are there any questions for the Senator? If not we will let you go, thank you very, very much.

SENATOR WYDEN: Thank you.

MR. BISHOP: Our next Congressional witness is the Honorable Richard M. Nolan, United States Representative, 8th District, Minnesota.

CHAIRMAN BROADBENT: Welcome Mr. Nolan.

STATEMENT OF THE HONORABLE REPRESENTATIVE RICHARD M. NOLAN

REPRESENTATIVE NOLAN: Thank you. As you may or may not know I served in the Congress in my youth and apparently I didn't learn my lesson but after volunteering -- retiring voluntarily back in like 1981 after 32 years later I came back. They tell me it's the longest hiatus in the history of the Congress but I did want you to know that I spent a good part of those 32 years as an export trader doing a little business all over the globe.

People ask me what I sold and I like to tell them I sold everything except for guns and drugs which is where all the real money was. So at any rate I have a little background in this and I want to thank you for the important work that you do and I can't tell you how grateful I am for the opportunity come here and testify this morning and I'll try to be brief because I know you have a lot of people to hear from so let me begin again by just thanking you for the opportunity here in support of the domestic solar manufacturing industry.

I appreciate the work of the Commission and your staff which is important to workers and families in my

district, in Northeastern Minnesota and of course throughout our nation. In my service to the people of the 8th District of Minnesota I am like so many of us committed to manufacturing and job growth and introduce you know a fair amount of legislation that end.

But in particular I work hard every day for the employees, the companies and the businesses of Minnesota's 8th Congressional District to make certain that they have a level playing field in which to compete in the global market. One of those companies is the solar manufacturer Silicon Energy whose President Gary Shaver, Gary welcome to the dome, is with us here today. Gary was kind enough to give me a tour of his company in July, 2013 and I can tell you it's a real northern Minnesota success story that we are all very proud of every day.

Gary I'll never forget when one of your employees took a run about from here to the door, got up in the air and about 5 or 6 feet and came crashing down onto that solar panel without even the slightest bit of damage to that panel, it was really quite a remarkable thing to see and what a wonderful product you have produced there.

I spent as I said a good part of my life in the export trading business all over the globe. Moreover, I also worked to establish a Minnesota World Trade Center Corporation as Chairman of the World Trade Center's

Associations Trade Policy Committee for a number of years and I have a fairly good understanding of the goals of what's termed as free trade.

But in my judgment the goal we should be striving for is to preserve and create jobs here in America and as Senator Wyden said you know, and abiding by the rules and ensuring that that trade is fair. The fact is American manufacturers and American workers can compete when in the global marketplace every time if they are given a level playing field and again I applaud you for the work that you do to help ensure that.

It's particularly true in the renewable energy sector which like other trade sectors holds great potential for good paying jobs in Minnesota, throughout the United States and in helping us achieve energy independence. But again, keep in mind that while we work to expand our trade agreements and our trade opportunities we also need to make sure that U.S. products get the access that they deserve abroad and that our trading partners compete fairly here in the United States.

U.S. innovation and efficiency started the worldwide growth of solar and will continue to fuel that growth as long as unfair trade practices are fully addressed. But that is not what is happening in the solar manufacturing market in America today as you have heard from

many of our witnesses.

Instead U.S. solar manufacturers have been devastated by China's buildup of massive amounts of state sponsored subsidized below cost solar capacity. This has led to a surge from dumped and subsidized imports from China and unprecedented price collapse in the U.S. market and tremendous injury to the U.S. producers.

More than 20 U.S. companies have gone out of business, gone bankrupt or had significant lay-offs. Thousands of workers have lost their jobs, causing serious harm to their families, communities and to the local businesses. In the 8th District, producers like Silicon Energy lost jobs and the company's future quite frankly looked a little bleak at one point in the process, but as you know China and Taiwan found a way around the first cases that you adjudicated.

China simply shifted its production and started using Taiwanese PV cells but it continued the same unfair trade pricing practices. The harm to the U.S. industry continued as a result of this new second import surge of solar products. The U.S. solar energy -- the U.S. solar industry then filled these current -- filed these current cases. As a result the U.S. market was stabilized allowing U.S. solar manufacturers to increase sales and reclaim some of that market share.

Again this rebound demonstrates what we all know, that American companies and American workers are second to none when they are allowed to operate in a fair and fully competitive marketplace so it is very possible that our domestic solar energy will have a bright future ahead for us.

U.S. solar demand is growing the U.S. producers are developing and making excellent products to meet that demand however your work today is critically important to this recovery. Without these cases the harm to U.S. industry and its workers will continue to worsen. More Minnesotans look forward to a growing domestic solar industry. Our state has mandated the use of solar for energy and set requirements for both large scale and consumer level renewable solar energy systems that utilities will need to meet over the next several years.

I am proud that my district was able to convince Silicon Energy to build its second U.S. factor in Northeastern Minnesota, we welcome the jobs and the innovation in our region and we need to assure that Silicon Energy is allowed to compete on a level playing field so their considerable investment in our region fully benefits our citizens, our communities and our national economy.

This Commission plays a critical role in insuring that the trade rules are enforced so I ask you to continue

that mission and apply the nation's trade laws fully so that American solar industry can have the future that it deserves and that we need. Thank you Madam Chairman.

CHAIRMAN BROADBENT: Great, thank you Congressman Nolan, are there any questions?

COMMISSIONER WILLIAMSON: Madam Chairman, about 25 years ago I was with the World Trade Center Association, I worked as the Executive Secretary of the Trade Policy Committee and I do remember Congressman Nolan's active leadership of the World Trade Center in Minnesota, and he worked on the Trade Policy Committee and so I haven't seen him since then so I want to welcome him to the Commission and I second his statements about his leadership in international trade.

REPRESENTATIVE NOLAN: Well thank you very much its nice and good memories.

COMMISSIONER WILLIAMSON: Thank you to be remembered well.

MR. BISHOP: Madam Chairman, that concludes our congressional testimony.

CHAIRMAN BROADBENT: Thank you, Mr. Secretary.

With that, Mr. Kaplan, you may resume. And I again apologize for the interruption, but I think that made for a shorter day here.

MR. KAPLAN: Thank you, Commissioner. I'm going

to let the slides go up again, if possible. If it can't be fixed quickly, I'll just work --

CHAIRMAN BROADBENT: We were a little worried because Senator Wyden had like orange stripes on.

MR. KAPLAN: I was enjoying the light show for a while, but it was distracting.

We might have to call Mr. Johnson, in who introducing himself failed to say that he was a nuclear engineer and a submariner when he was in the Navy. Even the sales people have incredibly strong technical backgrounds, so we'll see if we need him to go over there and kick start the computer system.

I'll work from this, and I just want you to note that that was the market share in 2011, and this is the subject market share in 2013. And I did point to the fact that both Tim and I had not quite seen increases of that magnitude in other cases. That is somewhere in the under 10 percent range, and that is over 80 percent in a matter of three years.

When I left off, I'd switched from volume to price, and we see that underselling has increased throughout the POI. The margins are significant. The number of instances has increased.

The next slide shows that subject import AUVs, beginning in 2012, consistently were below both U.S. AUVs

and non-subject Chinese AUVs. So, here's the U.S. and here's the subject imports. In 2012, they were much lower. In 2013, they fell again. The same pattern has continued throughout the interim periods.

The next slide shows particularly U.S. firms that were injured. The staff has done a fantastic job in showing the changes in the employment and bankruptcies, and I will refer you to the staff report because some of that information is APO.

The next slide shows U.S. producers capacity production and capacity utilization. And at a time when demand was increasing, when imports were going up 200 percent, the U.S. industry was forced to lower capacity, capacity utilization, and production solely due to the subject imports. There is significant excess capacity in the U.S. market today.

The next slide shows that the U.S. shipments decreased and the post-petition affect in June of -- January to June of 2014 where things have just started to turn because of the preliminary duties.

The next slide looks at the operating margins. These are concealed because of APO. They are low. The numbers are astounding. The numbers for sales are unbelievable. I do not use these terms casually. They are not hyperbolic, and I really encourage you to look at the

data in the staff report.

The next slide refers to what's happened to employment. These are both non-unionized and unionized workers. The domestic industry has done everything they can to retain their workers. They have been unable to because of bankruptcies caused by the imports, and you note that affects on workers have been negative as well.

The next slide refers to a tabulation of the negative affects to the statutory in dicta. Unsurprisingly, they're almost uniformly negative, despite the large increases in demand and consumption in the U.S. market.

I'm now going to turn to the conditions of competition. The Commission has now seen this and reached determinations three times supporting these conditions and there have been four staff reports supporting these conditions. The Commission is going to address them yet again here, and I believe the record supports their previous findings and the staff's previous evidence.

In this market decisions are based on price. The imported and domestic products are highly substitutable. Demand has fallen in third markets or there had been duties in third markets in Europe. Canada originated a case just this week. Grid parity, the input cost failed to explain the price movements. They have been decoupled. And there have been very significant profit losses as you've seen, and

domestic and subject imports compete across the board.

The next slide shows quickly that price is the most important factor in purchasing decisions, and that price was rated the highest, most important factor in the two surveys.

I'm going to skip the next several slides, which are quotes from Commission opinions which they have reached the determination that, in fact, price is important and the products are substitutable. Demand in the largest export market, and the next slide shows, has decreased, so the U.S. has become even more of the best market in the world to sell into.

I'm going to skip the next quote and move on to U.S. producers, subject and import competing in all markets. There's been talk that the U.S. industry does not compete in all segments, but you, in fact, can see that it competes in residential, commercial, utility, and among distributors. The Commission has reached this conclusion as well.

The next slide shows that the U.S. producers compete in all products, despite the fact that the Respondents had asked for a doubling of products and a distinction between mono and poly we still see there are domestic production and sales in all eight products. Competition across the board, once again, the Commission has reached this conclusion.

Slide 30 discusses the mono and multi issue. Purchasers do not generally specify mono or multi in RFPs. Once again, a red herring, a throw-away argument by Respondents in the earlier cases have now become their central argument, having their other arguments discredited. This is what they've turned to.

The second point is the domestic industry and individual producers in the U.S. manufacture and sell both mono and multicrystalline products. Imports have affected both mono and multicrystalline products, and monocrystalline products are used in the same applications. The Commission did find this in the previous investigation.

I'll now turn to another condition of competition, which is the issue of grid parity and the alternative explanation that natural gas prices were the cause of the decline. That argument was made in the earlier investigation when prices were falling for gas between 2011 and 2012. Now, with gas prices rising, we still see the same trends. The Commission also concluded that grid parity failed to completely explain the affects of the imports and the falling prices.

Finally, the idea that demand for solar panels is infinitely elastic and price sensitive is rebutted by the fact that, as the representative said, many states are required to install renewables and have set targets that go

on through up to 2030 in the case of Hawaii so that irregardless (sic) renewables are being used to cut down on emissions. So, there is a demand. The demand is more price sensitive in some segments and less in others, but there is a continual demand for this product as seen by the demand increases and the necessity for renewables in end uses for utilities.

I will leave with you the threat discussion from page 36 onward. I think the indications of threat are overwhelming, but I think the injury case is so strong that I will discuss it if asked to later, but I will conclude my presentation now. Thank you very much.

MR. BRIGHTBILL: And that concludes our direct presentation, and we'd like to hold the rest of the time for rebuttal.

CHAIRMAN BROADBENT: Thank you. This morning we'll begin our questioning with Commissioner Schmidtlein.

COMMISSIONER SCHMIDTLEIN: Thank you, Chairman Broadbent.

First, I'd like to take the opportunity to thank the witnesses for traveling to appear here today. That is the linchpin of our process, having fact witnesses contribute to the record, so we do appreciate it.

I wasn't here for the first investigation a few years ago, and so I want to start with what I think is one

of the key issues in this case is obviously what is driving the price declines. That's often the key issue in the cases. And one difference, as I understand it, between this case and the prior is the substantial decline in raw material costs.

And so, just playing devil's advocate for a moment, and either Mr. Brightbill or Mr. Kaplan -- I'm not sure which one of you would be the best one to answer this, but if you look at the raw material cost or at least the graph that's in the staff chart at page V-II, which shows polysilicon and wafer cost dropping substantially from 2011 through 2012 and sort of leveling out in the middle of 2012 for the wafers and then polysilicon really the beginning of 2013.

And if you look at the pricing data that was reported for the eight or nine pricing products, and you see prices dropping through 2012, but then sort of tapering off in 2013, can you tell me how I should consider that? Because it looks when you look at those two facts like the prices are tracking these raw material costs pretty closely, which would seem to make sense, given that the raw materials are such a substantial part of the production cost.

MR. BRIGHTBILL: Sure. Tim Brightbill, Wiley Rein. I can start and then Dr. Kaplan and maybe the industry as well can jump in.

I think, first of all, it's important to emphasize that we're not just looking at poly prices, but all raw material prices, some of which had had very different trends during the POI. There are other very important input, raw material inputs, including silver, including aluminum and others.

But even on polysilicon, really what we've seen is that the prices have been driven lower by the subject imports and not by polysilicon. And in fact, polysilicon they're long-term agreements in the industry that U.S. producers follow and foreign producers follow.

Normally, dropping raw material costs should benefit the U.S. industry. Instead, the profit levels that you've seen the industry has continued to suffer despite those declining raw material costs. So, I think it's a combination of those things.

COMMISSIONER SCHMIDTLEIN: You would expect that prices for these products would fall if raw material prices are coming down, right? You would agree with that.

MR. BRIGHTBILL: Certainly, there can be some relationship. But what we saw during the period and what I think the industry is that the pricing in the marketplace was not driven by raw material costs. It was driven by subject imports and the bids going lower and lower.

COMMISSIONER SCHMIDTLEIN: Mr. Kaplan?

MR. KAPLAN: Yes, input costs is one of the supply factors that will generally determine market prices in all industries. So, for example, you look at steel cases all the time and you look at the price of scrap and a metal margin. I would think another way of viewing this industry is to look at a poly margin in the same kind of way.

So, while the fact that there is a relationship between poly prices and the prices of wafers doesn't mean that poly prices determine the price of wafers. Because in a competitive market, what you'd expect is that there'd be a markup above poly which would produce a profit for the industry. But in this industry, poly prices and profitability have become completely decoupled.

So, look at poly prices and then look at operating margins and you'll see that the poly prices and the affect of the imports is really upon the processing cost and the sale of the final product. So, in the same what that you couldn't deny scrap would have an affect on steel prices, you won't deny that polysilicon would have an affect on the price of wafers. But what is so troubling to all the industry is that there is no relationship between the markup above poly and poly prices. That has been completely severed by the subject imports.

In the last investigation and now that they've been replaced more than fully in this investigation by

subject imports again. So, there's many costs of prices. Input costs are one of them, but input costs have become decoupled from profitability and what prices of the wafers and the final products are due to the subject imports.

COMMISSIONER SCHMIDTLEIN: Mr. Johnson, did you want to -- okay.

MR. JOHNSON: Artes Johnson, SolarWorld Americas.

I would say that in the market today poly prices have no relation to the seller. It never comes up as part of the discussion. It is always the dumped prices that are in the marketplace that set that expectation, and there's no discussion with customers about where raw goods are going and how those prices could affect or those costs could affect our prices.

COMMISSIONER SCHMIDTLEIN: Okay. Mr. Dulani.

MR. DULANI: So, when we look at raw material prices, we correlate always to how it's related to costs and prices, but the subject imports have just focused on pricing. It has no correlation. It is completely decoupled. Even in 2014, when some of the raw material prices went up, prices have kept going down just to kill the industry.

COMMISSIONER SCHMIDTLEIN: All right. Thank you very much.

Let me add one more fact in that scenario when you look at this information, the pricing products and the raw material costs. In the pricing products, at least, where you look at the quantities, it looks like, and I'm generalizing, right, which given eight products and so forth you have to do, but it looks like the surge in imports is really peaking in several of the products more in late 2012 or middle to late to 2012 or into 2013. I think I've got my facts right here.

And again, when you look at all of these combined facts, it looks like you see prices dropping. It looks like raw material prices are dropping. That's sort of correlating and that's not correlating where you see the surge in imports, where you see the prices, at least, not the underselling. I understand it looks like underselling is continuing into 2013 and so forth, but at least, from a price standpoint it looks like the prices are relatively flattening out in terms of their drop and that's where you see the import prices.

So, can you talk to me about how we should consider that in the analysis of causation here?

MR. KAPLAN: Sure.

COMMISSIONER SCHMIDTLEIN: And if not, of course, we've only got a couple of minutes, I'm happy for you to also address this in post-hearing, but I'd be

interested to hear your initial reaction.

MR. KAPLAN: Sure. I think that, you know, doing quarter-to-quarter correlations, given the time between the price contract and the delivery is sometimes could be not the apposite way of approaching the analysis.

I think here the trends of volumes, the underselling, and the profitability, I mean, they're exaggerated relative to other cases. To say, oh, in that period imports went from 6 percent to 70 versus 80, there's a distinction the Commission has never had to reach because imports have never risen this much.

The fact that prices may have leveled off and profits went from -- I can't speak to it, but extraordinarily low levels to another extraordinarily low level, but maybe slightly better is something that is parsing that misses the overall effects. So, sometimes raw material costs are a driver of the level, but they are -- or a driver of the trend, to a degree, as input costs are, but they are disconnected from the profits and the markup above that level; and that is the problem.

So, does Chinese dumping increase as the polysilicon prices fall? Well, they've kept their dumping margins really high and their imports really high during the whole period. It doesn't mean that they're causing less harm or less injury if the prices start to stabilize in

relation to polysilicon. I hope that's helpful.

COMMISSIONER SCHMIDTLEIN: Yes. Thank you.

MR. BRIGHTBILL: Tim Brightbill.

It is a somewhat difficult issue to discuss, given the confidential information. We're happy to do some more of that in the briefing afterwards.

COMMISSIONER SCHMIDTLEIN: All right. Thank you very much. My time is up.

CHAIRMAN BROADBENT: Great. Thank you. Let's see, I wanted to go to the scope issue right off the bat.

We have a pretty narrow focus here. We have to accept the scope that the Department of Commerce comes up with. Now, I understand that they may be coming up with a different definition of "scope," where the origin of the panel is, not where the sale is made, as it was in the first case.

That sort of puts the Commission in a pretty difficult position because if the scope changes and then the scope is challenged at the Court of International Trade based on a different practice than they did a year ago, then it will be remanded back here again with our staff having to go do this horrible process all over again, which has been very difficult, given the flux that we've been in on scope. So, how would you advise us to approach this at this point?

And then also, could you give me an explanation

of what you think is going on at the Commerce Department and why they're having such difficulties?

MR. BRIGHTBILL: Sure. Tim Brightbill, Wiley Rein.

First of all, with regard to -- certainly, it is difficult for the Commission, given that Commerce has not determined a final scope. But the staff has done an excellent job of breaking down the data in so many different ways and in capturing the data in a number of different categories, covering Taiwanese cells, Taiwanese modules, Chinese cells, Chinese modules that we think you have not only a solid, but an extremely solid basis for a final determination using what's in the pre-hearing report already, regardless of how the scope comes out.

And we have pointed out, the Court of International Trade has said, first of all, the subject import investigation by the Commission does not have to exactly match the definition of subject imports under Commerce's scope. We have that around page 18 and 19 of our brief.

You have to collect the information that allows you to fulfill your statutory obligation, but there's not always a perfect match between what you gather and the scope of a case. Here, though, because of the number of categories of data that you asked from domestic producers,

from importers, and so on, you have that data and you can cut it different ways, depending on the final determination.

The second point I would make is just what you see in terms of -- even if the Commission -- again, regardless of how they clarify the scope in the case, you have the vast majority of imports already covered in your discussion. So, the most notable change of Commerce's scope clarification would be to include modules from China assembled from third country cells as subject merchandise, all modules from China regardless of where the cell comes from.

Well, you already know that the vast majority during this period of Chinese modules assembled from third country cells were assembled with Taiwanese cells, and you have that data. It's shown in the importer questionnaire responses. So, inclusion of third country cell modules from China within the scope would have an insignificant affect on your determination. So, you already have the lion's share of what's going on.

Similarly, the Commerce clarification of all modules from China would also include all modules made in Taiwan from cells produced in Taiwan, and those assembled in Taiwan from third country non-Chinese cells. But the information that you've collected already shows that if you include Taiwanese modules with third country cells it's not

going to affect your determination.

So, again, you've gathered very granular data here, and as a result you have solid basis for a determination, regardless of what the final scope is.

And Chairman, I'm sorry, the second part of your question was?

CHAIRMAN BROADBENT: Why is the Commerce Department having so much difficulty?

MR. BRIGHTBILL: Well, as I said, in my opinion, when we put this scope together, as I said in the preliminary phase of the investigation, we wanted to come up with a scope that would cover as much of the unfair trade as possible and still be consistent with the first scope finding that Commerce made that cells, where possible, determine country of origin.

As the investigation has gone on, I think Commerce has seen that -- and remember that a scope has to be consistent with Petitioner's intent and has to address unfair trade practices and has to be enforceable. And the way to get there is with the scope clarification that Commerce issued in October, covering all Chinese modules, regardless of the cell comes from.

So, I think that is what Commerce is wrestling with. I'm speculating, but I think the combination of intent of covering all of the unfair trade practices as well

as not allowing further evasion and circumvention and having an order that is enforceable in the end are the things driving this determination.

CHAIRMAN BROADBENT: What is the Custom Service-determined country of origin for subject product?

MR. BRIGHTBILL: Under regular Customs tariff rulings, they consider the transformation of a cell to a module to be a substantial transformation. Commerce, of course, took the opposite position in the first solar case, saying that it is the cell, not the module, that determines the country of origin for anti-dumping and duty purposes.

CHAIRMAN BROADBENT: So do you think Commerce can enforce the memo definition, the October 3rd memo definition?

MR. BRIGHTBILL: Absolutely. It would be -- we've said --

CHAIRMAN BROADBENT: Customs.

MR. BRIGHTBILL: We've said to Commerce and to Customs that the October clarification by Commerce would be much more enforceable, because again, you would be measuring modules as they're coming in from the border. Modules are labeled with country of origin. They say China, they say Taiwan. The module is labeled, the cell is not. So the Commerce clarification would be much enforceable in scope using the two out of three rule.

CHAIRMAN BROADBENT: Okay, and then what about the modules coming from Mexico?

MR. BRIGHTBILL: Well, Tim Brightbill, Wiley Rein again. The modules coming from Mexico are made with cells -- if they're made from a cell from China or Taiwan, they would be covered as subject merchandise of wherever the cell comes from. That is clear in the two out of three rule scope; it is clear from the October clarified scope of the Commerce Department.

So in either case, regardless of which scope is applied, if the cell comes from Taiwan or the cell comes from China, that will determine the country of origin of those modules.

CHAIRMAN BROADBENT: And yet it wasn't legally obligated to do an investigation against Mexico?

MR. BRIGHTBILL: No, it is not, and no. Because of the finding that's made as far as cells, it's not required to and has not determined. So I think the brief filed by Mexican producers ignores the findings of the first case, and it ignores the reality that whatever scope is picked, those products coming from Mexico with a cell from China or Taiwan would be subject products.

CHAIRMAN BROADBENT: Okay. Mr. Brightbill, can you tell me a bit about what's going on in Europe, in their dumping investigations against China and Taiwan?

MR. BRIGHTBILL: Yes. Although we're not directly involved in that --

CHAIRMAN BROADBENT: Understood, yeah.

MR. BRIGHTBILL: --there was a two-year agreement made, and maybe Mukesh can help with this too, that includes both a quota and a minimum price component. There have been serious allegations of evasion and circumvention in Europe, that the domestic European industry has advanced. There has been debate about the minimum import price levels and what index they should be set to.

But currently, Europe is governed by that quota and minimum price agreement that is in place on Chinese products, and I would just point out the scope of the European agreement also covers Chinese modules in Chinese cells. It's broader than the scope. It's a very broad scope covering both cells and modules originating from or manufactured in China.

CHAIRMAN BROADBENT: And then what about product coming -- modules coming from third countries that have Chinese cells in them?

MR. BRIGHTBILL: Okay. So for example, a Chinese cell goes into a module somewhere else and then comes into the country.

CHAIRMAN BROADBENT: Yes. Say the Mexicans export to Europe.

MR. BRIGHTBILL: I have to verify. My understanding is that I don't believe those are subject to the EU undertaking, but I would need to address that in our brief.

CHAIRMAN BROADBENT: Understood, okay.

MR. DULANI: Mukesh Dulani, SolarWorld. In Europe, like Mr. Brightbill said, all cells and modules coming from China are the subject imports. But here, again there's a new loophole used. They put an index on the pricing in the contract. What happens with this index is since most of the capacity is sitting in China and Taiwan, and they can sell the product at a cheaper price to developing countries, as the index drops, the price again changes, and that is a new loophole used in Europe to kill the rest of the European solar industry.

CHAIRMAN BROADBENT: Okay. So my time is up. Vice Chairman Pinkert.

VICE CHAIRMAN PINKERT: Thank you, Madam Chairman and I join my colleagues in thanking all of you for being here today. I apologize about my cold. I want to understand a little bit more about this rule of origin issue. I'm not going to belabor it, but I do want to understand a little bit more about it.

And in particular, if Commerce reverted to the rule of origin that it applied in the first investigation,

what would be the problem with that from the point of view of the domestic industry?

MR. BRIGHTBILL: Well, Commissioner -- Tim Brightbill, Wiley Rein. If Commerce were to determine that cell -- that the scope would only cover products defined by where the cell is manufactured, it would cover Taiwanese cells, no matter where they're made, into a module.

But it would offer no additional coverage of Chinese product, and it would not allow us to address the unfair trade practices of Chinese modules, for example, because we already have duties on Chinese cells, but none on modules that are not made from Chinese cells.

So for example, we appealed this issue to the Court of International Trade, and one of the things we pointed out is that if Commerce simply applies a cell determines country of origin status, there's no way to address the vast subsidies that address Chinese -- and benefit Chinese module production.

Of all the subsidies we alleged at the Commerce Department, all but one affect module production. There are huge subsidies on glass, aluminum frames, polysilicon for less than adequate remuneration. All of these things benefit module production. But if you use a cell only to determine country of origin, there's no way to ever reach those subsidies.

So it can't be that Commerce is limited to its first country of origin ruling. It has to be that there is a way to address unfairly-traded Chinese modules, even if they don't contain Chinese cells, whether that's through the two out of three rule from our petition or from the broader Commerce clarification of October.

VICE CHAIRMAN PINKERT: Thank you, and is there a legal problem with applying a different rule of origin in this case than in the previous case?

MR. BRIGHTBILL: Tim Brightbill, Wiley Rein. No, there is not. First of all, under the two out of three rule country of origin that we crafted in the petition, we did that specifically to try and be as consistent with the first trade case as possible, recognizing that cell determines country of origin, except for a situation where most of the product comes from China but the cell does not.

So if the wafers in the module come from China but the cell does not, it's mostly a Chinese product. It should be subject to Chinese duties. So that is as consistent as possible with the prior case. But no, Commerce Department is free to define a scope of the investigation in a manner consistent with Petitioners' intent and in a manner that is enforceable.

That's what the statute says and both formulations that are before Commerce are enforceable and

consistent with Petitioners' intent, and would -- can be enforced and can be adopted by Commerce.

VICE CHAIRMAN PINKERT: Thank you. I said I wasn't going to belabor the issue, so I'm going to proceed to some of the other arguments that are before us. I know that you talked in your presentation about the competition between the multicrystalline and the monocrystalline product, and of course, you know that the Respondents have taken a different point of view about that issue.

But why might a purchaser prefer a multicrystalline product to a monocrystalline product?

MR. DULANI: Mukesh Dulani, SolarWorld Americas. Thanks for asking this question. I have been in the market now for five years with the solar product, and when there is -- if the price is same for monocrystalline or multicrystalline product, customer doesn't worry about it. Customers just focus on the price.

There are three segments how the market is divided, residential, commercial and utility. All three segments, if the price is same and the voltage is same, can use the same product. If you look at the RFPs which we go through, the RFPs don't say that it's a monocrystalline product or a multicrystalline product to be used.

All the decisions are based on just the price. Now I'll give you an example. On the U.S. industry, we make

monocrystalline, we make multicrystalline products. We can supply both to our customers depending on the needs. The other U.S. competitors of ours do multicrystalline, monocrystalline. Same for the format also, 60 cell and 70 cell products.

So we have full capability in the United States to serve our customers, and when it reaches at the roof, customer does not even notice whether it's a monocrystalline or a multicrystalline in residential or commercial or utility products. They just worry about can you achieve the price? Thank you.

MR. BRIGHTBILL: Tim Brightbill, Wiley Rein. Maybe some of the other witnesses can comment, but a preference for a multicrystalline, a customer, as Mukesh said, will prefer the lowest price that's out there, and many of them base their business model on the dumped and subsidized pricing.

