OFFICE OF THE UNITED STATES TRADE REPRESENTATIVE

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SECTION 201 PUBLIC HEARING

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EXTENSION REVIEW OF SAFEGUARD ACTION ON CRYSTALLINE SILICON PHOTOVOLTAIC PRODUCTS

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TUESDAY
JANUARY 4, 2022

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The Section 201 Committee met via Video Teleconference, at 9:00 a.m. EST, Will Martyn, Chair, presiding.

GOVERNMENT PANEL

- WILL MARTYN, ESQ., Chair; Chief Counsel for Negotiation, Legislation, and Administrative Law, Office of the United States Trade Representative
- LAURIE-ANN AGAMA, Deputy Assistant United States
 Trade Representative for Economic Affairs,
 Office of the United States Trade
 Representative
- ALEXANDER AMDUR, Director, AD/CVD Policy and Programs Division, Office of Trade, U.S. Department of Homeland Security, U.S. Customs and Border Protection
- HEATHER BOUSHEY, Ph.D., Member, Council of Economic Advisors
- MICHAEL GAGAIN, ESQ., Assistant General Counsel,
 Office of the United States Trade
 Representative

- MONICA GORMAN, Ph.D., Deputy Assistant Secretary for Manufacturing, International Trade Administration, U.S. Department of Commerce
- MAUREEN GREWE, International Economist, U.S. Department of the Treasury
- BECCA JONES-ALBERTUS, Ph.D., Director, Solar Energy Technologies Office, Energy Efficiency and Renewal Energy, U.S. Department of Energy
- RACHEL HASANDRAS, ESQ., Assistant General Counsel, Office of the United States Trade Representative
- KARI HEERMAN, Ph.D., Senior Economist, Council of Economic Advisors
- AMY KREPS, Director for Environment and Natural Resources, Office of the United States Trade Representative
- VICTOR MROCZKA, Director of Trade Remedies and Competition, Office of the United States Trade Representative
- PATRICIA MUELLER, International Economist,
 Office of the United States Trade
 Representative
- OLIVIA NEGUS, International Relations
 Specialist, U.S. Department of Labor
- WILLIAM SHPIECE, Chief Economist, Acting
 Assistant United States Trade Representative
 for Trade Policy and Economics, Office of
 the United States Trade Representative
- CARTER WILBUR, Acting Director, Office of
 Multilateral Trade Affairs, U.S. Department
 of State

PANEL ONE

TOM BELINE, ESQ., Cassidy Levy Kent
MATT CARD, President & CEO, Suniva
ELIZABETH DRAKE, ESQ., Schagrin Associates
ANDREW MUNRO, ESQ., General Counsel, Hanwha
SCOTT MOSKOWITZ, Director, Market Intelligence
and Public Affairs, Hanwha
DIANA QUAIA, ESQ., Arent Fox

MAMUN RASHID, CEO, Auxin Solar

PANEL TWO

AARON HALL, CEO, Borrego

ABIGAIL HOPPER, President & CEO, Solar Energy Industries Association

MATTHEW NICELY, ESQ., Akin Gump

JAMIE RESOR, CEO, EDF Renewables

GEORGE HERSHMAN, CEO, SOLV Energy

MEGHAN NUTTING, Executive Vice President,

Government & Regulatory Affairs, Sunnova

VANESSA SCIARRA, Vice President, Trade & International Competitiveness, American Clean Power Association

RON REAGAN, Executive Vice President,
Engineering, Construction, and Integrated
Supply Chain, NextEra Energy

PANEL THREE

VINCENT AMBROSE, General Manager, Canadian Solar PAOLO MACCARIO, President & CEO, Silfab JOHN R. MAGNUS, President, TradeWins MARTIN POCHTARUK, President, Heliene

JONATHAN STOEL, ESQ., Hogan Lovells

PANEL FOUR

ANNIE OUELLET, Counsel for Trade Policy,
Government of Canada

CESAR REMIS, Head, Office for the Implementation of the United States-Mexico-Canada

Agreement, Government of Mexico

SON BUI, Minister Counselor, Head of Trade
Office, Government of Vietnam

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P-R-O-C-E-E-D-I-N-G-S

9:00 a.m.

CHAIR MARTYN: Good morning and welcome. My name is Will Martyn, and I am the Chief Counsel for Negotiation, Legislation, and Administrative Law at USTR. I will be chairing today's hearing.

The purpose of this hearing is to receive public testimony relating to the appropriateness of extending the safeguard measure on crystalline silicon photovoltaic products and the action to be taken should the safeguard measure be extended.

Before we begin the hearing, I will provide some procedural and administrative instructions and introduce the other Trade Policy Staff Committee representatives participating in the hearing today. We will then proceed with the remainder of the hearing.

On January 23rd, 2018 the President, pursuant to Section 203 of the Trade Act of 1974, issued Proclamation 9693 imposing a safeguard

measure on imports of CSPV products in the form of a tariff rate quota on imports of solar cells not partially or fully assembled into other products and an increase on -- in duties on imports of modules. The measure took effect on February 7th, 2018 for four years, a period that ends on February 6th, 2022.

On October 10th, 2020 the President issued Proclamation 10101 which made certain modifications to the safeguard measure announced in Proclamation 9693. First, it withdrew an exclusion previously granted by USTR for bifacial panels. Second, it modified the applicable duty rate during the fourth year of the safeguard measure from 15 percent to 18 percent.

Proclamation 10101 has been subject to litigation before the Court of International Trade, and on November 16th, 2021 the court invalidated Proclamation 10101.

Meanwhile, on August 6th, 2021, following the receipt of petitions filed by members of the domestic CSPV industry, the U.S.

International Trade Commission instituted an investigation to determine pursuant to Section 204(c) of the Trade Act whether the safeguard measure continues to be necessary to prevent or remedy serious injury and whether there is evidence that the domestic industry is making a positive adjustment to import competition. That notice is at 86 FR 4403 of August 12th, 2021.

On November 24th, 2021 the ITC made an affirmative determination pursuant to Section 204(c) and on December 8th, 2021 the ITC transmitted its report to the President. As a result, the President now has authority under Section 203(e) of the Trade Act to extend the duration of the safeguard measure on CSPV products if the President determines that the safeguard measure continues to be necessary to prevent or remedy the serious injury and that there is evidence that the domestic industry is making a positive adjustment to import competition.

On September 30th, 2021 USTR on behalf

of the TPSC announced a process so that in the event of an affirmative determination by the ITC interested parties may submit views and evidence on the appropriateness of extending the safeguard measure and action to be taken should it be extended. That announcement in the Federal Register also invited interested parties to a public hearing regarding this matter.

On December 15th, 2021 certain members of the public submitted views and evidence on these questions and requested to testify at this hearing. We received rebuttal submissions from certain members of the public on December 22nd, 2021. All public versions of written comments are available for viewing on the regulations.gov website under docket No. USTR-2021-0017.

Today we will consider testimony from those who have requested to testify at this public hearing. The TPSC will carefully consider this testimony as well as all written comments received in preparing a recommendation to the President as to what action the President should

take under Section 203 of the Trade Act.

The schedule for today's public hearing is on ustr.gov. In brief, we have four panels comprising a total of 17 participants scheduled to testify today. We will have a brief break between panels to let the participants situate themselves. We will also have a longer break for lunch between the second and third panels. We will end the hearing with a few concluding remarks.

We have assigned each panel a time limit for oral testimony. With the exception of the fourth panel the participants on each panel have determined among themselves how to allocate their time. The TPSC has also circulated advanced written questions to the participants in each panel -- someone is not mute and probably needs to be.

The participants on each panel have determined among themselves how to allocate their time. The TPSC has also circulated advanced written questions to the participants on each

panel with instructions to them to address those questions in the testimony or be prepared to respond to them in a question and answer session following each panel. TPSC representatives may also raise follow-up questions at that time.

As we communicated by email to the participants on December 22nd, 2021, the TPSC will not consider new factual information during this hearing. We do not at this time plan to ask for or accept post-hearing submissions.

If a participant is having technical issues, please let us know. I'd also like to note that we had expected to do the USTR side of this hearing from our offices. That was not possible because of the snow, so we may be experiencing some technical interruptions for some of the participants, so please bear with us if we need to correct those. I will also warn you that I have some work going on in the house and it is possible that construction noise will interrupt at some point and I apologize for that if that happens.

Having said that, my colleague Michael Gagain will now review some technical details.

MR. GAGAIN: Good morning everyone, and thanks, Will.

As Will mentioned, my name is Michael Gagain. I'm an assistant general counsel here at USTR. I'd like to first introduce my other colleagues at USTR. As I call out your names please feel free to briefly turn on your cameras to make yourselves known. And if you're not speaking during the hearing, please turn your cameras off just to conserve bandwidth.

So, in addition to myself we first have Rachel Hasandras who is an assistant general counsel in OGC. We also have Victor Mroczka, Director of Trade Remedies and Competition. We have Amy Kreps, Director for Environment and Natural Resources. We have Bill Shpiece, who's our chief economist and the Acting Assistant U.S Trade Representative for Trade Policy and Economics. We have Laurie-Ann Agama, Deputy Assistant U.S. Trade Representative for Trade

Policy and Economics, and Tricia Mueller, an international economist. Finally, our timekeeper today who is graciously helping out is Ronalda Smith.

Now I'm going to introduce our colleagues from the interagency. Again, I invite them to briefly turn on their cameras as I introduce you to make yourselves known.

First and foremost, from the Council of Economic Advisors we have Dr. Heather Boushey, member of the CEA. Filling in in certain points is Kari Heerman, also from the CEA. From the U.S. Department of Commerce, we have Dr. Monica Gorman, who is the Deputy Assistant Secretary for Manufacturing in the International Trade Administration. From the U.S. Department of Energy, we have Becca Jones-Albertus, who is the Director for Solar Energy Technologies Office, Energy Efficiency and Renewable Energy. From the U.S. Department of Homeland Security, U.S. Customs and Border Protection we have Alexander Amdur from the AD/CVD Policy and Programs

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Division, Office of Trade. From the Department of Labor, we have Olivia Negus, who's an international specialist. From the Department of State, we have Carter Wilbur, who is the Acting Director of Office of Multilateral Trade Affairs. And finally, from the U.S. Department of the Treasury we have Maureen Grewe, who is an international economist.

Good morning to all of you.

Now that we've made these introductions we will proceed to hearing testimony from our first panel who are the proponents of extending the safeguard measure on solar products.

On Panel 1 we have representatives from three companies: First Auxin Solar, Incorporated; second Suniva, Incorporated; third Hanwha Q Cells USA. And we'll proceed in that order.

The three participants have a combined 60 minutes to provide testimony. They have previously communicated that they will each

provide 20 minutes of testimony. As indicated, 1 2 Ronalda from USTR will indicate on her video when you have two minutes, one minutes, and no time 3 4 remaining. We will keep your time as each of you 5 testify. Can someone confirm that you are all 6 ready from Panel 1? 7 8 MR. RASHID: Yes, Auxin Solar. I'm 9 here. 10 MR. GAGAIN: Okay. Great. So, we'll 11 begin with you, Auxin. And as you proceed we 12 request that you identify your name and title so 13 that our court reporter can capture that. 14 then following the panel, as indicated in the schedule, we'll have a Q&A session. 15 16 So, Auxin, if you're ready, please 17 proceed with your testimony. Thank you. 18 MR. RASHID: Good morning. My name is 19 Mamun Rashid. I'm the CEO of Auxin Solar. Along 20 with my business partner Sherry Tai, Auxin Solar 21 is a minority and woman-owned business.

and I co-founded the company in 2008. Since that

time, we've been providing high-paying jobs to our employees. We've been committed to producing American-made solar panels.

Auxin Solar produces 60 and 72 cell solar modules for use in all major product segments: utility, commercial, and residential. Since 2016 we have produced bifacial panels. At that time our bifacial panels were used in major utility-scale projects. One example is by Georgia Power at the football stadium in Atlanta, Georgia.

We admit that we're not a large module producer and our company may not sound familiar to you because we largely produce OEM modules or white-label products that bear our customers' brand logos, but our size, our bifacial production, and our channel of distribution makes this safeguard so important to Auxin. Its extension is necessary for us.

I know you issued a list of questions to the parties and I appreciate the opportunity to answer them with my testimony. I will note at

the outset that I was disappointed that none of your questions addressed the important topics of American's solar energy independence, security of our electricity grid, or the benefits of having an American manufacturing base for the entire CSPV supply line. I hope to expand upon some of the topics in addition to your written questions and explain why these issues necessitate extending the safeguard.

As I testified before the International Trade Commission, Auxin has benefitted from the safeguard. The safeguard helped us expand our production in 2019 and employ many more workers at our facility, but we know what we can do -- we know we can do so much more with the safeguard extended.

As we have told the International Trade Commission and many at the Department of Commerce Department of Energy, and here at USTR, we have plans to expand even further in intercell production. Our facility is located on 6.5 acres and we've built it out to allow for

additional expansion. We also have options on green field space in Northern California. We are poised to proceed, but implementing these plans requires the right economic and policy environment to justify the necessary investments.

I'll be 100 percent honest with you,
I'm not satisfied with where we are in our
investment plans at all. We should be further
along. We should have been able to re-shore a
substantial portion of our bill of materials by
now. We should be operating at full capacity,
but we're not as the ITC found head winds facing
us.

The head winds facing us as well as the rest of domestic industry were too significant. These factors included the bifacial exclusion. That exclusion resulted in foreign producers shipping massive volumes of fake bifacial panels for use in residential and commercial applications. We also faced import stockpiling and of course COVID-19.

If the safeguard is extended -- and

extended in the period when bifacial modules are covered, and we have covered -- and we have recovered from COVID-19, we have high hopes for what can be accomplished, but it takes time to bring these investments on line, execute a strategy and see a return on investment.

We don't have a state-sponsored industrial policy like China that has created the Chinese manufacturing base to produce more CSPV products than there is global demand. Chinese industrial policy helped industries set up new factories outside China in countries like Cambodia, Thailand, Vietnam, and Malaysia to avoid fairly trading their products.

The Chinese state-sponsored supply chain fueled these moves and Belt and Road money greased the skids. If we want to have a manufacturing base for solar products here in the United States, the safeguard needs to be extended for as long as possible. And to be clear, there is no reason to believe that a four-year extension of the safeguard will have a

detrimental effect on solar installation.

During the first four years of the safeguard solar deployment has skyrocketed, solar manufacturing and installation employment has increased and prices continue to decline, so this sky is falling claim that tariffs will have a negative impact on the market, on consumers, and on the world is simply not true. These arguments have been repeatedly rejected by the ITC. The investments we make today will make a long-term impact for America's energy independence, the security of our electricity grid and our manufacturing sector.

Your second question to all parties identified COVID-related supply chain disruptions and labor shortages that could potentially impact installations of CSPV products, but this is the wrong way to look at it. It presumes problems associated with importation. With the right policies in place long-distance transportation costs and international supply chain disruptions can be a thing of the past. We can also be free

from supply chain manipulation.

The biggest risk to the CSPV supply chain and installations are not COVID or labor issues. These logistical problems are temporary and experienced by everyone across the board. The biggest risk to the supply chain is continued reliance on China. At this time China controls the world's production of polysilicon ingots, wafers, and cells, all inputs needed for a CSPV module.

China produces 96 percent of the world's silicon wafers and that dominance allows them to force cell and module producers to replace their equipment to be able to utilize a near-constant stream of wafer size changes.

Right now, we're making a substantial capital investment to bring on line new machinery because Chinese wafer producers have changed the form factor. This is commonly referred to as the wafer size.

These changes are absolutely not new technology. In fact, a very little -- the larger

wafer sizes actually result in less efficient

power generation because the wafers are too big

to accommodate certain module sizes, meaning that

module producers need to cut wafers themselves to

fit.

So why did the Chinese wafer changes
-- wafer suppliers change the form factor? I
believe it's to continue their dominance of the
supply chain and to make companies like Auxin
bleed money to bring new production equipment on
line. In 2021 we were forced to spend tens of
millions of dollars on new equipment upgrades to
adjust to the new form factor. We'd just spent
millions to bring back -- bring brand new
equipment on line in 2019.

If the safeguard is extended as the ITC recommended and without any exclusions, I believe we will be able to bring cell and wafer production back on shore. Domestic polysilicon producers have come back on line and are looking for a market. We will then re-shore our bill of materials. We'll once again have a vibrant

industry that can focus its collective resources on innovation, returning America to the forefront of the solar energy long term. This should be the vision for domestic solar manufacturing.

Once we have the supply chain back on line here in the United States we can safely say that

America will be green energy-independent.

My vision requires us all to pay a little back -- a little bit. Look, Auxin is a module manufacturer, yet we fully support the unanimous recommendation of the ITC including its recommendation on cells. Given the projections for consumption of cells and given the ITC's recommendation for quarterly quotas on cell import volumes we know that our costs may increase in the short term. We don't have foreign ownership and we don't have private equity, but we are okay with the result of increased costs.

The only way to promote domestic cell production is to actually apply the safeguard remedy to cells. Because the quota on cells is

so large, this has yet -- not yet happened. With cells subject to the safeguard there will be an incentive to source cells from domestic suppliers. Domestic cell production, wafer and ingot production should be far behind. We project that wafer ingot production could come on line within a calendar year. This is largely because the domestic polysilicon suppliers like REC, Wacker (phonetic), and Hemlock are looking for a customer base.

This is my response to your first question to us. The market conditions are very different from the last four years. The domestic cell production is (audio interference) and not just a possibility.

Auxin has been around since 2008.

Before that I was producing microchips and semiconductors. I know well that investments in industries like (audio interference) years to pay off, but we need to counteract the Chinese dominance of the solar supply chain for our energy security. And make no mistake about it,

China's dominance of the solar supply chain is a matter of national security.

We should be asking ourselves whether we want the Chinese to control our electricity grid, we should be asking ourselves if the Chinese will stifle our ability to meet our ambitious carbon-neutral goals, and we should be asking ourselves -- we should be asking for (audio interference) on the back of forced labor and coal-fired power plants, and intellectual property theft.

rom my perspective I'd much prefer a vibrant innovative domestic American-made electricity grid. In this regard some of the questions we received seem to channel arguments that America needs cheaper and cheaper imports to support its transition to clean energy even if that means we're gutting the promise of a U.S.-based supply chain.

Thanks to the safeguard America has already made partial progress with firms like

Auxin increasing our module production footprint

and companies like Q Cells and LG investing in American manufacturing. With an extended safeguard and no exclusion there is great potential for the American-made industry to once again be an innovative force in the market free from Chinese manipulation and able to source its cells and upstream inputs domestically. We believe in American manufacturing and we believe that Auxin Solar is a key part of that.

American energy independence and safeguarding our national security are only possible if the extended safeguard is robust and free of loopholes. I cannot overstate the devastating impact of the recent decision by the U.S. Court of International Trade overturning the removal of the bifacial exclusion. An extended safeguard that fails to include bifacial modules is utterly worthless. Doing nothing on bifacial modules tells the world that the United States intends to be reliant on foreign production to meet its clean energy goals.

When this (audio interference) was

first granted USTR was grossly misinformed by companies driven by a desire to circumvent the safeguard remedy and buy cheap imports. Auxin is a small company and we do not have lobbyists in Washington. I was shocked to learn companies such Sunpreme told the administration it was not aware of any production of bifacial modules in the United States. Auxin was producing (audio interference) cell bifacial modules for Sunpreme during the same period.

Based on the false and misleading statements concerning a lack of domestic bifacial projection -- production, President Trump excluded bifacial panels from the safeguard remedy. Foreign producers quickly took advantage switching their monofacial module production to bifacial almost overnight. Other foreign producers identified work-arounds by adding clear back sheets to make the bifacial usable on residential and commercial jobs just to qualify for this exclusion.

Prices quickly crashed. Bifacial

imports replaced most monofacial imports and soon we were unable to cover your raw material costs. Our vibrant bifacial business largely disappeared due to cheap imports. Both ITC and the former president eventually recognized the mistake, which is why the exclusion was removed, but now the bifacial exclusion (audio interference) putting everything in jeopardy. And in this proceeding companies again advanced the same misleading arguments. These arguments were false four years ago and they're false today. We cannot stay silent anymore.

Auxin, as one of the first innovators of the bifacial panels, has a proven history for -- of supplying bifacial panels to both utility and commercial settings.

To your third question to Auxin, Auxin absolutely has the capacity to produce bifacial modules for utility-scale projects. More than that, Auxin has produced bifacial modules for utility-scope projects. As shown in Exhibit A to our comments, Auxin provided Georgia Power, a

utility, with bifacial panels to power the Mercedes Benz Stadium in Atlanta, Georgia. When the project was completed in 2017, the stadium had the largest voluntary renewable portfolio in the country.

Auxin has produced 72-cell bifacial panels for large-scale projects including the JP Morgan Chase McCoy Center in Columbus, Ohio, which is the largest commercial rooftop installation of bifacial solar modules in the world.

Auxin has a proven track record of producing large-scale solar projects. I will note that none of the companies requesting an exclusion for bifacial modules have contacted Auxin. The administration should not exclude bifacials from the safeguard based on the say-so of these companies when these companies have made no effort to source bifacials domestically.

We could use the work. My engineering team is standing by for a call. Give us an order and we can quickly scale up production provided

the exclusion is terminated.

Now I'd like to quickly turn to the exploitation of the bifacial loophole. Without question bifacial panels make sense in the utility segment and often in the commercial segment as well because they offer certain efficiencies due to their ability to absorb light from both sides of the panel. However, in the residential segment there's no reason to install a bifacial panel except to avoid tariffs to pay a lower price. This is exactly what we have seen firsthand.

Your seventh question to Auxin asks for examples. I direct you to Exhibit A of our comments which references several examples of foreign manufacturers advertising bifacial panels that they have altered by using clear back sheeting making them lighter and more suitable for rooftop residential installs where only one side of the panel is in use.

In fact, the video by Jinko, cited at footnote 51, boasts of the various applications

of its lighter weight bifacial panels including on the sun room of a home. This is circumvention plain and simple. Bifacial is just one example, but if any additional exclusions are granted like countrywide exclusions I fear they will also become a back door to evade the safeguard.

Sherry and I have put our own money into this company. Remarkably because of the recent court decision concerning bifacial panels we're having to work with our lenders to ensure that the necessary capital loans for the equipment upgrades I told you about are not pulled back.

When the wrong-headed decision came out we were very far along in capital equipment purchases to expand production to accommodate the new form factors. We spent our Christmas week trying to explain to our lenders that the bifacial loophole would be closed once again. When the decision came out we were also ramping up production for two customers who were forced to come back to us to ask for price concessions.

When we are only covering our costs because of import pricing there comes a point where we cannot provide further discounts. We have to pay our employees, we have to keep the lights on, and we have to be able to bring new equipment on line to deal with China's predatory change in form factors. After withstanding China -- the Chinese predatory behavior for 13 years I refuse to let a single judge put Auxin Solar out of business.

These are real world examples in response to your fourth question to Auxin of how the safeguard being only a temporary measure has direct impact on Auxin's ability to obtain capital for investments and customers to buy your products. The bifacial loophole needs to be closed once and for all.

You can probably tell from my comments that I'm frustrated. I'm frustrated by the misinformation from opponents of U.S. manufacturing, I'm frustrated by the addition to cheap Chinese solar-made -- solar panels, I'm

frustrated by the head winds we've had for the first four years of the safeguard, I'm frustrated that our business plans have not fully come to fruition, but let me (audio interference) that I'm also hopeful. Every day I work on the plant floor with our employees and (audio interference) together. We find solutions for customers together. We produce to custom specifications, every day a new challenge.

Sherry and I are living the American dream of owning a business and manufacturers in America. We may be small, but we're in it for the long haul. Our hope in many ways relies on you. We're confident that you'll be providing good advice to the President and that President Biden will take strong and decisive action to extend the safeguard in accordance with the unanimous bipartisan recommendation of the International Trade Commission.

I look forward to answering any additional questions you might have. Thank you.

MR. BELINE: For the record this is

Tom Beline with Cassidy Levy Kent. I'm joined by my partner Jack Levy. With the last couple of minutes that we have left of Auxin's testimony we just wanted to highlight a few things for the TPSC.

I think you heard from Mr. Rashid that the bifacial exclusion must be terminated if the safeguard remedy is to have any impact whatsoever on the market. We've provided in our detailed comments various different ways for the administration to address the bifacial exclusion, the first being primarily through this extension process you have the authority.

The second is through the circumvention provision which allows you to take decisive action to include by the way ratcheting up any coverage contrary to what Judge Katzmann seems to think the statute requires.

And third, one thing that bears
mentioning here is that all agencies; and this is
well-held Supreme Court precedent, all agencies
have inherent authority, inherent authority to

correct mistakes. What you've heard from Mr.

Rashid's testimony is that four years ago when

the bifacial exclusion was being talked about by

these same parties they were lying. They were

giving you false and misleading information that

nobody domestically was producing bifacial cells.

One of the specific parties requesting the

exclusion was sourcing bifacial panels from Mr.

Rashid's firm at Auxin Solar. If that's not a

bald-faced lie that requires decisive action

through the use of inherent authority, I don't

know what is.

And so, we're respectfully requesting that you take this opportunity to reflect on the testimony you've heard from Mr. Rashid. Auxin Solar is facing significant head winds as a result of the bifacial decision and an extension is therefore necessary. And with that we look forward to answering your questions further and we'll turn the presentation over to Suniva and its representatives. Thank you.

MR. GAGAIN: Thank you very much,

Auxin Solar. Yes, and we'll now hear from 1 2 Suniva. Suniva, are you ready? 3 4 MR. CARD: We're ready. Thank you. 5 All right. MR. GAGAIN: Please 6 proceed. Thank you. Good morning. 7 MR. CARD: It's my 8 honor to appear before you again. My name is 9 Matt Card and I'm the president and chief operating operator for Suniva, the Georgia-based 10 manufacturer of solar cells and one of the 11 12 original two co-petitioners in the 201 13 investigation. 14 We've co-petitioned with Auxin Solar 15 here today on the extension because we share a common vision for America that one includes both 16 17 solar cell manufacturing and solar module 18 manufacturing that uses domestically-made product 19 and we appreciate Auxin's support in this. 20 As you're aware on December 9th the 21 ITC unanimously recommended that the 201 22 safeguards be extended for four years and they

unanimously recommended that the in-place 2.5 gigawatt solar cell TRQ be kept flat. Further, there was near unanimity that step-down rate on tariffs for both modules and cells be almost as slow as practically possible at a rate of 2.5 percent annually.

Clearly, we agree with the ITC. The President needs to maintain a strong remedy that allows the domestic solar industry to fully recover from the impact of being of being targeted for extinction by foreign producers and their supporting governments.

While the 201 is a global action at the heart of the problem continues to sit China. Over the last decade-plus the Chinese government has used every tool available to them to target the U.S. solar industry and achieve dominance in the U.S. market including the Chinese industry dumping Chinese government-subsidized solar products into the U.S. market, the Chinese government facilitating the use of forced labor within its solar supply chain, the Chinese

government aiding its industry in establishing manufacturing operations in third countries to try to evade the original U.S. trade remedies, and then bragging about their success in doing so.

Based on her public statements in October it appears that Ambassador Tai also understands the severity of the problem. I quote from her remarks: We see the impact of China's unfair policies in the production of photovoltaic solar cells. The United States was once a global leader in what was then an emerging industry, but as China built out its own industry our companies were forced to close their doors. Today China represents 80 percent of global production and large parts of the solar supply chain don't even exist in the United States. End her quote.

But as a result of the 201 remedies our industry has started to rebuild. Instead of two companies fighting desperately from the edge of extinction you now see before you multiple companies fighting to grow even as they fight to

survive.

Suniva has exited bankruptcy and despite huge head winds over the last four years we continue on our path to restarting the largest solar cell manufacturing facility in the United States. As you know, we've invested tens of millions of dollars to date in the journey to restart. Suniva's restart is important to our collective dole of ensuring that America is not completely dependent on foreign manufacturers for its solar supply.

However, the safeguard has not been able to achieve its full goal because of significant head winds such as the exclusion for bifacial modules, COVID, and frankly, the exceptionally high TRQ granted for imported solar cells established by the prior administration.

In its reports the Commission noted the harsh impact of the bifacial exclusion on the solar manufacturing industry at large. The impact was especially severe on Suniva as it occurred just weeks after we exited bankruptcy

and the immediate impact, as we submitted to you before, of the exclusion was to halt investor discussions.

Litigation brought by the same stakeholders that have profited from, and even abetted the efforts of the Chinese government, allowed that massive loophole to eat away approximately 18 months, almost half of the entire safeguard period.

These efforts of opposition were a cynical attempt to simply run out the clock on the 201 safeguards, and sadly they were very effective. Like the Chinese government these stakeholders questioned the U.S. Government's will to reestablish its industry and simply are looking to regain their ability to profit from the demise of U.S. manufacturing. However, those parties, some of which will speak as respondents today, cannot run from the history of their words and actions.

When asking USTR for the bifacial exclusion respondents asserted that bifacial

solar modules were just an emerging product with low market share, that they would not be disruptive to the overall market, and on that basis urged the prior administration to exclude bifacial modules from the safeguards. However, during this extension process respondents told the ITC a very different story.

Respondents have now testified to the ITC that even before the exclusion was provided they were importing bifacial modules in substantial quantities and that bifacial was already becoming the mainstay of their businesses. Obviously, both of these claims cannot be true, and yet respondents have uttered both of them repeatedly and at times under oath.

Shortly after the midterm reviews and well before the bifacial exclusion was temporarily resolve the nation entered a period of disruption of historic proportions with the onset of the COVID-19 pandemic. For a manufacturer like Suniva looking to add the final piece of investment capital to restart operations

the impact of the pandemic was significant.

Outside investment capital for manufacturing understandably dried up. This was a head wind no one anticipated and it tragically touched on more people than just solar manufacturers, yet the impact to our industry was harsh and it severely undermined our ability to benefit from the safeguard.

In short, the bifacial exclusion and COVID combined for a one-two punch that muted well over two years of the total safeguard period introducing uncertainty that made it significantly harder for Suniva and other publicly-announced new entrants to source capital. Like our peers and like the ITC, we believe the safeguard is still needed and must be extended for an additional four years allowing the industry to continue to grow and provide the necessary runway for new plants to ramp and scale.

We join with other domestic manufacturers here today and ask that the tariff

on imported modules continue and it does so at a step-down rate of 0.25 percent, as recommended by the ITC. This will continue to address the needs of both cell manufacturers and module assemblers.

However, as the ITC has clearly found and documented, the remedies have had little benefit for the American cell manufacturing industry because of the exceptionally high TRQ put in place by the previous administration.

Others on this panel argue that the TRQ must be increased to ensure the continued growth of the domestic module assembly industry, however the module sector has grown precisely because of tariffs being applied on modules imported into the United States, something that has never occurred for solar cells during the four-year safeguard. Let me repeat that: Not a single imported solar cell has ever been subject to the safeguard tariffs.

The ITC rightly noted that the module sector has recovered because of the tariffs on modules while the cell sector has struggled

because of the lack of tariffs on cells.

Specifically, the ITC stated in its reports the lack of an effective remedy for cell producers materially hindered the industry's efforts to make a positive adjustment to import competition during the remedy period and contributes to our finding below that action continues to be necessary to prevent or remedy serious injury.

Arguments that there would be no demand or market support for U.S.-produced cells are spurious. Even if one were to accept the claims that only one quarter of domestic module producers would buy domestically-produced solar cells, that is sufficient demand to absorb all of Suniva's production alone, and more as the domestic module sector continues to grow.

Suniva has provided declarations

detailing interest in investing and sourcing from

its facility from a variety of market actors. We

have provided confidential data that supports

that Suniva is close to restarting and when we

can and will start quickly. However, with this

said, it is true that Hanwha, LG, and Jinko Solar are not interested in procuring cells from resurgent domestic producers.

Why is this? That's because these assemblers are all vertically integrated; that is, they have their own cell manufacturing capabilities in Asia. Their intent is to continue to import their own cheap Asian imports rather than procure domestically or invest in the essential technology, cell manufacturing here in the United States. Those arguing to increase the TRQ do not want you focusing on one additional vital fact. Without domestic cell manufacturing there is no U.S. market for domestically-produced wafers, ingots, and in turn polysilicon.

To be clear, domestic module assemblers do not procure polysilicon wafers. They use finished solar cells. Solar wafers are only procured by solar cell manufacturers. Without a domestic cell industry there is no reestablishment of the solar supply chain. There is only module assembly.

If the TRQ is held flat it still provides massive access to tariff-free cells every year. Even when tariffs are applied to the marginal over-quota cells the total effective tariff rate for cell imports to the U.S. will be extremely low as the module industry will continue to have access to 2.5 gigawatts of tariff-free cells. As a result, the effective tariff on module imports will always be significantly higher than the effective tariff on cell imports.

Until remedies have started to restore the module portion of the domestic supply chain a strong remedy that keeps the cell TRQ at 2.5 gigawatts is needed to finish the job and restore the rest of the domestic solar supply chain as well. To argue any differently is simply inconsistent.

Later today you'll hear from the respondents who will once again loudly proclaim that solar deployment in the United States is doomed with an extension of the 201 safeguards,

just as they've claimed in every single proceeding since 2011. Nothing could be further from the truth.

Despite their claims of doom the sun is shining very brightly on solar deployment in the United States. IN fact, quoting SEIA, the United States has set records for solar deployment in essentially every year since the 201 safeguards have been in place. Deployment in 2019 exceeded deployment in 2018 by 23 percent. 2020 set a record 19.2 gigawatts of solar installations. Deployment for the first three quarters of 2021 was already at just about 16 gigawatts, and 2022 is expected to set a new record for solar installs yet again.

Think about that. In the last four years during the 201 period we have installed almost as much solar as we have had in the entire history of the United States before the 201.

These are not the storm clouds that the respondents would have you believe. This is the very definition of solar deployment's day in the

sun.

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The respondents will once again offer you a false choice: dependence on foreign imports, many produced using forced labor and in a heavily coal-intensive process, for cheap solar or missing our nation's climate goals. This is simply wrong. And worse, it's in environmentally destructive.

You do not have to take my word for I'll reference the Wall Street Journal, this. which has reported reliance on solar imports from China will increase pollution. Increase pollution. Please let me quote the Journal. The solar industry's reliance on Chinese coal will create a big increase in emissions in the coming years as manufacturers rapidly scale up production of solar panels to meet demand. That would make the solar industry, and I quote, one of the world's most prolific polluters analysts say undermining of the emissions reductions achieved from widespread adoption. End quote.

Further, analysis by San Jose State

University found that it would take nearly nine years, nine years for a solar panel importer from Asia and installed in the U.S. to generate enough solar power to reach net zero emission conditions.

Our country not only deserves, but requires better than the false choice the respondents will offer you. As the ITC has already found failing to restore American solar cell and module manufacturing negatively impacts the national energy security of the United States. As the nation continues the ambitious energy renovation charted by the Biden Administration, without cell manufacturing our country will be 100 percent dependent on foreign actors to produce the technology that turns sunlight into electricity. Put simply, we will have traded Middle Eastern oil for Chinese solar.