So if that is the multicrystalline product, they will go to whatever it is, and as you saw in the staff report, price drives these decisions, and so that is one reason why they could gravitate toward that if that is the lowest dumped or subsidized price that's out there.

MR. SHAVER: Gary Shaver, Silicon Energy. You may see in some situations, if you have a very sophisticated buyer, which is really a small minority, you may see them

say that they look for a mono cell that does better in heat conditions or low light conditions, or there's a power density need. So you may see that.

But the vast majority of what we see is based purely on price, with no differentiation between the technologies.

MR. BRIGHTBILL: Mr. Clark.

MR. CLARK: Erin Clark, PetersenDean. We sell thousands of systems throughout the year, and we've sold them, installed tens of thousands of systems over the years. I have a lot of contact with customers and see the marketplace in different regions throughout the states we operate in, and the primary driving factor is price.

When the system's installed on the roof, typically customers are looking at I need a total system size of maybe five kilowatts. It's about the average system installed on a residential home, and then what is the price from the different contractors. But those customers get five kilowatts.

So as a contractor, I'm competing against a system size of five kilowatts, not necessarily a specific product. Just I need 22 modules. Are they going to fill my roof? Now I need to find a contractor, and what's the most attractive price? That's what we find in the marketplace.

MR. McKECHNIE: Mike McKechnie, Mountainview

Solar. Yeah, to chime in on that and to follow what my colleagues have said is the price per watt is really the driving factor in the price of the module. The mono or polycrystalline is something that the consumer at the residential market level has little or no knowledge of, at the commercial level, no knowledge of, the utility scale model, no knowledge of.

So in all three sectors, we don't see, for instance, at the RFP level, in the commercial work, in the utility scale work, there's no differentiation between the mono or the polycell. It's just about the lowest price possible, and the issue really is that the dumped and subsidized modules coming in from China and Taiwan are at such an usually low price, it doesn't matter what the actual manufacturer or what the actual cell is made of.

There's no relevance to that in either the residential market, the commercial or the utility market, in the region that we're in, in the Mid-Atlantic states.

VICE CHAIRMAN PINKERT: If I understood Mr. Shaver's testimony correctly, he was suggesting that sometimes, in a very small number of instances, there might be a preference for the monocrystalline product. Is there ever a preference for the multicrystalline product?

MR. SHAVER: Gary Shaver, Silicon Energy. Again, I point out that that's a very small group that are

highly technically skilled in understanding these things. Generally, people look at these as just modules. They're producing power and they really don't look at the technology.

So I'd just point out it's a very small group of people that are technically very capable in understanding that.

VICE CHAIRMAN PINKERT: Okay. It's the end of my round, but for the post-hearing, if you could try to quantify the number of instances where there might be a technical preference for one or the other. I think that would be helpful, and I can come back to this in the next round, Mr. Johnson. Thank you.

CHAIRMAN BROADBENT: Commissioner Williamson.

COMMISSIONER WILLIAMSON: Good. I want to thank all the witnesses for coming today and presenting their testimony. You may not get the chance, because I want to ask that question now. So if you could present now or either at post-hearing, what share of the actual installations are monocrystalline and what share are multicrystalline, and is that changing -- is that ratio changing? That could be for anyone who wants to.

MR. DULANI: Mukesh Dulani, SolarWorld Americas. If it's okay, we will have to get back with data and submit it in the post-hearing.

COMMISSIONER WILLIAMSON: Okay, okay. No, that's fine. Mr. Brightbill.

MR. BRIGHTBILL: Commissioner Williamson, percentage in the three market segments is what you were asking for mono and multi?

COMMISSIONER WILLIAMSON: Yes.

MR. BRIGHTBILL: Yeah. I think you see that in the staff report at Part 2, page 52, mono versus multi for residential, commercial and utility by cell type, so and I think you see at least U.S. producers' shares of all of those. And you see throughout the period, as you've heard, that there's competition in all those various sectors, and you see there is certainly some preference for --

COMMISSIONER WILLIAMSON: Which page are at now?

MR. BRIGHTBILL: 2-52, Table 2-19.

COMMISSIONER WILLIAMSON: Okay, thank you. Has there been any change, and this is just for I think 2013, is there any trend? Has there been over the last couple of years or just looking going forward, seeing changes in this distribution?

MR. BRIGHTBILL: Tim Brightbill, Wiley Rein. I think we could give you that information in a post-hearing, but I think there's, you know, there's certainly the factor going on that where space is

constrained, a customer might want a higher efficiency product, which I think you see in -- where a monocrystalline has a somewhat higher role.

Whereas if space is less constrained in the utility sector, then you can have a less efficient product, which is multicrystalline. But the bottom line is both mono and multi are made by the domestic industry in all sizes, and both have been dragged down by the dumping and the subsidies, and you've seen the results in the rest of the staff report.

COMMISSIONER WILLIAMSON: Okay. Mr. Kaplan.

DR. KAPLAN: Yes. I'm going to ask Mr. Clark to repeat the incidents he talked to me about, the choice of which sell and which company to use, and certain times he's installing. I think that would highlight the distinction without a difference that is being argued by Respondent.

MR. CLARK: Erin Clark, PetersenDean. Commission, I compete in the -- primarily in the residential marketplace, so I can't speak to the utility sector. But in the residential marketplace, the most competitors don't put -- don't specify a product when they're bidding a job to a customer.

It will just say five kilowatts, six kilowatts or the number of panels. It will actually inform the customer on the contract, because at the time, most

companies are looking for a cost competitive product. So they'll quote and then, coming close to the time of installation is when they'll purchase the product, and they don't want to be locked, necessarily locked into one technology.

So they have it not specified on the contracts. They're typically not on competitors' websites. You don't really find that information out until your job's actually installed. So what happens in the marketplace, it's very vague, and they're typically just competing at that point on price.

COMMISSIONER WILLIAMSON: Okay, so. Go ahead, Mr. Kaplan.

DR. KAPLAN: It could be the case that within days of the actual installation, that they'll purchase -- decide which type of technology and which producer. Is that correct, or could you elaborate on that more?

MR. CLARK: It probably needs to be a little sooner than that. I would assume they need to purchase the modules and get them shipped in. But it's definitely not specified on most competitor quotes what the customer is getting. The customer knows the size they're going to get, of course, and the price.

COMMISSIONER WILLIAMSON: They know that it's going to say -- be five kilowatts or something like that and

it's going to take up so much space, or they have so much space or they have so much space in which to put it. Is that what you're saying?

MR. CLARK: Absolutely correct. Yeah, they'll know that they're getting 20 modules, let's say, and you might even know a company, but they don't know what the actual product is, the mono or poly. And maybe a lot of times they don't have any company. It's just five kilowatts.

COMMISSIONER WILLIAMSON: Okay. So if you can give them the size would say one efficient -- cells of a certain efficiency or mono, or give them -- get the same, you know, specs, same production, you know, five kilowatts, same areas with the multis, you're likely to use one or the other?

MR. CLARK: So this is a very --

(Simultaneous speaking.)

COMMISSIONER WILLIAMSON: Both are getting more efficient, I take it?

MR. CLARK: Right. However, yeah. It's actually a very poignant topic because, and I deal with homeowners all the time. If you get five kilowatts, you get five kilowatts. Regardless of what the efficiency was, you're now at 5,000 watts. So you're delivering those 5,000 watts, and with -- if the system sizes are the same, one's

not going to make a difference of the production. You're getting those 5,000 watts either way.

So that's why it doesn't come up to the customer. If you install 5,000 watts of mono, you install 5,000 watts of poly, the customer's getting the 5,000 watts, and therefore they've achieved their goal at the price that they were looking for.

COMMISSIONER WILLIAMSON: Okay.

MR. BRIGHTBILL: Commissioner Williamson, Tim Brightbill, Wiley Rein. In the staff report again, I'm going to go back to it, because it's got lots of great data, page 249 you have the ranking of the purchase factors that Dr. Kaplan showed you. Wattage efficiency is on the list. It's number eight on the list. So it's far, far, far below price, which is of course the number one factor on the list.

COMMISSIONER WILLIAMSON: Okay, I got you. So for the consumers, it's how much is it going to cost me. Do they think about well, so how much is it going to cost me each year after I've, you know, bought it, or is that a selling point at all?

MR. DULANI: Mukesh Dulani, SolarWorld Americas. It only depends on when the customer is buying it. I get a five kilowatt system and what was the total price to install it, and after that, they forget it, because it lasts for 20-25 years. Payback looks good right now,

six, eight, nine years, depending on where you are.

So I think now solar has taken off, because everything is working in our direction. So they don't worry about it.

COMMISSIONER WILLIAMSON: Okay.

MR. CLARK: Erin Clark, PetersenDean. I would agree with that statement. The customers are getting products at 5,000 watts. They have the same warranties, and they're looking for the price, assuming that the warranties are the same, which they are. Now they're -- that's why it ends up dropping down lower on the list in decision-making factors.

They've got the same warranties. I've got now 5,000 watts. Now I'm going to look for the next decision-making factor, and that's price.

COMMISSIONER WILLIAMSON: Okay.

MR. SHAVER: Gary Shaver, Silicon Energy. One of the really frustrating things for us as a manufacturer is I can make all of the arguments I want about I use all U.S. components or a majority U.S. components, I've got a fantastic warranty, I've got all these things.

But at the end of the day, the consumer really is just looking at how much is this going to cost, you know? It's no one technology. It's just what is the cost and am I going to get it?

COMMISSIONER WILLIAMSON: Mr. Kaplan.

DR. KAPLAN: Yeah, and I think the price sensitivity increases as you move from home to commercial to utility, because the module share of the project is highest in the utilities. In a house, there's all kinds of labor and B-spoke design and things like that. In a utility, you have this huge area in a field, and you're just putting modules in.

So the -- while it's price sensitive everywhere and the homebuilders talked about how price sensitive it was in their sector, it even gets moreso as you move toward utilities, commercial and then utilities. So this is a very, very price sensitive product, between domestic and imported product, and it's very price sensitive in the home sector, increases commercial and industrial, and even further in utilities.

COMMISSIONER WILLIAMSON: I think what the Respondent said in their opening testimony about the color of the multi -- being more attractive, did I get that right? Is that a fact? You know, just what the color, what the cells look like. Yes, Mr. Shaver?

MR. SHAVER: Yes, Gary Shaver, Silicon Energy. So my product is really focused in on high aesthetics. So five years ago, six years ago architects absolutely hated the way multi-crystallines look and then they flip a few

years later and they wanted it to look, you know, they want it to be black or consistent. Then two or three years later, it flipped again, and now it flipped again. So it switches and who knows.

COMMISSIONER WILLIAMSON: It's fashion?

MR. SHAVER: Yeah, it's fashionable.

(Laughter.)

MR. DULANI: Mukesh Dulani, SolarWorld Americus. It doesn't make a difference. It just depends on the personal choice. And U.S. industry makes both, multi, mono, in black back sheet, white back sheet, whatever the customer needs. Our lines are so automated and flexible we can change the line in a few hours to satisfy the customer demand related to the next customer order.

COMMISSIONER WILLIAMSON: Okay.

MR. DULANI: But we don't worry about that at all. If some customer choose to want mono, we change the line for that. Then multi, some like black back sheet, some like white back sheet. No problems for us.

COMMISSIONER WILLIAMSON: Okay. And if they want both, you'll give them that. Thank you very much for those answers.

CHAIRMAN BROADBENT: Commissioner Johanson.

COMMISSIONER JOHANSON: Thank you, Chairman Broadbent. And I would like to also thank the witnesses and

their counsel for being here today, some of you for the second time. So I remember you, I guess, a year and a half or so ago. So welcome back and welcome for the first time to the rest of you.

Do you all agree with the Taiwanese Respondents that a prerequisite for accumulation is a common scope defining the imports from each country?

MR. BRIGHTBILL: Tim Brightbill, Wiley Rein, no we don't agree with that. That's not how I read the cumulation provision of the statute. And it's also not how the Commission reads it. So, in fact, I believe Taiwan's support for its position cites to the descenting views of the Commission in the Paintbrushes case. So that's a problematic reading.

I mean, when you look at the cumulation provision itself, it says, "the Commission shall cumulatively assess the volume and effective imports where petitions are filed on the same day, or investigations are initiated which is true. If such imports compete with each other, and with domestic-like products in the U.S. market." And I think the overwhelming demonstration of the staff report is that the imports compete with each other and the domestic-like product.

So you've addressed this issue before and you've decided to cumulate even if a scope is not identical from

one country to another. And accumulation is entirely consistent with the Tariff Act.

COMMISSIONER JOHANSON: I understand your position on this, but would it be fair to argue as Taiwanese respondents did that there is no common scope here.

MR. BRIGHTBILL: Tim Brightbill, Wiley Rein. I don't believe so. The scope the way it is drafted, the only difference is to exclude products from the first case. Which, of course, you can't cover the same product by more than one dumping or subsidy case. So, you know, the Commission has the legal authority to cumulate. In fact, it's mandated to cumulate because the scopes cover the same class or kind of merchandise, solar cells and modules. We talk about in our brief how subject imports are highly interchangeable, they're sold and offered for sale in the same geographic markets, they're sold in the same channels of distribution, they maintained a simultaneous presence in the U.S. market, so consistent with the Tariff Act and your precedent, cumulation is not only appropriate, it is required.

COMMISSIONER JOHANSON: All right. Thanks for your response.

In your view, what would the Commission need to do if Commerce in terms of data collection, presentation and -- what would the Commission need to do if Commerce were to

adopt the scope from October 3rd, 2014 memorandum and that would be in terms of us collecting possibly new data or what would we need to add and analyze?

MR. BRIGHTBILL: Commission, I attempted to answer that question to Chairman Broadbent, but I think the staff has gathered the data in so many different ways and so many separate discrete categories that you will be covering all or the vast, vast majority of subject imports regardless of which scope is adopted by the Commerce Department. And therefore I think you can use the data that's already on the record to reach a determination of material injury caused by subject imports. Some of the data is proprietary. We can put some more in our post-hearing brief to elucidate that point. But you have the data already, you would not need to gather more data. In fact, you adopted many changes that respondents asked you to make between the prelim and the final. And all the results are still the same despite the even more detailed investigation that you've done. So you already have the record and there would not be a need to go further to render your final determinations.

COMMISSIONER JOHANSON: The Taiwanese respondents contend that the supply of CSPV cell imports from Taiwan are not -- are a benefit and not a source of harm to the domestic industry. I understand you probably will not agree with that. But could you perhaps elaborate on that? I

mean, these are inputs which could possibly benefit the industry.

MR. BRIGHTBILL: Tim Brightbill. I can start and then our industry witnesses can comment. But, the case covers cells and laminates and modules and Taiwan ships those products. The Commerce Department has found that they're dumped at substantial margins. Even found that they are underselling the U.S. market. And therefore, Taiwan is a significant part of the problem here and in fact of course Taiwanese cells incorporated into Chinese modules were the vast majority of what came in to exploit the loophole. So, it's not -- Taiwan is equally part of the injury to the U.S. industry both on cells and on modules and as such you should rule in that way.

MR. DULANI: Mukesh Dulani, SolarWorld Americas, 50 gigawatt capacity sits in China for sales and modules. Ten gigawatt capacity sets for sale in module is increasing. Let's look at the total market in China and Taiwan. Taiwan installed only 170 megawatts out of 10 gigwatt of the cell capacity in Taiwan in 2013, I think.

The Chinese are trying to install more and more from that 50 gigawatts. So only five, seven, ten gigawatt. The rest is all export coming out. The loophole used was not to clear the duties which were found on them was to ship the Taiwan cells to China. If now we leave this open, they

can ship this Taiwan cell to somewhere else, build the module and again evade duties. That will kill the U.S. industry.

COMMISSIONER JOHANSON: Yes, Mr. Kaplan?

DR. KAPLAN: To the extent that someone could import a dumped product and benefit from the lower price, the Commission has seen this before both at the final level where utilities are buying dumped products of modules and benefitting or from an intermediate product like a cell. So this is not anything new that the Commission faces, and if the benefit is so high, the Commission actually excludes the importer as a related party. So I just wanted to place in context the notion of benefitting from imported dumped and subsidized merchandise.

MR. JOHNSON: All right. Thanks.

Mr. Kaplan, I'm going to stick with you. I believe you stated earlier today the demand in the European Union has fallen sharply. And I saw that and also looking at the -- it must have been the staff report that is discussed as well -- it has indeed fallen quite sharply. Why is that the case? I understand the climb in the EU Has been in the tank for a long time and it's also my understanding just from reading the press that certain government programs do support the use of solar panels in the EU have also been questioned. What is going on here?

DR. KAPLAN: Seth Kaplan, Capital Trade. If you could turn to page 43 of my handout?

That is a chart from the global markets for photovoltaics from the European Photovoltaic Industry Association. They have three scenarios going forward. The high scenario which by 2018 is still below 2012 anticipates subsidies returning. The low scenario is based on a lower demand estimate, and the blue line is the center. So there's a couple things going on. The main one is that the level of penetration of solar in the European market is much, much higher than it is in the United States. So certain opportunities that are available in the United States, for example, which has very low penetration are not available in Europe as well.

There was a change in the subsidy regime, internal subsidies for photovoltaics that had some effect. But if you could look at the orange you could see that even with a return of a certain level of internal subsidization they still do not expect the levels to return to where they were before.

So this is particularly alarming to the U.S. industry since that was the largest market. They aren't expected to grow that relative to what they were before. The Canadians have now put on orders, the European has an agreement, the same thing is going on, I believe, in

Australia. And so the U.S. is now the market of choice. I hope that helps some.

MR. JOHNSON: Yes, it does help. And so beyond just having a situation where the number of the amount of subsidies being provided for, let's say installation of solar products is going down, also just the fact that the EU is a more mature market compared to the United States. That's apparently a major factor as well, is that what you're stating?

DR. KAPLAN: I think that's correct. And I think the industry experts could speak to that as well.

COMMISSIONER JOHANSON: All right. Thanks.

MR. DULANI: Mukesh Dulani, SolarWorld, Americas. So as you look at the renewable portfolio in the major countries, in Germany and Italy, if I talk about Germany. They started a decade ago plus. Their renewable portfolio looks pretty good, 20, 25 percent reaching pretty high. Right now the subsidies went down and market has matured like Mr. Seth said, and that is the main thing. But if you look at other markets keep popping up, UK doing pretty good, and certain markets come and go in Europe to keep it but going to those hypes can be a little hard now after maturization.

MR. JOHNSON: All right. Thank you, much. Time is expired, I appreciate your answers.

MR. DULANI: Thank you.

CHAIRMAN BROADBENT: Commission Schmidtlein.

COMMISSIONER SCHMIDTLEIN: Thank you. So I wanted to follow up with a couple more questions about the mono versus multi and specifically if I understood the testimony, except for any small number of instances where you have sophisticated customers, customers are basically indifferent as to whether it's mono versus multi and because price is driving their decisionmaking in your experience. So my question is, isn't it -- I thought -- my understanding was, it's more expensive to produce mono; is that correct? And more specifically, you know, the respondents have put evidence on the record that there's a 30 percent premium for mono wafers. And in your experience does that translate into a premium? Do you agree with that and does that translate into a premium for the cells and the modules made with mono wafers?

MR. DULANI: Mukesh Dulani, SolarWorld Americas. If we make the same power of mono and multi with the technology where market technology has not grown, then there's no difference at all how the industry works on the mono and multi side.

If there is a few pennies difference between the mono and multi wafer on that side, that converts into almost same cost structure and you have to sell at the same price

for the same power. Let's say multi is 60 cell, 250-watt module. If you use the old technology on the mono side, mono BSF 250 watt. It has come to the similar things in the cost and customer will not pay more because of anything on the roof or commercial or utility. They are harvesting the same energy.

COMMISSIONER SCHMIDTLEIN: But it's not costing you any -- is this because you can use fewer modules or cells in the mono because they're more efficient? So is your answer, it doesn't cost more to produce the same wattage with the mono cell versus a multi?

MR. DULANI: If the power is the same.

COMMISSIONER SCHMIDTLEIN: Yeah.

MR. DULANI: For the old technology. If you use a very different technology in mono, which is new technology in mono, the wafer cost is exactly the same; right? What you would buy. The cell cost increases a little bit for a few pennies, and the marginal cost goes down because the build material is the same; right? You are producing more power. So you can pump it clearly with mono product in those markets also.

COMMISSIONER SCHMIDTLEIN: So you don't agree there's a premium that would translate to mono cells and modules over a multi?

MR. DULANI: So wherever the places are confined,

customer will make the premium. But if I sell the same mono power, 250-watt, 60 cell, and the same multi power, then the customer won't pay me any more. If the space is confined, and we can have more power of mono and use new technology, then premium will be there.

COMMISSIONER SCHMIDTLEIN: Okay. Mr. Johnson?

MR. JOHNSON: Yeah, Ardes Johnson, SolarWorld. I will echo what Mukesh has said that at the same power, you know, multi or mono commercial strategy is the same. The customer expects to pay the same. I think the mix up -- or not the mix up, the difference being if you're talking about a mono that provides a higher efficiency, customers can see value in space constrained areas to capture and harvest the same amount of energy in a smaller space.

COMMISSIONER SCHMIDTLEIN: Uh-huh.

MR. JOHNSON: But clearly, mono, multi, if they're the same power, 260 as an example, 260 watt, the strategy is the same, the price is the same.

COMMISSIONER SCHMIDTLEIN: Okay. Mr. Shaver.

MR. SHAVER: Gary Shaver, Silicon Energy. I would like to echo that. Even if my -- so I'm the manufacturer, I'm buying cells, even if my mono cell price is slightly higher, I can't pass that on to the customer. If I try to take my module pricing and make up that difference in that, I really risk losing that sale to the

customer because really what they're looking for is how many kilowatts can you get onto my roof in this area. So I really can't pass that on to be competitive.

COMMISSIONER SCHMIDTLEIN: Okay. So that -- I mean, again, sometimes when you try to oversimplify things it makes it more complicated. But when I saw, Mr. Kaplan, your slide, it was on page 13, U.S. firms that were injured. And you see, you know, the number of jobs lost reported on this slide in the multi crystalline being, you know, three times as much as the mono. And when I first saw that, I thought, well that seems to be consistent with the idea that the head-on-head competition with the imports is multi. But based on what you just told me, I'm a bit -- or based on what the witnesses just told me, I'm a bit confused now because if you can't pass the cost on, you know, why don't you see more jobs lost in the mono? If there indifference, you can't pass the cost in the mono, why do you -- why is this -- the jobs that are lost and the injury being felt mostly in the multi?

DR. KAPLAN: I don't think the consumer distinguish between them and companies chose technologies and they're all being put out of business.

So as I said, the staff report has -- the staff has done a really phenomenal job in documenting who went bankrupt and then another able with all the changes. This is part of

that because certain of that was confidential.

COMMISSIONER SCHMIDTLEIN: I see.

DR. KAPLAN: But the point is, it's just the whole industry has been crushed. It's across the board. And I'm glad the Commission is investigating this mono/multi issue. It's become their central argument now after different arguments in the prelim, in the first case, the final of the first case, and the prelim of this case that they've stumbled upon this one as their argument. But I think it doesn't hold up as well -- you know, it holds up as well as all their other ones that the Commission has specifically dismissed in their opinions. So take a look at all the producers and our point is across the board that they're being harmed.

And then -- and your point, I think, of -- I think you're in some ways looking at fine distinctions just because the particular data I put up shows this.

COMMISSIONER SCHMIDTLEIN: Uh-huh.

DR. KAPLAN: But broader data might show it differently.

COMMISSIONER SCHMIDTLEIN: Uh-huh.

DR. KAPLAN: But the point is, it's everybody.

COMMISSIONER SCHMIDTLEIN: Mr. Clark?

MR. CLARK: Erin Clark, PetersenDean. Commission, I'm a reseller. Most of the time I'll buy a

product from a manufacturer and then I install a complete product for the end-user, the homeowner. I buy mostly -- this past year, most of our product was multi from an American manufacturer and I'm paying more for that multi product. Significantly more than what I see out in the field. So if I choose to buy an American product, source American, domestically, I can't compete. However, because the industry is tough and it's primarily driven on price, even on the multi product, I'm paying significantly more. So I'll compete daily across the United States in the marketplace against the dumped product just in the multi arena and I'm losing margin. So we feel that in the loss of margin, we can't raise our prices for multi product, yet we have to pay more if we want to buy American.

COMMISSIONER SCHMIDTLEIN: Uh-huh. Okay.

MR. CLARK: That's how it affects us.

COMMISSIONER SCHMIDTLEIN: Mr. Dulani?

MR. DULANI: Mukesh Dulani, SolarWorld, America. So like I said, our lines are capable of making multi and mono both. So when the customer -- if customer requires a multi product, we can switch it from multi to mono and from mono to multi. So we have no problems, whatever the customer requires, we will fulfill the order to survive in this market. It's a hard market with all the dumping. But until right now we have survived and we continue to do that.

COMMISSIONER SCHMIDTLEIN: How often do customers make that kind of specific request for mono versus multi?

MR. DULANI: The customers don't make a lot of times the request for multi to mono because the reason is their customers don't care whether they use a five kilowatt system of mono or multi. So, we don't see many requests on the specific products.

COMMISSIONER SCHMIDTLEIN: Okay. Anybody else?

So, shifting gears just a little bit. In the staff report it reports that several purchasers experienced supply constraints during the period of investigation. And so I was wondering if one of the industry witnesses could talk about what was going on during that period or respond to those reports?

MR. DULANI: Mukesh Dulani, SolarWorld, America. So we have been harmed badly with these dumped products. So what was happening was we laid off all our people in December and market starts -- we have always tried to satisfy every customer. Our utilization was really low. Right?

So January comes, solar market is cyclical. So with the dumped products it becomes very hard to survive all the jobs in January and February and March. But we supplied all the product January, February, March and market starts coming back. So Q2 at certain time we start hiring back

quickly and start utilizing all machines more and more. So after that what happens in Q2 when the duties come in play, clearer trade practices come in play, so I would like to thank you for doing that and market became very clear starting June/July. And we saw the demand coming up. We hired more American jobs, filled our capacity market has now started going up more for U.S. product. So two months ago we went to the board and have announced our expansion in cell and module to satisfy our customers more. So what else happened, and this is other U.S. producers did the same. They also, because of solar market and dumped products had to let go people they hired and now like Saniva, did the same. They are running full, their utilization is complete and now they are expanding also. You saw SolarCity now starting another client in New York. So I would like to thank all of you guys to put this fair trade practices. But I'll agree starting Q2 and the demand coming up and the duties, we have kept -- tried to keep up and we will try more expansions as we go to satisfy customer demands.

MR. BRIGHTBILL: Tim Brightbill, Wiley Rein. I just wanted to emphasize, obviously, there are petitioner facts here that the Commission is permitted to discount. But even if you look at the full investigation data what the capacity of utilization was and the ability of the U.S. industry there was injury throughout the period and still

ability to supply that product right until the end of the period when again the duties kicked into place.

COMMISSIONER SCHMIDTLEIN: Okay. Thank you. Thank you very much. My time is up.

CHAIRMAN BROADBENT: Okay. Mr. Dulani, permit me just to ask this once more because I am still not quite getting it. We've been told the purchasers make their decision based on price, they're not generally requesting mono or multi one or the other. If multis are less expensive to produce, why don't you -- why are you so focused on the mono in your production?

MR. DULANI: So, like I said, we produce both multi and mono both. We really believe in R&D. So our certain portfolio is multi and certain is mono products. We can interchange on our lines, no problems.

CHAIRMAN BROADBENT: Right.

MR. DULANI: If the demand comes. But what happens is, we invest R&D money to keep increasing the efficiency on mono to buy new machines to make mono more productive. My personal dream is some day we get a living space from mother earth. Hopefully we will design houses which will make real energy houses while putting solar when we are building the new houses. And then we will get ahead. So to make this dream come true that every human kind can affect solar -- can afford solar, if we keep increasing the

efficiency on mono, we need less space to make zero energy home, that's one of the dreams. We invest in this mono technology to make this planet better, give our second and third generation in United States innovation which should never go away.

We invested this technology. This makes sense for us in the long-term that these modules will be more competitive than multi in a higher range. Right now customer doesn't care. So basically we do both, but we try to do R&D on mono.

Did I answer your question? I'm sorry.

CHAIRMAN BROADBENT: Well, I mean, you're doing a more high-cost product so you can recover your R&D costs. I get that. But if the market is demanding the multi, if the utilities are putting out, you know, fields of solar, of solar panels in the desert and it doesn't matter, the space that they're taking up, why don't you focus on that market and keep up with the demand?

MR. JOHNSON: Ardes Johnson, SolarWorld, Americas. I think the distinction between mono and multi almost becomes moot in the sense that we are dealing with illegally dumped and subsidized products in the market. Those markets happen to be multi.