Indeed, extension of the 201 will help achieve U.S. policy goals of national security, economic security, climate change mitigation, and of equal importance human rights.

Suniva has not given up. We believe in American solar manufacturing, American energy security, and American jobs. And once again I ask of this administration stay the course and work with us to shape the face of not only U.S. manufacturing, but our nation's energy security for years to come.

Before I close today I want to take a moment and specifically address several questions you have asked of Suniva which further detail much that I've already touched upon.

First, you queried as to what different market conditions would be necessary for an extension to be effective for solar cells compared to the previous four years. The four-year extension of the 201 remedy without an increase in the cell TRQ and an elimination of the bifacial exclusion is the single most significant signal the U.S. Government can send that is committed to this manufacturing sector long term and it will create the market conditions necessary for investors and the cell

industry to restart. The very large TRQ and the bifacial exclusion created cheaper solutions to import foreign cells and modules tariff-free.

There is no other way around this.

As noted in our December 22nd submission, Suniva has been engaged in multiple discussions with module assemblers to procure U.S.-made cells. When the TRQ was announced discussions either stopped, slowed, or morphed to a U.S. cell having to meet price points of tariff-free imported cells.

Suniva's experience is consistent with that of other market participants. For example, it was well noted prior to the notice of the TRQ Jinko Solar had announced plans to build an approximate 500 megawatt cell and 500 megawatt module manufacturing facility in Jacksonville, Florida. Shortly after the TRQ announcement Jinko stated it was no longer going to build a cell factor in the U.S., instead using foreign imports tariff-free.

Had the administration accepted the

ITC's much lower original TRQ recommendation, the U.S. would likely already have operational cell manufacturing today. Now it's time to accept the ITC's unanimous recommendation and extend the TRQ at its current level and to finally provide domestic relief -- provide relief to domestic cell producers.

Secondly, you wondered whether Suniva would restart domestic production of the tariffs were extended and cell demand conditions were similar today. Please let me be perfectly clear: Suniva's absolute and unequivocal intention is to restart operations as far as possible. We have provided testimony, affidavits, and confidential information as to the amount spent since emergence from bankruptcy for the sole purpose of restarting. Assuming no TRQ increase demand, conditions are already satisfactory today to support at least one gigawatt of domestic cell production. As the module industry grows so too will demand for domestically-produced cells.

Next you asked us to describe the

expected effect an extension would have on job creation in the cell industry over the next four years. Solar cell manufacturing is in fact semiconductor manufacturing. It is certainly unlike the manual labor that dominates solar deployment and is much more sophisticated than module assembly offering a range of opportunities from technical line workers to skilled tradesmen and technicians, and even includes Ph.D.-level scientists.

Within the course of one year from commencement of restart activities Suniva is targeted to employ 250 full-time, fully-benefited workers. This is not seasonal work commonly found in solar deployments. It's a reasonable expectation that any and all cell manufacturing facilities would face similar hiring profiles for the startup of an 800 megawatt to 1 gigawatt factory.

Finally, you expressed interest in understanding the investments Suniva has made in its sophisticated production environment. Suniva

submitted a description of its equipment and pictures in Exhibit 1 to its December 15th submission. In the period of Q4 2015 through Q1 2017 Suniva spent roughly \$80 million to upgrade its facility infrastructure and production equipment to produce a state-of-the-art monocrystalline PERC solar cell.

Mono-PERC cells are current the industry workhorse product and is the mainstream of production worldwide. The Suniva facility infrastructure was designed to accommodate further technological evolutions and can thus support additional upgrades to accommodate the ongoing evolution in cell size and form factor.

On October 7th a dozen or so ITC staff and Commissioner Schmidtlein participated in a virtual tour of Suniva's facility, and we'd be pleased to provide a similar opportunity to members of the TPSC should you desire it. We are very proud of our factory. It's the largest solar cell manufacturing facility in the Western Hemisphere and America's best opportunity to

quickly restoring solar cell manufacturing.

As the only solar cell manufacturer you'll hear from today I wanted to also comment on a question you posed to developers; that is, how complex is the transition from monofacial cell to bifacial cell production? To use a technical term, not very.

The equipment set we have can support the manufacturer of monofacial and bifacial Facility infrastructure is fundamentally the same for either. Indeed, a solar cell at creation is inherently bifacial, but that capability is masked for monofacial modules. To create a bifacial cell requires minor retooling. Total time, and I want to stress this to you because you saw this in how fast bifacial started swarming into America through the loophole -total time to retool takes between approximately 4 weeks and 12 weeks at a cost of 1 to \$3 million, or put in perspective less than 1 to 2 percent of new factory CapEx. That's it.

I want to thank you for asking these

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questions specifically as I think they go to some of the very fundamental issues in front of you.

I'll be happy to address any of this further during the Q&A. Thank you.

MR. GAGAIN: Thank you very much, Mr. Card. And we'll now hear from Hanwha Q Cells USA.

Are you ready?

MS. QUAIA: Yes. Good morning. This is Diana Quaia with Arent Fox representing Hanwha Q Cells USA. We plan to start our presentation with a short video following by testimonies of Mr. Andrew Munro and Scott Moskowitz. So, we will start with the video momentarily.

(Video played.)

MR. MUNRO: Good morning. My name is Andy Munro. I'm general counsel of Hanwha Q
Cells USA and I appreciate the opportunity to testify before you today.

The 201 safeguard has spurred a burgeoning renaissance in American solar manufacturing and in order to protect and promote

that renaissance a strong and smart extension will be necessary including the following: (1)

extending the safeguard for four years at the highest tariff rate and with a minimal step-down as recommended by the ITC; (2) promptly withdrawing the bifacial exclusion which has greatly undermined the safeguard remedy; and (3) increasing the TRQ for cells so that U.S. solar manufacturers are not penalized and are able to maintain their competitors.

In May 2018 as a direct result of the 201 Q Cells decided to build our state-of-the-art 1.7 gigawatt solar module factory in Dalton,
Georgia. That factory is the largest in the United States employing over 700 diverse and skilled workers producing over 10,000 modules per day for all segments of the market including utility, commercial, and residential.

As a direct result of the 201 several other solar manufacturers have also built and expanded factories resulting in hundreds of millions of dollars in investment and thousands

of jobs. And within the last year alone over 10 gigawatts of new U.S. module and cell factories have been announced.

Q Cells is currently planning to make massive additional U.S. investments across the full solar supply chain including modules, cells, wafers, and polysilicon. In fact, just two months ago Q Cells invested over \$160 million in REC Silicon. That investment will enable REC to start its dormant U.S. polysilicon production and will mark the auspicious rebirth of polysilicon production in the U.S.

Q Cells is also currently engaging in thorough business planning including actively exploring potential sites for large-scale cell and wafer manufacturing, as well as expansion of our module manufacturing. That would result in billions of dollars in investment, produce multigigawatts of capacity, and create several thousand high-quality stable and place-based manufacturing jobs of the future. Now more than ever U.S. solar manufacturing has momentum, but

in order to protect and promote this momentum a strong and smart four-year extension of the 201 safeguard is necessary.

Extension of the safeguard is all the more necessary because the effectiveness of the 201 remedy has been seriously impaired by COVID-19, high input costs, and the bifacial exclusion. COVID-19 has presented serious challenges due to lock-downs, production stoppages, delays and supply chain disruptions. High input costs due to Section 301 tariffs that are not faced by foreign producers and supply chain cost increases have also undermined the effectiveness of the safeguard. But most importantly the original bifacial exclusion which lasted nearly a yearand-a-half resulted in a massive surge of tarifffree bifacial imports from China and Southeast Asia.

NREL tracked over 10 gigawatts of imported duty-free modules entering the U.S. in 2020. This was nearly half of all imports during that period, which, as the ITC has reported,

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severely undermined the effectiveness of the remedy.

The reinstatement of the bifacial exclusion due to the recent CIT decision is having a similarly harmful result. Every day that goes by with the bifacial exclusion in place seriously harms U.S. solar manufacturers and the effectiveness of a safeguard extension will be severely undermined under the bifacial exclusion is promptly withdrawn.

The effect of the bifacial exclusion is even more damaging now as the rapidly expanding U.S. industry is increasingly producing these very modules. In fact, Q Cells has already transitioned our Dalton factory to produce bifacial modules and we will begin shipping them directly from Dalton next month.

The USTR should of course promptly appeal the CIT decision and seek a stay, but such an appeal is quite likely to result in a delay of a year or longer in withdrawing the bifacial exclusion. Thus, the President should use his

broad authority under the statute to promptly withdraw the bifacial exclusion via presidential order.

Similarly, the President should exercise his broad authority to establish high tariff rates during the extension with a tariff rate starting at 17.75 percent and stepping down at 0.25 percent per year as recommended by the ITC.

A fourth year tariff rate of 18
percent was appropriately prescribed by
presidential proclamation in order to address the
serious harm down by the bifacial exclusion, and
the harmful reinstatement of the bifacial
exclusion makes a high tariff rate all the more
necessary to provide a meaningful remedy for U.S.
manufacturers. As a result of the rapid growth
in module manufacturing the tariff rate quota on
cells will be exceeded and U.S. module
manufacturers will have to pay costly tariffs on
cells which are not available domestically if the
TRQ is not increased.

Q Cells is one of the world's largest producers of cells. We, like most large module manufacturers, use our own proprietary cells and have plans to produce cells in the U.S., but it will take at least two years for Q Cells to build a factory and begin producing cells in the U.S. And the recent cell factory announcements of other U.S. manufacturers will similarly not result in material cell production for at least two years. Thus, any cell tariffs imposed on U.S. manufacturers during the next two years would merely be a penalty that makes a U.S. solar manufacturer less competitive.

A smart extension of the 201 would avoid this harmful penalty by increasing TRQ on cells to a level that would result in no cell tariffs during the next two years when Q Cells and other cell factories are being built. An increase in the TRQ to at least five gigawatts will be necessary to accomplish this.

The 201 has not materially increased prices or slowed deployment of solar energy as

repeatedly claimed by opponents of the safeguard. On the contrary, during the 201 solar prices have decreased and solar deployment has skyrocketed exceeding all pre and post-201 forecasts. In addition, during an extension 201 duties are required to decrease and thus any effects on pricing in deployment will be even further reduced.

solar is the lowest cost form of energy available, even with the safeguard in place, and that remains global over capacity across the sector. U.S. manufacturing capacity including bifacial capacity is rapidly growing to serve all segments of the industry including utility, commercial, and residential, and the failure to extend the safeguard would significant imperil the short-term health and long-term potential of this nascent and growing industry.

Solar will be the leading source of energy by 2035. A strong American solar manufacturing industry that is not overly reliant on imports is crucial to our economic and climate

goals, energy independence, and national security. Support of American solar manufacturing can result in hundreds of thousands of American workers participating fully in the future of energy through good-paying, place-based and stable manufacturing jobs.

American manufacturing innovation and a secure and clean supply chain will be necessary to accomplish America's crucial climate goals and our energy independence and national security will require the U.S. to preserve its own solar manufacturing capability. Smart trade policy including a strong and smart extension of the 201 safeguard will be necessary to achieve these crucial goals.

Opponents of the 201 extension claim that American solar can be supported by tax or other incentives alone and that we should abandon smart trade policy, but as the ITC recognized in its report potential future tax and other incentives alone cannot replace the important tool of smart trade policy which is tailored to

address serious trade injury. A whole of government approach including smart trade policy is the right way to build back better with solar.

The opportunity is great and the stakes are high. A four-year extension of the 201 safeguard at the highest rates without a bifacial exclusion and with an increase in the TRQ on cells will be necessary to secure and promote the future of American solar manufacturing.

Thank you for your support and for your consideration of these important matters.

I'd be happy to answer any questions in the Q&A session.

MR. MOSKOWITZ: Thank you, Andy, and hi, everyone. My name is Scott Moskowitz. Let me go ahead and make sure you can see this. So, I am the Director of Market Intelligence and Public Affairs for Q Cells.

I'm going to be supplementing Andy's statements with a few slides just walking through the state of the solar industry and the

importance of this safeguard.

So, you have seen the video. You have heard our plea, but just to contextualize this factory within the scope of the industry, our facility has an annual capacity of about 1.9 gigawatts. It's increasing from the original 1.7 gigawatts due to efficiency improvements, and it produces over 10,000 panels per day.

So, for scale, the U.S. solar market is now quite a bit over 20 gigawatts. This facility alone is enough to cover not quite nearly ten percent of U.S. demand.

It produces panels for the residential and commercial sector where we are the U.S. market leader in both segments, as well as the utility sector. We have supplied products all over the country, including a 100 megawatt project powering the Facebook data center not too far from our factor in Newton County, Georgia.

We have transitioned one of our three production lines to make bifacial panels which will begin shipping from Dalton starting next

month.

You'll see the products in front of you. You'll notice the difference in these products are very, very small, the only visual discrepancies being the size of the panel and whether the back sheet is white, black, or glass for a bifacial panel.

So, this factory can produce about almost ten percent of U.S. demand. It's producing almost two gigawatts per year. We have hopes of significantly expanding it, which we're more than capable of doing.

We built this factory from scratch and it's been about eight months between 2018 and 2019, and this investment has laid the foundation for the additional expansion of the supply chain that Andy mentioned, including cells and wafers.

We recently announced investment and plans to restart the REC Silicon polysilicon plant in Moses Lake in pursuit of becoming a vertically integrated American solar manufacturer and we are not the only ones.

On the left, you will see a map of now legacy producers that were kept alive by the (audio interference) and about a dozen recent announcements of manufacturers looking to be part of a whole of government approach to building up this infant industry in the United States with trade being a key pillar of the policies that will enable this.

But it's worth caveating that today, this approach remains totally prospective, and so far, none of the major new investments on this list have broken ground.

Cell manufacturing will take at least two years to ramp up, which is why we think in an extension scenario, the tariff rate quote on cell (phonetic) should be increased to account for that investment. As Andy said, we think an appropriate level is five gigawatts.

The same is true of the bifacial exclusion. Bifacial panels now make up a majority of the solar installations in the United States and the existence of the exclusion not

only makes the 201 extremely weak, it, in fact, gives a competitive advantage to importing manufacturers that don't pay 301 tariffs for modular subcomponents. We urge you to do whatever it takes to remove that exclusion as soon as possible.

So, stepping back, and this is where I really want to focus, is that we have been able to -- is what's amazing about this safeguard is that we have been able to benefit from the 201 and grow U.S. manufacturing with no impact to downstream (audio interference).

And certainly, that is not what you will hear later this morning because there is a strong market dependence on growth, and it is a fact that there is not enough U.S. modular capacity to meet domestic demand, though there's more than there used to be, but that does not mean that the 201 has been harmful or that its extension would be harmful.

So, I'm a former market analyst with Wood Mackenzie. I have been tracking

installations and making forecasts in this industry since 2014. And in this case, before the 201 petition was filed in 2017, the U.S. market predicted forecast for solar deployment in 2021, and I'm not cherry picking. You can see 2019 and 2021 on the chart too.

But back in 2017, the forecast for solar installations in 2021 was 16 gigawatts.

After the 201 was proposed, Wood Mackenzie worked with the industry and lowered those limits. For 2021, they lowered the installation forecast to 13 gigawatts. So, when you hear an argument that 62,000 jobs were lost because of 201, that's where it comes from. It comes from the change in that forecast back in 2018, but the actual installations in 2021, 26 gigawatts.

Throughout the 201, prices have fallen and installations have risen just as they would in extension (audio interference). So, any argument that the 201 has depressed demand is extrapolated off of those old forecasts and it is not a reflection of what actually happened, which

were record installations year after year.

And that is because fundamentally, solar is the lowest cost form of energy available in most places even with a tariff. We do not have to rely on undersold imported products in the United States.

And it's worth keeping in mind too,
the scope and context of what we're talking about
with these tariffs. Fifteen percent on a 30
percent on a \$0.30 per watt solar panel is 4.5
cents per watt. That's about one to two percent
of the cost of a residential solar project or
four to five percent of a utility project.
That's not insignificant, but it is not enough to
overwhelmingly change the economics of solar
energy in the United States.

Now, for developer and installer, that four to five cents is a little extra profit. For a manufacturer, it is the difference in life or death, which is why, in our view, it is a very small price to pay to lay a foundation for the U.S. solar supply chain and to prevent our

1 industry from becoming any more reliant on 2 imports than it already is. This is an industry that will grow for 3 4 decades, it's critical to fighting climate 5 change, and it is a major economic growth driver. One last data point that I will leave 6 7 you with is on solar jobs. It's the second 8 bullet on this chart. The U.S. has 230,000 solar 9 workers and now installs 25 gigawatts of solar a Those are the facts. 10 year. 11 China installs about two times that 12 per year, 50 gigawatts, but their solar industry 13 employs 2.3 million people, ten times as many because of its investment in solar manufacturing. 14 That is the opportunity that we have 15 16 in investing in our supply chain, which is why, 17 in our view, anything short of a full four-year 18 extension would be shortsighted and counter to 19 the long-term interests of the United States. 20 Thank you very much and that wraps up 21 Q Cells testimony.

Thank you very much for

MR. GAGAIN:

your testimony. We will now move onto the Q&A session and I thought I would start with Suniva.

And what I'm going to do here is I'm going to pose a few questions to each of the participants and then I'm going to turn it over to Will Martyn at USTR and then other of our panelists, both from USTR and from the interagency.

So, I want to just start with Suniva.

During your testimony, you made various remarks
on the TRQ on cells, and one question I have is
that the ITC recommended changing the annual
quota to a quarterly quota.

So, how do you expect that to affect imports of sales into the United States if the TPSC were to make such a recommendation to the President, and what anticipated impact would that have on Suniva's production of cells in the United States? Thanks.