We sell the multi product all day long. And I think what Mukesh was discussing was that a roof five years

ago said it was 1.7 kilowatts of space. What we're pushing for is to have a roof -- that same roof, that same footprint that will have over three, three and a half kilowatts. That's the R&D development. All of this has been stymied because we've been illegally taken on by the Chinese -- the Chinese government.

Now, we have customers out there that we sell both multi and mono to. And we could increase the multi as needed, it's not a problem. When we talk about the same power, it's all about the power. The same power, essentially the same price, either way we're dealing with prices that are unrealistic.

And further, depending on what you believe what you read, subject producers are making announcements all the time that they're making heavy investments in mono. So that -- we don't know if that's going to happen or not. We think that that's probably something to do with us, but what I'll say is, we satisfy the customers based on their need. Either way, we're dealing against prices that are unfair and below cost.

MR. DULANI: Mukesh Dulani, SolarWorld, Americas. Our Cameo facility which got shut off was making a lot of multis when we shut it off. Just couldn't compete either on multi or mono on the pricing section; 186 people on jobs were lost while doing the multi product and we had no

choices.

MR. SHAVER: Gary Shaver, Silicon Energy. Our product is unique and it has a much smaller footprint than other products. So we see the future heading -- the near future is heading to be mono. For us to be competitive, we need to keep moving forward with technology. And I think what's happening in the market right now is that everyone is focused in on the really highest volume, what they have the capacity to do now. And that just floods the market.

But the market, really, other than price, doesn't really know what it's demanding. It just needs that price to make these project pencil out for these developers to make this go through. But for a sustainable industry, moving forward, you have to innovate. You've got to put in the R&D and that will pay off for more efficient, lower-cost product as you move forward. And that's what we are trying to position ourselves for.

CHAIRMAN BROADBENT: Yes, sir.

MR. DULANI: Mukesh Dulani, SolarWorld, Americas. If we don't focus on this, and as the wafer prices shrink in the mono and the efficiencies grow, if the module will be the same and there will be few extra step in the cell. And if your competition focuses on that we can lose it because mono will become less expensive than multi in the coming years.

CHAIRMAN BROADBENT: Wait, so wouldn't that become less expensive?

MR. DULANI: So basically if the wafer cost is let's say will come almost similar, the module will become less expensive because it's producing more watts. If the cell has only three processes extra or a few processes extra depending on the process, it will more than overcompensate for the module and mono will cost less and will give more power and will change the world. And if our company can get focused on that and we don't focus, then that will be our mistake we make.

CHAIRMAN BROADBENT: Okay. All right.

MR. McKECHNIE: Madam Chairwoman, if I could join in as a purchaser of SolarWorld products, we buy almost exclusively 98 and 99 percent of the modules that we buy are multi crystalline. That's what our consumer is using and that's once again because that's what the market has been flooded with from the subject importers. So we just don't buy the monos. That's not what the consumers ask for. They ask for the best price. Therefore from SolarWorld we buy megawatts and megawatts of the multi crystalline.

CHAIRMAN BROADBENT: Yes?

MR. SHAVER: Gary Shaver, Silicon Energy. And to simplify this even more, as a module manufacturer, the fewer modules I have to produce, means my cost per unit. If I can

get the same wattage in one module that I was getting for two before, that helps to decrease my manufacturing costs. So that's the obvious. I'm getting scale, and I'm able to lower that price.

CHAIRMAN BROADBENT: Okay. I wanted to talk a little bit about demand overall for CSPV products. Maybe Mr. Dulani you could start off. Is demand increasing primarily because of government incentive programs recently, or is has it started to reach parity and be equivalent to other sources of energy?

MR. DULANI: Mukesh Dulani, SolarWorld Americas. I think we fully agree with the Commission on this. The demand is based we think on these five factors which the Commission confirmed. Total energy consumption is going up, environmental concerns, people are being more aware of the environmental concerns. Costs, competitiveness is coming like we said, we talked a little bit about -- some of the places are becoming very cost compared with the lesser products.

Traditional energy sources and other liberty of incentive, this is what the Commission found and when we do our surveys every portion is a little difference, why this market is going up. And in some cases, like I give an example, in California they took the state incentives out but demand is off the roof. Hawaii, basically we have

better solar prices than the lesser prices they can get from anywhere so the demand is way up.

So depending where we see the market it changes in between these 5 factors and correlates enhance the demand is going up. It's not one particular thing which the demand is steep.

CHAIRMAN BROADBENT: Okay say then what you think is going on in California.

MR. DULANI: California the state has taken incentives that are not there but still demand is going through the roof.

CHAIRMAN BROADBENT: They don't have the utility requirements for certain?

MR. DULANI: They have certain requirements also like every state, that is also producing more demand because by 2020 or 2030 they have to do that much renewables and that is one of the factors yes.

CHAIRMAN BROADBENT: Okay.

MR. JOHNSON: Yes Ardes Johnson, Solar Americas I would echo what Mukesh is saying that while we have the federal tax incentive there depending on what state and what area you are in and what utility you go with, incentives can vary. But California is a great example that while the local and state incentives have gone away, the conditions are such that solar continues to increase and once again

thank you for the determination, the preliminary determinations this year but we see that while prices stabilized overall the market continues to increase at a rapid clip.

And all predictions, no one disagrees that it will continue next year so what we say is that it is somewhat decoupled from reparity but at the same time that's a piece, local and state incentives play a part, plus renewable portfolio standards by each of the states which was represented in other things have a lessening effect and plus the knowledge of solar it's increasing, we have an awareness and a desire for people to be more sustainable. It's also helping to increase.

CHAIRMAN BROADBENT: Okay Vice Chairman Pinkert.

VICE CHAIRMAN PINKERT: Thank you Madam Chairman. Just a technical question for Mr. Brightbill and Dr. Kaplan, are the imports shown in the staff report as non-subject Chinese are they all subject to the earlier Order?

MR. BRIGHTBILL: Tim Brightbill of Wiley Rein. I believe that is correct, not non-subject Chinese are non-subject because they are subject to the prior case but we can check and confirm that and put it in the post-hearing brief.

VICE CHAIRMAN PINKERT: Thank you. Now on table Roman III-3 on page Roman III-8 of the staff report, which

is a public table we see that there are a number of domestic plants opening and closing throughout the period that is covered by that table, 2011 to 2014, is this just volatility or charm within the industry or does this reflect in some way the impact of subject imports?

MR. BRIGHTBILL: Commissioner Tim Brightbill, Wiley Rein. I think what this reflects is the harm that occurred which led to the shutdowns in 2012-2013 and in 2014 with relief in place, some announcements of additional capacity to come so you see the shutdowns Advance Solar Photonics, Helios which testified here 2 years ago, Alternate Energies, Kentucky, layoffs by Kyocera, MX Solar, Nu-Sun, Schott Solar, part of SolarWorld, Solar Tech Renewables, the list goes on and on, that's the harm from this case, that's the injury caused by subject imports.

And you see the newer announcements, announcements by High Tech Energy, by Solar City, by SolarWorld and by Suniva all in recent months where construction or expansion is going on on the expectation that these trade orders will stay in place and that the unfair trade practices will be addressed and I think the industry witnesses can comment if that doesn't happen and the trade relief doesn't stay in place things will quickly head back downward again.

MR. DULANI: Mukesh Dulani, SolarWorld Americas,

I agree with Mr. Brightbill like we said we will not be able to satisfy now customer demand after the duties so we first filled all the way utilization, hired all the workers and now we start expansion. Still expansion is on the way but if the duties don't come then it becomes very hard because then again dumping starts and we won't be able to compete.

VICE CHAIRMAN PINKERT: Dr. Kaplan?

MR. KAPLAN: Yes, you are also seeing some of the beneficial effects of orders you have seen in other cases where for example a Chinese company is now breaking ground in the United States, creating U.S. jobs and selling fairly and competing on the U.S. playing field and that accounts for some of the increase in domestic activity in the future. Of course, that potential activity is hanging by a thread and that thread being whether these duties will become final or not.

VICE CHAIRMAN PINKERT: Thank you, now I don't want to mischaracterize the testimony on this panel but I thought I heard a hint of the idea that the market overtime may be moving away from the multi-crystalline product toward the mono-crystalline, is that where we are headed and if so how does the multi-crystalline product affect the future of the mono-crystalline product?

MR. DULANI: Mukesh Dulani, SolarWorld Americas. Everybody is trying to progress in both sections, multi and

mono so according to every supplier will have their different input depending on their duties, our import in our opinion that mono efficiencies will grow more because climate structure is in the future. There is typically more possibilities to grow the efficiencies in mono. Now somebody can argue that they can multi also then they will invest their R&D monies in the multi and try to come to the same efficiencies.

If the price, there are a lot of ifs I apologize for this because we try to do better in our section. If the refill price is seen, whoever wins this efficiency race will have the cost advantage if the processes in the cell are similar to get to that efficiency. Apologize for answer is a little bit this way but I can do it I mean.

MR. BRIGHTBILL: Tim Brightbill, Wiley Rein just to underscore of course in order to compete and in order to innovate you have got to spend capital, you have to invest in R&D and you have the staff report which shows the trends which I can't discuss publicly but the trends indicate injury -- the U.S. industry will do its best to compete with the trade remedies in place otherwise it will not be able to compete in mono, multi or any combination of the two.

VICE CHAIRMAN PINKERT: Dr. Kaplan and then Mr. Shaver I think.

MR. KAPLAN: I just want to give you a little

context in particular to Commissioners that weren't here for the first case. SolarWorld and firms like SolarWorld have been in business for decades R&D and production of solar cells. The Chinese government in the 5 year plan decided that it should enter the solar market which it had not participated in at all. But in a short period of time it had more capacity than all of the world's consumption.

It was dramatic is an understatement for how quickly it grew but the growth was based on the importation of technology from abroad. The machines were from abroad, the technology was from abroad so I just want to place this in context of the very long and careful research and development done by firms like SolarWorld in developing this technology over you know 20 plus years and that the harm to the U.S. industry is not only the harm to the consumption and profits and shipments, but it has also harmed R&D from the world leaders and R&D from the whole business.

And maybe Mr. Shaver could talk to this as well but that's a context that you just don't see very often. Someone decided oh we'll enter this industry and we will build more capacity than all of the consumption in the world in 5 years it's astounding. It is of course the direct result of that that has led to the first case, this case, all the bankruptcies, all the losses, the decline in prices that are unrelated to input costs.

It is an astounding event. Solar cell exports at one point were 5% of the value of all Chinese exports to the world starting from zero.

VICE CHAIRMAN PINKERT: Thank you.

MR. KAPLAN: Well I just want you to kind of get this context.

VICE CHAIRMAN PINKERT: Mr. Shaver if you could speak to the technology frontier here and whether the future is with mono and then how does the multi crystalline product affect that future?

MR. SHAVER: Gary Shaver, Silicon Energy. I think I believe its ENRO has an efficiency chart where they show, this is like 20 years roughly of data, where they are looking at the theoretical yield of different technologies that are out there. The income has been low down, you had poly you have had mono, out of all those charts that they put together, the future is looking like it's more and mono. To Mr. Dulani's response earlier, everybody is going to try to say their technology is the best but ENRO is clearly showing that mono is going to be where things are going and that is where we can get the most efficiency and drive down that cost.

Silicon Energy specifically for our product again, we have such a specific product, has a need for high density in its power so we see for where we are going in the

integrated market, that is clearly a winner in that. As far as multi, again there's going to maybe that genius somewhere that's going to find a way to make multi make it just that much better but right now ENRO looks like mono is going to be the winner.

VICE CHAIRMAN PINKERT: Very briefly Mr. Dulani I'm at the end of my round.

MR. DULANI: Mukest Dulani, SolarWorld Americas. We are investing R&D money on multi also so we don't lose that train just to platify there is a sliver of hope that multi efficiencies can also grow in our R&D facility, then we might change our lines to multi just I will platify that we are waging both of them with our R&D money to take more time.

VICE CHAIRMAN PINKERT: Thank you very much, thank you Madam Chairman.

CHAIRMAN BROADBENT: Commissioner Williamson?

COMMISSIONER WILLIAMSON: Thank you. Mr. Dulani previous sellers selling in the modular investigation, we visited your end production facility in Oregon which since then it closed down. Can you describe the cell production operations that you currently perform in the United States?

MR. DULANI: Mukest Dulani, SolarWorld America. So right now we have a full cell line we laid off our workers and we are doing 335 megawatt of our production out

of 500 megawatt of our nameplate capacity in the cell department. We announced 100 megawatt more of production last month now we are hiring the people to take our production in the cell capacity to 435. If demand for customers keep increasing then we will hire more people and announce the 500 megawatt for cell production.

But unfortunately when you might have visited we were doing our own ingots and cutting up our own wafers and then making the cells so this was what I told you but unfortunately we had to lay off all the workers from ingot and wafer department and those facilities have been idled.

COMMISSIONER WILLIAMSON: Okay so are you producing wafers anywhere in the U.S. now?

MR. DULANI: No not right now we are working on technology to which will make us more competitive to restart that process here so right now in Germany we are making wafers.

COMMISSIONER WILLIAMSON: Okay and oh so you are making them in Europe and bring them in?

MR. DULANI: Yeah and we are making everywhere in the world, and so a lot of it are making in Germany, we acquired the bosh facility and we have restarted that facility to make more wafers now.

MR. BRIGHTBILL: Tim Brightbill, Wiley Rein. Let me just say the ingot and wafer facilities while they are

idled right now, if market conditions improve Solarworld would have the opportunity to bring those back with the workers involved and they would again be fully vertically integrated which is very valuable to the process.

COMMISSIONER WILLIAMSON: Okay thank you. Right now I guess is it more cost efficient to bring the wafers in and have someone else do it or do them elsewhere?

MR. DULANI: Yes.

COMMISSIONER WILLIAMSON: Thank you. I do that demonstration of the ingot thing was very impressive.

MR. DULANI: That ingot facility is a dream come true and we are on knock on wood, a lot but I can do it in post briefing, we are investing money in that also on the new technology so we can bring all of that back and that will be a phenomenal achievement to change the world again, working on that.

COMMISSIONER WILLIAMSON: Thank you. In the previous cases I think there was discussion of production incentives for U.S. producers and I haven't heard that mentioned so I was wondering is that still a factor are U.S. producers still having incentives to produce the product? I know there was discussion about that in the previous case.

MR. BRIGHTBILL: Tim Brightbill Wiley Rein. If you are talking about incentives, most of the incentives in the marketplace the vast majority of the U.S. are for the

installation which contrasts greatly with China where the subsidies we have alleged are to the companies, the production, the grants and the loans and the discounted raw materials so and even when Mukesh talked about a recent R&D grant from the Department of Energy, but that's a matching grant so SolarWorld is required to put its own money forward and make that investment in order to receive the match so and as Mukesh pointed out in his testimony, SolarWorld's manufacturing facilities were built with more than 600 million dollars' worth of investment and no federal subsidies.

COMMISSIONER WILLIAMSON: Okay thank you. Let's see, okay sorry. Respondents argue and we may have addressed it but argue that price data do not offer convenient conclusions because a limited number of businesses in volume and trade where domestic and subject product overlaps is very small. I think you basically said you disagree with that?

MR. BRIGHTBILL: Tim Brightbill, Wiley Rein. Yes we do and as we have said the Commission went out of its way to accommodate Respondents on pricing products, added additional products and lo and behold you have the same result of substantial underselling in the marketplace.

COMMISSIONER WILLIAMSON: Okay thank you. The Respondents note that the domestic industry data do not

include information from the same domestic producers for each period of the POI and they caution against relying on trends from one period to the next and I was wondering if you have a suggestion in the alternative data set for the Commissioners to examine that would better represent the conditions of the domestic industry, Mr. Kaplan, I thought you might?

MR. KAPLAN: Yeah, the -- what the Commission collects is the performance of the industry during each year of the period of the POI and in this investigation the staff has made I think it's a great job, they went back and they did -- they went back to earlier cases and found questionnaires from the companies that went bankrupt because their performance counts in the years they were produced so they did the right thing. What the results produced is what's called the classic survivor bias in that you are eliminating firms with bad performance that went bankrupt and keeping only the remaining firms in.

So if anything that data should show it's biased against us and it should show an improvement but if you look at the data, it's awful for the domestic industry so the staff did the right thing, they collected all the data. The results produce a survivor bias as they always do when firms that are performing poorly leave because of bankruptcy and nonetheless you don't see this great performance in the

industry by eliminating these firms that are performing so poorly before they go bankrupt so I just want the Commission to be aware of all of those things.

To go back and eliminate the firms that went bankrupt in the years which they were actually producing and having losses to me distorts the industry performance in those years and would make it inconsistent with what they measured in the past when they collected the information. The only thing the Commission should be aware of though is the survivor bias but in this case the survivor bias has such a small effect because of the large increase of the imports and their devastating effect.

COMMISSIONER WILLIAMSON: Okay thanks. Is there any meaningful way to evaluate the prices of CS PV cells in the U.S. market given those CS PV cells are consumed to make modules? And if that is not clear we can do it post-hearing.

MR. BRIGHTBILL: Let's address that in the post-hearing, Tim Brightbill.

COMMISSIONER WILLIAMSON: Okay thank you. Okay I think that's all I have for right now thank you.

CHAIRMAN BROADBENT: Commissioner Johanson?

COMMISSIONER JOHANSON: Thank you Chairman Broadbent. The Chinese Respondents and this is at page 46 to 49 of the brief argue that the margins of underselling

are well within the range to be expected due to the mix of available products such as cell color, working range, compatibility et cetera and you give the range of the price and product. How do you all respond to this?

MR. BRIGHTBILL: Tim Brightbill Wiley Rein. Again this is Respondents specifically asked for this pricing data, they asked for additional categories. The Commission gave it to them and still found substantial underselling. Now they are trying to splinter it with these other factors that you have shown are extremely irrelevant to the purchasing decision.

The ZEP frame issue is particularly problematic in terms of the importance of a factor. If you look at the table 2-17 on page 249 ranking the various importance of the purchase factors you see the module ranking system is arguably the least important factor so no there is no need for the Commission to measure underselling with all of these other variables, you are comparing apples to apples and what that is showing is substantial underselling by Chinese and Taiwanese subject imports.

COMMISSIONER JOHANSON: Mr. Kaplan?

MR. KAPLAN: It's not like this suddenly appeared and is sui generous out of nowhere, this is the fourth time the Commission has collected pricing data and the Respondents are repeatedly trying to re-imagine a situation

in which they aren't underselling and as hard as they try and as much as they squint their eyes and turn their heads sideways to try to make sure that there's no underselling there is so 4 out of 4.

Why they failed to do this in the original case, why they failed to do this in the prelim it's unclear to me. The Commission found underselling and underselling leading to injury as well as large increases in imports, three times previously you know, I admire their grit in trying to change the topic but I don't see any substantive reasons for you to abandon your current practice and in this case the practice was to accept all the changes that they suggested to the pricing product.

COMMISSIONER JOHANSON: Thank you. And Mr. Mckechnie you might be able to delve a little bit further into this since you know all that installation also Mr. Clark you as well. But getting back to the whole ZEP mounting technology I'm kind of curious about it because Respondents argue that the domestic industry was effectively shut out of about half of the residential market because these products were not compatible with ZEP proprietary technology.

I know Mr. Brightbill you are dismissing that but could you all speak a bit more on that, this caught my attention.

MR. MCKECHNIE: Yeah I would love to answer that question I'm glad that you asked it. I saw that I was here as you know the first time and I have seen a couple of things in here that I didn't see or I don't think they brought up in the first case but does that module frames I mean we never get requests in the residential market or from the commercial market or from the utility market for frame preferences. It's even more outrageous than the mono versus the poly selection process it's not even in the equation at all.

I would simply dismiss it as it's not relevant and we know the product, we have seen it -- it doesn't look like it's bag-less it doesn't look like it's a huge timesaver that would fit into our equation, never been requested, never helped to save money so we simply haven't used it and we don't think it's a factor.

MR. CLARK: Erin Clark, PetersenDean. Mr. Commissioner as I stated previously since my time in this whole industry since 2005 I have not me personally, I have installed systems, but I haven't installed tens of thousands but the two companies that I have worked for over the last 10 years have installed more systems than any other competitor in the United States and I have direct experience operating in 10 different states across the U.S.

We are fairly indifferent to racking as long as

its code compliant, it's a quality product we are open to any and all racking choices and having installed these systems over a 10 year period for tens of thousands of customers we have looked at that product, it wasn't a driving factor from the customer base. If they had asked for it we would have absolutely used it, we just did not see ZEP as ever a defining factor or request that came up enough where you would want to invest in that product and like I said that's over the entire United States geography that we operated in.

MR. DULANI: Mukest Dulani SolarWorld Americas and we will continue to work with all the racking companies. We have agreement with ZEP to change our lines to ZEP if any customer asks for it we can now change the line, it's a signed contract, supply them with that. We do not see a problem if customer demand goes up to use ZEP as a technology.

COMMISSIONER JOHANSON: All right thanks, you have answered my question. I'm the last Commissioner so I'm trying to get some of the grab bag questions that appear in my head when I am sitting up here, a lot of the other questions have already been asked. I have kind of a general question, we read frequently about environmental degradation in China, allegedly due to the burning the sense of burning of low quality coal, does not China have a growing market

for solar products for CP -- CSPV products? I know there's a lot of production there but it is also a very large country with a lot of people and a lot of homes. Mr. Kaplan?

MR. KAPLAN: Yes I recall Commissioner Broadbent at the original investigation towards the end asking you know what could solve this problem and I suggested that since the Chinese were building a coal-fired power plant and exporting 95% of their solar cells that maybe they could use them in their home market and stop dumping them around the world.

They -- since that time they have increased their use in their home market but they are still building much more coal and have plans to build much more coal than they are in terms of increasing solar, so while solar has gone up it's still a minor share not a majority share of the production in China in the capacity used. If they did turn to that and because they need the energy and all of their capacity is in fact less than the capacity that they are going to build in coal that would solve the problem but it hasn't happened.

There's extraordinary amounts of excess capacity. Their total capacity is still in excess of total world consumption and we like you would like to see them use it in their home market, it saves all kinds of transportation

costs, you know, if you need energy in China why ship it to Europe and the United States and instead build a coal plant that pollutes.

MR. BRIGHTBILL: Tim Brightbill Wiley Rein. Just two quick things, demand in Europe dropping faster than demand is increasing in China so China is not -- what it's been sending to Europe it is still going to have excess to send around the world and also China has encountered this year connection issues and other issues, it's unclear that it will meet its target, in fact the target for installation in 2014 have already been reduced either once or twice and not even clear that that will be matched for installation in China in 2014.

COMMISSIONER JOHANSON: Thank you. One more kind of grab bag question that I read in the Economist yesterday not connected to this investigation, I was reading something else for a while. The Economist had an article talking about utilities in the United States and how a number of utilities are protesting that they are forced to buy excess produced solar electricity from residential panels and some I believe have already perhaps stopped buying or not buying but just taking excess power and putting it into the general grid.

I assume the long term has some kind of impact on demand in the United States. Could one of you please

address this?

MR. BRIGHTBILL: I think the industry probably could do it better than I but I think it's a reflection of what you have in the staff report that some states are up in terms of demand for a variety of reasons and others are down maybe the industry can talk about those specific developments.

MR. DULANI: So I agree on that. Right now some states don't even have any solar so there the solar is growing and Hawaii and all that had a few concerns on that side so they slowed down a little bit but I think they will balance it out, the grid and will again grow in those actions also. That's just my opinion but.

MR. JOHNSON: Ardes Johnson from SolarWorld Americas. I had the unique opportunity prior to coming to SolarWorld when I worked with General Electric to sell utilities on a day to day basis and what I would say is the integration of renewables, whether it is distributed or at the utilities scale, is something that is evolving and I believe that from the utilities perspective yes they potentially can feel forced into this. I think it is not going to stop the growth of the renewables and particularly solar at the distributor level, the home roof you know, it's going to continue and I think there's a lot of policy discussion that needs to go on here but as far as the

evolution of the grid and the technologies that come along with that including now today with battery technologies that are starting to move up I think those are going to continue and I think utilities are going to come on board, some slower than others but all the senior executives that I have ever spoken to with the door shut essentially said the ship has left the harbor and we have got to figure it out, we have to figure it out.

COMMISSIONER JOHANSEN: All right. Thank you for your responses. That concludes my times. I appreciate the answers you gave.

CHAIRMAN BROADBENT: Commissioner Schmidtlein.

COMMISSIONER SCHMIDTLEIN: Okay, I'm sensitive to the time, so I just have a couple of questions, and you can answer them in the post-hearing brief if that would be easier.

One is, and I just want to make sure that this is on the record, I assume that you agree or that it's your position that the prices of monocrystalline products affect the prices of multi and vice versus. It's not just mono affecting mono, and multi affecting multi, correct? Okay, so could you elaborate on why that is in the post-hearing just so that question has been specifically answered?

MR. BRIGHTBILL: Tim Brightbill, Wiley Rein. We will do that.

COMMISSIONER SCHMIDTLEIN: Okay.

And one other thing that I wanted to make sure that you responded to was the Chinese Respondents have argued that the 72 cell, 300 water grade, or 1,000 volt modules are the bread and butter for the utility segment. So, I'd like to know whether you agree with that statement. And secondly, more specifically, how long have U.S. producers been offering that particular module to meet those specifications? So, this is just in response to arguments that they've made in the brief. I'd like to hear your reply.

MR. BRIGHTBILL: Tim Brightbill. We can do that post-hearing as well. But I would note if you consider the domestic industry as a whole it makes 60 cell, 72 cell, 96 cell, cells to utilities and has been doing so for a while, but we'll elaborate in the brief.

COMMISSIONER SCHMIDTLEIN: Yes, that will be helpful. More specifically, what does "a while" mean?

MR. BRIGHTBILL: Sure.

COMMISSIONER SCHMIDTLEIN: Okay.

MR. BRIGHTBILL: Absolutely.

COMMISSIONER SCHMIDTLEIN: All right. Thank you. I don't have any further questions.

CHAIRMAN BROADBENT: Okay.

Mr. Brightbill, could you respond to allegations

from Respondents that the domestic industry's unable to meet demand in the U.S. market and has placed customers in allocation, or otherwise, been unable to supply customers the products they wanted to purchase? And please discuss cells and modules separately.

MR. BRIGHTBILL: Sure. You have, without getting into any propriety data, throughout the period you have the evidence of capacity utilization for the various periods that show that the U.S. industry because of the injury had much idle capacity on both cells and modules throughout the majority of the period of investigation than you do have with the trade cases and the preliminary duties in June and July of this year.

You've had some tightness between supply and demand. Of course, the Commission -- it's disingenuous, at best, to criticize the domestic industry for being unable to supply after the dumped and subsidized imports caused so many shutdowns and layoffs and plant closures as the Commission has well documented.

So, the domestic industry is not required by law to be able to supply the entire market. I think you've heard today this industry is ready to, with trade relief is in place, quickly ramp up. There's been some announcements of that, and those will go forward, unless trade relief is not imposed in which case the injury that is already ongoing

will continue and worsen.

CHAIRMAN BROADBENT: Okay. Mr. Kaplan.

MR. KAPLAN: In many cases I've participated in the domestic industry's capacity is less than the consumption in the United States. That's a common event. That's why the remedy is not an embargo and the stopping of all imports. The remedy is remedial, and it just affects pricing. So, Chinese and Taiwanese product could enter the United States fairly traded and supply the market. They just can't dump and subsidize those products any more.

As said before, some of the Chinese producers are going to produce in the United States and have already started that process. There's excess capacity. There's new producers ready to enter the market, so the industry would be able to produce more.

And as Mr. Brightbill said, this is -- you know the story of the son that kills his parents and pleads mercy in front of the judge for being an orphan. I think we're seeing the chutzpah defense again by Respondents, and I just want to point that out.

CHAIRMAN BROADBENT: Okay.

Let's see, as we've already discussed, subject imports increased rapidly during the period of investigation. Can you walk us through how the shift occurred? Was production shifting to new channels and new

supply chains to get around the orders? Was it ramping up already existing, production channels, walk us through how the shift occurred?

MR. BRIGHTBILL: Tim Brightbill, Wiley Rein.

I can try and walk you through that, and unfortunately -- yes, if you look at my slides that we talked about earlier, Slide 7 first you see the quotes of the executives, some of which are here today that can tell you what you need to know about this occurred.

So, even before preliminary duties were imposed in the first trade case, you have Triana saying June 2012 "Modules we're shipping now to the U.S. have solar cells that are made from outside of China, so we're not affected by the tariff." Canadian Solar, "Now, all U.S. bound modules will be made with slightly more expensive Taiwanese cells to avoid the tariff." And CCME from China, "70 percent of the company's exporting to the U.S. market are now using Taiwan manufactured solar cells."

And then if we could show Slide 10. Actually, I'm sorry, Slide 8. Sorry. In terms of the imports, you see the subject imports are red and pink, red for China, pink for Taiwan, and the whitish is the China non-subject. That's covered by the first trade case. So, in 2011, all the product is Chinese cells and Chinese modules with Chinese cells.