MR. CARD: Yeah, thank you. Thank you for the question. Again, for the record, this is Matt Card with Suniva. I'd ask you, I'd

encourage you to ask that same question of module manufacturers because they actually have to procure cells. I'm a cell manufacturer.

But from my own observation, what I believe the quarterly quota actually recognizes and what the commission recognized was the weight of the large vertically integrated multinational players who are in the U.S. to dominate the cell import market and to actually game the system.

Certainly, the capital requirements to import cells while there's still TRQ available is more prevalent for the larger companies than it is for the smaller companies like Auxin.

What a quarterly cap does is allow the TRQ to be spread balanced evenly over the course of the year. Consumption of sales is a fairly linear process. You don't ramp it up and down as you're manufacturing modules. Your goal is just simply straight line based on your capacity.

From Suniva's standpoint, a quarterly tariff won't change anything. We've already talked about the notion that Suniva's capacity,

which will be restarted at just about a gig, can be more than consumed by the domestic market.

We will produce cells at a flat line rate. You won't suddenly stop production of cells because TRQ may or may not have been hit for a potential quarter. You just continue to operate your factory at a level rate.

But I do believe there's benefit and potentially some of the other module manufacturers can talk to that about levelizing that so that you don't have the situation where hoarding can take effect, you know, in Q3, or Q2, or Q4 to consume all the rest of the available supply underneath the TRQ.

So, actually, you know, as an outside observer to that process who certainly knows a good bit about it, I actually think it was wise of the commission in that putting it in helps them govern potential abuses by players that are more capitally advantaged than others.

MR. GAGAIN: Thanks for that, Mr. Card. Another question I have is with regard to

the second advanced written question that we posted to Suniva specifically.

You mentioned demand is already there to restart production of up to one gigawatt of cells. If that's the case, has Suniva started production, and if not, why not?

MR. CARD: We have not because what you can't confuse between demand is actually demand is different from restart costs. When you're talking to the investment community, what they're looking for, because cell manufacturing does cost more to stand up than module manufacturing, they're looking for a longer term return on their investment.

Certainly, demand is in the short term, but quite frankly, people worried, because of the very large TRQ put in place, whether or not the U.S. government was committed to restoring cell manufacturing or was happy being at the back end of the process if you will with just simply assembling modules.

So, the TRQ sent a hugely mixed

message to the buying public and to the investment community specifically as to whether or not investments in cell manufacturing long term was a good idea.

You then layered onto that TRQ in fairly short order the bifacial exclusion and you created, as everyone on this panel has said, a massive loophole where it was simply easier to convert your factories.

As the data clearly shows, it's not a long and hard process. That's not my take or anyone else on this panel. The data proves that it's easy, and half the imports that came in over that period were bifacial.

That became a -- using a bifacial module, whether it was technically the right answer or not, became the cheaper answer and that's what we saw.

And so, I think between the two, when you're in the investment community, you look for what does the position look like in 12 months, in 24 months, in 60 months, and beyond? Because of

-- we understand this industry is tied to policy.

That is the reality for the foreseeable future.

Investors look for market signals from the U.S. government, and the U.S. government signals, quite honestly, over the previous four years, was very lukewarm for cell manufacturing, which is why it's so important the TRQ not increase now because there needs to be a declarative statement from the U.S. government that yes, we want the entire supply chain.

We are not satirized just assembling modules. We have to have the entire supply chain to a certain degree here and sustainable in the U.S.

There needs to be some signals because there has been no signals to the market that the government is committed to solar cell manufacturing and that's just the reality that the investment world has spoken to.

MR. GAGAIN: Thank you very much, Mr. Card. I'd like to move onto Hanwha Q Cells. I have a couple of questions for you all.

And the first one is the same one as the first one I asked to Suniva which regards the potential recommendation of a quarterly, administering the TRQ on a quarterly basis, and I'm wondering how do you expect that to affect imports of cells in the U.S. and what anticipated impacts would that have on Hanwha Q Cell's production in the United States? Thank you.

MR. MUNRO: So, I think the fundamental issue is the need to increase the TRQ to avoid a penalty and remain competitive so that we can expand our module production and then have a flow through to expand all of the other parts of the supply chain that we want to make billions of dollars of investment, so that's really the fundamental issue on the TRQ.

As to a quarterly administration, while it won't have a material effect, it's probably a smarter way to administer it and could eliminate certain gaming that could occur, so a quarterly TRQ, in my opinion, would probably be superior to an annual.

MR. GAGAIN: Okay, thank you. Another question is in your testimony today, you've mentioned it at various points and you mentioned this in your written comments before the TPSC as well, is an expansion of the TRQ on cells, and one of the questions we had is by how much would you recommend expending the cell TRQ and why? And I'm not sure in your testimony that I heard an answer to that question, so I just wanted to follow up on that.

MR. MUNRO: Sure, sure, there was a lot said. We did mention that we were recommending a TRQ of at least five gigawatts, and that is what we estimate the spread between module manufacturing and cell manufacturing during the first two years while Q Cells and other announced major cell factories are being built because it will take at least two years.

So, what we're saying is the smart way to extend the 201 is to avoid that penalty on those who are making massive investments to bringing back the supply chain, and so what we're

asking for is the minimum necessary to avoid that penalty, and we believe that that would be at least five gigawatts, a TRQ of at least five gigawatts.

MR. GAGAIN: Okay, thanks for that clarification. And then the last question I have for you is you mentioned in your testimony that you're considering an investment in cell manufacturing in the United States.

And further to one of the advanced written questions we asked you, could you identify any concrete steps you have taken to commence cell production in the United States such as site selection or anything of that sort?

MR. MUNRO: Sure, so, yeah, first I'd like to say that we're not only looking at cells, but we've already made a major investment in polysilicon which will be a rebirth of polysilicon production in the U.S.

We plan to build wafers. We plan to expand our module manufacturing, and as well as the cell investment.

And we have had a number of discussions with state and local authorities, as well as private parties. We are exploring financing options and we are serious about this if we can get the policy right.

A whole of government approach with smart trade policy at its center will be crucial to make that vision a reality from Q Cells and all of the other over ten gigawatts announced module and cell factories within the past year.

MR. GAGAIN: Okay, thanks for all of that. Before I turn it over to Will Martyn, I have one question for Auxin, and that is I believe I heard you mention circumvention of the safeguard measure, and you mentioned this in conjunction, I believe, with the bifacial exclusion.

So, when you mention circumvention, are you only speaking to your arguments regarding the bifacial exclusion in your written comments to the TPSC or are you speaking of something more than that? I'm wondering if you could maybe

clarify that? Thank you.

MR. RASHID: Yes, sure, thank you.

Thank you, Mike. Yes, the circumvention, any
kind of -- we've seen this with the Chinese and
the predatory practices of the Chinese to win
market share at all costs.

So, any time there's any kind of exclusion, whether it's bifacial or countrywide, is a potential loophole to circumvent the tariffs, whether it's the 201 safeguard tariffs or the antidumping tariffs we've seen where they're going through Southeast Asia, so we're very, very concerned about it.

So, the policies, the AD, the Section 201, great, but if you have any kind of exclusion, it's a potential for -- it's a loophole for circumventing, and we've seen evidence of this and we have suffered for it here at Auxin.

MR. BELINE: Mike, it's Tom Beline from CLK just to elucidate a couple of points.

Admittedly, it's early for Mamun on the west

coast, but one of the things that he often talked to me about is that he's seen Cambodia come out of nowhere.

Cambodia was treated as a developing country and thus excluded from the safeguard because of their lack of any shipments of CSPV products. Well, lo and behold, over the last four years of that countrywide exclusion, look at the data on Cambodia.

Why does Cambodia now have a production facility? It's because of Belt and Road money. If you read the press, you'll see that Cambodia is highly leveraged to China and is allowing Chinese manufacturing to use it as an export platform for things like CSPV products.

And then to Mamun's point about bifacial, what he testified was that what companies did was that they just basically add a clear back sheet to make panels lighter for use in residential application.

This is not intended for utility as was told to the administration three-plus years

ago, and in fact, it was a loophole that you 1 2 could drive a truck through, and so those are the types of specific circumvention activities that 3 4 we're talking about and we provided to you in 5 Auxin's written comments. Thank you very much for 6 MR. GAGAIN: 7 that, and with that, I'll now turn it over to 8 Will Martyn from USTR. Thank you. 9 CHAIR MARTYN: All right, thank you. 10 Thank you, Mr. Gagain. I don't have any questions at this time, so I will turn to my 11 12 interagency colleagues and ask them to indicate 13 by raising hands if they have any questions, and 14 if after they're done, I have some, I will circle back. 15 Thanks. 16 All right, I see Dr. Boushey, you have 17 some questions. Mike, could you please begin? 18 DR. BOUSHEY: Okay, I think I am 19 unmuted and you should be able to see me. 20 Someone confirm that you can hear me, please. 21 CHAIR MARTYN: That is correct. 22 DR. BOUSHEY: Awesome, thanks, Jack.

All right, so I have a couple of questions. So, the first one, and this is for all three panelists -- and thank you very much for your testimony. It was very interesting and very compelling.

So, the first question, you know, a number of you noted the ways that the past four years were specifically challenging for the industry and that this is part of the justification for the extension of the safeguard.

And so, my question to you is do you believe that another four years of a decreasing, of this, you know, lower tariff rate would be sufficient to justify the investments that you all outlined were possible? So, will this four years be sufficient, especially given the challenges of the past four years?

(Simultaneous speaking.)

MS. DRAKE: If I just may say, one of the key differences between the past four years and the upcoming four years is that the 2.5 gigawatt TRQ will finally have teeth. It will

finally bite.

It will finally result in tariffs being applied to at least some imported solar cells, and for cell manufacturers like Suniva, that makes all the difference in the world in terms of justifying to their investors that we have four full years of relief where tariffs will actually finally be applied to some imported cells and that is a game changer for the domestic cell industry, but Mr. Card might want to elaborate, whereas a five gigawatt TRQ as has been proposed would be an absolute disaster and would eviscerate the remedy for American cell producers.

MR. CARD: Yeah, I'll follow up on that point very quickly. You know, I'll point back to one of the comments Mr. Moskowitz made where he talked about more or less the effective tariff, and this isn't an exact quote, but he said with the effective tariff on modules about three to four cents, which was basically profit into a developer's pocket.

Let's talk about the effective tariff. What we really are talking about an effective tariff on solar cells. First, a solar cell sells for half the price of a module. So, assuming there was no tariff at all, we're talking about a two cent tariff.

However, there is a tariff. If 100 percent of cells come in tariff free, as has in the last four years, that was two cents of tariff they did not receive. If we talk about leaving the TRQ flat and let's use Hanwha's number of five gigawatts, that represents approximately 50 percent of the sales that come in will still come in tariff free.

So, when we talk about numbers that don't change much the equation for installation, the cell tariff is exactly that. An effective tariff of 50 percent, half of 2.5 gigawatts on five, on what was already roughly a two cent tariff, is a penny or less.

And we've already heard Mr. Moskowitz talk about three to four cents is meaningless,

not meaningless, but certain absorbable by developers. What is under a penny if that's what causes us to rebuild the cell industry? And that is what we are talking about.

That's what we're talking about, about the marginal tariff rate even on a non-expanded TRQ, under a penny, and that assumes their numbers, not mine, of five gigawatts. If it's less than five gigawatts, it gets even less.

MR. RASHID: And if I may add to your question, Doctor, about is this safeguard enough, I don't think so. I think it needs to be everything. The safeguard is one component of the whole of government approach that we're all requesting here to re-shore the solar supply chain.

So, the safeguard remedies will create the runway, but we need the proper tax incentives that are being discussed in the Build Back Better bill, as well as looking at Southeast Asia and these other countries through which the Chinese are circumventing.

And the other panelists that you're going to hear from later on today enable these imports of cheap Southeast Asian products that are holding back the development of the solar supply chain here in the U.S.

So, it's not only the safeguard. It's a very, very important first step that must happen because it sends a clear message for the other policies that must follow.

MR. MOSKOWITZ: Yeah, I think we've -so we all certainly agree on the whole of
government approach being needed here and, you
know, even across panelists here, there are
certain policies that we all think are critical
to further expanding beyond where we currently
are.

I think, frankly, what we've seen for the last four years is that the 201 has kept this industry alive. It has enabled it to grow quite a bit.

The U.S. module manufacturing made up less than five percent of U.S. shipments back in

2017 and now it's almost 20 percent, or ten to 20 percent. We are significantly further along.

Without the 201, I think it is quite safe to say that this industry would be extinct.

And so, the question -- we have seen that with the 201 in place, we have been able to keep U.S. cell manufacturing alive and installations have grown.

So, the question becomes what happens if the 201 is removed? Like, it should not be a question of what happens to the industry if it gets extended.

We've seen what happens with the 201 in place. And when it extends, it has to continue to liberalize, so prices will continue to fall and the installations will continue to rise.

But in the ITC hearing last month or in November, the respondents to the case said that if the 201 goes away, their importing module vendors will drop prices and that will come to the detriment of domestic producers.

And so, you know, it's really not a question of -- it's not that if you take the 201 away, magically more imports will come in and we'll be installing more solar. It will just simply be that the market price will drop and it will make life for domestic manufacturers extremely difficult.

DR. BOUSHEY: Thank you. Do I have time for a second question?

CHAIR MARTYN: Yes, one more would be fine.

DR. BOUSHEY: Okay, great. So, I wanted to just push all three of you on the counter factual. So, you've each, you know, made this argument that a U.S. industry to manufacture solar is both a national energy security issue and an economic issue, and so that it is a must do regardless of the tradeoffs, you know, and sort of insisted in the tenor of your remarks.

And so, my question is, you know, where do you think those tradeoffs would balance towards not thinking that this was important?

You know, the tradeoffs generally are characterized as reliance on China. Would removal of the global safeguard necessarily push towards reliance specifically on China?

So, I wanted to ask each of you, and I'm a little bit ambivalent about order, but I realize last time there was some chaos, so maybe we should go in the order in which you all did the testimony at the beginning, so starting with Auxin Solar. Thank you.

MR. RASHID: Yes, yeah, we view this definitely as a national security issue, number one to me, because if we're going to go renewable for our energy grid, and that's a whole separate topic, everyone agrees that renewable energy has to be the future.

If we're not in a position with the proper policies in place, you cannot turn on the tap overnight, so it takes time for these investments, first of all, to get the investments. To get the investments requires the right policies, and then to put those investments

into work and bring these factories online for the entire supply chain, that takes years.

So, that has to be done now.

Otherwise, you essentially give up energy independence and control of the grid because at any moment, the faucet can be turned off and that's how we view it.

And again, as I've said, we're not necessarily the largest player here, but as you've seen with what we're advocating, we're really looking at a larger picture to the entire supply chain at broad here, and to me, it's very, very obvious it's a national security issue.

You have to own this supply of equipment to this grid that's going to become renewable. I hope I answered the question.

MR. CARD: I'll follow on with Mamun.

I think the proof that it's a national security issue is an easy question. That's a very easy question. If we're relying on foreign actors for our supply, if that supply is turned off, we're in trouble.

So, I don't want to debate that point, but what I want to come back to actually is a point I made because this shows the influence of the false choice that the respondents are going to promote at you, that basically the way I interpret your question is are we trading off energy and national security for potentially a slower movement towards climate mitigation and ultimately the other moral issues.

I've quoted from independents, not people here, not necessarily people that have historically been friends of U.S. manufacturing. Certainly, if you go back in the history of the 201, the Wall Street Journal was no friend as I personally remember very, very well early in this process.

But the Wall Street Journal in their studies and people like San Jose State said this is not an either/or. In fact, it's an if you choose imports, not only do you have an issue of national and energy security, which no one debates, but you actually increase pollution.

I'm struck by the Wall Street Journal comment that the solar deployment industry will become one of the largest polluters on the planet with the dependence on predominantly Chinese supply chain. That doesn't even begin to touch the moral issues associated with what's going on in Xianjiang and the Uyghurs.

So, the reality is we have a moral imperative beyond an economic and national security imperative to do just this. The two are not opposing choices. They actually work very much hand in glove and that's not what respondents will want you to focus on.

MR. MUNRO: And I'd like to echo

Matt's point that it is a false choice, that we

can do both build the American solar supply chain

and rapidly roll out solar.

During the 201, solar deployment has skyrocketed, and in fact, the rate of growth in solar in the U.S. has been higher than almost every other major market.

And if you were to look at every part

of the solar supply chain, it's over 90 percent dominated by Chinese manufacturers, so I think that, you know, that is the key point you need to keep in mind, and whether or not it's directly imported from China or imported from Southeast Asia, the money and the control is from China.

MR. RASHID: And if I may add just real quick, and we'll hear this later in the day, and I'm so frustrated after my testimony, but I find it very, very irresponsible to be honest with you what's gone on in the last ten years, and we're trying to get the right policies in place and it shouldn't be so hard.

It's quite sad because these are

American companies and I don't know what they see
in our future. I hope the right things happen,
but to me, it makes me quite angry to see such
blatant lies and misinformation just to make a
buck.

CHAIR MARTYN: All right, thank you, Mr. Rashid, and Dr. Jones-Albertus, I see you have a question.

DR. JONES-ALBERTUS: Thank you, Will, and thank you to all of the panelists. Yes, I'm Becca Jones-Albertus, Director of the Solar Energy Technologies Office at DOE. I have a question actually for each of the panelists starting with Hanwha Q Cells.

You mention a request to increase the TRQ to five gigawatts, but I would like to ask could you speak more specifically to the impacts of not increasing the TRQ over the next two years?

MR. MUNRO: Well, if the TRQ is not increased, then we will have a tariff on our most important input. This will harm out competitiveness.

This will -- we will have to consider this in terms of our plans to expand our module manufacturing, and, of course, with our current plans, that's going to ripple through the cell manufacturing.

The scope of our module manufacturing will dictate the scope of our cell manufacturing,

our wafer manufacturing, the amount of polysilicon that we're restarting through our new investment in REC. So, that's why this is smart.

allow the module manufacturers who have made major investments and who are planning to make additional major investments throughout the full supply chain to remain competitive during the two years in which we're building a massive cell, wafer, and polysilicon capability in the U.S., this is going to incentivize us to follow through and actually do that.

DR. JONES-ALBERTUS: Thank you. Next,
I have a question for Suniva, which is if the
tariffs were extended as proposed, what date or
month would you expect that Suniva would be able
to restart cell production and when would you
reach one gigawatts?

MR. CARD: Yeah, thank you. Thank you for that. As we have indicated in multiple submissions, both to the Department of Commerce, both to the USTR over this process, to get to

initial first article production, it's inside nine to ten months from when we begin the activity, and we're full scale within about a quarter of that.

DR. JONES-ALBERTUS: Okay, and if there were a short-term increase in the TRQ for the first one to two years, would that impact those plans?

MR. CARD: I don't think we have to guess about that. All we got to do is look at the last four years. It absolutely impacts it and aside from --

And we have an honest disagreement, it appears, with some of the module companies as far as the relative impact of tariffs, and I will state again we're not talking about a tariff from unit one. We're talking a tariff from unit 2.501, right?

The first however much percentage of what they bring in, anywhere from 50 to 100 percent depending on what volumes people grow to, is still tariff free, but the reality is the much

broader issue when we talked about what are the market conditions that have to exist for cell manufacturing to come back. This isn't just a Suniva question.

There were multiple people that had announced plans for cell facilities, most notably, Jinko Solar, and within days after the establishment of a large TRQ, they pulled the plan saying it's more economical to continue to work with imports.

So, I don't think there's any speculation about what happens. If we continue to live in an environment where the U.S. government sends a message that cell manufacturing is not a strategic priority, you will not get investment in cell manufacturing in the United States.

And the simple fact of the matter is historically the data already shows that a large TRQ, when it was, you know, four to five times the size of U.S. production in 2018, sent a crushing message to the investment community that

the U.S. government really isn't serious about reestablishing the supply chain, that we'll take the low hanging fruit and the quickest to come back, which is module assembly.

So, an expanded TRQ will continue to do a couple of things. It will continue to delay investment, but then you get into the fact, as others have noted, that the scale time -- Suniva is, in fact, the fastest.

We can be at first article, like I said, within three quarters, but new construction that has to build the extensive infrastructure is a longer period. Now you're talking about when it makes no economic sense to build a cell here if you can bring them in tariff free.

You're saying it does begin to make economic sense with two years to go. What's Mr. Moskowitz and Mr. Munro testified how long it will take Hanwha to bring up a plant? Two years.

So, as they bring up -- and once they start literally tomorrow or on February 8 doing this, it takes a while for plants to come up, and

others will look at that continued ambiguity, the lack of true support from the U.S. government for cell manufacturing, and the length of time to bring up plants and they'll say I've got better places to put my investment dollars, and we've already proven that out in the last four years.

DR. JONES-ALBERTUS: Thank you. And just a quick clarification, that three quarters to startup, that's after you secure investment or that's from the day the tariffs are rescinded?

MR. CARD: It's from the day we start the process and the two are not unlinked to each other. It's not from February 8 if we say that, but February 8 does trigger other decisions and other milestones in our process that will -- assuming -- I should say the results on February 8.

So, you're looking at a very short period after that and then the start on activities, and depending where we are in the process, we can already start some of our renovation work in advance.

So, it's from a start date. 1 There's 2 multiple factors that play into a start date beyond just the extension. 3 4 DR. JONES-ALBERTUS: Thank you. CHAIR MARTYN: All right. 5 I'm sorry, are you finished, Dr. Jones-Albertus? 6 DR. JONES-ALBERTUS: I had one 7 8 question for Auxin if there's time. 9 CHAIR MARTYN: All right, what I'm 10 going to say is I do not want to cut off 11 discussion. We have reached the official end of 12 questions and answers, and I note that Dr. Gorman 13 also has a question. 14 So, please ask your question, then I'll ask Dr. Gorman to present her question, and 15 16 I would ask Ronalda to take the that, track the 17 time that we are going over and to allow the same 18 amount of extra time for panel two. 19 And I would ask the folks responding 20 to the questions to please be very brief and to 21 not repeat things that previous responders have

said.

Thank you.

DR. JONES-ALBERTUS: Thank you. So, my question for Auxin is given that there is no existing cell production in the U.S. and you stated support for removing the TRQ in entirety, can you speak to how the higher prices that you'd need to pay to import cells impact your business model?

MR. RASHID: We'll definitely -- thank you for the question. We'll definitely need to pay a little bit more, but I anticipate the same result that we saw with the 201 tariffs on the modules, which is to have minimal if no impact on the business.

And so, what I mean by that is just like the tariffs have increased, supposedly have increased the price of modules, and in the marketplace, we see the installations have gone up and the prices have come down, the impact is minimal.

I suspect it will be the same thing for the cells, but as I said in my testimony, we'll -- willing to make that sacrifice because

you need to bring it upstream. You need to bring 1 2 cell manufacturing here in the U.S. So, I just, I bring credibility to 3 this argument because I'm a module manufacturer, 4 5 but, yeah, to answer your question, I don't think it's going to have any detrimental impact. 6 7 DR. JONES-ALBERTUS: Thank you. 8 CHAIR MARTYN: All right, thank you, 9 Dr. Jones-Albertus. Dr. Gorman? 10 DR. GORMAN: Thanks, Will, just a 11 question for Suniva. So, you spoke in-depth 12 about the focus of the investment community on 13 the long-term recovery of costs, particularly 14 regarding cell manufacturing in the U.S. And I'm just curious, would an 15 16 investor find it more economically viable to open 17 a combined cell and module facility versus a 18 standalone just cell production facility? 19 curious to hear your perspective. MR. CARD: 20 I think different people 21 will make different decisions, but I think 22 there's obviously some scale in creating both,

but I think, as we've seen already, the first -again, I go back to the case point, and I'll be
brief as Will requested.

We don't have to look any further than Jinko Solar. It came down to an economic decision. Jinko said, and certainly had the financial capability to do it, to build an integrated plant here.

For that matter, so did Hanwha or LG.

They chose not to because the economics were more advantageous to continue to use imported cells while building modules here and they satisfied the requirements of the 201 safeguards.

So, there is economic advantages to it, but investors will look at multiple calculations as to what's the way to do that.

What they look first and foremost for is a signal that these issues aren't going to go away, that the U.S. government is committed to a full supply chain no matter how big or marginal.

DR. GORMAN: Will, that was my only question. Thank you.

CHAIR MARTYN: All right, now I also 1 2 want to be sure we're not cutting off queries unnecessarily. Dr. Boushey or Dr. Jones-3 4 Albertus, do you have any additional questions 5 that you think warrant us going over the limit? DR. JONES-ALBERTUS: I do not. 6 Thank 7 you. 8 Similarly, thank you. DR. BOUSHEY: 9 CHAIR MARTYN: You're very welcome. 10 All right, then, Mr. Gagain, can we proceed to --11 first, I should thank all of the folks on the 12 first panel for your being here and presenting

This has been very informative to us and will help us in putting together our recommendation for the President. So, with that, Mr. Gagain, could we move to the next panel?

this testimony and your responding to our

MR. GAGAIN: Yes, thanks, Mr. Martyn. We dismiss the first panel with our thanks and we will pause for approximately five minutes to compose the second panel. Thank you.

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questions.

(Whereupon, the above-entitled matter 1 2 went off the record at 10:46 a.m. and resumed at 10:50 a.m.) 3 MR. GAGAIN: We will now proceed with 4 5 Panel 2. On Panel 2, we have first of all Counsel to the Solar Energy Industries 6 7 Association and to NextEra Energy Incorporated. 8 We have the Solar Energies Industries 9 Association. We have EDF Renewables Distributed 10 11 Solutions Incorporated. We have Borrego Solar 12 Systems Incorporated, SOLV Energy, Sunnova Energy 13 Corporation, the American Clean Power 14 Association, and NextEra Energy. 15 The participants on Panel 2 have a 16 combined 60 minutes to provide testimony. 17 on prior communications, each of them has 18 indicated that they will provide approximately 19 seven and a half minutes of testimony. 20 We will set the clock for one hour, 21 based on the requests of this panel. And we will track the aggregated time. And then we will 22

shift to the Q&A session. 1 2 Similar to the first panel, as each of you take the floor, please indicate your name and 3 4 title so that our Court Reporter can capture 5 that. Mr. Nicely, are you ready, and is 6 7 everybody on your panel ready? Thanks, Mike, I do 8 MR. NICELY: 9 believe we're all here, and yes, we're ready. 10 MR. GAGAIN: Okay, thank you. Please 11 proceed. 12 MR. NICELY: Thanks very much. 13 I'm Matt Nicely of Akin Gump Strauss 14 Hauer & Feld, Counsel to the Solar Energy Industries Association, or SEIA, and NextEra 15 16 Energy. I'm going to kick off the panel today to 17 set the proper legal context for the trade policy 18 decision facing the Committee, and ultimately the 19 President. 20 First, it's important not to lose 21 sight of the fact that safeguard actions are an

extraordinary form of relief aimed at addressing

the effects of presumptively fair trade, that is, trade in product for which there is no proof of unfair trade activity.

During the last 20 years, only three products have been subject to U.S. safeguard actions, steel, residential washers, and solar cells and panels. Extension of such actions is even more extraordinary. Until last year, it had literally never happened.

No president except Donald Trump has extended a safeguard action beyond the first three or four years. And even when Donald Trump extended the washer safeguard, he did so from an initial period of three years and added only two more years, for an extended total period of five years.

Here, the safeguard has already been in effect for nearly four years, and the domestic industry is seeking an additional four. That's eight years of total safeguard relief against fairly traded imports. This would be unprecedented for any product for any president.

In fact, extensions of any kind are rare across the globe, and with good reason. The WTO safeguards agreements permits trading partners to seek compensation or suspend concessions for safeguard measures that stay in place over three years.

If the President extends these safeguard measures, we should expect that our trading partners will impose retaliatory tariffs on billions of dollars' worth of U.S. exports, as is their right.

The notion that we would take such rare action and risk retaliation over the products in question here would be senseless. This case is not about a consumer item like residential washers, where less demand as a result of higher prices is not the end of the world.

But here, the Biden-Harris

Administration has already identified massive

increases in solar deployment as a key component

of its policies to fight climate change, which

President Biden himself has called an existential threat.

And those massive increases in social deployment cannot happen without a massive increase in a supply of crystalline silicon photovoltaic, CSPV, solar cells and panels that are the subject of this safeguard action. And that increase in supply cannot happen without significantly more imports.

Whatever additional capacity the domestic industry might be planning to build in the next few years, it will still be a drop in the bucket compared with what the market needs to meet the goals set forth in this administration's Department of Energy's solar future study.

To extend safeguards on products that are a centerpiece of this administration's climate change policy would be illogical. It would mean carrying on with the policies of a prior administration that denied that climate change was something to even be concerned about.

I said at the beginning of my

testimony that I was going to provide legal context for our panel today. You might wonder what my discussion about climate policy has to do with the law. It has everything to do with the law.

It is not the President's job merely to consider the Commission's views on what would facilitate the domestic industry's adjustment to import competition and to decide if he agrees or disagrees. It's the President's job also to compare the economic and social costs versus benefits of a safeguard action.

This is a foundational element of
Section 201 enshrined in the very first paragraph
of the law, and it's something the Commission
elected not to address. Notwithstanding our
efforts to get them to consider it, they decided
this is the President's job, not theirs.

And there is no question whatsoever that the costs of the safeguard measures on CSPV modules in particular has exceeded their benefits, and their extension will just be more

of the same.

Now, let me be clear: SEIA, ACP, and all the industry representatives with us today agree that having a large, thriving domestic industry producing CSPV products would be ideal. After all, the supply chain interruptions associated with reliance on imports has become a huge burden, particularly in the last couple of years, and we can't battle climate change without imports and the significant volume.

And as Abby Hopper from SEIA will testify, safeguard measures on those imports have cost tens of thousands of jobs along the solar supply chain, cost consumers billions of dollars, and dampened demand by increasing the cost of solar products and challenging the economics of solar as compared to other sources of electricity in many parts of the country.

It's time for adoption of policies that will allow solar to flourish unabated, while also incentivizing domestic manufacturing, which can and should be done by lowering tariffs on

manufacturing equipment and inputs and passing legislation that puts money in the pockets of the domestic producers who produce here in the USA.

Next, I want to talk about -- I want to address the legal question of whether the Administration can impose safeguard duties on bifacial panels as part of this extension proceeding.

This is not a question of extension of safeguard duties, this is a question of reimposition of such duties, because the safeguard currently does not apply to these imports since the Court of International Trade issued its

November 16, 2021 decision in SEIA v. the United States, nullifying Donald Trump's Proclamation 10101 -- 10101.

As the Court concluded, once a product has been excluded from a safeguard action, reimposition of safeguard measures on that product violate the statues requirement that the trade protections be progressively liberalized.

The President does not have the authority to

reimpose safeguard duties now, for the same reasons identified by the Court in the SEIA decision.

The domestic producers have argued that the President can trigger Section 204(b)(2) of the Trade Act because they claim import of bifacial panels are circumventing the safeguard action. This is nonsense.

During the periods the exclusion has been in place since June 2019, importers did exactly what the exclusion specifically allowed them to do, which is to import bifacial panels free of safeguard duties. There can be no circumvention when importers are doing exactly what the exclusion contemplated.

You should also reject the prior panel's insinuation that original requesters of the bifacial exclusion mislead USTR. Pine Gate, the lead requester, specifically said that, quote, the exclusion would pave the way for greater adoption of bifacial modules in the utility segment.

In other words, one of the key 1 2 purposes was to increase demand for the product because of the greater efficiencies to be gained. 3 In any event, the President may -- may therefore 4 5 only consider extension of safeguard duties currently in effect. That means that any 6 7 extended safeguard action would be limited to 8 CSPV cells and monofacial CSPV panels at duty 9 rates of less than 15 percent. But even if Proclamation 101 were 10 11 still in effect, the fact remains that imposition 12 of safeguard duties on solar products of any kind undermines the Biden-Harris Administration's 13 14 battle against climate change and imposes greater economic and social costs than benefits. 15 16 It's time to bring these safeguard 17 measures to an end and allow solar deployment in 18 the United States to reach its full potential. 19 Abby. 20 MS. HOPPER: Thank you, Matt. 21 Good morning, I'm Abby Hopper,

President and CEO of the Solar Energy Industries

Association, SEIA. As a national trade association for the U.S. solar industry, SEIA represents the entire supply chain, including companies that promote, manufacture, install, and support development of American solar energy.

During the original safeguard investigation, SEIA led the opposition to these tariffs. We believe strongly that the costs of these measures would significantly outweigh any benefit to domestic producers. Unfortunately, we were right about that.

At the time of the original investigation, we forecast that tariffs in the rage of 30 percent would lead to several gigawatts of lost deployment, tens of thousands of lost jobs, and billions of dollars of lost investments. And unfortunately, that is exactly what happened.

In contrast, Petitioners argued that the tariff would create 45,000 jobs in solar manufacturing alone.

So, who are you going to believe going

forward? The side whose earlier forecasts were prescient, or the one that just plain got it wrong? The President should not let history repeat itself. It's the time to end the solar safeguard measures, the costs are simply too high.

As you know and as Matt talked about, this administration has recognized that rapid and widespread deployment of solar energy is critical for the fight against climate change. As the Department of Energy found in its solar future study, the United States must double its annual solar deployment in the early 2020s and quadruple deployment by the mid to late 2020s and beyond.

Domestic module production alone cannot reach these goals, and it's currently inadequate at only 3.8 gigawatts relative to the current annual demand of more than 20 gigawatts. This is particularly true in the utility scale segment, which represents nearly 75 percent of the total U.S. solar market, and where there is almost no domestic module capacity.

To address this supply -- this supply shortfall in the utility segment and as far back as 2018, SEIA has been the leading advocate for excluding bifacial modules from the Section 201 tariff. We fought for the exclusion before it was granted and then against the unlawful attempts to revoke it.

And contrary to what Petitioners have said, no domestic supplier is currently able to produce bifacial modules at the scale required for utility scale projects. And as you'll hear later, 150 megawatts of bifacial module production capacity won't even qualify a company to compete for most utility scale projects where scale and bankability are so important. It is critical that the Administration maintain this exclusion.

The Administration should also get rid of the tariff on imported cells for the benefit of not only domestic producers, but also their customers, who are mainly in the rooftop segment.

We were surprised that the Commission

concluded that keeping a cell TRQ in place will drive investments in domestic cell capacity.

This just doesn't square with the commercial realities as we understand them, or even the history of the safeguard measure.

U.S. consumers have also paid an estimated \$2.8 billion in tariffs on imported modules since February of 2018, implying an average cost of 1.4 million per CSPV job. Going forward, the consumer costs of extending the safeguard tariff and withdrawing the bifacial panel exclusion is over 6.5 billion, with a majority of the burden, 4.15 billion, falling on the utility scale segment.

Under an extension, the cost per job would grow to \$6.5 million. Let me repeat that, \$6.5 million per module manufacturing job.

Next, I would like to address some of the questions that you asked in advance. You asked SEIA about the impact of the duties on prices faced by consumers and to respond to the LG's rebuttal comments that the impact was close

to zero.

Simply said, LG misses the point. The reality is that increasing the cost of modules challenges the economics of solar project compared to other sources of electricity.

Consumers may not pay significantly more for electricity, but solar becomes less cost-competitive with added tariffs.