You see in 2012 while the case is still going on the shift is underway. So, you've already got Taiwan about half of the imports and the Chinese product about half. By 2013, the shift is complete to subject imports and the Chinese product from the case is virtually shut out of the market. Incredible shift, as Seth said, from 6 percent markets share of subject imports to 82, and the 85 percent in the interim period.

The only other thing I'll say is interim 2014 you see Chinese imports from the first case starting to come back a little in white because China has started to move back to producing the whole product and just paying the 30 percent duties. That's what trade cases are supposed to do, impose remedial duties to address the unfair trade practices. So, the loophole, hopefully, is now closed and will stay closed as a result of these cases.

CHAIRMAN BROADBENT: Okay, I have no further questions. Mr. Vice Chairman Pinkert.

VICE CHAIRMAN PINKERT: Just one or two questions. Does this panel expect conventional energy prices to continue to decline?

MR. JOHNSON: Ardes Johnson, Solar Americas.

What I can say is in my 15 years of experience when you talk about energy prices or utility prices we decouple those from the consumer. And at the consumer

level, electricity prices have never gone down. They always go up, and they continue to go up. And we can go look at all evidence -- not even evidence. It's public record that all prices continue to go up.

So, the consumer, from that perspective, that consumer sees that prices continuing to rise over time. And while at the source solar itself fits very well from the distributive perspective, in other words, on the roof of a home. This will be continued to become a more pronounced opportunity for each individual to have solar on their roof because electricity prices just don't go down. They don't.

MR. DULANI: Mukesh Dulani, Solar Americas.

If you let's say take an example of natural gas. 2011, the price of natural gas keep coming down. '12 and '13 they went up. Solar keeps growing and growing and growing. It is decoupled to these things. The state mandates will work on this 2020 and 2030, which will keep growing solar, and we don't think so that it will affect at all.

Moreover, as the great question was there, and I agree with Ardes Johnson here, battery storage will become big, cell consumption will become big, and solar will continue to grow in that direction.

VICE CHAIRMAN PINKERT: Dr. Kaplan.

MR. KAPLAN: Yes, I think anyone who knows

what's going to happens to energy prices is not in this room. If they knew what happened in the past they're on a boat in the Caribbean right now with probably a pink drink and kind of cool little umbrella coming out of it.

The fluctuations have been significant over the last several years. The Energy Information Agency, who does a good job, but whose forecasts have been notoriously off, has revised certain of their estimates, given what's happened in the last several years.

So, for example, in 2013 to '14, they've actually predicted a little bit more solar and a little slower switch to gas because prices went up. I think as soon as they put that report out prices turned down for gas. So, the demand situation is going to increase with both China and India developing quickly, and the supply side is just way more uncertain.

So, I don't think anyone at this table wants to measure a guess, but the best estimates show that there is significant -- all predict significant increases in solar consumption in the United States going forward, with solar being a small part relative to the whole energy generation in the United States.

VICE CHAIRMAN PINKERT: Given your point about the hazards of prediction, let me frame the question as a hypothetical. If we're in an environment of low,

conventional energy prices going forward what does that tend for the future of this industry?

MR. KAPLAN: Well, there's a couple of things. First, I don't believe people are going to be using oil to generate electricity. They don't do much now, and so oil prices I don't believe are going to have a significant affect.

With respect to gas, there's several issues involved. One is the growth in gas, but the second is the question of whether that's going to be turned into liquefied natural gas and exported, in which case the gas that's in the United States now might be gas that's sold aboard as well. So, that's an issue that comes into play.

I think in the United States, given the mandates for green, at the state level, the small share of solar right now that we're still talking growth, but the speed of growth may be affected in the future; but it really is quite a guess as you're looking more than several years. But as I say, the last EIA report that I saw had solar growing faster in '14 than it did in '13.

VICE CHAIRMAN PINKERT: Go ahead.

MR. CLARK: Erin Clark, Peterson Dean.

The current ROI on paying a utility bill is zero for a homeowner. I mean you get the return of the joy of having your lights on and the TV working, but you don't ever

get out of paying that utility bill. And so what we see, no matter -- if the prices stayed the same customers still don't ever have relief from paying that utility bill, staying on traditional utility sources and that payment goes on for the rest of their life. So, customers can still switch to solar, have an ROI of whatever the time period is, and then stop paying that utility bill even if prices were stagnant.

MR. SHAVER: Gary Shaver, Silicon Energy.

I think the other thing to remember is there's a really strong base demand that is really surfacing in the United States. People are aware of issues around global warming. They understand things much more than they did before with fossil fuels, strategic issues around fossil fuels, so people really want to move forward with solar and renewable. So the demand is very strong.

We talked with a lot of utilities in the primary states that we work in, which are Washington and Minnesota, and these utilities, the people are demanding that solar be used as part of the mix. So, people are voting. They're making a social choice, so that's a strong underlying demand.

MR. BRIGHTBILL: Tim Brightbill, Wiley Rein.

I'll just point out the obvious. With demand growing throughout the POI and forecasted to grow in the

United States why is this industry doing so poorly, just abysmally? You would normally expect companies to be setting up shop, adding workers. And we've just seen the opposite throughout this POI, unrelenting injury, and I think we know the answer why.

VICE CHAIRMAN PINKERT: Thank you very much. Thank you, Madam Chairman.

CHAIRMAN BROADBENT: Commissioner Williamson.

COMMISSIONER WILLIAMSON: Thank you. Just a couple of quick questions, briefly, can you describe what certifications are required to sell your cells or modules in the U.S. markets, and if you want to do it post-hearing it's okay.

MR. DULANI: So, we use UL certificate and we have some certain quality certifications, which we go through. We go through our testings, and then we get the CNC testing for the product before we can ship.

COMMISSIONER WILLIAMSON: Okay. And generally, how long does it take to get those types of certifications? I imagine they vary depending --

MR. DULANI: It depends. If you start from scratch, sometimes it can take few months to get the certificate. If you are changing only a certain product, then you have to do that section of the testing, so it might take less, like a month to change that material. And

sometimes you can certify the internal labs and they come and certify it in your lab, then it takes a little less, so depending on the change.

COMMISSIONER WILLIAMSON: Thank you.

MR. BRIGHTBILL: Tim Brightbill, Wiley Rein.

The certification process is very standard like Mukesh described. It's clearly not a barrier to trade as evidenced by the overwhelming market share shifts in the subject imports.

COMMISSIONER WILLIAMSON: Thank you. And lastly -- you can do this post-hearing -- do you agree that the data presented in the Taiwanese Respondents pre-hearing brief at Exhibit 7 accurately reflect the volumes and market shares that would be associated with the scope language of the Congress October 3 memorandum?

MR. BRIGHTBILL: Tim Brightbill.

We'll do that in post-hearing.

COMMISSIONER WILLIAMSON: Good. Thank you. And with that, I want to thank you all for your answers to the questions.

CHAIRMAN BROADBENT: Okay, if Commissioners have no further questions, do the staff have any questions for this panel?

MR. MCCLURE: Thank you, Madam Chairman. Jim McClure, Office of Investigations. I'd like to thank the

panel for their testimony and their responsiveness to the Commissioner's questions.

With that said, the staff has no questions.

CHAIRMAN BROADBENT: Thank you. Do the Respondents have any questions for this panel?

Seeing none represented --

MR. ELLIS: No questions.

CHAIRMAN BROADBENT: Okay. Thank you.

In that case, it's time for our lunch break. We will resume -- we'll take a few minutes -- it's 1:45. We'll be back in this room just so we can get out of here before dark, hopefully.

Please be advised the hearing room is not secure. Do not leave your confidential business information out. And we want to thank again all the witnesses for taking time to be with us today.

(Whereupon, a lunch recess was taken.)

AFTERNOON SESSION

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

CHAIRMAN BROADBENT: Mr. Secretary, are there any preliminary matters?

MR. BISHOP: Madam Chairman, I would note that those in opposition to the imposition of anti-dumping and countervailing duties have been seated. All witnesses have been sworn.

CHAIRMAN BROADBENT: Thank you, Mr. Secretary. I want to welcome the afternoon panel to the ITC. I would like to again remind all witnesses to speak clearly into the microphones and state your name for the record for the benefit of the court reporter. You may begin when you're ready.

STATEMENT OF BRENDA JACOBS

MS. JACOBS: Thank you, Madam Chairman. I am Brenda Jacobs from Sidley Austin. Earlier, you heard SolarWorld tell essentially the same story it has told before. But thanks largely to the Commission's detailed questionnaires in these investigations, the present record differs significantly from the early CSPV investigations.

Most important, the record shows attenuated competition. The domestic industry has focused on the more expensive monocrystalline products, while subject imports

have focused on less expensive multicrystalline products, with demand concentrated and growing in the latter.

The prehearing report at V-7 recognizes these facts. Simply, the domestic industry bet on the wrong, more expensive technology. There is now clear evidence, and you will hear more today, that SolarWorld has never offered 72 cell multi-modules, the mainstay of the utility segment, and has lagged behind imports in terms of the efficiency and wattage of its 60 cell mono, 60 cell multi and 72 cell mono modules.

Two, the domestic industry lacks the capacity to satisfy domestic demand, and three, the domestic industry placed customers on allocation or could not supply the products that customers demanded. These facts are quite different from the conclusions cited at page 36 of the Commission's preliminary investigation views.

The prehearing report recognizes that utility installations now account for the largest share of the U.S. CSPV market, unlike the past. The utility segment, of course, cares most about cost effectiveness, and will most quickly and likely turn to alternative sources of energy if CSPV products are priced too high.

The present record also does not establish any price effects by subject imports. Because meaningful under-selling conclusions are not possible due to attenuated

competition and the available mix of products within individual pricing products, price declines are plainly explained by declining raw material costs and rapid technology improvements, and there is no evidence of a cost price squeeze indicating price suppression.

The record also shows Chinese and Taiwanese production capacities to be well below forecasted global demand, indicating no imminent threat of injury. Our panel will elaborate on these points, and why the Commission must issue negative final determinations.

You'll hear U.S. affiliates of Chinese CSPV manufacturers explain the quickly evolving technology. You'll also hear U.S. purchasers explain their thinking behind which solar technology to buy, including why multi modules generally make the most financial sense. The unusual situation of SunEdison, a developer that has succeeded in focusing on mono, but is still subject to the basic efficiency-driven math of solar power generation.

Thomas Koerner will start us off.

STATEMENT OF THOMAS KOERNER

MR. KOERNER: Good afternoon. My name is Thomas Koerner, and I'm the general manager Americas of Canadian Solar USA, Inc. I've been in the solar industry since 2002, and I also serve as a member of the board of directors of the Solar Energy Industry Association.

Canadian Solar USA is a subsidiary of Canadian Solar, Inc. or CSI, which is headquartered in Guelph, Ontario with competitive production facilities in Guelph and London, Ontario in Canada, and in Jiangsu in China. CSI is publicly listed on the NASDAQ, and is one of the world's largest vertically integrated solar manufacturers, and also the largest module manufacturer in North America.

Today, I will address the evolution of CSPV technology and its impact on demand and prices in the U.S. CSPV market during the POI. To do so, I will discuss first, product life cycles; second, the distinction between monocrystalline and multicrystalline technology; and third, the consequences for demand and prices of CSPV products.

First, the solar PV industry is a high tech industry, and there's no better evidence of that than the changes that have taken place in the last three and a half years. We are a lot like the semiconductor industry, which has significantly changed electronics, facilitating the development of ever-smaller yet more powerful and innovative devices at ever-more affordable prices.

Thanks to similar continuous R&D initiatives, as well as the advantages of increasing production scale, international raw material sourcing and optimized production technologies, we have been able to continuous introduce since 2011 more efficient CSPV products with higher wattage

and lower cost.

Just looking at the principal exports for the Canadian Solar to the U.S. market since 2011, shows how quickly the product mix has changed. For example, in 2011, our principal export for a 60 cell, multi module for 235 watts, and for a 72 cell multi module was 280 watts. At the end of 2013, the respective module power measures were 255 and 310 watts.

In other words, the life cycle of individual CSPV product power classes is short, with principal module power output increasing approximately five to ten watts every 6 to 12 months.

Second, as you are aware, there are two types of CSPV technology, mono and multicrystalline. Generally speaking, the average mono cell has a higher efficiency than the average multi cell. By efficiency, I mean how much the sun's energy can be converted to electricity, given the fixed surface area of a cell.

Importantly however, the gap between mono and multi efficiencies narrowed during the POI. The other critical difference between mono and multi module is cost. On a per watt basis, mono cells cost significantly more to produce than multi cells. Consequently, the per watt price of a mono module is on average ten percent more expensive than a multi module.

Finally, let me turn to the consequences of these technologies on issues for demand and price. The first critical point is that the continuous improvement in cell efficiencies, combined with falling costs for raw materials and lower production costs, driven by production scale means excessively declining per watt cost, and hence per watt prices for any given module variety.

The second critical point is that during the course of the POI, the higher efficiencies achievable with multi cells, combined with the lower per watt cost, have meant that multi modules, whether 60 or 72 cells, have simply made more financial sense in most applications, whether utility scale, small and large for commercial and, to a significant extent, in residential installations.

This has been especially so for 72 cell multi modules in the utility and commercial segments, where space constraints and aesthetics are typically not an issue, and the lowest cost of each produced kilowatt hour is key.

SolarWorld has underestimated the cost and efficiency improvements of the multi technology, including how quickly multi technology would catch up with the mono products that cost disproportionately more to produce on a per watt base. SolarWorld's principal offering throughout the POI has been a 60 cell mono product, based on a high cost PERC production technology, which has limited

desirability in the market and is only suitable for certain market niches and sales channels.

While SolarWorld has offered a 60 cell multi product, it has failed to keep pace with foreign producers in terms of wattage output. SolarWorld only recently introduced a 255 watt product, while the top ten Chinese producers are already as much up to as 265 watts. SolarWorld has never offered a 72 cell multi product, which is the product most demanded by U.S. utilities, developers and EPC firms.

SolarWorld just recently offered a German-made 72 cell mono product, outputting 310 to 350 watts. But again, the product has limited desirability in the market, given the availability of a 72 cell multi module, outputting also 310 to 350 watts, and 72 mono modules outputting 320 to 325 watts, available from the top ten Chinese producers.

This is a highly competitive industry. Those manufacturers who decide on the right technology at the right time and then are able to execute cost efficient high quality products that meet the needs of the market, are winning the business.

That is really what the case is about, and why the Commission should find that the problems of U.S. producers like SolarWorld are of their own making, by virtue of choosing high cost mono technology that is able to serve

only certain niches of the U.S. market. Thank you very much.

MS. JACOBS: Now Robert Petrina.

STATEMENT OF ROBERT PETRINA

MR. PETRINA: Thank you. Good afternoon. I'm Robert Petrina. I'm managing director for the Yingli Green Energy Americas, a subsidiary of Yingli Green Energy Holding Company. I've been with the company as the head of its Americas operations since 2007.

Yingli is the world's largest photovoltaic module manufacturer. Our manufacturing covers the photovoltaic value chain from ingot casting through module assembly and services both China and the global market.

I will address four issues. Number one, the composition of our sales in the U.S. market during the POI; number two, the different prices that may apply to modules with individual pricing products; number three, why module prices have declined and can be expected to continue to decline in a per watt basis; and number four, global demand and capacity for CSPV products.

First, regarding our U.S. sales, on a market segment basis, most of our sales in the U.S. market during the POI were in the rapidly-expanding utility sector. Further, on a product basis, the overwhelming majority of our U.S. sales during the POI were of our 60 cell and 72

cell multicrystalline modules.

Thus, one of our most successful products in the U.S. market has been our 72 cell multi module, which U.S. utilities demand because of their cost effectiveness. We have offered such modules through the POI, with 300 watt or greater, 1,000 volt versions available since 2012, August 2012. To our knowledge, SolarWorld has never offered any 72 cell multi modules.

Second, you heard a lot about prices this morning, but an important fact that Petitioner failed to mention is that the per watt price for modules fitting within one of the Commission's pricing products can vary significantly. This may be due to other important technical characteristics.

For example, Yingli's 60 cell multi modules are available with or without Zep compatibility. The Zep-compatible varieties are typically sold at a varying premium of two to three cents per watt. Prices may also vary based on the importance of the customer relationship, and the segment of the market into which the product is sold.

On this point, utility-scale customers, especially those with whom we have been doing a large volume of business over an extended period of time, can negotiate a better price per watt than a small customer. Such price

differences for otherwise identical modules can be on the scale of three to four cents per watt.

Third, the Commission should understand that this is a high tech industry that is moving forward quickly. We are constantly improving our products. Thus, every product we make ultimately becomes obsolete because more efficient, higher wattage modules with a lower cost per watt are continuously developed and introduced every 6 to 12 months.

That means the price per watt we can get for an old module, such as a 300 watt, 72 cell multi, will necessarily decline because we have a more powerful product available, such as a 310 72 cell multi, that costs less to produce on a per watt basis.

As long as we keep improving our production processes and achieve greater efficiencies, and our input costs also continue to fall, the inherent downward pricing for products in this industry will continue.

Finally, let me talk about where Yingli sees its business going forward. The U.S. is an important market, but it is not our largest market and we do not expect it to be. Yingli's products are certified globally, so that they can be sold in multiple markets.

Our sales are diversified worldwide to support sustainable growth. For example, as of the third quarter of

2014, 27 percent of our revenues came from China, the world's largest market in 2013, 22 percent from Japan, 17 percent from the U.S., 15 percent from Europe and 19 percent from the rest of the world, including an expanded footprint in Latin America and the Middle East region. Yingli ships modules to more than 50 countries annually.

Going forward, we expect an increasing share of Yingli shipments and revenues to be in China and across emerging markets, and we're very excited about these opportunities. In September, China's National Energy Administration published new policies to accelerate distributor generation and simplify the approval process for the solar projects.

In addition, as I'm sure you are well aware, just last month at the APEC Summit, the U.S. and China issued a joint statement on climate change, in which China pledged to increase the share of renewable energy and domestic primary energy consumption to 20 percent by 2030.

On top of that, the State Council of China has a 100 gigawatt target for the development of PV power generation by 2020, which indicates that at least 11 gigawatts of PV power generation will be installed each year through 2020. Obviously, these new policies signal very significant opportunities for Yingli and the solar industry at large.

Currently, Yingli has 350 megawatts of solar projects under construction in China, and we expect to start construction on another 50 to 60 megawatts of projects this quarter. Our capacity is therefore poised to address Chinese and other global demand, not threaten the U.S. domestic industry. Thank you.

MS. JACOBS: Now John Morrison.

STATEMENT OF JOHN MORRISON

MR. MORRISON: Good afternoon. My name is John Morrison, a senior vice president with Strata Solar LLC, a solar development and construction company headquartered in North Carolina. We provide complete solar energy systems and installations for utility and commercial applications.

This afternoon, I will talk about each of the segments of the U.S. solar market, and the decision-making process behind purchases in those segments. I hope my discussion with clarify the complete disconnect between whatever problems SolarWorld may be having, and the role of imported CSPV modules in the U.S. market.

When I first joined Strata in 2010, the company's business was primarily in rooftop solar installations, including the residential market. Homeowners look at solar module purchases very differently than the institutional investors, whose requirements dictate module

purchasing decisions in the utility market.

When Strata was serving the rooftop market, we sold by multicrystalline and monocrystalline modules, and we sold primarily 54 and 60 cell modules. For some homeowners, the higher efficiency mono modules made sense because of space constraints. Mono modules also made sense if a homeowner cared about aesthetics, and preferred the darker, more uniform appearances of mono modules.

However, some homeowners chose to purchase multi modules if the efficiencies worked, or if aesthetics were not of much concern. In short, in the residential rooftop segment, we sold a mix of mono and multi modules. For commercial rooftops, where the arrays are typically not visible, and appearances therefore are not an issue, we sold primarily multi modules, because their lower cost made them a more sensible business investment.

We also installed and still install ground mount projects for commercial property owners, where again multi modules are the primary product due to their cost effectiveness. In 2011, in order to drive better returns, Strata changed its business model to focus on utility-scale projects, generating electricity in large ground mount arrays and selling that electricity to utilities.

We saw in 2010 that the utility-scale market was poised to take off, and determined that we needed to be

in that space, a decision that in hindsight proved to be very fortuitous. The utility segment has been and still is where the greatest growth is occurring in the U.S. solar market.

Today, Strata is one of the leading end-to-end utility-scale solar farm developers in the country, and the sixth largest overall solar energy system contractor. In 2011, we installed seven megawatts of utility scale solar. In 2012, we installed an additional 70 megawatts of utility-scale solar. In 2012, we installed an additional 70 megawatts, in 2013, 170 megawatts, and this year we will finish the year with adding approximately 220 megawatts to the utility grid.

To be clear, for utility-scale projects, we do not consider the mono modules that are commercially available, because the cost effectiveness and therefore the profitability of the project is the overriding priority for Strata's institutional investors. Investors are not going to pay even a quarter of a cent more per watt for aesthetics, or for the very narrow differences in efficiency between the mono and multi modules that are available in the market.

Instead, they first want to know that the project financial model makes sense. Second, they want to have confidence that the project is being built with high

quality inputs, particularly the modules, inverters and the racking system. Third, they require the vendors of those primary components to be bankable, meaning that their products have a proven track record, and the manufacturer will be around for the next 25 years to service the warranty.

Consequently in our experience, what the utility sector demands are high wattage, high voltage, cost effective multi modules from quality suppliers. In this regard, the 300 plus watt 72 cell 1,000 volt multi modules that we install provide significant labor and material savings, making our projects commercially viable.

Meanwhile, SolarWorld has never offered for sale a 72 cell, 1,000 volt multicrystalline module in the U.S. market. Recently I learned that SolarWorld began offering a 72 cell 1,000 volt mono module above 300 watts. Given their higher cost, mono modules at this wattage make little sense in the utility sector, especially given that multi modules of the same size and power rating are available, and have been so for two years now.

In closing, I must also note that since earlier in this year, Strata started designing its upcoming projects to use thin film. Because of the imposition of the provisional AD/CVD duties on the CSPV products, our projects are no longer financially viable with CSPV modules.

We had to reconfigure our layouts because we needed more acreage and different racking to accommodate thin film. The thin film is less efficient. But given the post-tariff cost differential, it now makes more financial sense than the CSPV modules encumbered by the duties.

First Solar, a thin film producer, is Strata's new module vendor. It is the only high volume bankable option for Strata. SolarWorld's U.S. products, 60 cell or 72 cell monocrystalline modules are simply not an option. Thank you.

MS. JACOBS: And now Polly Shaw.

STATEMENT OF POLLY SHAW

MS. SHAW: Thank you. I'm Polly Shaw, Vice President of North America Government Affairs at SunEdison, the world's largest solar developer. We are a U.S. company that is vertically integrated throughout the solar supply chain, and as of this year, active in all sectors of the U.S. solar market, utility, commercial and residential. We manufacture polysilicon and silicon wafers. We contract for the manufacture of high efficiency solar cells. We assemble our own modules using these cells, and then we develop, install and operate solar power generating installations.

SunEdison is responsible for more than 1.8 gigawatts of operating solar projects globally, with 5.1 gigawatts in our pipeline and backlog. Today I will focus

on one issue: U.S. suppliers cannot supply the high efficiency cells and high wattage modules that we use for our projects.

For this reason, in our experience the U.S. solar products are not interchangeable with the solar products we import. SunEdison understands that multicrystalline modules account for the majority of demand across all sectors of the U.S. market.

However, we have concluded that where monocrystalline modules achieve efficiencies that permit them to output substantially more watts than the same size multi module, the higher per watt cost of the mono module makes financial sense.

For that reason, the modules we currently spec are 72 cell mono modules with cell efficiencies greater than 20 percent. Over the last few years, SunEdison manufactured 72 cell mono modules, producing 315 to 325 watts, and are now at 335 to 340 watts. This allows us to maintain a substantial wattage differential, compared to the highest wattage 72 cell multi modules available on the market.

For the projects we build, operate and own, these extremely high wattage mono modules ensure the project costs work. Our experience does not vary by market segment. In each, we must compete with traditional sources of energy, and accordingly, we seek to maximize power production.

For our residential and commercial projects, roof size is the constraint. For our utility projects, the cost of land, rights-of-way, topography and other restrictions impose similar restraints. The more power output we can squeeze into the available space, the more viable the project.

We use extremely high wattage mono panels to maximize power output per square foot, at a cost competitive with other energy sources. Thus, the cells we buy to make our modules are the most advanced mono cells on the market. The U.S. industry does not make such advanced cells, and doesn't offer commercial quantities of the less efficient mono cells that they do make.

Thus, SunEdison relies on mono cells from Taiwan, which we incorporate into our 72 cell modules in third countries and then import into the United States. When demand exceeds our supply, which is rare, we don't resort to lower wattage mono modules.

Rather, we supplement our module production with high wattage multi modules from China. We source high efficiency cells from Taiwan and high wattage modules from China as necessary on occasion, because they reliably offer a commercially available supply that meets our specifications.

We don't have a specific preference, as long

as our criteria for high efficiency and power output are met. In our experience, Taiwan makes the highest efficiency cells, but other suppliers such as Korea are improving, though with limited supply. Though the domestic industry would have you believe otherwise, their products are not an option for SunEdison.

Regarding cells, even if U.S. solar cells did meet our specifications, they are not available on the market. We tried to establish a relationship with Suniva, but Suniva cut off our supply due to lack of availability. SolarWorld primarily produces cells for its internal production of modules, and does not offer meaningful quantities for external sale, such as to SunEdison.

Our experience is that SolarWorld consumes all of the cells it produces, the majority of which ends up in 60 cell modules, which we would never consider using in distributed generation or in the utility sector. Regarding modules, the U.S. industry simply does not produce the high wattage 72 cell modules we use.

Earlier this year, SolarWorld released its Sun Module Pro Series XL 310 to 315 watt mono module. But as mentioned earlier, mono modules at that wattage output today would not make our project costs work, and we have been well above that on mono for some time now.

If Taiwanese cells were no longer an option,

we would seek to adjust our supply chain to source high efficiency mono cells from other suppliers. But U.S. producers do not offer the high efficiency products we need, so we would not be able to source from them.

In short, SunEdison's purchases of solar products are not SolarWorld's and Suniva's lost sales, because they do not provide the high efficiency cells and high wattage modules that we need to finance and develop our projects. Rather, the decisions taken by SolarWorld and Suniva in terms of what to produce and offer on the market have ensured that SunEdison is not a potential customer.

Thank you.

MS. JACOBS: Now, Jennifer Lutz.

STATEMENT OF JENNIFER LUTZ

MS. LUTZ: Good afternoon. I am Jennifer Lutz of Economic Consulting Services, accompanied by my colleague, Keith Button.

I would like to briefly discuss the conditions of competition in the U.S. CSPV market and issues related to demand and pricing. The U.S. CSPV market is different from other markets examined by the Commission because of its explosive growth and high elasticity of demand.

First, U.S. demand for solar modules has continued to increase very strongly during the POI. Slide 1 shows a large increase in total U.S. PV installations from

2005 through 2013, and the first half of 2013 and 2014, based on SEIA data.

In the 2011 to 2013 period, the annual volume of solar installations more than doubled and increased again by 47 percent in the first half of 2014. Installations in the first half of 2014 exceeded total installations in 2011.

Demand growth has been particularly impressive in the utility sector as shown in Slide 2. The SEIA data show that annual installations in this sector increased by 264 percent from 2011 to 2013, and by another 72 percent in part year 2014. During the POI utilities became the largest segment of the domestic market as the pre-hearing report itself recognizes. Residential installations increased by 162 percent and commercial installations increased by a lower 34 percent from 2011 to 2013.

Second, demand for solar electricity is highly price elastic as it is very sensitive to changes in solar electricity prices relative to anticipated prices for other energy sources. In turn, demand for solar modules is a derived demand, arising from the demand for solar electricity.

Because solar modules constitute roughly 30 to 40 percent of the total cost for a solar electricity system, a reduction in the price of solar modules has a substantial, direct impact in reducing the total cost of a solar

electricity system and therefore increasing the quantity of modules demanded in the market. As a result, the elasticity of demand for solar modules is itself very high.

As a general matter, in the utility sector, any new solar project's total system must produce electricity at a sufficiently low net cost to make that solar system competitive with other forms of generation. Utility systems must produce electricity at costs that compete with wholesale electricity costs. In the residential and commercial sectors, the installed system must be able to produce electricity at a net cost that competes with retail electricity costs, otherwise, there is no economic incentive for the home or business owner to incur the up front cost or inconvenience to install the new system.

Demand for modules increased sharply during the POI because module prices have declined, making solar electricity more competitive with electricity from other sources. The data collected by the Commission show a significant decline in module prices over the POI. These declines, however, are explained by factors other than subject imports.

Most important, the decline in module prices was accompanied by a similar and also significant decline in per kilowatt raw materials costs and cost of goods sold. There is no evidence of a cost price squeeze.

Petitioner's brief, in fact, reports that "Overall cost of production declined over the period due somewhat to decreases in polysilicon pricing, but also to significant cost-cutting measures and efficiency improvements implemented by U.S. producers." On the latter point, as other members of our panel have discussed, the rapid improvements in technology and resulting higher cell efficiencies in this industry mean that prices inherently decline over time.

In these investigations, upon the urging of the CCCME, the Commission's questionnaires requested pricing data that separated mono and multi products. As expected, these data show a significant difference between the products offered by the domestic industry and subject importers. Almost 80 percent of the domestic industry volumes were in products 2, 4, and 6, which are all higher cost, monocrystalline technology products.

In contrast, the vast majority of the subject imports was reported in products 1, 5, and 7, all of which are lower cost, multicrystalline technology. Moreover, Product 7 is the modular type widely used in the utility segment, which experienced the greatest demand growth during the POI.

Furthermore, the average margins of underselling are relatively modest, particularly, because a single

pricing product may encompass a mix of module offerings with prices that can vary by significant amounts. This is documented at pages 47 to 48 of the CCCME's pre-hearing brief. No meaningful conclusions regarding underselling are possible.

BPI Exhibit 1 shows the volumes underlying the pricing data reported for mono versus multi products. It is clear from this exhibit that multi-technology rapidly gained share over mono-technology during the POI and subject imports entered the U.S. market in order to satisfy that exploding demand for multi-products, which the domestic industry did not adequately supply. Thank you.

MS. JACOBS: And the final witness for the CCCME is John Smirnow.

STATEMENT OF JOHN SMIRNOW

MR. SMIRNOW: Thank you, Brenda.

Good afternoon, Madam Chairman, members of the Commission. Thank you for the opportunity to appear before you today.

My name is John Smirnow, and I serve as Vice President of Trade and Competitiveness at the Solar Energy Industries Association here in Washington, D. C. As you've heard, we also use SEIA. I also represent SEIA on USTR/EPA's Trade and Environment Policy Advisory Committee and the Secretary of Commerce's Renewable Energy and Energy

Efficiency Advisory Committee, which I chaired from February of 2013 until June of this year.

With nearly 1,000 member companies, SEIA is the voice of the U.S. solar industry. We have members in every state and every segment of the U.S. solar value chain. Our mission is to build a strong solar industry to power America.

At the end of 2013, there are more 140,000 individuals employed in the U.S. solar industry. Of this number, more than 30,000 are employed in U.S. solar manufacturing facilities, making a variety of products, including polysilicon, backsheet, and encapusulants, inverters, racking and mounting systems, and of course, PV cells and modules.

The other 110,000 U.S. solar employees work in a variety of service businesses, including installation, sales or distribution, project development, professional services, and research and development. For important context in going to the issue of capacity, Petitioners represent less than one half of 1 percent of total U.S. solar jobs. Again, Petitioners represent less than one half of 1 percent of total U.S. solar jobs, or slightly more than 2 percent of total U.S. solar manufacturing jobs.

From 2010 to 2013, the U.S. solar industry experienced explosive growth. During these four years

alone, the industry added 50,000 new jobs to the U.S. economy and we expect to add even thousands more just this year. Importantly, the primary driver of this growth has been and will continue to be falling costs.

As the Commission is well aware, however, our growth hasn't been without challenges. Like any high-tech industry, some technology bets and investment decisions pay off. Others do not. And we'll continue to see new investments in manufacturing and technology in the U.S. in the solar industry.

As we heard earlier, Petitioners would like to take credit for these new investments in U.S. crystalline and silicon manufacturing, but they conveniently overlook several key facts. Three of which I'll touch upon now.

One, limited competition. While subject imports from China are sold in all three segments of the U.S. market, in 2013 more than two-thirds of these imports were sold in the utility segment. And in this segment, 72 cell, 1,000 volt, multicrystalline modules are the norm. If you don't offer that product, you have to bring something else to the table like a high efficiency model, something approaching 20 percent efficiency, which is what we heard from SunEdision, another PV technology, like thin-film or some other alternative, none of which is offered by the domestic industry in any meaningful volume.

Two, volume discounts. The utility segment is also where we see the lowest module prices, given large volume discounts. These discounts are also available to the leading players in the commercial and residential segments and would explain some of the price differences between subject imports and the domestic-like product.

And three, capacity. If you're buying hundreds of megawatts of modules you want to be sure your supplier is able to fill the order. Domestic producers, however, would not be your first choice. The total capacity of the entire domestic industry was only 289 megawatts for the first six months of this year. This year we're going to install 6.5 gigawatts of solar in the United States. This equates to only 12 percent of market demand, based on the record, or what you would expect for producers focused on a niche or sub-segment of a given market.

Finally, a few comments on the issue of scope and its relevance to these investigations. If Commerce was consistent with the 2012 scope ruling, they would again find that a module's country of origin is based on the cell's origin. That's really what they should do here. Unfortunately, Commerce is seriously entertaining Petitioner's two out of three propositions, or something even more expansive.

Two out of three is nothing more than a veiled

attempt to circumvent U.S. 80's CVD laws by folding separate and distinct products from multiple countries into a single investigation. It's wrong, and it's a dangerous approach from a trade policy perspective, possibly leading to a WTO challenge or similar behaviors from the United States trading partners.

Commerce's October 3 proposed scope expansion suffers from the same flaws. We agree with Commission staff that Commerce failed to explain the apparent contradiction between its proposed scope expansion and the rule imposed in 2012. Indeed, we would go even a step further and say that that contradiction is unsupportable. Nonetheless, we continue to hold out hope that Commerce will make the right decision at the end of the day.

And if they do, the Commission should be prepared to assess injury based on a cell origin scope ruling, and then conclude that there were no subject imports from China.

I thank you for your time and consideration, and would be happy to answer to any questions.

MR. CAMPBELL: Good afternoon. I am Jay Campbell with White & Case here today on behalf of the Taiwan Respondents.

Our first presenter will be Austin Chiu with Neo Solar Power, a Taiwan producer. Austin will provide an overview of the Taiwan industry and its role in the global

market. Austin will be followed by Joel Cannon of tenK, a U.S. producer of modules that uses Taiwan cells. And lastly, I will conclude with a few key points specific to Taiwan. Austin?

STATEMENT OF AUSTIN CHIU

MS. CHIU: My name is Austin Chiu. I've been the Taiwan solar industry since 2007. Today, I'm speaking on behalf of not only my company, Neo Solar Power, but also on behalf of all members of the Taiwan Photovoltaic Industry Association.

Our association accounts for over 90 percent of Taiwan's production of solar products. The solar value chain has several stages, polysilicon, wafers, cells, modules, and installation. The Taiwan solar industry is a cell industry. Unlike Solarworld and most of the large Chinese producer are integrated producer of both cells and modules, Taiwan producer focus on cells because this is what we do best.

Taiwan's focus on solar cell production can be traced to its leadership in producing high quality, high efficiency semiconductors going back to the 1970s. That's why our expertise, in large, in converting wafers into microchips it makes sense for Taiwan to become the world's commercial leader in producing the highest quality solar cells.

Taiwan cells are regarded as having higher reliability than cells from other sources because our cells have lower power loss, low power degradation and higher yields. Taiwan is also a leader in the production of cells. We have higher efficiency on average for both multi and mono cells.

While there are a handful of other companies that can produce high efficiency cells, this company primarily produce for their own internal consumption of modules. Taiwan is the clear leader in providing commercially available, high quality, high efficiency cells. Global demand for solar products has grown rapidly and will continue to grow as many countries aim to meet renewable energy targets, less, in turn, has driven the growth in demand for Taiwan cells as we supply cells to module makers all around the world.

Taiwan cells consistently have higher efficiency on average than other cell producers; including SolarWorld because Taiwan is the leader in commercially available, high efficiency cells worldwide. Demand for Taiwan cells will continue to be strong even in markets with declining or flat demand.

Customers in residential and small commercial market segments will demand the highest efficiency products in order to maximum wattage output, wattage output from a

limited space available. Because few can match Taiwan's efficiency and reliability demand for Taiwan cells will continue to be strong.

In the U.S. there are only two producers of cells, SolarWorld and Suniva. Both produce cells only for internal consumption to produce their own modules and sell very little to the commercial market. Taiwan cells help and do not hurt U.S. module makers who must rely on Taiwan cells because they cannot get the cells that are made from SolarWorld or Suniva. We too are saddened by closure of U.S. module makers because this were our customers. In 2013, Taiwan shipment of cells to the U.S. were less than 3 percent of our total shipments.

In short, Taiwan cells are not injuring or threatening the domestic industry in any way because Taiwan focuses on supplying cells to module makers around the world. Our presence in the module market is very small. It's 2013 module account for only 7 percent of Taiwan's total exports of cell products. We do not want to undermine our cell business by producing and selling modules that would compete with modules produced by our cell customers.

For example, many of our Japanese customers have phased down their own module production in favor of Taiwan producing modules for them on an OEM basis. Our customer can then sell these modules under their own brand name in

their home markets.

With limited exceptions, Taiwan's production of modules have been on an OEM basis and not under a Taiwan brand. Taiwan has chosen to invest in the highest quality cell production technology and not invest in establishing their own module brands. Without adequate resources to establish their own brand, Taiwan will continue to have limited penetration in modules.

In the U.S., Taiwanese companies have about 10 people on the ground. With such minimal presence, it is very difficult to build a Taiwan module brand for the U.S. market. The data supports this as Taiwan direct shipments of modules to the U.S. on a limited scale because Taiwan's module industry is not significant. Taiwan's solar industry, as a whole, does not compete with SolarWorld.

Finally, as a cell industry, we were very surprised to see the staff report showed that Taiwan was the largest source of subject imports. This grossly overstates Taiwan's presence in the U.S. market. Although, the Commission data currently shows Chinese modules with Chinese cells as being Chinese subject merchandise. Under the proposed clarification rule, we do not consider this module to be our models. We are principally a cell producer and we supply cells at highest price we can get from our customers.

We certainly do not have control over how our

customers set their pricing for their modules. Although Chinese modules with Taiwan cells are currently considered of Taiwan origin under the clarification rule, these modules would become Chinese subject merchandise under the proposed clarification rule. If DOC accepts their clarification rule, the need to target Taiwan goes away. Under the clarification rule, we believe the Commission's data will reflect a more accurate picture of the Taiwan industry role in the U.S. market.

Taiwan had a low volume of cells that was shipped to U.S. Taiwan had even smaller volume of modules that were shipped directly to the U.S., but since SolarBuzz figures for 2013 Taiwan module imports account for only 2 percent of the U.S. market. The remaining volume of indirect cells, indirect modules that were made in third country using Taiwan cells and exported to the United States is still small and insignificant.

The Commission should recognize that Taiwan as a cell producer should not be cumulated together with China and that Taiwan considered alone is not causing any injury to the domestic industry. In fact, Taiwan cells are in a position to help U.S. producers that cannot get high efficiency cells from any other source. Thank you.

MR. CAMPBELL: Our next witness is Joel Cannon.

STATEMENT OF JOEL CANNON

MR. CANNON: Thank you, Madam Chairman, Commissioners, members of the staff. I really appreciate the opportunity to speak with you today.

I'm Joel Cannon, Chief Executive Officer of tenKsolar, a U.S. company that develops and produces solar energy systems. I've held this position since the company's formation in 2009, having spent all my career working as an entrepreneur in the electric power industry.

At our headquarters in Minnesota, we employ approximately 80 people, including 35 dedicated to manufacturing our solar products. TenKsolar makes a unique and patented solar module, unique in its technology construction and features. Believe it or not, I have never been a wafer or a cell producer, but our advanced and propriety technology has enabled us to grow in a very competitive industry.

TenKsolar imports laminated cells and completes the module construction and assembly in Minnesota. Our advanced and propriety technology which completes the module in Minnesota differentiates us from our competitors by allowing our solar systems to operate more efficiently. In fact, tenK systems generate up to 40 percent more energy from a given area of space than conventional crystalline and solar PV. With that process and technology we make a solar module which, to the best of my knowledge, is among the most

powerful in the world rated at 410 watts when made with multicrystalline cells and 450 with mono.

We achieve the lowest cost energy and thus, deliver the most value and we are able to build a technology with high efficiency cells; thus, access to high efficiency, quality cells is crucial to our business. We have come to rely on non-U.S. cell producers because they offer the highest efficiency cells in each category. In particular, Taiwan is home to nearly all of the reliable suppliers of high quality, high efficiency cells that we need to produce our solar modules.

Even if SolarWorld or somebody that would sell PV cells to tenK, which they rarely will, those cells do not stack up against the Taiwanese cells in terms of efficiency, offerings, and quality. In particular, tenKsolar has never been able to purchase cells from SolarWorld, other than their leftovers in down level quality bins. These are not available on a consistent basis and are poorly suited to feeding steady demand to a sophisticated supply chain. We simply cannot get the cells we need in the U.S.

Proximity to quality cell producers in Asia was one of the reason that tenKsolar opened our wholly-owned laminating facility in Shanghai. Like many world class U.S. manufacturers the portion of our supply chain that resides in Asia allows tenK to employ dozens of workers in Minnesota

with plans for that number to exceed 100 in Minnesota in 2015.

As indicated in our pre-hearing comments, we agree with the arguments and testimony of the Chinese Chamber of Commerce and Taiwan PV Industry Association. We also offered limited observations explaining our view that the alleged unfairly traded imports are not causing injury to SolarWorld.

Our involvement in the final stage of this investigation was spun, in large part, by a discovery after the Commerce Department issued its preliminary determinations that we believe is relevant to the analysis by staff and Commission for this investigation. We discussed this issue in the propriety sections of our pre-hearing comment.

And sadly, tenKsolar believes SolarWorld seeks relief only for its benefit, not for the U.S. solar industry as a whole. We are also a U.S. owned, U.S. based solar manufacturer and developer of technology, one who has been able to compete, grow, and create U.S. manufacturing jobs working within a global supply chain that maximizes the value of our technology.

Again, I appreciate the opportunity to speak with you today and welcome any questions.

STATEMENT OF JAY C. CAMPBELL

MR. CAMPBELL: This is Jay Campbell again. I will wrap up with a few quick points.

As you've heard from the testimony, the Taiwan industry is principally a cell industry. As such, Taiwan is not a source of material injury or threat to the U.S. industry. Competition in the U.S. market takes place in modules, not in cells. Taiwan is here today only because of the so-called loophole whereby Chinese modules with third country cells were excluded from the scope of the prior investigations.

Now, we agree with the Chinese Respondents that there is no injury or threat on a cumulated basis, but we are also making several arguments specific to Taiwan. First, cells and modules are separate like products. Although the Commission defined a single like product in the prior investigations, we ask that you reconsider the issue in this case.

As discussed in our brief, the facts on record, including assertions made by SolarWorld demonstrate that cells and modules are separate like products under the semi-finished product test.

Second, the plain language of the statute precludes cumulation in this case because the scopes are defined differently for Taiwan and China, whereas the scope for Taiwan include cells and all modules made with Taiwan

cells, the scope of China excludes cells and also excludes modules made with Chinese cells.

Third, there is no injury or threat of injury from imports of Taiwan cells. As noted, competition between imports and domestic product occurs at the module level, not in cells. This is because U.S. cell producers make cells for their internal production of modules and supply minimal volumes of cells to commercial market.

Fourth, there is no injury or threat of injury from imports of Taiwan modules. In our brief, we presented this argument based on the clarification rule in the event that defines the scope. Under the clarification rule, imports of Taiwan modules were low and declining as a share of total U.S. imports and consumption during the POI.

As you've heard from the testimony, Taiwan ships miniscule volumes of modules to the U.S. market. To compete in t he U.S. market a supplier needs an established brand. In keeping with its core business as a cell industry, Taiwan producers supply modules on a non-branded bases to OEMs, mostly in Japan, so that they avoid competing with their cell customers.

Most imports of modules that would be considered subject Taiwan consisted of indirect imports, modules assembled in a third country with Taiwan cells. These volumes should be discounted because the Taiwan industry has

no control over their pricing and third country module assemblers could've used third country cells in place of Taiwan cells.

Lastly, I would like to introduce others on Taiwan's panel who are available to answer questions, Laylay Pan of Gintech, Joyce Chen of Solartech, Sascha Rossmann of Winaico, and Barry Moore of Moore Energy. Winaico is an exception, a Taiwan company that supplies modules, but not cells. So, Sascha can address that topic. Moore Energy is one of Winaico's U.S. customers. As Sascha and Barry can explain, Winaico focuses on high efficiency modules sold at higher prices than SolarWorld modules.

This concludes our presentation. Thank you.

CHAIRMAN BROADBENT: Okay. Thank you very much. I appreciate it.

Ms. Jacobs, if you could just distinguish. There's a different position between the Taiwanese and the Chinese on like product.

MS. JACOBS: We're not taking a position on the like product.

CHAIRMAN BROADBENT: Got it. Okay. Thanks.

What I wanted to get to, just a basic question, and then we can go on from there, but if we set aside or are unable to assigned imports, it seems to me that no matter what scope Commerce applies to these investigations there

were significant and increasing volume of subject imports that took market share from domestic industries, caused adverse price effects, and adverse impact on the domestic industry's condition.

This looks fairly straightforward to me when I look at it starting out. Can you kind of guide me elsewhere, please?

MR. PAL: Yes. Thank you. Rajib Pal, from Sidley Austin.

I think if you look at it at first glance it may seem straightforward, but as we have presented in our written and oral presentations, the world is a little more complicated than that because what comes across --

CHAIRMAN BROADBENT: I mean I know the world's complicated. I've got to look at the statute.

MR. PAL: Right. What comes across in the record is the distinction between multi and mono products, and really the fact that there is attenuated competition between the subject imports and the domestic-like products. So, on volume, for example, yes, volumes have increased, but when you look at the data the volumes have increased at the multi products that the domestic industry has not been able to adequately supply.

On price, underselling conclusions are -- to the extent that comparisons are possible, the underselling

conclusions are mixed, but I think out of the 224 possible quarterly comparisons a fraction of those comparisons could actually be made because of the distinction between the subject imports focusing on multi and the domestic-like product focusing on mono. So, those are the key distinctions that really make it not possible to look at just the simple trends as the Commission as looked in the past because this record really is very different, given that thankfully the Commission has asked the questions that distinguish between mono and multi on the record.

CHAIRMAN BROADBENT: Okay.

MS. LUTZ: Jennifer Lutz of ECS.

I'd just like to add that I think the Commission should be careful in assessing the trends with respect to the domestic industry. Petitioner's panel talked about the survivor bias, but based on the production volumes reported in the pre-hearing report compared to data compiled by the industry association, SEIA; in 2011 the pre-hearing report data cover about 87 percent of the production reported by SEIA. By 2013, it's only 34 percent. In the first half of 2014, it's still less than 50 percent. So, there's a significant portion of U.S. production that is not covered by the data in the report.

CHAIRMAN BROADBENT: Okay. I would be interested in a discussion of the nature of imports into the

U.S. market for non-subject countries. What portion of the official import statistics pertain to CSPV products from non-subject countries as opposed to imports of thin film and other non-subject products from non-subject sources?

MS. LUTZ: Jennifer Lutz again.

The import data are -- I don't want to call them unreliable, but it's hard to match them to the data on the record here, and they don't distinguish between thin film and CSPV, so we just don't know.

CHAIRMAN BROADBENT: Okay. So, we don't have a sense of major sources of imports from non-subject countries and what they're likely exporting to the U.S.?

MS. LUTZ: My understanding, and please correct me if I'm wrong, is that most imports of thin film are likely to be coming from First Solar, which has plants in Malaysia and -- Malaysia, mainly, I believe. So, some portions of imports from Malaysia is probably imports of thin film.

CHAIRMAN BROADBENT: Okay.

In terms of declines in prices, what would be your explanation for why prices are declining in the U.S. market?

MS. LUTZ: Jennifer Lutz again.

I think that if you look at the decline in cost of goods sold on a per kilowatt basis it is -- I don't want

to trend on confidential data, but it's pretty close to price declines over the period, so I think that's a large portion and then the technology improvements that have been discussed by our panel.

MR. KOERNER: Thomas Koerner from Canadian Solar.

As stated before, in 2011 the focused product we have produced was a 230 to 235 flat panel. In 2013, we're talking about 255, and to a certain extent lead to 260.

CHAIRMAN BROADBENT: Say those numbers again.

MR. KOERNER: 230 to 235 in 2011, end of 2013, 255 to 260.

CHAIRMAN BROADBENT: Right.

MR. KOERNER: However, the time you need to produce such a panel with respect to fixed cost and how many people working it, how many steps the machine has to make stays the same. So, just by increasing the power output of a single panel the proportional cost goes down significantly. So, with every efficiency increase we are saving cost and that's what the market is demanding. So, without making any changes, we're able to the market a lower cost product with the absolute same ingredients, the same components just by increasing the efficiencies.

CHAIRMAN BROADBENT: So, this increased efficient product is lower priced.

MR. KOERNER: Absolutely.

CHAIRMAN BROADBENT: The price continues to fall.

MR. KOERNER: It's possible to offer a lower price on a per watt basis.

CHAIRMAN BROADBENT: What would you say the price premium for monocrystalline is over multicrystalline?

MR. KOERNER: So, our experience today is offering both poly and multi pounds to the market, around about 10 percent. With very extreme monocrystalline process, it could be even higher, but 10 percent is a good number orientation of the market.

MR. MOORE: If I could, Moore Energy, Barry Moore.

I have pricing from SolarWorld of poly versus moly that just received on Wednesday. The poly was priced at 83 cents a watt. The mono was priced at 95 cents a watt for a 60-cell module. So, that's a 16 percent difference between mono and poly.

CHAIRMAN BROADBENT: Okay. I had thought there was a 20 to 30 percent number in one of the briefs.

MR. MOORE: Well, this is just a price quote I got last week from a distributor. Now, this price here includes the profit being made by the distributor because I'm buying through a third party. But basically, the poly

is priced at 83 cents a watt and the mono is at 95 cents a watt.

CHAIRMAN BROADBENT: Okay.

MR. PAL: Rajib Pal.

And I think the 20 to 30 percent number you're citing is on a wafer basis, so I think the point made in the brief was that the 20 to 30 percent extra cost of a mono wafer translates into 10 percent on average cost per watt, and per watt is really key here.

I think what Thomas was trying to explain ^^^^ I mean it's really a matter of math because you're looking at dollars per watt, so if your wattage is increasing your denominator is increasing, but your numerator, your cost of producing the module is actually, as we know, is going down, the raw material cost is going down. If you've got a falling numerator and a growing denominator, your per watt cost, which is the metric we're using here, will inherently decline.

CHAIRMAN BROADBENT: Okay. Ms. Jacobs, could you tell me whether think Commerce can enforce the early October scope proposal that they were making, or that Customs could enforce the Commerce proposal?

MS. JACOBS: We have serious concerns about the enforceability and administribility. Companies are struggling to obtain the information necessary to identify

the origin of wafers, and they're relying upon others for that. And it becomes a tremendous burden on the companies to get that information, whether their suppliers are willing to provide it and whether they can match it precisely to the particular shipment as well. They know they put the wafer in a cell, then the cell gets sold, then the cell gets put into a module. And the willingness of the supplier of the cell to provide the information on a wafer basis in those cells is problematic.

I think some of the company people may be able to talk specifically about it, but it is a serious concern about the burden of trying to enforce such an order.

CHAIRMAN BROADBENT: Okay, Vice Chairman Pinkert.

VICE CHAIRMAN PINKERT: Thank you, Madam Chairman. And I thank all of you for being here today to help us understand these issues.

I want to begin with a couple of questions for the Taiwanese industry. And first of all, do I correctly understand that the Taiwanese industry does not have any concerns about the October 3 draft scope from the Commerce Department?

MR. LEE: No. I mean we recognize that Commerce is in charge of the scope definition, and that the Commission has to make due with whatever is handed to them

from Commerce. And unfortunately, you're in a tough position where you have less than ideal clarity from them.

So, under these circumstances, I think the Commission staff has done a remarkable job collecting the data. We feel that in terms of the volume of imports and market share the questionnaire data is sufficiently broken down and the sub-categories can be rearranged so that it would fit the clarification rule.

We do have some concerns that the pricing data does not match closely to the clarification rule because the questionnaires were sent out asking importers to report pricing focused on the origin of the cell, whereas the clarification rule focuses on the origin of where the module is assembled. So, the pricing data does have some issues with regard to how you would analyze the data under the clarification rule. But all in all, we feel that if you look at the revised data under the clarification rule it would show that Taiwan is a very, very insignificant portion. And that to the extent that you use the pricing data, which show that we're not underselling to any significant degree and that Taiwan really is not injuring the domestic industry in any way, primarily because we're a cell industry and not really involved in modules to any significant degree.

VICE CHAIRMAN PINKERT: Thank you. Now, Mr.

Campbell, you referred to the so-called loophole explanation, and I just want to drill down a little bit on that. And in particular, what's wrong with the theory that the Chinese producers in response to how the earlier investigation was going shifted from a situation where they were producing the cell in China to assembling the module in China. Is that an inaccurate explanation or understanding of what happened?

MR. CAMPBELL: This is Jay Campbell.

Well, the factual record would demonstrate that there is some extent of a shift whereby Chinese module assemblers began using more Taiwanese cells. Our point is that the Taiwanese industry, as a cell industry, has never been a source of injury to the U.S. market. The competition in the U.S. market occurs at the module level, not at the cell level. U.S. producers do not supply -- supply minimal volumes of cells to the commercial market, so it's odd that Taiwan is here. And the only reason they are here is because of that loophole, whereby what SolarWorld's real concern is is competition from modules coming from China and using third country cells.

We agree, of course, with the Chinese Respondents that there's no injury threat, even on a cumulated basis, but we strongly contest any notion that Taiwan subject producers are a cause or a threat of harm

because they're not -- you know, they're a cell industry and has a cell industry they're not harming the U.S. market or U.S. industry in any way.

VICE CHAIRMAN PINKERT: Thank you very much for that answer.

I want to turn to the Chinese industry and ask you whether that loophole explanation is adequate to what occurred once the Chinese producers understood what the scope of the earlier investigation would be.

MR. KOERNER: Thomas Koerner from Canadian Solar.

We have a large and model manufacturing capacity that we have a cell manufacturing capacity. And we have been used Taiwanese cells for many, many years before all these CVD and antidumping investigation in our Canadian and Chinese manufacturing. Whenever we needed to produced a highly efficient product and use cells in which simply provide a higher efficiency than other cells.

So, this situation has not happened just overnight because of a loophole or whatever. We have and had business relationships with Taiwanese manufacturers throughout the years. We have increased these volumes from time on because of the international demand for PV panels, not only in the U.S., but also in other markets.

Just to give you one example, Japan is a market

highly driving high efficiencies because their roof space installation -- their roof space are very limited, so they're demanding very high efficiencies. And in this perspective, we're using mainly Taiwanese cells rather than other cells. So, it's not a loophole. It's a natural evolution over the last years how we're utilizing cells for what kind of markets and what kind of applications.

VICE CHAIRMAN PINKERT: Any other comments on the panel on that issue?

MR. PETRINA: Robert Petrina with Yingli.

I'd like to second what Thomas said. Over the years, Chinese companies like ours have been buying cells from a number of high quality suppliers across the world and Taiwan has been obviously a great source of high quality product, so there was an evolution over the years to source more from Taiwan. I think that's reflected in the imports in the U.S.

VICE CHAIRMAN PINKERT: But was that evolution dramatically accelerated by the earlier investigation?

MR. PETRINA: I think it coincided with the growth of other markets as well with differential requirements in terms of efficiencies.

VICE CHAIRMAN PINKERT: Ms. Lutz.

MS. LUTZ: Commissioner Pinkert, I think that -- we discussed this a little bit at the prelim. This

relationship with the Taiwanese cell producers and the Chinese module producers has been going on for a long time, but there was no reason for the module producers to keep track of where the cells came from for modules shipped to different markets because it didn't matter at that point.

So, some portion of the imports that were considered subject imports in the China case probably had Taiwanese cells, but there just wasn't any documentation to show it.

MR. DORETY: This is Jeff Dorety of Trina Solar.

I'll add one comment. With respect to Trina, we have a larger module manufacturing capacity than we do cell capacity; therefore, for many years we've been buying the extra cells we need from Taiwan.

VICE CHAIRMAN PINKERT: Thank you.

Now, other than cost, is there a reason why a purchaser would prefer the multicrystalline product to the mono?

MR. MORRISON: This is John Morrison with Strata Solar.

Yes, there's a variety of technologies that the vendors put into their products. One of the other ones that was mentioned in some of the testimony is a 1,000-volt versus what had previously been a 600-volt product, as well as simply the quality of the product and its robustness and

durability. So, there's a number of factors that a purchaser like Strata would look at, there's technology, there's the quality of the product, there's the responsiveness and reliability of the company. It's their delivery and then it's the cost.