TPM Research found that solar is now less expensive than other forms of new power supply in 16 states. And while solar could be competitive in all but four states by 2025, that depends on the long-term trend of declining prices. Extending the safeguard tariff would undermine this progress.

Moreover, SEIA estimates that the
United States has lost almost 13,000 total solar
jobs due to the negative deployment effects of
the safeguard tariffs, in addition to almost
20,000 projected new solar jobs that were never
realized. This reversed years of steady growth
in U.S. solar jobs that had occurred prior to

imposition of the safeguard measures. And again, the costs are too high.

You also asked about job losses on 2202 and whether COVID is to blame. What's important here is that we have unquestionably lost jobs because of tariffs lost before COVID, and these jobs have not yet returned. Extending the tariffs will only extend the damage.

It is also undisputable -indisputable that the safeguard measures have
slowed deployment by several gigawatts. Total
solar -- total solar installments fell in 2017
and 2018 as a direct result of the safeguard
investigation after years of dynamic growth, a
loss of nearly 5.5 gigawatts of deployment from
2018 to 2020 alone.

This is consistent with SEIA's original studies conducted during the investigation. And although even though deployment has increased since 2018, it would have gone up even more without the tariffs. Lost solar deployment is a missed opportunity to

address climate change and one we can no longer afford.

recently lowered its 2022 outlook for solar installations by 25 percent, which reflects a staggering decrease of 7.4 gigawatts in deployment. And adjusting its forecast, Wood Mackenzie opined that 2022 will be a challenging year for the solar industry because of the, quote, Ongoing solar chain -- solar supply chain constraints and prices increases.

Now, the prices for CSPV panels in the United States are highest in the world. The Commission staff found that U.S. prices are 50 percent higher than elsewhere. TPM Research found that, quote, If the U.S. extends the same set of tariffs for another round, by 2026 it may cost twice as much to buy solar modules in the U.S. than in Europe or Canada, end quote.

The suggestion that the safeguard has not had any impact on price is simply false. By extending the tariff, the Administration would

place an even greater burden on already severely strained supply chains, solar supply chain.

You also asked how extension would affect the broader U.S. solar industry. Clearly, placing safeguard tariffs on modules in the years ahead when deployment is already expected to be negatively impacted by rising costs and supply chain constraints will make solar less competitive with other forms of energy.

This will result in suppressed demand for solar energy, fewer jobs, less fuller deployed, and the loss of precious time in our fight against climate change.

Regarding the impact of extension on U.S. cell and module producers, domestic manufacturers are poised for dramatic growth, but tariffs are not going to be the driver. What these companies need are long-term federal investments. And even with these investments, it will take several years before we see significant growth in domestic capacity.

Under any scenario, the U.S. solar

industry will continue to rely on imported modules, including continued imports from U.S. module producers themselves. Extension of the safeguard will not change this reality.

So, SEIA has long argued that tariffs are ineffective at growing solar manufacturing, and that what's needed instead is a suite of long-term policy options.

In September 2019, SEIA published a manufacturing white paper, which opines that growing domestic solar manufacturing requires, one, demand drivers such as a long-term extension on the solar investment tax credit with a bonus for domestic content. Two, manufacturing tax credits. And three, ongoing domestic production support as companies and their suppliers scale operations.

Importantly, all three categories of federal investments are required if we hope to be globally competitive, and Congress is close to enacting such -- just such a program under the Build Back Better Act. Indeed, SEIA is the lead

proponent of the climate provisions in Build Back 1 2 Better, including Senator John Ossoff's Solar Energy Manufacturing for America Act, or SEMA. 3 We forecast that these investments 4 would create 27,000 direct manufacturing jobs by 5 2025 and 40,000 by 2030. This is how we help 6 7 domestic manufacturers. 8 Finally, all the great news we're 9 hearing about new U.S. solar manufacturing investments has little to do with the potential 10 extension of the Section 201 tariff. 11 12 it's all about the climate provisions of the Build Back Better Act, and SEMA in particular. 13 SEIA has found hard to make Build Back 14 Better provisions provide domestic manufacturers 15 16 with the help that they need. More tariffs are 17 simply not the solution, the costs are just too 18 high. 19 Thank you. Ron. 20 MS. SCIARRA: Hi, I'm Vanessa Sciarra, 21 Vice President for Trade International

Competitiveness at the American Clean Power

Association, or ACP.

We represent the companies that build, finance, own, and operate a majority of the utility-scale solar projects in the United States. Our companies work every day to help American utilities and businesses find ways to meet President Biden's goal of creating a carbon pollution-free power sector by 2035.

We agree with the previous witnesses on this panel that what is needed to reach this goal is quick and decisive action to reduce barriers to utility grade renewable energy installation. This in turn requires rapid deployment, a large, utility grade, bifacial CSPV products that are not used in the residential and commercial markets and are not currently produced at scale in the United States.

Achieving these aggressive but necessary targets requires a thoughtful balancing of what is more important to the national interest. We believe that the TPSC should recommend that the President act to confirm that

imports of utility scale products and specifically bifacial panels should not be subject to further Section 201 tariffs.

Looking at the statutory language of 201, the President is authorized to take appropriate and feasible action that provides greater economic and social benefits than costs. In essence, he must consider the -- he must consider the ITC recommendation in the broader context of what is best not just for the Petitioners, but what is best for the country overall.

In contrast, the ITC report was limited to a narrow examination of the domestic industry's experience in the past four years of tariff protection. In fact, the ITC made no findings or recommendations as to the economic impact on all Americans of extending its proposed tariff measures.

The utility solar market requires access to a dependable supply of utility scale modules to meet the massive demand for large

scale solar projects. To build on this progress toward meeting the renewable energy goals of the Administration, ACP asks that the TPSC consider how tariffs on bifacial modules, which would add to other headwinds facing the utility solar industry, would impact these larger social and economic goals.

I am pleased that in your specific questions posed to ACP, you focused on the issue of whether the ITC erred in finding that there was no market segmentation in the CSPV industry. We continue to believe that ITC made specific analytic error when it rejected the concept that there are essentially two distinct markets for solar modules.

It is true that the ITC found some domestic utility scale module production and some evidence of bifacial modules sold in the residential market. But what is critical to an accurate assessment of this data is scale and context. Any domestic production is simply minuscule when compared to the massive demand of

utility projects.

Further, industry representatives from companies representing the largest utility grade solar developers in the country spoke directly to this dynamic at the ITC hearing and unfortunately were largely ignored.

We understand that the TPSC has received the complete from the ITC proceeding and we urge you to consider the direct testimony and sworn declarations of these company representatives as they explained how the supply and demand conditions of the solar utility market affected their purchasing decisions.

In particular, we cite to ACP's

October 27 prehearing brief at Exhibits 2 and 3,
which were declarations from ACP members Clearway
and Invenergy. Their testimony noted that they
knew of no domestic suppliers that have
manufactured utility grade bifacial modules in a
quantity sufficient to support utility scale
developments.

Further information that is consistent

with this will be provided by NextEra and EDF representatives on this panel.

Further, you asked us to comment on Hanwha's statement regarding the, quote,

Dedicated production line for 72 cell modules,
end quote. Again, context is key. Just because

Hanwha itself claims that it has a, quote,

Material percentage, end quote, of its production
in bifacial says nothing about what percentage of
overall utility project demand Hanwha or the
domestic industry can supply.

We urge the TPSC to closely consider the broader context of these utility scale projects, which are simply massive when compared to the inconsistent and inadequate of domestic producers.

I would further refer you to ACP's post-hearing brief at page 13, and also Annex 4, where we respond to Commissioner Schmidtlein's questions, where you can see that the utility scale production was woefully insufficient during the POI to meet the demand of the utility market.

What we continue to find perplexing is that the ITC did not refute the evidence provided directly by procurement officials who work for the companies engaged in the most significant large scale solar deployment projects. Instead, they chose to disregard the experience of these officials entirely.

I urge you to consider their approach as you hear from others on this panel who work on a daily basis in this industry as to their experience both with regard to their attempts to purchase from U.S. domestic manufacturers, as well as their business concerns about the needs of utility grade developers.

Acting as the TPSC, you can -- you can assess the ITC's conclusions and assess whether the ITC was justified in rejecting the actual onthe-ground experiences of APC -- ACP's solar energy developers, who comprise the largest purchasers of solar modules, in deference to testimony of witnesses who, as a practical matter, have very limited experience of dealing

with purchasers outside the context of residential and small scale commercial applications.

You also asked us to expand upon our statement that we are supporting increasing domestic manufacturing equipment for utility grade projects. ACP has been very public in its advocacy of the long-term extension of the renewable energy investment tax and production tax credits.

When coupled with manufacturing tax incentives currently being debated in Congress, long-term certainty around these credits will bring the necessary market stability to maintain existing domestic manufacturing capacity and to encourage additional investments in domestic clean energy supply.

As a final matter, I would like to address the CIT decision of November 16. This case bears consideration because it means that, as a current legal matter, bifacial modules are excluded from the Section 201 tariffs, and there

are no measures on bifacial products to extend.

We recommend that the President confirm that the CSPV bifacial modules remain excluded from further Section 201 tariffs. Even if there is an increase in the domestic manufacturing footprint of utility grade products, which ACP does not oppose, the practical reality is that production on the scale necessary to meet U.S. utility scale deployment needs would take years to come online, leaving U.S. utility grade solar developers with no option but to import these modules and pay tariffs.

Tariffs on imported bifacial modules will translate into higher electricity costs for solar energy operators, as that cost will be passed on to consumers and the economy as a whole. The net result of reintroducing tariffs on bifacial products will be a negative and inflationatory impact on consumers and less solar deployment overall.

The short- and long-term economic

costs of extending measures must, under the 1 2 statute, be considered by the President. Our ability as a country to meet the 3 4 clean energy targets established by the Biden-5 Harris Administration with insufficient domestic capacity is simply put a significant cost for all 6 Americans. 7 8 Thank you, and I look forward to 9 answering any of your questions. 10 MR. NICELY: Ron. Ron, it looks like 11 you may be frozen. Ron, are you there? If Ron is having trouble, maybe we should move on to 12 13 Jamie. 14 CHAIR MARTYN: I think that's a good idea. 15 16 MR. RESOR: Okay, good afternoon, can 17 you hear me? 18 MR. NICELY: Yes. Although, Jamie, it 19 looks like Ron is in fact on. 20 (Simultaneous speaking.) 21 MR. REAGAN: I lost my connection. 22 MR. RESOR: Go ahead, Ron. Yup.

1 MR. NICELY: Go ahead, Ron.

MR. REAGAN: Yeah, sorry, about that, lost my connection.

Good morning, my name is Ron Reagan,
I am the Executive Vice President for
Engineering, Construction, and Integrated Supply
Chain for NextEra Energy.

(Audio interference) my test utility scale solar sector and respond to the questions posed by the TPSC to NextEra and the world.

NextEra and its affiliates own and operate approximately 58 gigawatts of total electric generating capacity. We employ over 14,000 people throughout the United States, and our projects create thousands of additional local U.S. jobs every year.

As one of the largest capital investors in U.S. infrastructure, we are planning to invest more than \$60 billion over the next four years. We have already invested billions of dollars in utility scale solar generation projects in 33 U.S. states.

Extension of safeguard measures has only occurred once in our history, and the President must consider how an extension would harm solar deployment, which is required to combat climate change.

To meet the ambitious climate goals of the Biden Administration, the U.S. energy industry must significantly increase the share of U.S. solar energy production from approximately four percent of U.S. electricity production today to 40 percent of U.S. electricity production by 2035. And estimated 80-90 percent of added solar capacity will need to be in the form of utility scale solar projects like those developed by NextEra.

As NextEra has maintained throughout these safeguard extension proceedings, the domestic industry has no meaningful presence in the utility scale segment of the market. The TPSC asked us to address the WTO panel's finding that the domestic industry was present in the utility segment and the ITC's finality that a

plurality of the domestic industry's reported shipments of CSPV modules went to the utility segment in 2020 and the interim 2021.

The pages cited either rely on confidential data to which we do not have access or refer to residential installations, which doesn't appear relevant to the question. In any event, I can speak to the Commission's finding that in 2020 and interim 2021, a plurality of the domestic industry shipments went to the utility scale segment.

First, the Commission's data is flawed because the Commission did not meaningfully engage in a market segmentation analysis. The Commission rejected the respondent's recommendation to clearly define the utility scale segment and collect data on U.S. shipments by market segment.

Instead, the Commission relied on its typical channels of distribution questions, which did not clearly capture (audio interference.)

MR. HALL: Is Ron frozen again?

MR. REAGAN: Enough new U.S. module manufacturing capacity for the utility scale market. Domestic module manufacturing increased by approximately 2.6 gigawatts during the four years of safeguard measures.

Solar module demand grew by
approximately 15 gigawatts during those same four
years and is expected to grow by another
approximately 40 gigawatts over the next four
years to meet the Biden Administration's goals.

Safeguard measures have not be effective in creating the domestic manufacturing we need to balance domestic supply with domestic demand.

An even greater restriction on domestic supply of utility scale capacity is that no U.S. producer or manufacturer of bifacial modules for utility scale applications, which currently make up more than 80 percent of our projects. This means that NextEra cannot even consider domestic producers for the great majority of our projects, which has been the case

since the NextEra began shifting to the use of bifacial modules in 2019.

The TPSC asked NextEra to explain the increase in bifacial module imports following the imposition of safeguard measures in light of the fact that bifacial technology was not available at the time the safeguard measures went into effect.

The shift to bifacial modules was long anticipated and revolutionary to utility scale solar deployment. Even before the safeguard measures went into effect, we were aware that solar manufacturers around the world were developing bifacial technology and we were eagerly anticipating designing and integrating this technology into our projects.

Once bifacial technology became available, it was a game changer for our projects because it allowed us to maximize the amount of electricity that a project can produce. Because of these efficiencies, we shifted the vast majority of NextEra's utility scale deployment to

bifacial modules, and this shift continued to occur even after President Trump redrew the bifacial module exclusion, showing that the conversion to bifacial modules was not conditional on the exclusion.

This move to bifacial technology is not limited to the United States either. Utility scale developers worldwide have done the same because of the clear advantages of bifacial modules. However, despite the widespread global adoption of bifacial technology, no U.S. producer currently manufactures bifacial modules in the quantity necessary for large projects.

The TPSC also asked whether the safeguard measures resulted in any changes to sourcing plans for CSPV sales and modules. The answer is no. The utility scale segment is moving to bifacial modules, regardless of the safeguard measures. U.S. producers simply have not responded to this clear shift in the market. So, we have no choice but to source from foreign suppliers that manufacture the bifacial product

we require.

It's all about scale. Domestic producers continue to focus on supplying the residential and commercial segments of the markets, not the utility scale sector. Even Hanwha, which supplies some monofacial modules to utility scale developers, dedicates the vast majority of its supply to residential and small commercial buyers and has very little capacity available for NextEra or the rest of the utility scale sector.

The safeguard measures only act to make utility scale projects less economically viable and solar energy more expensive for end us consumers of electricity.

The President must also examine whether extension of safeguard measures provides greater economic and social benefits than costs. The safeguard measures have depressed demand in solar projects because they add significant and unexpected cost to the large projects developed by utility scale companies.

When bidding on projects, solar can lose out to other less expensive forms of energy because of the added costs and uncertainty caused by the safeguard measures. Long-term power purchase agreements are negotiated and priced based on costs expected at the time the agreement is signed.

The future addition of costs, such as duties imposed under the extension of safeguard measures, can make a project no longer economically viable. Extension of the safeguard measures will only make this problem worse while doing little to increase the domestic production of modules.

This slows deployment of utility scale solar energy, which is critical to expanding clean energy technology in the United States.

The cost of safeguard measures far outweigh any incremental benefit to the domestic industry.

For these reasons, extension of the safeguard measures is simply not the right answer for America. This is especially the case for

bifacial modules in light of domestic supply constraints and the solar goals of the Biden Administration, which are dependent on utility scale deployment that rely on bifacial technology.

Earlier this year, domestic module producers and solar developers worked together on policy that achieves positive adjustment for the domestic module industry while maintaining strong demand for solar projects. U.S. manufacturing incentives and tax credits are currently proposed in the Build Back Better Act that meet the needs of all parties in this case.

This is good policy, policy that would benefit and strengthen domestic manufacturing without increasing costs and without restricting imports that are necessary to meet demand and increase solar growth in the United States.

This is the type of policy required to meet the Biden Administration's climate goals and make a meaningful impact on carbon emissions.

NextEra therefore requests that the President not

extend these harmful safeguard measures, but rather allow us to move in a new direction the benefits the U.S. solar industry as a whole, including passing needed manufacturing incentives and tax credits.

Thank you.

MR. NICELY: Jamie.

MR. RESOR: Good morning, my name is

James Resor, and I'm the CEO of EDF Renewables

Distributed Solutions, which is part of EDF

Renewables or EDF-R. I have been in my role at

EDF-R for six years and have worked for a total

of 15 years in many facets of the solar industry.

Headquartered in California, EDF
Renewables is one the largest utility scale
renewable energy developers in the U.S., with
over 20 gigawatts of developed projects. We
employ approximately 1,400 employees in the U.S.,
and for example, over the last five years, EDF-R
has built projects in 20 states, which have
collectively created and supported hundreds of
construction jobs in those states, in addition to

numerous jobs in engineering, development, operations, and administration.

The utility market is by far the largest segment of the U.S. market and is key for the Biden Administration's goal of carbon-free electricity generation by 2035. As a rule, domestic CSPV manufacturers are not capable of supplying the utility segment. Most domestic module producers focus on the residential and small scale commercial segments, which have smaller projects and higher profit margins.