And by cost, it's not just the price of the product. There is the cost that is incurred for us to build the entire system. There are some modules, for example, the 72-cell, 1,000-volt that allow us to reduce our balance of system cost in the construction. It requires less wire, less racking, less labor and the like. So, we look at all of those features when making a selection of a module.

MR. MOORE: If I could add -- Barry Moore from Moore Energy.

We sell directly to homeowners, you know, our area, and having a more powerful cell per square foot, if you will, on the roof is very important. Typically, when you go into a home the person wants as much power as possible from the solar system and they have very limited space to work with because you have the roof area. So, we always opt to have the most efficient, the most powerful cell, so we almost opt for the mono module.

MR. PETRINA: Robert Petrina with Yingli.

I was going add that if you look at the actual survey that shows the importance of other purchase factors

defined there I mean there's a few key things. Obviously, product consistency is very important. And due to the various decisions that companies make, multi was the product that the market demands. And if you look at -- again, it's the difference between demand again, SUV versus a sedan. It was the product that was demanded by the largest growing segment of the market that the Petitioner does not provide that product to that particular market, so it's pretty straightforward in terms of availability what choice you can make as a customer.

VICE CHAIRMAN PINKERT: You're saying the market demands the multi product, but I'm trying to understand why.

MR. KOERNER: Thomas Koerner from Canadian Solar.

There are many small details, for example, most of them technical details. One detail, for example, is a temperature coefficient. That means how much drops the power of the panel it's getting hot in sunlight, and mono doesn't have a very positive performance in this case, though it's a pretty small technical detail, but poly is performing a little bit better compared to mono in this case.

VICE CHAIRMAN PINKERT: If you wish to complete your answer, Mr. Petrina, I think I've got another 10 seconds.

MR. PETRINA: I'd like to add that also, for example, the 1,000-volt UL requirement that's available on multi, has been for a number of years, was a determining factor in the procurement decision.

VICE CHAIRMAN PINKERT: Thank you.

CHAIRMAN BROADBENT: Commissioner Williamson.

COMMISSIONER WILLIAMSON: Thank you. And I too want to express my appreciation to all of the witnesses. It's a rare time that we've had this many different witnesses at a hearing.

Do you agree with the Taiwanese Respondents that the prerequisite for cumulation is a common scope definition, a common scope defining import from each country that are subject to the investigation? I'm not sure that I asked that all ready.

MS. JACOBS: I think we'll deal with that in the post-hearing brief.

COMMISSIONER WILLIAMSON: Okay. Thank you.

To the Taiwanese Respondent, which one of the productions in Taiwan is monocrystalline cells versus multicrystalline cells, and I guess also for the Chinese Respondents what is the comparable figures for China?

MS. CHIU: Although our mono is about 30 and multi is 70. And the price level actually the mono price premium is about 20 to 30 level.

COMMISSIONER WILLIAMSON: Are you saying that on a value basis it's a greater share?

MS. CHIU: Our average selling price of mono versus multi is about -- price premium is about 20 to 30 percent.

COMMISSIONER WILLIAMSON: Okay.

MS. CHIU: And our total production volume for mono cells and multi cells currently is about 30 percent for mono and 70 percent for multi.

COMMISSIONER WILLIAMSON: On a price --

MS. CHIU: Volume basis.

COMMISSIONER WILLIAMSON: On a volume basis?

MS. CHIU: Yes.

COMMISSIONER WILLIAMSON: Okay. Thank you. For the Chinese Respondents? Yes, Mr. Koerner?

MR. KOERNER: Thomas Koerner from Canadian Solar.

So, the majority of cells, a significant majority of cells we are buying from Taiwan of poly cells. The mono cells we're buying with the price difference you just heard are mainly going into the Japanese market, which are simply justifying with a very limited roof space, a significantly higher cost level because there's simply not more roof available for these systems to be installed. So, again, for the U.S. market, the majority of the cells are

used are multicrystalline cells.

COMMISSIONER WILLIAMSON: Okay. I think you raised this, and a couple others have raised the point that they could not get it from the domestic industry the product that they wanted or in meeting certain specifications. And I was curious, is it that you can't get or is it you can't get it at the price that you want?

MR. MORRISON: This is John Morrison.

In many cases, it doesn't exist. And for example, the 72-cell, 1,000-volt that form factor and the voltage provides us tremendous balance of system savings, and the domestic industry --

COMMISSIONER WILLIAMSON: Excuse me. Have you asked them for it or is it just --

MR. MORRISION: Well, it wasn't available when it was first introduced. They now have it available, but they're several years late to the market.

COMMISSIONER WILLIAMSON: Well, are you on a long-term contracts?

MR. MORRISON: Oh yeah. We go out there and we make purchases, long-term supply agreements with our vendors. The product that SolarWorld has as a mono product there is no multi, and there's no reason to pay a premium for the mono if you have a multi product that's of comparable performance that's out there. So, yes, they now

have it.

COMMISSIONER WILLIAMSON: They now have the ^^^^

MR. MORRISON: They have a 1,000-volt, 72-cell monocrystalline product.

COMMISSIONER WILLIAMSON: But you can get at a multi?

MR. MORRISON: We can get a multi -- yeah, with vendors that we've had a long-term relationship with.

MR. CANNON: This is Joel Cannon with tenKsolar, Commissioner.

COMMISSIONER WILLIAMSON: Okay. Go ahead.

MR. CANNON: We cannot sell a whole we will sell it ourselves. They've told us, no, we don't have any availability for you at all. So, if we had to rely on the two cell suppliers today, we'd be out business.

COMMISSIONER WILLIAMSON: Okay.

MS. SHAW: Polly Shaw, SunEdison.

We try to procure cells on occasion. SolarWorld doesn't make its cells available to us. Price is not the issue. We need to have the highest efficiency. When we've gone to Suniva they've been unable to provide their cells. They don't have the availability.

Other factors that we look at are timeliness of delivery, but availability is huge. Earlier, in 2013, we had purchased some cells from Suniva. By Q3 we were asking

again, no response. We elevated it to multiple levels of executives. No response. We needed another 15 megawatts about midyear this year from Suniva and asked them again. They were totally sold out again.

We suspect that they have a production capacity of only about 150 megawatts per annum anyway. It's the availability and the efficiency level that we're looking for. Thanks.

COMMISSIONER WILLIAMSON: Okay. Without being overly burdensome, to the extent that you all could document this unavailability, post-hearing, it might be helpful. I'm sure the Petitioners will have their own comments on it.

Yes, Mr. Koerner?

MR. KOERNER: Yes, Thomas Koerner, Canadian Solar.

So, we have learned today again that the Chinese manufacturers had available, a 72-cell, multi product with 1,000-volt system capability for many years already. SolarWorld did not. SolarWorld has a mono product, but does not have a multi product.

Now, just to make you understand how the technologies is even moving further forward, we already discussing a 72-cell, multi product with 1,500 watts. That's currently in the last stage of certification. We're talking with the first customers about that. That's the

next evolution of the market.

So, SolarWorld is catching up with a 1,000-volt mono product right now, which we had for many years; but now we're already in the verge of the next step of the technology level. So, we're talking about 1,500-volts already, which would give on a 72-cell module a significant advantage to developers in APCs. That just states to you how fast this industry is changing and moving forward.

MR. MORRISON: And to speak to the developer's world, we're developing projects today that will be built in -- for which we'll take delivery in modules in 2016 and beyond. And so, we're making decisions, we're making designs and the like based on what we see coming in terms of those technologies. So, it's a very long lead time. So, you'd say we know this product is going to be available and then we can put into our product.

COMMISSIONER WILLIAMSON: Is this primarily the utility market.

MR. MORRISON: Yes.

COMMISSIONER WILLIAMSON: Is the utility market quite different in that respect than say the residential market?

MR. MORRISION: Absolutely. I mean the development time for utility projects, like I said, could be months and years. For residential it can be weeks and maybe

months to get a homeowner to make a decision. So, it's a very, very different marketplace.

COMMISSIONER WILLIAMSON: Okay. That's helpful clarification.

COMMISSIONER WILLIAMSON: Now where does that put the commercial market is that in between?

MR. MORRISON: Yes it's in between. Depending on the market there and some of the regulatory hurdles in terms of interconnection with the grid and the line but a commercial market will be in the 8 to 14 month time frame from time of initial conversations with a potential customer and actually doing construction and completing the project and connecting it.

COMMISSIONER WILLIAMSON: Okay. That's helpful. To what extent is the domestic industry they complain about the unfair imports and that they don't have the capital to invest and it makes an argument to keep up and yet you are saying everybody else, or at least your suppliers are much further ahead than they are?

MR. MORRISON: Yeah I obviously can't speak for the domestic.

COMMISSIONER WILLIAMSON: Yes, that's fair, yeah.

MR. MORRISON: But my observation is we are looking for suppliers who have the latest technology who are moving forward who can give us products that will help us

lower the overall system cost. We are in a dynamic market and as opposed to what you heard earlier this morning we are facing a reduction in the revenue we get for the electricity that we sell. We are competing with the utilities marginal cost of energy, not their retail price but their marginal cost, that's natural gas typically and so the last two years we've seen that go down 20% so we are in a very tight position of having to reduce our loss so we look for vendors.

And it's not just modules it's the inverter manufacturers, the racking manufacturer, every part of our supply chain to give us the latest technology that can let us reduce that overall system quality.

MS. SHAW: Can I? Hi, Polly Shaw from SunEdison. We consider ourselves to be an American company who is doing extremely well. We are a business leader who is now the leading solar developer and a very successful manufacturer. We are highly vertically integrated. Over the last 5 years my company has deeply invested in every piece of the supply chain out to building and owning our projects to insure that we can control our costs and innovate and differentiate.

We manufacture poly silicon for example in Portland, Oregon, Pasadena, Texas and in Korea. We turn those into wafers, we partner with manufacturers I have described before in Taiwan who build to our specifications,

we make our panels in Malaysia and we work aggressively on every piece of the BOS system to bring down costs to produce common competitive products generations that can compete in natural gas and have a strong 25 year performance.

COMMISSIONER WILLIAMSON: And what are the modules --

MS. SHAW: Our manufacturing facilities in Malaysia, it's ours.

COMMISSIONER WILLIAMSON: Okay thank you my time has expired and thank you for those answers.

CHAIRMAN BROADBENT: Commissioner Johanson?

COMMISSIONER JOHANSON: Thank you Chairman Broadbent and I would also like to thank all the witnesses and the counsel for appearing here today. I would like to second what Commissioner Williamson said. It is indeed a big crowd I see I think 5 rows of tables out there I can barely see some of the witnesses in the back so there you are.

It's a full room, but thank you for appearing here today it really does help us to try to grapple with this rather complex investigation. According to the staff reports, subject imports from China increased over 1,000% from 2011 to 2013 and those from Taiwan increased by over 2600% and that all is on table C-1 of the staff report. The domestic industry lost over 20 points of market share while

subject imports from China gained over 10 percentage points and subject imports from Taiwan gained over 65 percentage points and combined subject imports from the two countries gained over 75 percentage points of market share and that is also from table C-1.

This is -- these are rather high numbers no matter how you look at them. Why should the Commission not find significant import volumes on this record?

MR. PAL: Thank you Rajib Pal from Sidley Austin. I think the problem with the data that you just read out loud is that it mixes the worlds of mono and multi. In fact if you look at slide 28 from Dr. Kaplan's presentation from this morning which actually is I believe very similar to BPI's slide in Exhibit 3 to the CCC&E's post-hearing brief, it will show you the distinction where imports are coming in and where domestic products are being sold. The odd numbered products, 1, 3, 5 and 7 are the multi crystalline products and the even numbered products, 2,4, 6 and 8 are the mono crystalline products and as you can see the overwhelming volume of imports were in products 1 and 7, those are in product 7 are the 72 cell 300 to 315 watt multi crystalline product.

BPI Exhibit 1 I believe to Miss Lutz's testimony from this morning which also is in Exhibit 3 to CCCME pre-hearing brief. It compiles the data that we have on the

record based on the pricing products to illustrate that the mono crystalline share of the market has fallen and the multi crystalline share of the market has exploded overwhelmingly during the POI and the vast majority of subject imports have been in the multi crystalline side.

So when you look at it in the context of mono versus multi what are subject imports supplying versus what are domestic's product supplying it explains the volume trends. If the market is demanding multi crystalline products then that is not the product the domestic industry is supplying then you know that explains the overwhelming increase in the volume.

MR. ELLIS: This is Neil Ellis also from Sidley. I just want to elaborate on something Raj said. If the market demands multi, you heard a lot of people say this morning that consumers don't distinguish mono from multi, that's -- I don't want you to be misled by that. The point is not that the consumer goes to the store and says I want multi product or I want mono. They probably don't know what that means.

The point is they want a cost effective way of getting electrons delivered to them, a truly fungible product electricity. Multi is the technology that delivers that in almost all applications. Polly Shaw has one of the few companies that is able to generate a very high level of

electricity using a mono product and that's because they have developed something very unusual.

But basically it's a mono versus multi choice even though people don't necessarily ask for that. I don't want you to be confused by that. And the point that Raj said is that because multi is almost always more capable of delivering a cost effective electricity to whatever the application may be, multi exploded over the past several years. And for whatever reason the United States industry did not invest in multi, they invested almost exclusively in mono and that's why you have these statistics that Commissioner Johanson just mentioned. Thank you.

MR. PETRINA: Commissioner Johanson, Rob Petrina with Yingli. I want to add one more thought. If you look over that period of time the growth rate that was at the highest rate was the utility segment which demanded that specific product so that is explainable by the fact that that grew much, much quicker. If you look at one of the slides in Jennifer's presentation I mentioned that the commercial segment has been growing but at a much more subdued rate and the residential segment has grown more recently more rapidly, that was a complete different product than was submitted, which I think explains the bigger change.

MR. CAMPBELL: Commissioner Johanson this is Jay

Campbell if I may just make one quick point. Also it should be recognized the figures you throw out for Taiwan, volume increase of 2600%, market share of 65%, these are of course numbers based on the 2-out-of-3 rule. We understand that that is the scope as of the prelim and that is the scope the staff had to use and we understand that but nevertheless it's very important to recognize that those numbers present a very distorted picture of Taiwan's role in the marketplace. Those are figures for modules coming in but Taiwan again, they are not the module supplier, at least not to any significant extent, they are the upstream supplier of cells so you know whatever scope Commerce ultimately decides upon we would just ask you to recognize that those figures present a very distorted view of Taiwan's very small role in the U.S. market.

COMMISSIONER JOHANSON: Yes Mr. Button?

MR. BUTTON: Thank you. Ken Button from Economic Consulting Services. I wanted to make sure that a couple of basic points are very clear to you folks as to the difference between mono and multi. First off the mono is more expensive to produce. It costs more to make it. Secondly, mono is more efficient than multi. However the delta between the costs is greater than the delta between the efficiencies so you do not on a per watt basis get a better deal using mono.

Secondly that the delta as to efficiency between mono and multi is shrinking such that over time the economic imperative to use multi, the economic rationale for that has increased. You can take that put it into the perspective of the purchaser who is buying electrons and could care less frequently whether it's multi or mono, perhaps and do not have esthetic concerns, perhaps they do not have particular space concerns. Take the utility situation.

They want electrons and over time multi has made the better sense. Overlay upon that the timing factor. You have heard the description today that yes, solar will eventually produce a product of a certain wattage but what you have been hearing is that with catch up, when they got to that level that the multi-product was at finally, the multi-product was now available at the next higher increment so on a per watt basis, that new higher voltage product was cheaper than was the old product at the same price and therefore the catch up SolarWorld product is already out of date both technologically and economically.

MR. CHRISTY: If I may. David Christy from Perkins Coie on behalf of SunEdison, to put that into context. Occasionally SunEdison's supply chain that Polly Shaw just described is insufficient to meet their customer's needs. When that happens they go to the market. They do not buy mono on the market. The mono they could get on the

market would be much less efficient than the mono that they make, much less efficient.

Rather they buy high efficiency multi, right, so it's not -- these technology choices as Ken Button just pointed out are based on this cost, you know this efficiency cost per watt of the electricity. It makes sense for SunEdison because of its particular supply chain to run mono and use that in their projects. But when that runs out they don't insist on using mono, they get the next best per watt cost of electricity and that is very high efficiency multi.

MR. KOERNER: Thomas Koerner, Canadian Solar. I would like to give you one simple example, a very hands-on example from an end consumer perspective. I just recently installed a PV system on my own house. My target was I wanted to offset my electricity bill. In order to do that I needed a certain system size. Okay now I would have the choice between multi and mono. At the end, my roof space was large enough to accommodate a poly panel instead of mono panel. Why would I pay 10, 15, 20% more for a system which does the exact same job and I don't have any roof limitations. And gladly my wife did not interfere me with aesthetics whatever, so I simply installed a poly panel which does exactly to the same cost efficient way what I was demanding to offset my electricity bill.

COMMISSIONER JOHANSON: All right, thank you that

concludes my time, thank you for your responses.

CHAIRMAN BROADBENT: Commissioner Schmidtlein?

COMMISSIONER SCHMIDTLEIN: Thank you very much. So I was actually going to start along these lines but I think you have all answered my question because you started out saying that the market demanded multi but what I am hearing you say now is, no customers don't actually, because that was going to be my request is, do you have contemporaneous documents showing that purchasers want multi versus mono but it seems like the argument has kind of meshed now into, and this actually makes a little more sense, that people want the cheapest form of electricity.

Electricity is a commodity and it happens that multi is a cheaper way to provide that, so it sounds to me and you are shaking your head yes. So it sounds like price is the most important factor when it comes to purchaser decisions right? And that would be consistent with the survey results that we see in the staff report.

MR. ELLIS: This is Neil Ellis at Sidley. As I am sure the Commissioners are aware, it is always dangerous for a Respondent side to say price is the overriding factor, therefore you lose because dumped products are therefore what people get. So I'd rather not give a sound bite to Petitioner for their post-hearing brief. However, you are raising a really important, perhaps a critical question and

the point is that electricity is a commodity and so you want to be able to deliver it, the output, the electricity in the most cost effective way.

The U.S. industry bet on a particular methodology, particular technology to deliver that commodity to consumers, they picked mono and it ends up that multi is a more efficient way. And those efficiencies have continued over the past several years during the POI. So you are going to the crux of the question, it's not necessarily that price is most important but it is a cost of delivery of a commodity product that is always going to be fundamental. Thank you.

COMMISSIONER SCHMIDTLEIN: So but there were producers in the U.S. making multi crystalline right? Do you disagree with the slide page 13 which showed the U.S. producers making multi crystalline that have shut down or gone bankrupt?

MR. ELLIS: Okay others may know more than me. There are a couple things about the production of the U.S. industry. One is what Ken Button said previously which is you have to take into account the time period over which people are producing the product. So they may be producing multi, but they weren't producing, they were always lagging in terms of the level of the number of cells per panel, 60 or 72 and the number of watts that were being generated per

panel. So they were producing multi but at lower levels at any given period of time.

The other point I think is that they have never produced the 72 cell, 1000 volt 300 and whatever I'm sorry, multi panels. So they have been producing some but not the range and not at the level that is currently demanded by primarily by the utility segment of the industry.

MS. LUTZ: Jennifer Lutz with ECS. I would just like to add I found it interesting going through this list given that most of these closures were cited by Petitioners in the last case as well saying that they closed because of the Chinese cells and modules to the last case but now apparently it's due to the products subject to this case. I don't think they can have it both ways.

I would also suggest that some of these producers possibly were sourcing, because there are not many cell producers in the U.S., were possibly sourcing their cells from subject suppliers and if those get cut off by this case, well they can't produce the modules anymore.

COMMISSIONER SCHMIDTLEIN: So there are U.S. producers of multi crystalline though right?

MS. LUTZ: There are small volumes of multi crystalline produced in the U.S. market.

MR. PETRINA: Commissioner Schmidtlein, Rob Petrina with Yingli. Beyond the price being an important

purchase factor if you look at the survey there are other very important purchase factors such as product consistency, such as availability and the availability to buy for a significant size project looking for the necessary volume which is consistently required by the particular client.

As John mentioned from Strata, these decisions are made into the future fairly far on to that future so it is important to recognize that there is more than that particular factor in deciding what product you are going to buy. So I just wanted to clarify that.

MR. LEE: I just wanted to confirm that of the U.S. producers that we are producing multi modules that they were purchasing Taiwanese cells.

COMMISSIONER SCHMIDTLEIN: I'm sorry I could not see who was talking, okay, sorry okay, so many people yes?

MR. PAL: Rajib Pal from Sidley Austin. So on the U.S. production of multi I think Petitioner's panel and SolarWorld keeps blurring the lines between mono and multi and 60 and 72. They will say that yes they make multi. They will say that yes they make panels of 60 or 72 but the fact of the matter is for example, if you look at SolarWorld's website which is in one of our exhibits, and you look at what their product offerings are, the highest wattage multi-crystalline module that SolarWorld currently offers is a 255 watt, 60 cell module.

They do not and they never have offered a 72 cell multi-crystalline module of any wattage or any voltage. And with respect to the 60 cell multi as Thomas explained previously I believe the Chinese producers are already at 265 watts, so and you know that is back to the catch up point. So what they do offer in product and what they don't offer is 72 cell multi 1,000 volt which is in high demand by the utility sector.

COMMISSIONER SCHMIDTLEIN: Yes in the back?

MR. CANNON: Commissioner I wanted to add with regards to the cost of the present energy issue it's the present weak energy that matters not the price of the product and there's really two ways of depending on which way delivers the lower price of energy and I think we are starting if non module project costs are not excessive then mono crystalline is the most efficient form if the non-module fixed costs are very high, in other words if you have a very constrained space and other expenses that you want to spread across the maximum amount of energy.

I really want to emphasize that sort of a modestly efficient mono crystalline products so for example, when Edison needs a maximum efficiency mono for instance, high energy density product, we need a maximum efficiency multi or mono depending on what we make.

What they make falls in this sort of netherworld

of its neither super-efficient mono which optimizes fixed costs over the low cost multi which is a lower cost of energy if fixed costs aren't an issue.

COMMISSIONER SCHMIDTLEIN: Okay, all right thank you. Did anyone else want to comment on that, yes Mr. Koerner?

MR. KOERNER: Thomas Koerner from Canadian Solar. As the name indicates we are a Canadian company and we also produce a significant amount of panel in Canada on a very competitive level. So with business decision made many years ago, we have offered to the market 72 cell multi thousand volt products into the Canadian market and other markets as well.

So it is possible if you invest into the latest and greatest technology if you constantly keep operating this technology. If you are constantly driving down costs, if you are constantly getting the best products on the market in these factories as for someone that sells from Taiwan, you are competitive, you are able to produce in North America. And we've stayed there, day by day with more than 1,000 amperages are from Canada.

COMMISSIOENR SCHMIDTLEIN: Okay thank you for that. I'm running short on time a little bit but I did want to try to get to the two points that you make with regard to the underselling and why it's not meaningful for us to rely

on any conclusions when we look at that data. And the first point you had was this attenuated competition which is a little bit about what we have been talking about. And I guess you know we've seen this argument in cases before and my question is always, because you do see, you know, domestic shipments in each of the pricing products though not as big I think, maybe there's one that there's not any domestic shipments.

And in some of those products the subject imports are small. So my question though is where is the line? Why is this not enough because they are present in all of those products?

MR. ELLIS: This Neil Ellis from Sidley Austin. The attenuated competition doesn't mean zero competition. You are right they are always going to find some fuzziness around the edges so we are not going to pretend it's perfectly zero.

COMMISSIONER SCHMIDTLEIN: Right.

MR. ELLIS: But when you look at the graphs, ironically both Dr. Kaplan's graphs and our own, you see what I have seen over 30 years of litigating this area a remarkable difference between the products that are offered by the subject merchandise and those that are offered by the United States. The breakdown really is very significant. Can we define a border? No, but this is clearly on the side

of the border that says there are attenuated competition. And I just wanted to jump in.

COMMISSIONER SCHMIDTLEIN: Yes?

MR. BUTTON: If I could just comment on it. If we were trying to frame the debate and the terminology the words we use in this, what we are trying to express and we believe that you are seeing competition between two technologies. It's not domestic versus import, two technologies that are really in competition. And you have heard here a history of the mono technology in a race with the multi technology and that the purchasers were seeking the multi technology. And that's what we are saying is what is happening over time and there were choices by the producers to go with one technology or the other. And I understand from the commentary this morning SolarWorld still believes in the mono technology and that's the future.

But the past we have seen the purchasers voting with their feet so to speak that way.

MR. ELLIS: One more point on that, again, Neil Ellis. Looking at page 28 of Dr. Kaplan's packet, if I wanted to draw a picture of what attenuated competition looks like, this is what that picture would look like. You have really dramatic, dramatic differences between what is shipped by the subject merchandise and what is sold by the domestic industry. Thank you.

COMMISSIONER SCHMIDTLEIN: Okay thank you my time is up, thank you.

CHAIRMAN BROADBENT: Okay Mr. Smirnow you mentioned that you represent a lot of solar workers and that SolarWorld is a pretty small percentage of the overall industry. I take it SolarWorld is not a member of your association?

MR. SMIRNOW: They are not, they were at one point. I believe they terminated their membership before they filed the first Petition in 2011.

CHAIRMAN BROADBENT: Okay and are you concerned about a lot of these trade remedy cases in different countries, Europe and I think that we heard there was one in Canada?

MR. SMIRNOW: We are concerned overall about the growth of the trade litigation globally. You are seeing an explosion of it, it is not just AD/CVD we are also seeing a growth in local content. We were very active in encouraging the U.S. to be aggressive in the WTO case against Canada as well as the case against India, we were critical of India's AD/CVD case against U.S. exports which would have included SolarWorld and for solar's thin film exports. So just the growth of conflict within the industry we think is something that should be avoided.

And what we have focused on is, sure we recognize

that litigation is an important part of the global trading rules. When the Petitions were first filed in 2011 we said we support their right to bring this case, open transparent process, supported rules-based training system. As we have seen the conflict grow we have increasingly focused on resolving the conflict, a negotiated solution.

And indeed over the past 6 months SEIA has facilitated a dialogue between SolarWorld and several of the Chinese manufacturers to try to find some middle ground and a solution that addresses some of SolarWorld's competiveness concerns issues but also allows the U.S. industry to continue to grow because we think that no job in solar is better or more important than others, we think they are equally important.

CHAIRMAN BROADBENT: Okay in terms of what is your perspective of what's going on in Europe, I mean is Solar World pursuing pretty much the same strategy in Europe that they are here?

MR. SMIRNOW: So there was a negotiated solution where the governments got together they negotiated solution and we are seeing that negotiation be implemented and beyond that, to us, that's not our preferred, from SEIA's perspective, we don't want to see increasing prices, quotas, we think that is the wrong approach. We put together an industry proposal that would effectively put a tax on

imports and then that money would go into a solar manufacturing fund to help research and development, help offset any price differentials while the U.S. industry was able to expand capacity. And so some of the R&D efficiency improvements that they were talking about earlier, but also allowing the industry to continue to grow because we need to continue to drive down costs. Because as you will see in the staff report, state programs, state incentives are being slowly phased down and we have other incentives that are going to have a shelf life, and so it's critically important that going forward that we continue, we have to continue to drive down costs in the industry.

CHAIRMAN BROADBENT: OK. What is your company projecting for demand in the next couple of years for these products?

MS. SHAW: In the U.S.?

CHAIRMAN BROADBENT: Yes.

MS. SHAW: I'm sorry, I don't have the number offhand. May I respond offline? I'm sorry.

CHAIRMAN BROADBENT: Sure, and what do you think will be driving it and how does it relate, for example, to falling natural gas prices? I mean what are the trends?

MS. SHAW: Sure. Now that a lot of the state renewable portfolio standards in the U.S. are somewhat

saturated, we are now really competing for utilities purchases beyond RPSs, against natural gas. So I think we're happy to see, we and a number of other players responding positively to bids at Georgia Power this summer and Austin Energy and other places where you're seeing very competitive prices, even more competitive than gas-driven electricity bids.

So we are now out in the world competing for electricity demand cost competitively. We see global demand exploding. Last year, our U.S. sales were probably 45 percent of our total. We are watching South America, Latin America, Middle East, India, parts of Africa, Southeast Asia absolutely exploding.

An example is just one state in India, Rajasthan, that has set a goal now for solar energy of 25 gigawatts by 2025. I'm very happy to announce two months ago a memorandum of understanding for five gigawatts of that with the State of Rajasthan. They're just one state in one country we're seeing global demand for solar booming because of its cost competitiveness.

CHAIRMAN BROADBENT: Okay. Mr. Button.

MR. BUTTON: Thank you. Ken Button, Economic Consulting Services. Two comments that relate directly to what we have described here. We heard earlier that U.S. state incentive programs are declining or have declined a

great deal.

The effect of that, please understand, is that the absence of the subsidy effect causes the net cost to the developer to go up. If something is going to be ten cents and the subsidy covered five cents and the subsidy goes away, he's got to find some other way to get back to five cents to be where he was before. So that's a cost concern along the developer.

Secondly, natural gas. We heard discussions of that this morning, and we saw the chart in -- that was provided by the Petitioners. One of the things that you do want to remember about the U.S. natural gas developments, they're extremely dynamic and somewhat strange.

Fracking has caused such an explosion in the production of natural gas in the United States that two things have happened. One is natural gas pipe wells have been capped, because there was no infrastructure out of the Bakken and, you know, the North Central United States, to get that down to the distribution systems.

Secondly, up in the Bakken, some major producers are flaring 30 percent of the natural gas they get out there, and that's a very controversial issue up there. They're trying like crazy to build the pipelines that will bring it down to Cushing, Oklahoma, handle the distribution across the United States.

Don't count on natural gas supplies going away. This is a game-changer, according to those who know it. Therefore, if you are in the solar energy business and you're looking out 10, 15 more years, you've got to realize that your grid parity competition, and that's why the discussion from Mr. Smirnow about driving down cost, is important and very germane to us today.

CHAIRMAN BROADBENT: Okay. How much of SolarWorld's situation is impacted by the intellectual property that they have or they don't have? Is there a reason that they feel so strongly about the mono production process? Is it based on the intellectual property that they have and they cannot have it in the multi?

MR. ELLIS: This is Neil Ellis. I don't know if anyone here feels comfortable presuming to know what the thought processes were of SolarWorld. However, this morning we did hear the vision of, I think, of putting a solar panel on everybody's rooftop, and there is a sense that rooftops do lend themselves more to mono focus. Whether or not it's intellectual property or just kind of a vision of where solar was going.

CHAIRMAN BROADBENT: Right.

MR. ELLIS: Because rooftops do have that aesthetic concern, that is more amenable to mono. That's one place where mono may be more suitable, or one of the few

places. So I don't know if it's intellectual property issue or just kind of a strategic focus issue.

But they clearly seem to be coming from a rooftop-based vision of where solar would go, as opposed to the gigantic utility scale projects that are now really driving the industry, and those that require the cost efficiencies of a multi product.

CHAIRMAN BROADBENT: Right, okay. I just -- I'll yield to Vice Chairman Pinkert in a second. I just want to remind the folks as we finish up the questions here, to keep introducing yourself, because I think the court reporter's having trouble in the back rows identifying witnesses. Vice Chairman Pinkert.

VICE CHAIRMAN PINKERT: Thank you, Madam Chairman. Just one more question on the value package for multi versus the value package for the mono technology. I understand the testimony, that currently the value package for the multi, when viewed from the perspective of the customer, is better than mono.

So my question is does that suggest that within the domestic industry, multi should be growing at the expense of mono, within the domestic industry?

MR. CANNON: Joel Cannon from tenK. May I address that?

VICE CHAIRMAN PINKERT: Please.

MR. CANNON: It's really -- I'm the one in the back here. I never know. We make both products.

VICE CHAIRMAN PINKERT: You're the one with the beard, right?

MR. CANNON: I'm the one with the beard, right. That's right. We make both products. There's a few instances where mono will have a better economic return because, as I mentioned before, there's a lot of fixed costs associated with a product and a real need for energy density.

So I would say no, I don't see multi growing at the expense of mono per se. I'd say that mono has a niche, and it's got places where it fits. Multi has bigger niches, and more places where it fits. And so there is a home for both, but mono's is just much, much smaller, because you need to have those other constraints in order to make it make sense economically.

And again if you do need a mono product, you want the most efficient product you could get, not sort of a kind of efficient mono product.

MR. CHRISTY: David Christy from Perkins Coie again. I think this gets back a little bit to something that Ken Button talked about, which feels like a half hour ago, probably five minutes, that in essence you have, in addition to the mono, multi and other overlays, the

efficiencies, you also have this time lag.

I think, you know, the premise of your question is well if these -- if the competition is as you say between multi and mono because of the per watt cost for each, right, with multi having the advantage, then you would expect to see U.S. multi producers out-competing U.S. mono producers. That's the premise of your question, I think.

The problem is the lag, right, because the U.S. mono and the U.S. multi producers aren't producing the current products. Basically, they're producing the products that the entities sitting at these tables were producing two, three years ago, maybe as recently as one year ago, but certainly a while ago.

So the products that are currently being offered by the companies on this panel are, you know, ahead, substantially ahead of the products that are now being offered by the U.S. producers. So you don't have that same, the type of competition break that one would otherwise expect.

MR. ELLIS: This is Neil Ellis again from Sidley. You know, the other side will be affronted by these kinds of statements. They'll say, we can compete with anybody. We can make anything. We do make anything, etcetera, etcetera. We've heard a lot of that.

But the point is -- the time lag point is

really important because of the rapid change of efficiencies and technology here. It really matters a lot, especially when people make their decisions now, that will be used three, four, five years hence in their production.

In our brief, we do talk about it. To the extent that publicly available information was there, we talk about the time lag differences. When the Chinese companies are making X, the U.S. industry is X minus 1 or whatever. When the Chinese were making X plus 1, the U.S. industry was making X and so on.

You can't look at it kind of as a blob. You have to look at it in slices of time, and that really does make a difference. Thank you.

MR. KOERNER: Thomas Koerner, Canadian Solar. On October 13th, 2014, SolarWorld has issued a press release about their production capacity expansions in Oregon. I just want to read one portion of that, stating that SolarWorld is producing cells, monocrystalline cells with a PERC technology, with efficiencies in the high 19 percent range.

I would encourage you to discuss, to ask the Taiwanese manufacturers, where there are currently in the efficiencies of mono and they will stay. They are significantly above 20 percent already, or already last year. So again, SolarWorld is confirming an investment and

an upgrade of the efficiencies, 19 percent, which is still lagging behind what we can buy from other markets today.

VICE CHAIRMAN PINKERT: I wasn't asking that question to be answered in a public hearing. But if they could supply that information in the post-hearing, I think that would be helpful. Did somebody else want to respond?

MR. ROSSMANN: This is Sascha Rossmann of Winaico. We are Taiwan's module maker. We are shipping already 280 watt modules since the fourth quarter of 2012 to the U.S. market. Just like SolarWorld mentioned this morning, their newest product that they released this year is a 280 watt module, and just as Thomas Koerner referred to their press release, they're using efficiencies lower than 20 percent to achieve that 280 watt.

That is actually technically not possible, because you need 20 percent plus efficiencies to reach 280 watt, according to the Accredited Institute's power standard. So just to emphasize how quickly technology is moving ahead, and now we started shipping 290 watt to the Europe and also the U.S. market.

So that is 20.4 to 20.6 percent efficiency, that nobody else can produce at the moment commercially except Taiwan.

MS. CHIU: If I may?

VICE CHAIRMAN PINKERT: Yes please.

MS. CHIU: Taiwan has a tradition of component provide to all the world. We keep increasing and improving and investing our cell technology. That's why we offer all of the world a higher cell efficiency, and the highest level in Taiwan actually a certain cell. That would be 17.8 percent, and the mono will be 20 percent. This is not U.S. producer can provide. Thank you.

MR. ROSSMANN: This is Sascha Rossmann of Winaico. Just one short comment. This morning, SolarWorld also mentioned that there is not -- no premium they can charge basically on the 250 mono, compared to a 250 poly. That is true, because that product at the moment in the market is already outdated.

So also in Europe, we are facing this kind of competition in the market. We actually cannot sell the mono panel at that low price as SolarWorld, because we are selling only 260 watts. So we have to charge a premium compared to their product, shipping with the 250 mono to the market.

But if you are talking vertically integrated manufacturer, you're always lagging behind time, because you cannot be an export in the waiver, in the ingot, in the solar cell and the module. So the organic technological advancement that happens in Taiwan particularly, you cannot follow up as a fully vertically integrated manufacturer.

It's not possible.

VICE CHAIRMAN PINKERT: Thank you. Mr. Campbell, it seems that we got a lot of information here in the public hearing. But if you wish to add anything in the post-hearing about the relative efficiency, I think that would be helpful.

MR. CAMPBELL: We will do so Commissioner.

VICE CHAIRMAN PINKERT: Thank you. And my last question for this round has to do with the future. We've heard a lot on this panel about how the domestic industry has made a bad bet on the mono technology. Betting sometimes relates to the present, sometimes it relates to the future.

Have they made the right bet for the future and just the wrong bet for the Period of Investigation, or would you characterize it differently?

MR. KOERNER: Thomas Koerner from Canadian Solar. As I just read out of the press release, from the press release, they decided again on a monocrystalline technology for the next years to come. They're making the investment now, which has to be written off the next two, three, four, five years, and as they have stated that these efficiencies they're currently investing on are below 20 percent, around in the high teens or some things like.

It's not on me to judge that, but it does not

seem to be very competitive for the time being, or for the next years to come.

MR. MORRISON: I would add, this morning you heard reference to an NREL (ph) charge showing efficiencies of cells. If you take a close look at that, the technology that's actually improving the fastest is thin film.

So I think that's an issue for everybody in this industry, is what should the bet be on technologies. I'm not going to hesitate to try to give my prediction, but just look at what recent trends have been, and so there's a lot of hard decisions to be made by this industry on a number of different technologies.

VICE CHAIRMAN PINKERT: I'm not clear about your answer, Mr. Koerner. Are you saying that the future is not with mono, or are you saying the future is not with the domestic industry's version of mono?

MR. KOERNER: What I was stating is that the announcement from SolarWorld, and that's a recent announcement, is that they're investing into a monocrystalline technology which already behind efficiencies of other manufacturers from other countries. So they're deciding on something which is already lagging behind.

VICE CHAIRMAN PINKERT: Right. So perhaps in the post-hearing, if you would, address the question of whether mono itself is a bad bet for the future, or are you

simply saying that the domestic industry is not betting on the right verison of mono? Thank you very much.

CHAIRMAN BROADBENT: Commissioner Williamson.

COMMISSIONER WILLIAMSON: Thank you. Continuing along the lines of Commissioner Pinkert, because we've had other cases where we've had lots of complaints, the U.S. industry is not making the right product, it's not as good, and then you sort of look at the numbers and you find out that yeah, where the -- say the importers are talking about superiority, they're really talking maybe about a very small segment of the market, and that if you look at the overall market, there is really head to head competition.

And in that regard, I'm looking at -- and this would be really for post-hearing, page 260, Table 2-23 of the staff report, which compares the purchaser's comparison of the U.S. product with imported product. I'm particularly looking at the U.S. versus Taiwan, and what those numbers show doesn't give you that same dramatic picture that y'all are painting.

So I wish you to take a look at that, and maybe comment on it post-hearing, and I'd like the Petitioners to do so too, and also if there is this big difference, how large -- in those areas where you say you're way ahead, how important is that to the market relative to

the bulk of the product?

Because that's the only way I think we can really sort of say is this -- if you are ahead in this. I can understand where the producers could be, the Taiwanese producers may very well be. But how significant is that to the bread and butter, if you look in the context of the overall market?

MS. SHAW: Commissioner, Polly Shaw, SunEdison.

COMMISSIONER WILLIAMSON: Yeah, uh-huh.

MS. SHAW: I think as we have demonstrated this morning, utility scale sales have just exploded and dominate now the sales during the Period of Investigation. Also medium and large-scale distributed generation has gone up considerably.

So I think that's the dominant sales that we're talking about, and as a provider who excels in those segments, we would say that the higher efficiency wattages that we seek are not available or produced in the U.S. So that's the -- it almost turns your question on its head, that you know, SolarWorld's product only serves a minority, if anything, of the marketplace, if you're looking at the scale of --

COMMISSIONER WILLIAMSON: Well, I guess take a look at the table I pointed to, and sort of relate that to

what you just answered, just told me.

MR. ELLIS: Commissioner Williamson, Neil Ellis. What page was that again?

COMMISSIONER WILLIAMSON: It's 2-60 of the staff report. It's Table 2-23, and we can clarify all this post-hearing for staff.

MR. ELLIS: Well if I may take a stab at it now, this is the standard table that shows what people are interested in, and this gets to my response earlier about to I believe it was Commissioner Schmidtlein's question, which is isn't price what matters here, and I assume that's what you're focusing on.

COMMISSIONER WILLIAMSON: Well no. It's clear that the Taiwanese imports are superior in terms of that. It concerns what these purchasers are saying. But I'm also getting to this quality, availability of what the key products are. Right. I think it would be better to do it post-hearing, to get it -- so we can get it down, and also gives -- both sides can comment on that. Thank you. Sorry, go ahead.

MR. ELLIS: One thing in response, although I won't address this in detail; I'll even not look at it now. But the point is that in the brief, we did again enumerate the steps in which -- the time periods in which the U.S. industry was lagging from, as compared to the provision to

the marketplace, of product as compared to the imports.

We haven't seen anything to the contrary, and also the fact that the differences are significant; in other words, these are 10-20 percent differences in the efficiency ratings, and that really -- or the wattages, and that really does make a difference.

COMMISSIONER WILLIAMSON: Okay. I'm not disagreeing with you, and this is legitimate. There are times when there's been technology, you know, an imported product has been technologically ahead, and that could be a factor in why they're being sold.

I mean so I'm not saying it's not possible. I just want to kind of get it down more clearly, because sometimes -- there have been a lot of other times when I've heard this, and then we looked at the numbers and wait a minute. Thank you.

Some of domestic producers are related parties under the statute, and SolarWorld argues that the Commission should exclude three firms from the domestic industry, Motech and Juangjing, and I was wondering if you agree with that, and that could be either now or post-hearing.

MS. JACOBS: I think to some extent we address that in how we discuss some issues of comparability of products. But we will discuss that some more in the post-hearing brief.

COMMISSIONER WILLIAMSON: Okay. Just, you know, reaffirm the points you've made. Thank you.

MR. LEE: We'll address that as well. But we would also just note that it highlights the issue that in the domestic industry, you have a significant number of people who are not making their own cells, but are relying on imports. So to the extent that they are dependent on having high quality, high efficiency cells, as U.S. module assembler like tenK, they do need Taiwan cells to be available to them.

COMMISSIONER WILLIAMSON: Okay. Thank you, yes. That's what makes these cases so fascinating. Umm, okay. In the -- we talked a lot about the utility market and the 72 cell multicrystalline modules, the preferred modules for the utilities. I was wondering in these markets, and in these markets there appear to be a range of products. I think someone made reference to First Solar's low efficiency thin film modules, high efficiency monocrystalline modules.

I was wondering what other factors than price determine the type of modules used in particularly utility applications? You may have touched on this already but Mr. Morrison.

MR. MORRISON: I think we attempted to address that. I mean it really is -- the efficiency of delivering

that electron, and which technology gets us the best point, and I think what you see here on the panel are different companies who achieve that low point in different manners.

SunEdison has managed to get a very high efficiency mono and, as such, benefit from the fact that their balance of system -- racking, land, you know, is much less. Strata, on the other hand, doesn't have access to their technologies. So we have historically been using multicrystalline for that low point.

However, with the provisional tariffs that have been imposed, you know, this summer, that tipped the balance. So since this summer, we have been building, redesigning projects and building them with thin film. Now thin film is less efficient; it's a much lower -- it's even a lower cost per watt, but we have pay more for racking, land, labor, wire and the like.

So as that ability to deliver that electron and the relative cost of the modules change, it affects the balance of system. So they're all real close but --

COMMISSIONER WILLIAMSON: Briefly, okay. I'm sorry, Mr. Ellis.

MR. ELLIS: I'm sorry, Neil Ellis. I wanted to build on something that Mr. Morrison just said very quickly, which is that if you noticed what he said is that when the cost went up because of the tariffs, the price went

up because of tariffs, it didn't go to U.S. suppliers or multi or try to find something U.S.

They went to thin film, and the point, you know, we've not argued any more that thin film should be considered the same like product. But we nevertheless feel that it is very much an important part of the competitive landscape here. Whether or not technically it meets the legal requirements for being a like product.

COMMISSIONER WILLIAMSON: I understand the point very well.

MR. ELLIS: That's very important.

COMMISSIONER WILLIAMSON: I understand. One thing I don't think you discussed at all, and particularly in the utility sector, is there like -- do they go out with bids every year and every so often?

MR. MORRISON: There are two basic --

COMMISSIONER WILLIAMSON: Let me finish. Because this morning, the point was made that people don't ask for multi film, you know, multicrystal or monocrystal. Still, they want a certain -- an efficiency or certain power output.

MR. MORRISON: And this is John Morrison with Strata Solar. There are utilities themselves that will purchase solar farms and operate them. There are also independent power producers who will build a solar farm, and

then sell the electricity from that.

So there's a slight difference there. Typically in an RFP, if a utility's going to go buy, they're going to simply say give us the most cost effective solar farm that you have. As an independent power producer, and that's the market that Strata is in, we make that analysis ourselves. We obviously want to have the most cost efficient production of that electron.

COMMISSIONER WILLIAMSON: Do you say I want a mono or --

(Simultaneous speaking.)

MR. MORRISON: Well, we go through that analysis of does the efficiency of the mono and the premium we'd pay for that balance against the balance of system costs. As I said earlier, it used to be that the lowest, most cost efficient point was with multicrystalline. That's changed, because of the tariffs, and as we do that analysis, we're now seeing that thin film, which is cheaper per watt but requires more balance of system, delivers the lowest overall cost of electricity.

COMMISSIONER WILLIAMSON: Okay. Okay, thank you. My time has expired.

CHAIRMAN BROADBENT: Commissioner --

MS. SHAW: Polly Shaw with SunEdison.

CHAIRMAN BROADBENT: Excuse me. Go ahead, Ms.

Shaw.

MS. SHAW: I'm sorry. I just do want to reiterate that across the country, it's very normal for utilities to offer all source RFOs, request for offers. So we frequently bid against thin film for solar; we frequently bid against other forms of renewable energy.

I don't quite understand the comments that were made this morning about unsophisticated customers, because whether it's utility scale or distributor generation, big box or other commercial/industrial customers of ours, they're extremely sophisticated when they're looking at performance guarantees.

It's not that they're spec'ing a mono or a multi; they're looking at performance over the 25 or more longer life of the contract.

CHAIRMAN BROADBENT: Mr. Johansen.

COMMISSIONER JOHANSON: Thank you, Chairman Broadbent.

This morning's panel had some opinions on Zep technology, all to the effect that this is not a significant condition of competition and does not impact the ability of the domestic industry to compete with subject imports. How do you all respond, and please explain the role you think that this technology plays in purchasing decisions in the U.S. market?

MS. LUTZ: Commissioner Johansen, this is Jennifer Lutz of ECS.

I was listening to this morning's testimony and I thought, wow, I think they really missed the point. An individual homeowner is not going to come to a supplier and say I want Zep mounting systems. But at the preliminary conference, you had a representative from Solar City, which is the largest U.S. residential installer of solar systems -- they do commercial as well -- saying -- I think it was starting in 2013, maybe even earlier, they were only sourcing modules that used the Zep system. They would not purchase modules that did not use this system. And so that eliminated SolarWorld as a supplier to them.

It's one thing to say no individual purchaser homeowner cares about Zep, but when the single largest residential installer says we care about Zep and you don't provide it, you're shutting yourself out of a pretty significant part of the market.

MR. PAL: Rajib Pal from Sidley Austin.

And on that point, if you look at Table II-21, on page II-53 of the public pre-hearing report, the record data shows that about half of the residential market use Zep-compatible mounting technology. So, right there if you didn't supply Zep you were shut of the market.

MR. CANNON: Commissioner, I would add that the

zep system has to be licensed, so with regards to the testimony this morning to the effect of if a customer comes and asks us for zep we can make it. Well, it's a little bit misleading because -- controls that zep technology. It's licensed. It's selected manufacturer. So, that sort -- is pretty unlikely.

COMMISSIONER JOHANSON: All right. Thanks for your comments on this. I appreciate it, and will look further into it, of course, following the hearing. It's awful difficult when you hear different -- very different opinions from both sides, but we'll look further into it. And anything you can add -- well, maybe I'll take one or two more responses and then I have some other things.

MR. KOERNER: Thomas Koerner, Canadian Solar.

Just to show the importance of the cost saving of the Zep system, Solar City has acquired Zep because they have seen the competitiveness of the system, and the cost benefits are so significant they want to keep it for themselves.

COMMISSIONER JOHANSON: Okay. Thanks for your responses on this.

SolarWorld argues that China's production capacity is massive and continues to expand, even in the face of significant losses and price declines. And also, I might add in light of declines of demands in the EU market,

which I think is the largest market in the world, rampant over capacity is how they described it. How do you all respond, and why is there growing capacity in China under these circumstances?

MR. PETRINA: Robert Petrina with Yingli.

Commissioner Johanson, I think what's very important to recognize is that the market demand in China has grown dramatically over the last few years to the point that last year I think the number -- I'm going to improvise the exact figure -- was more than 15 gigawatts of installed capacity within China, on a similar track for this year. And again, as I mentioned my testimony, between now and 2020, there's going to be at least 11 gigawatts installed per annum going forward into the Chinese market.

And that's just one example of the growth, not just in China, but emerging markets are growing very rapidly as well, and that's a huge opportunity for all the companies involved in the industry.

COMMISSIONER JOHANSON: All right. Thanks for your response.

And Ms. Jacobs, I was wondering if you could clarify something for me. I believe you stated earlier today that Chinese capacity is projected -- I'm sorry -- is below projected demand. That is a relative issue with regard to threat considerations, but how about with regard

to present conditions in the industry, which, of course, is a factor with regard to present injury. Is China's present capacity indeed above current market demand as alleged by the Petitioners, or did I not understand you earlier today?

MS. JACOBS: We did not make that statement, but we'll get a clarification for you.

COMMISSIONER JOHANSON: That'd be helpful. I thought I heard differently, and I just wanted to check. Thanks.

In a growing market, why would domestic producers continue to drop prices, given the industry's financial conditions, as evidenced on the record, were it not for price pressure, low priced subject imports?

MS. LUTZ: Jennifer Lutz with ECS.

One of the primary reasons that you see in the data collected for the domestic industry is the sharp decline in raw materials costs and overall cost of goods sold.

MS. JACOBS: Brenda Jacobs of Sidley Austin.

Let me add to that the point that we've made several times today, and in our pre-hearing brief, is that the technology evolves and you are putting out more watts per module you are necessarily having a per watt cost go down, and that is why you're seeing prices go down on a per-watt basis. So, you have to remember you're not looking

at the total cost there. You're looking at a 325, 72-cell module. You're looking at on a per-watt basis and it necessarily is going down to the exact math reasons that Raj Pal explained earlier.

MR. ELLIS: If I may, we have a comparison, which I think works, in our brief about comparing this to the Iphone. If you come out with the Iphone 5 at a certain price, and then a year later you come out with Iphone 6, technology is developed enough that the Iphone 6 is going to be at the same price as the Iphone 5, roughly, and the Iphone 5 now is going to have sell at an even lower price. So, you've got two things going on. The technology is such that the new product is being released at the same price as the old product was a year ago. And if you're trying to sell the old product now, you have to discount even more because that's an old product.

So, you've got this constant dynamism in this industry. It's an incredibly dynamic industry where technology and efficiencies are changing very rapidly, and that's what driving the prices down, that, plus, as someone else just said, the fact that raw material costs have also come way down over the past two years. Polysilicon, primarily, but others as well, as were identified by your staff.

COMMISSIONER JOHANSON: So, Mr. Ellis, you're

contending, in effect, at least for the first points you made that the U.S. industry is not evolving as quickly as market demands would call for, at least, vis- -vis, Chinese and Taiwan producers?

MR. ELLIS: They are going to be affronted this, but the answer basically is yes.

COMMISSIONER JOHANSON: Okay.

MR. ELLIS: And our brief demonstrates that over time.

MS. SHAW: Polly Shaw, SunEdision.

I was a little surprised to hear testimony this morning that they didn't find raw materials dropping what we could call building materials, so glass, backsheet, solder, things like that we found have dropped 8 percent per annum over the last two years.

COMMISSIONER JOHANSON: Okay. Thank you.

This next question is something of interest to me because I read newspapers a lot, and I see all over the world there've been cases involving solar products and I've noticed that.

SolarWorld noted in its brief that Chinese exports to the European Union, which accounted for 70 percent of total Chinese exports fell to only 30 percent. What impact has this had on the Chinese industry? And also, you can address other trade cases being brought around the

world in India, Canada, and perhaps other countries as well.

MR. PETRINA: As I mentioned before, there is substantial growth in a number of other markets that companies that have the wherewithal and the long-term focus to be present there I think have benefited from what has been a decline in Europe. I think everybody discussed the decline in -- in Europe and what that meant for the market.

I think in particular for companies like ours we've been active outside of Europe for years and have invested in and put the systems in place to benefit from those other markets. So, you also see when you read newspapers new bids that are putting put by countries such as Brazil, and so on, and deploying solar power. So, I think it's very important as well to see that growth taking in place in more than just Europe.

COMMISSIONER JOHANSON: Yes, EU, I believe, is the largest market; is that correct?

MR. PETRINA: At one point it was the largest market. Yes.

COMMISSIONER JOHANSON: And due to economic conditions there, the reduction of subsidies in the European Union and the trade -- I guess it's the equivalent of a suspension agreement in the EU has restricted imports to the European Union. I mean that has definitely impacted Chinese producers I would assume.

MR. KOERNER: Thomas Koerner, Canadian Solar.

I am German, so I know the German market pretty well. Germany has reduced the feed in tariff for every kilowatt hour produced by a solar system significantly. One key driver for that was to reduce the system cost overall and to make a solar system competitive with other energy sources, and that's done pretty successfully. However, it's very difficult right now and extremely competitive for anybody, not only Chinese manufacturers, but also other manufacturers to sell systems in Germany on a competitive level.

And if you look up SolarWorld's quarterly reports, their sales in Europe, and especially in Germany, went down significantly. Not because of whatever trade case or whatever, but because the system is so competitive at this point and feed in tariff are requiring a very low system cost so that the homeowner decides on a solar system; otherwise it doesn't do that.

COMMISSIONER JOHANSON: All right. Thanks for your responses. My time has expired.

Actually, can I take one more response, please? Thank you. And try to make it a little brief, if you could, please. Thank you.

MR. WEINER: Yes, Commissioner. Richard Weiner from Sidley Austin.

A couple of comments on the European market, and then some of the other cases that you mentioned. In Europe, there is what we would call a suspension agreement, an undertaking of a two-year term. It allows for 70 percent of the European market to be sourced from Chinese merchandise. That is Chinese by virtue of a rule of origin that we would call the First Case Rule, meaning that the substantial transformation of a wafer turns that wafer to a cell and the cell determines the origin of the module. So, this was misstated earlier on.

It also has a price level that is now set at market that is the spot price for cells according to the Bloomberg Index. So, there was a statement earlier that this was pursuant to a loophole. It wasn't. It's pursuant to an agreement of the government.

COMMISSIONER JOHANSON: All right. I thank you for your response, and my apologies to Commissioner Schmidtlein.

MR. WEINER: I was going to say one other thing, if I might.

COMMISSIONER JOHANSON: Okay. Very briefly, please.

MR. WEINER: There was a comment made about an Indian order. There's no order on India.

COMMISSIONER JOHANSON: But there's an

investigation; is that correct?

MR. WEINER: That's correct.

COMMISSIONER JOHANSON: Okay.

MR. WEINER: And there was also a statement made about a Canadian order. That's not correct. They started an investigation on Friday.

COMMISSIONER JOHANSON: Okay. Thanks for your clarifications, and my apologies for a second time to Commissioner Schmidtlein.

COMMISSIONER SCHMIDTLEIN: That's all right. I don't mind.

All right, so at the end of the day we're always beating a dead horse I feel like, but I just want to make sure I understand since when we go back and make a decision it has to be based on the record, so I want to make sure I understand you all's position with regard to the pricing data, so I have a few questions about that, okay.

And the first one, we've talking about efficiency here and the price and what buyers are willing pay and what they're getting. Let me put it that way. So, when I look at the pricing data, I just want to see if I understand your argument.

So, for instance, Product 7, the product there is a 72-cell, multicrystalline peak power wattage between 300 to 315 watts, right? And so you see the quantities from

the United States actually going up. They go down a little bit, then they go up. You see the quantities from Taiwan going up substantially, starting in the middle of 2012 and you see underselling; is that right?

So, just so I understand, is it your position there that the United States producers couldn't have gotten those sales because they product they're producing is lagging behind the product that's in that pricing category? So, in other words, when I look at these pricing products where they have parameters set out for the product that we're looking at is it your position that the U.S. is losing sales to the subject imports because there's some lag in the technology or efficiency?

MR. JACOBS: Commissioner, Brenda Jacobs from Sidley.