Domestic producers do not have the production capacity to provide the line that we need for our utility scale projects. Also, suppliers must be able to effectively deliver modules not only to suitable utility scale projects, but at a rate of at least 20 megawatts per week.

And then these same suppliers of other customers, so they are -- therefore they really need to be able to supply 50 megawatts a week for the U.S. market, which is approximately two

gigawatts per year. But hardly any domestic CSP producers have near that capacity, other than Hanwha, to produce the volume and pace that we need for our utility scale projects, and thus are not capable of meeting this requirement.

In addition to -- we also need to trust our suppliers and rely on their long cooperation for dedicated supply, and also because the functionality and performance of the modules and other system components, such as single access trackers, which we procure separately, are very interrelated and must remain capable with the module provider.

This further limits the pool of potential module suppliers. Moreover, I strongly disagree with the assertions by Hanwha and LG that the same type of module is used in all applications. Residential and small scale commercial projects are generally located in residential groups or commercial buildings with all the modules in a stationary position and the modules used are suited for those purposes.

Specific kinds of modules such as bifacial with - and typical with largely wafers as the industry
continues to advance, which have increase energy
production. The bifacial modules almost always
utilize single access trackers holding the
modules above the ground to track the sun during
the day and allowing for the capture of reflected
light on the back side of the module.

energy from the bifacial module is essential for the economics of very competitive utility scale projects. These large bifacial modules are not suitable for use in residential and most commercial installations where the back side of the module sits closely on the roof, which effectively prevents the backside gain of the bifacial modules and also brings more weight on the roof.

Since the safeguard measures were proposed, I've yet to see any U.S. producer offering the 72 cell comparable panels in a

bifacial format for the utility scale segment in a meaningful way. And certainly, none have approached EDF Renewables to do so. While there have been some, I'm not aware of any significant volume, as others have testified today.

I understand that some U.S. producers have blamed the bifacial exclusion for their failure to adjust to the import competition. But U.S. producers largely ignored this key technology in the utility segment more generally, before the bifacial exclusion was granted, while the bifacial exclusion was in place, and after President Trump approved the exclusion.

Given the volume and product demands of the utility scale market, the domestic CSPV industry is capable -- is capable of supplying only a small sliver of utility scale product, and only then with the suboptimal module. Thus, EDF and other renewable energy utility scale project developers have no choice but to rely on imported panels to support and undertake our projects.

Utility scale developers rely on

suppliers whose individual production capacity is often more than two gigawatts per annum in order to meet the volume requirements for our projects.

Extending the safeguard measures and reimposing the duties on bifacial panels would place a tax on solar energy without changing the purchasing patterns of utility scale developers, because the import's often our only source of reliable supply.

Thus, even if the President had the authority to reinstate duties on bifacial panels despite what Mr. Nicely said on that, doing so would be terrible policy.

I would also like to address some of the comments that suggest that tariffs have not harmed the broader solar industry. The tariffs have had a negative impact on demand. Although this might have always resulted in a year-over-year decline in demand, demand in the utility market has increased since the imposition of safeguard measures because of things like technological advances and the tariffs.

Deployment is also not immune to price increase and market uncertainty, including wind, natural gas, and other existing generation resources. In our experience, although the demand in the utility market has grown, the tariffs have prevented our firm from installing a number of projects that we could have absent the tariff.

Tariffs reduce demand because we have to increase our price and/or shift more risk to the potential purchaser of electricity from the solar project to cover the added cost of tariffs to a point where such potential purchasers may not accept those terms.

This is even more problematic now with the substantial increase in costs for steel, shipping, and labor and general chain constraints that are greatly hindering the ability of EDF and other solar developers to meet the demand of the utility market to the point where some contracts are being canceled.

In response to the TSPC's question

regarding the potential ongoing impacts of COVID19 on the supply chain for solar materials and
labor, these adverse impacts will continue at
least through third quarter of 2023.

exacerbate these supply chain challenges and reduce the growth of business for, one, U.S. producers of single-axis trackers and other balance of system components which are manufactured in the U.S. And also U.S. installers, including union electricians, engineers, and other construction workers.

Alignment will increase at the pace needed to meet the -- in order to ensure that solar is competitive with other forms of energy. Extending the safeguards -- safeguard tariffs, especially in bifacial panels, will make it more difficult for solar to compete with other energy sources and will act as a dead weight on demand, particularly during a period where there's already under-supplies of bifacial panels in the U.S.

I emphasize that we're happy for the CSPV cell and module manufacturers to grow and to source some of our supply from within the U.S.

But the way to grow U.S. solar manufacturing is to manufacture along the entire solar supply chain, including polysilicon and wafer production. Incentives like those in SEMA encourage that type of long-term investment, and importantly, do not act as a tax on the broader solar industry.

The safeguards, however are temporary, raise prices for solar cells and modules, suppress demand, and none of the duty collected is invested in the domestic CSPV industry. Four more years of the tariffs at progressively lower rates will not spur the kind of investment needed for the domestic CSPV producers to become more than bit player in the utility market.

We need more solar manufacturing centers to help achieve that goal, extending the safeguard tariffs will not.

Thank you very much.

2 MR. HERSHMAN: Thank you for the
3 opportunity to speak today. I am George
4 Hershman, CEO of SOLV Energy, formerly known as

MR. NICELY: George, go ahead.

6 CA.

Until recently, Swinnerton Renewable

Energy was a division of Swinnerton, Inc., one of
the oldest and largest general contractors in the
U.S., with a 130-year history. We carry this
legacy with us at SOLV Energy as the largest
engineering procurement and construction firm, or
EPC, for utility scale solar in the United
States.

Swinnerton Renewable Energy, based in San Diego,

I was employee number one when we started in 2008, and I now represent over 4,000 people working in almost 30 states across the country. We offer turnkey solar power solutions and partner with major utilities and developers to build reliable, clean power.

Solar -- SOLV Energy has installed 9.3 gigawatts of solar nationwide. Collectively

we've created 11,000 construction jobs, all high paying and with many union workers.

We have a pipeline of over 4.3 gigawatts of solar projects scheduled to begin installation between now and the end of Q3 2022. These projects will span across 20 job sites in nine states. SOLV Energy must have access to imported modules to complete these projects as contracted.

You asked about the impact of the safeguard action on the broader U.S. solar industry. In my testimony before the TPSC during the original safeguard investigation and before the International Trade Commission during the extension proceedings, I expressed concern about the negative effects of safeguard tariffs. My concerns have only grown since then as I've seen and experienced the actual impacts of these tariffs first hand.

Over the years, trade restrictions led to slower industry growth, fewer installations, canceled projects, lost revenue, and reduced

employment across all sectors of the domestic solar industry. We have -- there have been meaningful changes in the U.S. solar industry since the original investigation.

The average size of the utility scale solar installation has increased significantly.

In 2016 and '17, the average project was only 30 megawatts. Eight megawatts was considered a large project. In 2021, the average project size grew to 150 megawatts. In 2022, it will be 180 megawatts.

The size of these projects has a profound impact on local employment. Larger deployments lead to hundreds of additional well-paid local jobs. For example, 150-megawatt project would make about 200 local hires. But a 500-megawatt project has over 500 local hires.

We're providing good-paying jobs in rural areas where the ability to have trainable, safe jobs, particularly during COVID, is often very limited. There are also multiplier effects as income is spent in local communities on goods

and services, rental equipment, and local suppliers.

A continuation of the tariff could mean these jobs wouldn't be created and projects can't be completed as contracted. Since the -- since the Section 201 tariff was implemented, several module manufacturers started production in the U.S. But we continued to use a majority of imported modules.

We have seen no significant increase in the utility scale module production capacity, despite what we've heard from U.S. module producers in written comments to this committee. For a number of reasons, domestic module producers cannot supply utility scale demand.

Developers and companies like mine
that procure modules must mitigate as much risk
as possible. We are unable to finance large
scale projects if a majority of module
manufacturers' capacity is being consumed by only
one project.

This fact should come as no surprise

to this committee that supply capacity and bankability is not unique to the solar industry. If SOLV Energy is contracted to build a 250-megawatt project, we would not able to procure from a U.S. or any plant that produces 500 megawatts or less, as procuring 50 percent of a manufacturer's capacity is a high risk and not bankable.

Our team and client partners evaluate whether a potential supplier meets a very specific set of qualifications. Does the manufacturer have a sufficient and bankable supply of modules that can be delivered in a timely fashion? Do they meet our high quality and technical specifications? And finally, do they meet our warranty standards?

SOLV and our developer partners do not purchase CSPV solar modules based on the location of their manufacture or cost alone.

Finally, I challenge what U.S. module producers said about the demand for bifacial in utility projects. In 2021, we installed almost

one gigawatt of bifacial panels. In 22 -- in 2022 and beyond we are currently bidding on or under contract for 27 projects totaling almost five gigawatts of bifacial panels.

In all cases, the developer is using bifacial due to high efficiency and energy yield, as this allows for more efficiency per installed module.

Hanwha Q cell and LG say there are no technical differences between modules. They are wrong. Lower efficiency monofacial modules are not adequate substitutes, and entire racking systems are engineered around specific types of modules, including the make and model, and are not interchangeable without re-engineering the entire solar plan.

Reimposing safeguard tariffs on bifacial panels will have a negative financial impact on these projects and will create general disruption to the U.S. market. Many businesses, including SOLV Energy, made decisions based on the assumption that there would be no safeguard

duties on these panels. The cost to the utility segment is simply unjustified.

For these reasons, I believe an extension of the safeguard measure is not warranted. I ask the President and the Administration to listen to the guidance in the safeguard statute that any safeguard action must do more good than harm, not the other way around as is in this case.

Any extension to the 201 would only raise prices, causing self-inflicted inflation in the energy market. And I'm concerned that policymakers continue to ignore the negative impacts this would have on the rest of the solar value chain, including U.S. producers that balance the system components, U.S. installers, and EPCs, as well as the U.S. energy consumer. The best option is to not extend the safeguard action.

Thank you.

MR. HALL: Good morning, my name is

Aaron Hall, and I am President of Borrego Solar

Systems, and I've been personally responsible for module procurement for the last 20 years.

According to our industry's leading research and consultancy firm, Wood Mackenzie,
Borrego has had the largest market share in the commercial market. Last year, we represented 11 percent of this market. We are therefore the leader in commercial across our business units, which include EPC services, as well as developing, operating, and maintaining commercial solar projects.

We conduct projects for our educational facilities, local and state governments, small and large corporations, water agencies and districts, commercial real estate developers and owners, independent power producers, and investor-owned utilities.

Most of our installations are between one and ten megawatts, and we have over 383 commercial projects and over four gigawatts of utility scale projects in development through 2025. Our solar projects depend on a reliable

supply of modules. For this reason, we order directly from manufacturers, which allows us to establish a predetermined delivery schedule for modules.

Due to the size of our projects, the timeline for completion is often over several weeks, months, or even years. We can only work with suppliers who are able to meet our supply needs over these longer durations and reserve their future capacity to continue to fill our supply needs.

But in our experience, domestic suppliers do not have the capacity or willingness to fill our orders. Our projects use 72 cell monofacial and bifacial modules, neither of which are produced by U.S. producers in significant enough quantities to serve the non-residential and utility scale markets.

Instead of focusing on large format modules like the 500-plus and 600-plus watt modules using large commercial or utility scale projects, domestic producers primarily

manufacture for residential and small scale commercial projects.

During these extension proceedings, proponents of extension have tried to argue that there is little difference between the larger format modules used in large commercial and utility scale projects and the smaller format modules used in residential and small commercial projects.

The TSP -- TPSC also asked SEIA to discuss the limitations of bifacial modules in residential applications. Larger format modules including bifacial modules are utterly unsuitable for residential projects.

Obviously, 72 cell monofacial modules are larger and weigh more than small format modules. And bifacial modules weigh even more because of the double glass that is often used.

OSHA requirements prohibit individual workers from handling items that are more than 50 pounds, so residential installers would need to hire more workers to install the larger format

modules that weigh significantly more. These labor costs compound in small residential projects.

Additionally, residential installers and homeowners generally want to avoid excess weight on a roof for safety and maintenance reasons. Slanted rooftops also have smaller areas for installers to work and often have small or irregular geometry so residential installers can fit more small format panels into the same surface area.

At the ITC hearing, Hanwha and LG both played videos about their operations that clearly showed the limitations that residential installers face when installing on rooftops and why bulky, heavy large format and bifacial panels are inappropriate in these applications.

Moreover, even the few domestic producers that do manufacture large format modules cannot meet our needs. Borrego has consistently contacted domestic producers to supply modules, especially in light of the

uncertainty in the import market caused by safeguard measures and other tariffs.

However, despite our efforts, we have been unable to find domestic producers willing or able to sell to us in any meaningful quantities. In fact, we have had domestic producers expressly decline to sell to us because they have reserved their capacity for the residential market. And we have had domestic producers completely stop responding to our inquiries.

Additionally, no U.S. suppliers have consistently maintained Tier 1 status, meaning that banks have confirmed that they are comfortable providing non-recourse debt to projects that utilize modules from these suppliers.

This is a key consideration for
Borrego, as we want to ensure that the owners and
independent power producers that are our
customers are able to finance their projects with
the modules that we supply.

However, because most U.S. producers

have chosen to focus on residential projects, they are not Tier 1 certified. We are only aware of two U.S. CSPV producers that have reached Tier 1 status, but they have not remained on the list long-term, which we and our buyers typically require.

Accordingly, even if U.S. producers had the capacity to supply our projects, which they have made clear they do not, almost all have not attempted to show financial institutions, and by extension purchases like Borrego and its customers, that they are suitable options to supply these large scale, high cost projects over long periods of time.

We are willing and eager to buy modules from U.S. producers to supply our large commercial projects, which has had -- which has the added bonus of reducing logistics costs, particularly with supply chain disruptions currently increasing international shipping costs.

We also support federal policies that

incentivize a strong domestic manufacturing base. 1 2 But despite almost four years of safeguard measures, we still cannot source from domestic 3 4 manufacturers for large commercial projects as 5 they have focused most of their efforts on the resident market. 6 And the safeguard measures have slowed 7 8 critical solar deployment in the significantly 9 larger large commercial and utility scale segments of the market. 10 11 Thank you. 12 MR. NICELY: Meghan. You're on mute, 13 Meghan, you're on mute. 14 MS. SMITH: Hi, Meghan. At this time, you have about six minutes left. Thank you. 15 MS. NUTTING: Great, thank you. 16 17 morning, I am Meghan Nutting, Executive Vice 18 President of Government and Regulatory Affairs at 19 Sunnova Energy Corporation. 20 Founded in 2012, Sunnova is a leading 21 residential solar and storage service provider.

Sunnova's goal is to be the source of clean,

affordable, and reliable energy. We have a simply mission, to power energy independence so homeowners have the freedom to live life uninterrupted.

We have more than 180,000 customers in 33 U.S. states and territories. Sunnova works exclusively in the residential sector of the market. Sunnova works with over 800 dealers and sub dealers, many of whom are small businesses or EPC contractors that handle design, procurement, and installation of residential solar systems.

Since Hurricanes Maria and Irma in 2017, Sunnova annually purchases a small quantity of modules to have inventory available for our dealers for hurricane response.

I would like to address some
misperceptions put forward by U.S. module
producers that support extension of the safeguard
action. All solar modules are not
interchangeable. We have strict technical
specifications consistent with residential
building codes and the practical limitations of

rooftop solar installations.

We require lighter weight, 60 cell modules with an aesthetically pleasing design, such as triple black, which means black back sheets, black frames, and black cells, and low voltage of 48-500 volts. These requirements are distinctly different from commercial and utility projects.

We use 60 cell modules for typical rooftop installations because larger modules are more difficult to handle and install on a pitched roof. The roof area is also constrained, requiring few solar modules at higher efficiencies. For these reasons, the majority of our dealers simply do not use the 72 cell modules and have no desire to do so.

And as a result, the price of 72 cell utility scale modules has no effect on the price of 60 cell rooftop modules. They simply do not compete with each other.

You asked SEIA to explain the limitations of bifacial modules in residential

applications. Bifacial technology is incompatible with residential installations because roofs are commonly a dark shade that does not permit the added energy generation of a two-sided cell.

A very small percentage of residential installations, almost -- which are almost entirely in tropical locations, have a white surface. As a result, residential solar systems require monofacial modules.

You asked for the percentage of imported bifacial modules used in residential versus commercial applications. The Commission did not collect questionnaire data at this level of detail, but according to the Commission's own research, bifacial modules accounted for only .3 percent of residential installations in 2020, 1.8 percent in 2021 for the five states with data available. That is at page I-70 of the staff report.

Sunnova opposes extension of the safeguard action because any increase in cost for

solar installations is a disincentive for customers to install solar. The safeguard also negatively affects American jobs.

It is indisputable that more solar deployment means more good-paying jobs, particularly in the residential segment that relies on more workers than other segments of the solar industry. The small changes in domestic module supply industry over the last four years do not outweigh the increased cost and job loss caused by the safeguard measures.

Sunnova is extremely supportive of domestic panel manufacturing. Our dealers purchase panels from domestic manufacturers to the extent that they are available. We've also been very supportive of Senator Ossoff's Solar Energy Manufacturing for America Act, which we believe is the right approach to supporting domestic manufacturing capabilities.

The TSPC should also acknowledge the obvious conflict in the position of U.S. module producers regarding extension of the tariff on

modules while also wanting more access to tarifffree imported cells.

Sunnova supports termination of the safeguard action in its entirety to ensure a reliable supply of modules, imported and domestic, which can only be achieved by removing these unnecessary trade restrictions.

Thank you for your time.

MR. NICELY: Thanks, Meghan. That concludes our presentation, Mike and Will.