I think what we're saying there is that that's where there's attenuated competition. There's very little competition between the two products. So, in those instances where you see a comparison, you see in the same quarter there are sales, and there may be a few instances of underselling or overselling, you also need to look at the volumes of the import and the volumes of the domestic product. And if they're grossly disproportionate to one another, then you have to question what's the viability of that comparison.

If there's huge --

COMMISSIONER SCHMIDTLEIN: Well, I'm not looking at it -- I'm trying to understand your argument about -- I guess it's really about efficiency. I'm trying to understand where does efficiency convert into this 300 to 315, right, because when I look at these -- I'm looking at a specific product parameter. So, why is it that the U.S. can't achieve greater sales in that product because they're lagging behind? And if that's contention, can you just point to the evidence in the record that shows they're lagging behind. Like what do you mean they're lagging behind in that particular -- with those particular parameters?

MR. PAL: Raj Pal from Sidley Austin. I'm not sure this will completely answer your question. I think one of the issues with the pricing product data is the fact that they're defined by wattage ranges, and I think that makes it difficult to draw perhaps the conclusion that you're trying to draw.

One point I will make is that in our comments in the questionnaires we had requested specific wattages. And I think if the present products were designed by specific wattages more meaningful comparisons may be possible. But the fact that there's in this case a 15-watt range does, to some extent, blur the comparison.

Right, so for example, if the U.S. product -- now, here Product 7, as I understand it there were very, very limited quantities of U.S. product, maybe from one or two manufacturers, certainly, not SolarWorld because SolarWorld does not make a 72-cell, multi in this category, according to their website. So, right there that -- but there's extremely limited domestic volumes that perhaps are not even getting meaningful price data.

If you're making price comparison, and I make this up, if you've got one unit of domestic product sold at whatever price and you've got 100,000 units of imports, how do you even know that the price for that domestic product has any meaning in that comparison? So, I think that's, to some extent, one thing you're seeing in Product 7. The other is, sure, you just don't know from this if domestic product was mostly 300-watt and imported product was mostly 315-watt or vice versus. Nobody knows that given the wattage range.

COMMISSIONER SCHMIDTLEIN: Okay. So, what is the evidence in the record? I mean we see the market share for the U.S. producers going from 27 to 7 percent, something like that, over the POI. We see the subject going from 6 to 82 percent, right? And if I understand your argument, it is U.S. producers lagged behind. So, they lost 20 points in market share. That's because they're lagging behind. So,

I'm trying to find, besides this sort of general anecdotal testimony where does that show up in the record? Where does that show up in the import data? Yes?

MR. BUTTON: Let me just point out a couple of things. In this now famous exhibit for Product Number 7, and Product Number 7 is a multicrystalline product.

COMMISSIONER SCHMIDTLEIN: Right.

MR. BUTTON: And the point is, is this that this is a very big number. The domestic industry, in short, didn't have a product that could match it in product --

COMMISSIONER SCHMIDTLEIN: But how is that? I mean the product parameters are the product parameters. So, presumably, we're collecting data on that product.

MR. BUTTON: The volumes that you see here, that tiny line represents the capacity of the domestic industry, the volumes that they were able to get based on that product, and it reflects the market's response to the product and its efficiencies and the power it put out and that they didn't have.

What you heard here today was basically saying that the reason this is a small number, even as it is, is that the domestic industry didn't have the product to put out.

COMMISSIONER SCHMIDTLEIN: Can you elaborate on that? Like what do you mean, that it was 290 and it didn't

meet the -- I mean what do you mean they didn't have the product to put out.

MR. BUTTON: I think a couple of the people here said that they sought the product and SolarWorld didn't have it. Now, I'm going turn it over to let them comment on, but let me say one small thing, as a numerical thing, the underselling. Volume discounts, look at the red line there was a big volume discount in that. And if you look at the underselling that we see, keep in mind when you look at the underselling that much of that is going to reflect the difference in the volumes per sale. So, with that the customers to comment further on this.

MR. ROSSMANN: This is Sascha Rossmann of Winaico.

The issue why there is a lag behind is this is a time to market and other equipment problem for domestic makers, but here, for instance, there were -- maker we do not have the equipment to make a 72-pieces panel. So, it's not necessarily an efficiency problem from the solar cell point of view or the power point of view. It's equipment problems. So, if you don't have that equipment, you cannot make those kinds of panels.

So, domestic producers in the United States they do not usually have this kind of large-scale laminator can make a 72-pieces panel just like us. So, we cannot

participate in this market here in the U.S. in this market segment because we simply do have the equipment.

The other part is you have to have the certificate. So, in case of SolarWorld just recently they started to offer this product because since the takeover of the -- facilities they also took over the certificates and the equipment that allowed them to produce these products. So, now they have to ship those 72 panels from Germany to the United States because the equipment is in Germany.

So, maybe that helps you to understand it's not necessarily the efficient or panel technology, it's also you have to have the equipment and you have to have that at the right time.

COMMISSIONER SCHMIDTLEIN: Okay. Mr. Pal.

MR. PAL: Raj Pal from Sidley Austin.

You had asked before about where the evidence on the record is found.

COMMISSIONER SCHMIDTLEIN: Yes, that's where I'm trying to get to.

MR. PAL: I would point you to page 67 and 68 of CCCME's pre-hearing brief, and I believe Commissioner Williamson may have asked us to try to diagram where different producers were at different points in time to show the -- and that's precisely what these two pages attempt to do, going category by category, 60-cell multi, 72-cell

multi, 60-cell mono and 72-cell mono, based on the evidence that we were able to collect for the pre-hearing brief. You can see the lag.

On 60-cell multi, for example, at the start of the POI, the domestic industry was at 240 watts. The Chinese producers were at 250 watts. By the end of the POI, the domestic industry's maximum wattage, 60-cell multi module is a 255-watt panel, and Chinese producers are at 265 watts. On 72-cell multicrystalline modules, again, SolarWorld has never had this product. Apparently, a U.S. producer may have had very trivial quantities of that product, that's your Product 7, but it's certainly not available in any meaningful amount and certainly not by SolarWorld, which has claimed various lost sales and lost revenues on this category.

60-cell mono, again, at the start of the POI, based on the data we had, the domestic industry was at 250 watts. Chinese producers were at 265 watts. Perhaps by the end of the POI, the two may have been about the same level. And with regard to 72-cell mono, as you've heard, the product that SolarWorld offered earlier this year, in Q2 2014, it's their first 72-cell, 1,000-volt product. It's a mono product. It was at 310 to 315 watts.

Chinese producers have been offering 300 -- I'm sorry -- Chinese producers have been offering 310 to

315-watt multi product at this same time. And on mono, they're already ahead at 320, 325. So, these two pages of the brief --

COMMISSIONER SCHMIDTLEIN: Lay it out. Okay, that's very helpful. Can I just ask; I have one short question? One last thing on the pricing products, I just want to understand one other point that the Chinese Respondents make, that the pricing products should only include the U.S. cell producers. Correct? That's a point made in the brief.

MS. LUTZ: Jennifer Lutz, ECS.

I'm not a hundred percent sure if that was our argument. I think it's that the pricing data for the domestic modules does not break it out by country of origin of the cell, and there are a number of U.S. producers that produce using Taiwanese cells. So, in affect, you're counting it as a subject import and as a domestic product, which seems a little inappropriate.

COMMISSIONER SCHMIDTLEIN: Okay -- go ahead.

MR. PAL: Just to add, I think your point made was that the pricing products should ensure that the product specification matches the definition and also that the producers is not a related party that's excluded from the domestic industry. So, I think in the way the data were compiled in the staff report I believe there were certain

producers included in the domestic industry that supplied data that was either not consistent with the product definition or that were for producers that are related parties and therefore excluded from the industry.

COMMISSIONER SCHMIDTLEIN: Okay. Okay, so I think that clarifies my question about your position on that. Okay. Thank you. I'll stop there.

CHAIRMAN BROADBENT: Sure. Can someone help me out with what's going on with polysilicon and prices? Are there things in the solar cell market that are impacting polysilicon prices or other dynamics going on there?

MR. CANNON: The general trends.

CHAIRMAN BROADBENT: Sorry who's speaking please?

MR. CANNON: Sorry Joe Cannon, tenKsolar. When the solar market began to take off there was no policy or capacity in place many years ago to deal with that incredible uptick in demand and so you saw poly silicon prices go off the charts from I think spot prices in the formulas of kilogram range. So we usually go however, it turns out to be common in years across once the supply is just the market normal price is in the 20 and 30 dollar kilogram range it has been a commodity it's used in industrial processes around the globe and ask supplier didn't you adjust to the fact that there was a spike going on in the poly silicon market.

They did a poor job of investing, a poor job of planning and in fact many of the companies that you see in the record of having gone out of business even in the U.S. over the last few years, were really casualties of the fact that market dynamics changed so rapidly and they didn't understand that that was really a spike in the commodity price that was abnormal, thank you.

MS. JACOBS: Madame Chairwoman the staff actually covered this issue on page 5-2 of the staff report where they note that back in 2010 the prices went up high, still high in 2011 and they dipped considerably but by 2013 they basically stabilized at a much lower. They are up very slightly from earlier in 2013 compared to the current first half of 2014 but they have been pretty stable for a while but much lower than the prices we were dealing with back in 2010 and 2011.

CHAIRMAN BROADBENT: Okay.

MR. PAL: Rajib Pal from Sidley Austin. Also on that point on page 5-2 the decline of raw material costs is not just about price. Silicon, as you know, poly silicon prices stabilized in mid-2012 and as the staff report found you know prices for other raw material input such as silver paste, glass and aluminum also decreased during the POI. So when you put that all together and you look at the data on per-unit raw materials and per unit COGS, I think this is

how we started the question this morning, the trend in per unit raw materials and per unit COGS tracks extremely closely to trend in prices throughout the entire POI whether you look at it on the basis of the average net sales values in the industry's data or even on the basis of the individual pricing products.

And you know it's hard to conclude in that circumstance that subject imports, as opposed to raw material costs are the explanation for the declining prices.

MR. KOERNER: Thomas Koerner, Canadian Solar. You may ask yourself, where is this price decline poly silicon even coming from? Why is it suddenly from this brief and table dropping from 60, 65$ per kilogram down to the 20 level? Poly silicon manufacturing plant takes roughly 2 to 3 years for developing it, setting it up until it starts to produce so we have seen in 2007 and 2008 and 2009 a significant number of manufacturers investing into the latest and greatest technology to be able to produce on a low cost level. And that's what happened after 2010 and '11 that these new capacities, larger capacities with a lower cost per kilogram production cost level came online and able to supply the market and the entire value chain took this advantage, this lower cost from our till, turning that into a lower cost to sell and a lower cost per watt panel. So we may see an additional production cost

reduction in the next 2 to 4 years when even further silicon production coming online. So technologies are not standing still, they are further evolving, and this is the outcome of the latest and greatest threat to react to other silicon technologies we have in the market at this point.

CHAIRMAN BROADBENT: Okay Mr. Koerner could you tell me who the Petitioner is in Canada on the case that we heard was filed there?

MR. KOERNER: We can list the restricted small manufacturers in the after document.

CHAIRMAN BROADBENT: Is it SolarWorld in Canada do they have?

MR. KOERNER: No, SolarWorld is not, so we have companies like SoFab, Eclipson, Halian, Job, under the complainants.

CHAIRMAN BROADBENT: Yeah we are just curious as to who was doing that. Okay I think I am coming to the end of my questions here. I had just one hole in my understanding what is the wafer production in the U.S. is there much wafer production or none? Anybody have a sense and want to hazard a guess okay?

MS. SHAW: Sorry. Polly Shaw, SunEdison I was just going to volunteer that we are doing it, it's not wafers. We don't know of wafer production.

CHAIRMAN BROADBENT: Okay.

MR. SMIRNOW: John Smirnow Solar Energy Industries Association, no large volume wafer production. There's a company up in the Boston area called 1366 that has pilot production but not commercial scale.

CHAIRMAN BROADBENT: Okay, all right. Let's see Vice Chairman Pinkert?

VICE CHAIRMAN PINKERT: I have no further questions for the panel.

CHAIRMAN BROADBENT: Okay, Commissioner Williamson?

COMMISSIONER WILLIAMSON: Just one question for the post-hearing. Mr. Button I think you made the point that the extra costs of producing mono crystalline has increased relative to the efficiency difference between mono and multi and I think that was the point you were making.

MR. BUTTON: Commissioner, what I was saying was that it was the aggregate size of the difference in cost production was greater than the aggregate size of the efficiency benefits you have from mono crystalline. Then I think the additional question is that the gap between the mono efficiency and the multi efficiency is narrowing, and those two factors have the effect of making consumers all that much more you know interested in the multi crystalline solution as giving them the --

COMMISSIONER WILLIAMSON: I'm going to ask you to

do it post-hearing and to provide any evidence regarding production costs and efficiencies to support that point.

MR. BUTTON: Very good.

COMMISSIONER WILLIAMSON: Okay, yes sir, thank you that's all.

CHAIRMAN BROADBENT: Okay good we are all done before the sun came down at night we got finished here. Let's see the Commissioners have no further questions, does the staff have any questions?

MR. CASSIE: Madame Chairman the staff has no questions, thank you.

CHAIRMAN BROADBENT: Yeah I want to thank the staff for their detailed collection of data, this was a huge job and very impressive. With that I wanted to thank the -- oh I know I need to ask the Petitioners if they have any questions for the panel?

MR. BRIGHTBILL: Chairman Broadbent we have no questions.

CHAIRMAN BROADBENT: Okay, then I want to thank the panel and dismiss you now. With that we will come to closing statements and those in support of the Petition have 6 minutes from direct and 5 for closing for a total of 11 minutes and those in opposition have 6 minutes from direct and 5 for closing for a total of 11 minutes. As is our custom we will combine those, you don't have to take all of

your time and we will start with those in support of the Petition.

MR. BRIGHTBILL: Would you like us to come forward?

CHAIRMAN BROADBENT: Sure, please yes, I can dismiss the panel now. Please begin.

MR. KAPLAN: Thank you. Several points in rebuttal and then I'll hand it off to Tim. First the evidence shows that both mono and multi are used in all segments. SunEd, the self-described largest solar company in the world uses mono. The notion that mono is technologically impossible to use has been disproven by the Respondent's own panel.

Further Commissioner Schmidtlein pointed out that end users don't care about whether they use mono or multi and elicited evidence that the consumers don't even know and then asked well isn't it price. Mr. Ellis doing the best he could and being an honest person basically said yes.

Commissioner Pinkert then asked whether the shift to Taiwanese cells was due to the order, what followed was epic dissembling of something I haven't seen quite much at the ITC. I turn you to Exhibit 7, page 7 of Tim's exhibit the presence of the companies in China that these people represent admitted that they moved to Taiwanese cells so they could sell in the United States.

It's obvious. Commissioner Johanson pointed to the market share data, it's on page 8 look from 2011 in the pink to '12 to '13 of course they bought Taiwanese cells so they could evade the Order and get by. The fact that this wasn't admitted to me just calls into question any answers from those particulars witnesses.

This is not rocket science. Any casual observer can see what happened and it was admitted to by the presidents of those companies. Commissioner Mr. Ellis also seemed to imply that injuring U.S. R&D should be rewarded with an Order to the extent that R&D was injured that is a sign of injury, not a sign that there shouldn't be an Order to correct the situation.

Once again the chutzpah defense. Mr. Williamson, Commissioner Williamson showed record evidence that U.S. products are equal or superior to the products in question based on the Commission's own data in the questionnaire. I would point to the second to the last line if I believe I'm correct in that table on the first page where it asked about efficiency and it asks if U.S. was superior, equal or worse than China or Taiwan or third markets. Mostly it was comparable but in fact more said the U.S. industry was superior then inferior.

Commissioner Johanson asked a very pointed question, why does the domestic industry keep lowering

prices when they are losing money. Isn't it the imports? And the response was well you know Apple does that. Apple is the most profitable company in the world. The question asked why did people lower their prices when they are losing money and going bankrupt if it wasn't for the competition from imports. And the answer is there is no answer, of course that's why they lower prices and the effects of the order show that prices were stabilized and the domestic industry, even in these last six months have shown some improvement.

That concludes my rebuttal statements. I think your questions were very revealing and the lack of answers to those questions I think highlighted our case in chief, thank you very much.

CLOSING REMARKS BY TIMOTHY C. BRIGHTBILL

MR. BRIGHTBILL: Just to highlight several other points which we will also do in our brief with regard to scope you had two Taiwanese producers or witnesses who support Commerce's expanded scope proposal and said that it would be a more accurate reflection of China and Taiwan's dumping activities and that the ITC data would work well with that clarification of scope, that's very significant.

Also it was notable that the like product analysis sought by Taiwan and China is not taken a position on. With regard to SEIA's testimony we find it embarrassing

and disappointing that SEIA would testify about the fact that the U.S. industry doesn't have capacity of course we don't have capacity because of the harm that's occurred over the last 3 years.

I would also say Mr. Smirnow just called for a scope definition of the cases that would prevent the U.S. industry from addressing China's unfair trade practices on subsidies to modules, is that really what the U.S. Trade Association wants?

With regard does to does China have a better product it sounded like there were all those arguments today. Again Commissioner Williamson pointed out on wattage efficiency the U.S. product is comparable or better, that's what the staff found so China does not have a better product, Taiwan does not have a better product, we will outline in our post-hearing brief efficiencies that are comparable if not superior to those that presented this afternoon.

And interesting if we have such a bad product, if SolarWorld made such a bad bet it's interesting that so many purchasers said that they are on allocation from the domestic industry, something doesn't really add up there. With regard to mono and multi, an issue that we spent a lot of time on today, Commissioner Pinkert hit the point doesn't this suggest that multi should be growing instead of mono

and yet the only survivors in the U.S. industry are the large mono producers, that just shows that the hypothesis of Respondents doesn't hold water in this case, that's not surprising.

As Seth said SunEdison is mono, Taiwan ships significant quantities of mono, 30% according to the witness. Canadian Solar said that what they are going for is higher efficiency and lower cost, that's our argument for mono products, so this is not a mono versus multi issue. We have 72 cell mono modules in the 315, 320 watt and even higher range than that and will present that in our post-hearing brief.

Also with regard to mono versus multi I just have to emphasize the domestic industry is not SolarWorld alone. If you look at table 3-3 the staff compiled all the injury this is not bad bets of one company it must have been bad bets of everyone in the industry if they are out of business. We showed you that both mono and multi producers have been shut down and dumped in subsidized subject imports of the cost.

With regard to 72 cell product its dumped pricing that created the market for 72 cell products in the first place. It was a product of China's inability to follow others who were leading the way in efficiency so they created 72 cell. What Chinese Respondents are saying about

U.S. wattage versus Chinese wattage is inaccurate and we will look forward to putting that in our post-hearing brief.

Strata Solar admitted that SolarWorld now does have a 72 cell 1,000 volt mono module. We do have it and in fact our wattage is higher than what was pointed out this afternoon and SolarWorld will make that clear.

This is not a case of attenuated competition. The domestic industry competes head to head in all products, in all market segments. Keep in mind again this is a domestic industry some of which companies have gone out of business along the way but we have the capability until we were injured by subject imports to produce all of those products and the staff report backs us up on that.

With regard to prices being driven down and Mr. Ellis's reference to IPhone 5 versus IPhone 6 if that's true then how come United States is being undersold consistently by China and Taiwan, this you know, model going out of date, it is true, solar products get better every year, they become more efficient every year and that devalues inventory -- that is why China -- that's where dumping from China and Taiwan as well as they offload their old last generation products but regardless of last generation or current generation, we are being undersold by China and Taiwan as the staff has found.

With regard to ZEP frames, just to clarify and

Castulani said it SolarWorld does have a ZEP license, we just haven't used it because there's not that much interest in the market from our customers but we have the ability to manufacture when it's needed. I would also point out that Solar City was here but isn't here today, buys massive megawatts of solar panels from other companies that don't involve ZEP framing.

Just to return to some of the key quotes from this afternoon. I agree that the Commissioners raised some great points and found many of the inconsistencies in Respondent's presentations. Commissioner Pinkert asked whether the "evolution into Taiwanese cells wasn't that dramatically accelerated by the first trade case," obviously it was 6% market share compared to 85% market share is a dramatic acceleration and that's a sign of injury caused by subject imports.

Commissioner Johanson asked 2600% increase in imports, a gain of 75% points market share, why is that not significant? The only answer Respondents gave you was mono versus multi, that's all they had. Counsel said the market is demanding multi but the Taiwanese have plenty of that and what Mr. Ellis said is it's a cost effective product that is being sought. Cost effective means low price, low price in this investigation means dumped and subsidized product.

Multi is not inherently more cost effective than

mono unless you means cheaper dumped and subsidized imports. Like Commissioner Schmidtlein said people want the cheapest form of electricity, is price the most important factor, yes it is the most important factor.

And then Chairman Broadbent I thought wrapped things up nicely with one of her very first questions when she said no matter what label you call it subject imports increased in volume, there were price effects, negative impacts on the U.S. industry, this looks fairly straightforward to me. It looks fairly straightforward to us as well, thank you very much.

CLOSING REMARKS OF RAJIB PAL

MR. PAL: Thank you I'm Rajib Pal from Sidley Austin, for the Chinese Respondents. First off let me thank the Commissioners and the staff for their hard work and attention for what is now the fourth time discussing this industry. Although we are here for a fourth time we hope we have shown that the present record is quite different from the records in the prior investigations and that it's in large part thanks to the different questions that the Commission asked this time around.

Most importantly the veil that SolarWorld previously erected has finally been lifted on the critical distinction between multi crystalline and mono crystalline products in the market. During the current POI the U.S.

market demanded overwhelmingly multi products because they are less costly and almost as efficient if not as efficient as the mono products supplied by the domestic industry.

In most applications and especially in utilities which is now confirmed to be the largest segment of the U.S. market, high wattage multi modules make most finance sense unless mono modules output substantially more wattage which is not the case for domestic products despite their emphasis on mono. And the highest wattage multi modules, especially 72-cell multi modules are precisely what subject imports supplied.

Put simply the domestic industry bet on the wrong technology and the record now proves it. Throughout the day SolarWorld continued to blur the lines between mono and multi products and 60 cell and 72 cell products. For example, in Mr. Brightbill's opening slides, slide 9 presented the blended pricing for mono and multi modules which is meaningless given the known price premium for mono and the domestic industry's focus on mono. Mr. Johnson from SolarWorld also mentioned that SolarWorld makes 280 watt 60 cell modules and 320 watt 72 cell modules without specifying that these are mono products. He also said SolarWorld makes both mono and multi products without specifying that it's highest wattage, multi product is a 60 cell 255 watt module and SolarWorld has never offered a 72 cell multi product.

So what the record actually shows is that the domestic industry lags subject imports in offering the highest wattage products across the board. SolarWorld's ongoing claims to the contrary are belied by a detailed comparison of domestic and foreign product offerings.

Given this industry's economics, why for example, would a purchaser buy SolarWorld's 315 watt 72 cell mono module when they could buy less costly 315 watt, 72 cell multi or more efficient 325 watt, 72 cell mono.

Ultimately what this case is about is which technology can product the most electrons from a fixed surface area at the lowest cost. Think about it this way, if you want a bottle of filtered water and somebody is selling it to you at a dollar and I have different technology that can make it at 90 cents which one will you buy? You don't need to specify the filtering technology you want, but you would clearly prefer the technology that produces the lowest price bottle of water.

Moving on the present record also establishes that the domestic industry does not even come close to having capacity required to satisfy domestic demand. According to SEIA data, domestic PV installations in 2013 were almost 4.8 gigawatts. The record shows the domestic industry has only a fraction of that capacity and that conclusion does not change even factoring in domestic

producers that are no longer in business.

Moreover as Petitioner's panel mentioned, U.S. producers are making investments with a view to their future indicating that they do not perceive a threat from subject imports. Petitioner's panel kept pointing to the downwards trends in the domestic industry based on data on the record. However, in analyzing this issue, the Commission should bear in mind that the 2013 data cover only about one-third of the domestic industry based on the total production data reported by SEIA because the data compiled by the staff combine only partial data from the prior investigations.

Finally, unlike before the current record shows no evidence of price effects by subject imports. Meaningful underselling conclusions are not possible mainly due to the attenuated competition between imports and domestic products. Price depression is clearly explained by declining raw material costs and the inherent per watt price declines that result from the successive introduction of higher wattage modules with lower absolute input costs.

The domestic industry has not faced any cost price squeeze indicative of price suppression. On this I would like to recall slides 11 and 12 from Mr. Brightbill's opening remarks. Both slides present prices for 60 cell 230 or 235 watt multi crystalline modules but as you heard today 60 cell multi modules are now at 265 watts so what these

slides are presenting are prices for outdated products that are being sold in inventory clearance and therefore they are not indicative of underselling or price effects by subject imports.

I believe I heard Mr. Brightbill in his remarks right now just ask the question why are U.S. products being undersold if the foreign technology is better and more advanced? It's a matter of simple math as we discussed earlier. If you have got high wattages being produced by subject imports and input costs going down, you have got a lower numerator and a higher denominator. Naturally the higher wattage products will be priced lower on a per watt basis.

Let me close with a fundamental legal point. The trade remedies laws permit the imposition of duties only if the Commission determines that a U.S. industry has been materially injured or threatened with material injury by reason of dumped or subsidized imports. Here for the reasons just discussed and those discussed in our written and oral presentations, the current record plainly establishes that any injury suffered or threat of injury facing the domestic CS PV industry has not been by reason of subject imports, thus the Commission should issue negative final determinations, thank you.

CLOSING REMARKS OF WALTER SPAK

MR. SPAK: Commissioners my name is Walter Spak from the Taiwan industry. I know you can see from today's testimony in both of your questions that the focus of this case is on modules. When asked by several of the Commissioners to describe the situation related to modules and cells, Petitioners only talk about modules.

Why is that? It's because they don't produce for commercial basis cells. From today's testimony we can see that Taiwan is a cell industry, I think you could also tell from the testimony today that everyone recognizes that Taiwan is the world's commercial leader in the supply of solar cells. Taiwanese industry produces high quality.

It seems like today we also heard at least from our side that SolarWorld might benefit from purchasing some of those cells because they do produce the types of cells which are the high efficiency cells that the world is demanding. Cutting off the supply of Taiwan cells to the United States makes little economic sense. It could be a disruption in growth of the solar energy industry in the U.S. and many of the companies who don't produce their own cells would like to assemble modules in the U.S. will have to turn to other sources and not get the same type of high energy, high quality cells.

Taiwan industry produces cells because as we have heard that is what they do best. By focusing on cell

production we heard how they remain at the forefront of cell technology. That is what they do, they do cells. All of their R&D is in cells. We also heard why they don't focus on module production they simply "do not want to compete with their customers", it makes sense. In fact almost all of the module production in Taiwan is destined for local market or for OEM production primarily for Japan.

Brick shipments of modules to the United States is miniscule. Petitioner throughout the presentation always mentions China and Taiwan as if they were somehow one industry however China, like the U.S. is a customer producer. They are both customers. The Taiwan producers do not compete with the China module producers, they don't compete with the U.S. module producers. Again, they simple do what they do best they produce the highest quality cells and sell them to module producers around the world including the U.S. They can't be a cause of injury to the U.S. producers.

In fact they are a source of a very valuable input to modular assemblers in the U.S. I would like to have Jay just talk for a moment.

MR. CAMPBELL: This is Jay Campbell, also on behalf of the Taiwan industry. I just want to make one quick point regarding cumulation. We are arguing that Taiwan should be decumulated, this is a legal argument. Mr.

Brightbill was asked for his response to our argument and his response was quite interesting because it was very evasive. He ignored the key operative language in the cumulation provision.

Mr. Brightbill stated that cumulation is required or the Commission is required to cumulate subject imports when the Petitions are filed on the same day and there is a reasonable overlap of competition, but that's not what the statute says. What it actually says is the Commission is required to cumulate imports of the subject merchandise from all countries when the Petitions are filed on the same day and there is a reasonable overlap of competition.

This key language, the subject merchandise from all countries when read in conjunction with the statutory definition of the subject merchandise requires a common scope. There is not a common scope in this case and our statutory interpretation is also supported by the legislative history and we will elaborate on this in our post-hearing brief, thank you.

CHAIRMAN BROADBENT: I want to express the Commission's appreciation for everyone coming here today. Closing statement, post-hearing briefs, statements responsive to the questions or requests of the Commission and corrections to the transcript must be filed by December 15, 2014. Closing of the record and final release of data

to the parties will be on January 12, 2015. Final comments are due January 14, 2015 and with that this hearing is adjourned.

(Whereupon hearing adjourned at 5:04 p.m.)

CERTIFICATE OF REPORTER

TITLE: In The Matter Of: Certain Crystalline Silicon Photovoltaic Products from China And Taiwan

INVESTIGATION NOS.: 701-TA-511 and 731-TA-1246-1247 (Final)

HEARING DATE: 12-8-2014

LOCATION: Washington, D.C.

NATURE OF HEARING: Hearing

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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