But if I could just mention one other thing, that if it would be helpful, particularly for the court reporter, for Ron and Jamie's testimony, you can tell there were some technical difficulties. So, if we need to give you the written testimony to help the court reporter, we'd be happy to do that.

With that, we turn it back to you.

MR. GAGAIN: Thank you to all the participants on this panel. And thank you, Mr. Nicely, for that. We'll consult internally and let you know if we need any, you know, written to

clean up the transcript.

That being said, let's turn to the question and answer session now. Like the first panel, I'll begin. I have a couple hopefully quick questions just to clarify some state of the record. And then I'll turn it over to Mr. Martyn and the other panelists to pose any questions that they may have.

So, my first question is to the American Clean Power Association. And this is just a matter of clarifying the record.

One of our advanced written questions to you indicates that at page 4 of your written comments you argued that economic data presented at the ITC hearing demonstrated that none of the petitioners has produced utility grade products but instead focused any investment or expansion planning on the more lucrative residential module market.

However, in that question, we pointed to statements by Hanwha Q CELLS and by Auxin Solar that they have production lines or have

produced bifacial products in the United States.

I want you to, I'm hoping you can reconcile your position with the statements of these domestic CSPV producers.

For the record, is it that no, just to clarify, is it that no domestic producer is doing this in your view, or is it more of a question of scale? Thank you.

MS. SCIARRA: So, thanks for the question, Mike. Just to keep in mind for everyone viewing, I don't have access to the confidential record. So, I'm working on publicly available information.

And I think the answer is scale. You know, I'm not going to tell you that I don't have access, as I said, into the confidential record. But it's my understanding from talking to my members and talking to our legal team that the issue of production on the domestic side is, if there is production or there was production or there were sales in the market, they were so small that they were relatively insignificant

relative to the scale of the developer needs.

MR. GAGAIN: Okay. Thanks. And then one other question to ACP as well. I believe I heard you mention in your testimony that this country is dependent on imports of CSPV products. And that is a basis for not continuing the solar safeguard measure.

Do you believe that there is any connection between such imports and what the ITC found regarding the state of the domestic industry in its extension review report?

MS. SCIARRA: So, my point about imports is that I think if you look at the sheer numbers of the panels that our industry will need to move forward with the deployment goals that we have and that the administration has, it's impossible to conceive even under the most optimistic scenario that we would have a situation where there weren't some imports.

And the reality is that for the domestic manufacturing footprint to grow, and this is really based on testimony that the first

panel provided, you're talking scales of a year 1 2 to three to four years for people to be able to have capacity come online. 3 And if at the same time we're trying 4 5 to grow our deployment and really sort of hit the goals that we're trying to hit, there's just no 6 7 way to do that without some level of imports. 8 So, I think the question that I'm 9 trying to put before you all is what level of tariff do we want to have on those imports, if we 10 want to have any level of tariff. 11 12 MR. GAGAIN: Okay. Thanks for that. 13 And then I have one question to SEIA. 14 And that is, you contend that no domestic cell producer can produce bifacial 15 16 modules. And you emphasize at the scale needed. 17 Do you have any estimate of how much bifacial 18 product production is needed to satisfy U.S. 19 demand? 20 MS. HOPPER: So, I would concur with 21 I don't have access to the confidential

record either.

But I think you heard from George

Hershman at SOLV and other of the developers that

the -- and you heard from Ron at NextEra about

how much of their products are bifacial.

But if you think about it, if you listen to their testimony, they have to de-risk their investments, right, so they're not going to buy 100 percent of the output for their, from one manufacturer. And so, as we think about the amount that is growing, I don't have a particular number.

But if we think of 20 gigawatts of deployment this year, we think 75 percent of it is utility-scale. We heard from the largest developer that the majority of their projects are bifacial. You can sort of quickly do the math around -- and then understand that you're not going to buy just from one developer. You have to de-risk that investment. You can pretty quickly get to a very large number.

MR. GAGAIN: Thanks for that. I have no further questions. So, I'll turn it over to

1 Mr. Martyn. Thanks. 2 CHAIR MARTYN: All right. I think I I have a few questions. 3 am on screen now. The 4 first two are for SEIA. The first question to SEIA is, does 5 SEIA include in its membership any U.S. producers 6 7 of solar cells or solar modules for polysilicon? Yes, 100 percent. 8 MS. HOPPER: 9 CHAIR MARTYN: Okay. Second question 10 is I noted you said that the loss of employment 11 in 2018 was due to tariffs. Now, I look at --12 and this was something from SEIA's submission. 13 On page 17, it shows the number of jobs in the 14 U.S. solar industry peaking in 2016, declining in 2017, declining again in 2018 by somewhat less, 15 16 and then rising in 2019. 17 How is that consistent with your 18 assertion that the safeguard measure resulted in 19 a loss of employment? 20 MS. HOPPER: I think, Mr. Martyn, when 21 you think about a loss of employment, it is both

the loss of actual jobs and the loss of jobs that

were not created.

And I think when we compared our projections of what deployment would be and the resulting employment as a result of that deployment versus what it was in 2017 and 2018 our projections, there is a pretty significant sort of delta there between what could have been and what is.

I mean, you are right that over the course of time our industry has continued to grow. But it is our opinion, and I think our economic analysis shows, that the job loss in deployment has been greater because of the imposition of tariffs.

CHAIR MARTYN: Thank you. All right.

My next question, I think it was the gentleman

from NextEra who was saying that the ITC had an

error in its collection of data for the utility

sector. He said that I think the ITC collected

its data based on its normal channels of

distribution and did not look at utilities.

And I want to look into that because

that's a pretty serious accusation. It says the ITC ignored what it said, what some participants had alleged.

I note here there's Table 2-1, which says that the ITC gathered data on assemblers, distributors, residential, commercial, and utilities. So those aren't the ITC's normal channels of distribution. So, I don't think that's accurate.

Is it your assertion that the ITC defined the utilities channel incorrectly, or is there something I'm missing?

MR. NICELY: Ron, I can -- since we were involved in helping with the, develop the questionnaires with the ITC, I can answer that.

Well, the issue is that this is a case in which it's quite clear to us that, and you can tell from our witness testimony that there are clear segments, different segments that required different kinds of products. And we made this very clear to the ITC throughout, all the way back to the original investigation.

And the only extent to which they gathered information about that clear distinction was through their channels of distribution questions, which only had to do with sales. And they asked about distributors. We tried to make it clear that distributors were mostly devoted to selling to the residential sector. But that muddied the water because of the distributor category.

In any event, the point is that if they had gathered more information, not just sales information through channels, but production, et cetera, et cetera, other information about the various segments, what we think of as three large segments, the residential on the one hand, the commercial/industrial on the other hand, and the utility-scale, they would have had a clearer picture of what was going on and a better understanding of what we are talking about when we distinguish and explain why it is that the industry is really woefully incapable of supplying the largest segment, which is utility-

scale.

So that's I think what Mr. Reagan was really speaking to.

CHAIR MARTYN: All right. Well, this is a really significant point, so I want to be really clear about it so that there's no confusion.

So, it is your position -- well, let me ask. Is it your position that the utilities data that the ITC gathered contains companies that aren't utilities?

MR. NICELY: When you ask the utilities data, well, there's another issue that I think maybe others can help me with here, which is utilities versus utility-scale. But the point is I think what the ITC was collecting, when they said just purely utilities what they actually meant there was utility-scale.

But, again, we offered, just to be really clear with this, Will, we offered specific definitions of what utility-scale means and what the size is, because as George Hershman talked

about in his testimony today, over the last several years the size of a utility-scale project has changed dramatically, right, going from, you know, in the, around 10 several years ago to as big as 150 on average to what George said next year would be 180 megawatts per project.

So that's also something that wasn't captured, what's happened in the market from a dynamic perspective with the size of these projects. And that's important to getting a better sense of whether or not the domestic industry can actually service that part of the market.

I mean, let's bear in mind, Auxin, for instance, and publicly available information tells us that Auxin has about 150 megawatts' worth of capacity total. And Mr. Hershman talked about how an average utility-scale project is 150 megawatts.

So that's really the critical issue to recognize here and what we weren't able to gather in as much detail as we wanted to when the

Commission didn't accept our proposal for 1 2 adjusting or adding questions to the questionnaires. 3 4 CHAIR MARTYN: All right. Thank you. 5 That's all. Last question, and you can decide, Mr. 6 7 Nicely, whether you want to ask this, whether you want to answer this or refer it to Mr. Hershman. 8 9 You said that folks in the utilities, selling the utilities sector made a number of 10 11 purchases based on the assumption that there 12 would not be duties on bifacial cells. note that we granted the bifacial exclusion in 13 June of 2019. And the first withdrawal was in 14 15 October of 2019. 16 So, was it reasonable after October 17 2019 to rely on the proposition that there would 18 be no duties on bifacial panels? 19 MR. NICELY: Well, part of the problem 20 with the yo-yo effect that happened as a result 21 of this litigation was that it was difficult to know whether or not there was going to be, there 22

were going to be duties imposed on these products or not.

And part of the goal of these safeguards from the first instance, given that you're imposing these duties on fairly traded products and the reason why when they were originally announced in the first year, when the President announces them, he actually indicates what the rates will be year by year is so companies can plan, right.

And what has happened with this
particular case is it's made it much more
difficult for companies to plan in advance. You
heard Abby talk about how even for '22 going
forward Wood Mack talked about, had established
what was going to happen in the market assuming
no more safeguard.

And now we're in an extension proceeding that is an extraordinary proceeding that nobody thought, nobody expected would happen. And so now they're adjusting their numbers.

Now, so I'm getting off topic from what you asked about. But the point is that you need certainty in the market. And we haven't had that here.

But, George, do you want to speak to that issue of reliance upon what the duties would be or not be going forward?

MR. HERSHMAN: Sure. So, an average utility-scale solar project, even by the time it gets to us, right, as an EPC, a developer has moved that project along for 12 or 18 months on a planning schedule. And then we are, we're another six or eight months out in design before we start construction.

So, you can easily see where planning began years ago for projects that are slotted for 2022 where the tariff was intended to be stepped completely down.

So, we absolutely relied on the fact that we were going to be past a four-year safeguard and that we were not going to be in an extension period.

So those project have been priced both from a PPA standpoint from the developers and from an EPC point of view priced on buying projects, buying modules without a tariff imposed in the 201, because the belief is that the 201 would have ended in 2022.

And those projects were priced back in, you know, '19 and '20, and let alone that the, when we talk about the bifacial exemption and then the exemption being reversed. You know, all of those were happening in a period of time where we're continuing to price out projects years in advance.

MR. RESOR: As an example to that from a developer perspective, if we have executed PPAs with utility offtakers and we executed it in 2019 for delivery of products in 2022 and 2023 and we have a fixed contract to deliver that power, and our assumption was that there would be no tariffs and worst case on bifacial after February 7, 2027. So, we're currently underwater on some of those if the tariffs, indeed, were extended or

reimposed.

CHAIR MARTYN: All right. Ron, did you want to add anything further on that, Ron?

Ron might be frozen again.

MR. HALL: I'll just add that that's definitely the industry perspective. Since the beginning of the process four years ago, we've been planning on that it's going to go down five percent every year and it's going to be gone after the end of four years.

This is one of those things that has happened, what, two or three times in history.

We thought, okay, under Trump, yeah, but things will change.

And so, I'm just telling you that's our perspective and basically every one of our customer's perspectives is like, okay, we're waiting for February for relief.

In the utility-scale market, in particular, you know, three cents is not a small thing. And nowadays the tariff is about six cents. So, it's a huge deal.

1	CHAIR MARTYN: All right. Thank you
2	very much. I think we, I have a sense of where
3	you guys are on this, which is very helpful. And
4	I don't want to monopolize the time that's
5	available to us for questions. Have I lost you
6	all?
7	MR. NICELY: No, I can hear you, Will.
8	CHAIR MARTYN: All right. Just wanted
9	to be sure.
10	All right, then. I will now turn to
11	my TPSC colleagues to ask if they have any
12	questions. And I see that Dr. Boushey is first
13	in line. So, please, go ahead.
14	DR. BOUSHEY: Yes. And thank you.
15	Thank you for all of the testimony. Really it
16	was very interesting.
17	I just wrote my question down here.
18	I want to get it back up on my screen. Okay.
19	So, I'm going to direct this to Mr. Swinerton at
20	SOLV Energy, but others can weigh in, of course,
21	if they have answers.
22	And so the question here I think rests

a little bit on the last set of questions. will utilities still be able to meet their clean energy goals with the tariffs extended for this four-year period?

And if you answer that question, can you please clarify whether or not this four years of a declining safeguard will disadvantage solar as an option for utilities seeking to shift to clean energy sources permanently? Is that the argument that you are making here? Thank you.

Well, I'll take part of MR. HERSHMAN: this question. And then I think what you probably want to hear is from the developers in a group that actually worked directly with the utilities, because in our capacity we are EPC contractors. So, we build projects for utility developers.

And so, the more direct question would be to the developers themselves that work with the utilities and understand more closely that business model.

I can assure you that from our point

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of view at the kind of the final deployment aspect is that we are seeing less deployment, less contracts moving forward because of the, if we see a safeguard measure imposed.

As we spoke about in the earlier, our answer to the previous question, we've made business decisions and priced projects according to a step down or a, you know, completion of the safeguard at the end of February. And projects were priced with that tariff level or lack of tariff in place.

And so those prices will go up. So, we'll have to renegotiate our contracts with developers. Developers will have to try to renegotiate a project with a utility with a fixed price contract. And those projects are now no longer economic.

So, we're seeing many projects of ours that are on the bubble because of the economics that will change dramatically if a tariff is left in place at its, you know, its current rate and with a marginal if, you know, negligible step

down as it's been recommended.

So, we're seeing that at the very end of the scale, right, of building and deploying projects. But I think Ron or Jamie can speak to the discussions directly with the utilities and what their goals are and being able to meet their goals or lack of being able to meet those.

MR. REAGAN: Yeah, thanks, George.

And thanks, Doctor, for the question.

So, as George said, when we talk to the customers right now, we're still pricing our solar projects assuming the safeguard measures go away. You know, our assumption is safeguard measures have only been extended once in history. So, you know, we don't want to price up to our customer something that, you know, historically has not happened.

And, you know, our other assumption is if safeguard measures were to be extended we would still have the bifacial exclusion, because, you know, it's been through the courts twice now.

And, you know, the judge has found that the

bifacial exclusion must remain in place because of liberalization of duties. So, at this point, you know, we're still pricing them up at the lower rate.

on both of those fronts, then we got to go back and talk to our customers. And like George said, you know, some of these projects likely go away because our customers are not going to be willing to pay a higher price for solar projects.

MR. RESOR: Well, another example related to that, and I agree with those comments, is we sometimes are seeking to, our customers need us to meet, get below their avoided costs of energy. So, there's a pretty clear target price to hit.

And if we lose on one or two of those things that Ron mentioned, we're just in many cases not going to be able to hit that mark. And the project won't go forward.

So, there will definitely be -- for the utilities to meet their clean energy goals

will definitely be significantly held back if we 1 2 lose on, if one or two of these variables were to go against us. 3 4 MR. HALL: To your point about 5 permanency, I don't know that there would be a permanent impact of a short-term tariff. 6 7 But, you know, if we're thinking about 8 cost and benefit, I just want to remind you that 9 the goals for the Biden administration, of 10 course, the solar industry are very aggressive. 11 And four years of hamstringing that growth will have a long-term impact and prevent us from 12 13 achieving those goals. 14 And that's I think important to keep 15 in mind. We don't have ten years to kind of 16 slowly play at this game to get where we want to 17 be. 18 DR. BOUSHEY: Thank you. Will, I'll 19 turn it back to you as we're running out of time. 20 CHAIR MARTYN: All right. Next 21 question I see is from Mr. Mroczka. Please go ahead. 22

Thanks, Ron. 1 MR. MROCZKA: You all 2 mentioned -- this is for pretty much everybody. But I suspect Ron will probably take the first 3 4 crack at the nut. 5 You all mentioned that a tariff will 6 just be an increase in prices. As you all know, 7 tackling inflation is a serious issue for this 8 administration. 9 We've already seen a significant impact that a, what a tariff increase can have on 10 an input and will have on inflation with ammonium 11 12 nitrate and food prices, which is a main contributor to inflation. 13 14 Do you all have any sense on what an 15 extension of the tariffs would contribute to 16 inflation? Would it move the needle at all and 17 would the impact be minimal? 18 MR. REAGAN: Yeah, so I'll start. 19 you know, if the extension were at 15 percent, 20 you know, that directly translates to \$2 to \$3 a 21 megawatt hour on the price (audio interference).

MR. NICELY:

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It looks like we lost Ron

again. Does anybody else want to take this on? 1 MR. HERSHMAN: Well, if you look at it 2 just from a --3 4 MR. NICELY: Ron, are you back? 5 lost you for a little bit there. We lost you. (Simultaneous speaking.) 6 MR. HALL: We heard you say \$2 to \$3 7 a megawatt hour, and then we lost you. 8 9 MR. REAGAN: Oh, sorry. So, the market today for solar PPAs is \$20 to \$30. 10 11 you're talking about ten percent increase in the 12 price of a solar PPA if the safeguard measures 13 get extended. 14 MR. HERSHMAN: And from a build cost, modules still make up roughly 50 percent of the 15 16 cost of a utility-scale project. So, if you 17 have, you know, 15 percent tariff, you've got 7.5 18 percent of just raw costs that go into the 19 additional cost of building a solar project. 20 And then you compound those on top of 21 historically high shipping costs, you know, a number of other, you know, inflationary costs 22

within the overall project build, and you can see 1 2 that the projects quickly get, become uneconomic. CHAIR MARTYN: All right. 3 MR. NICELY: Victor, I think there's 4 5 one thing to bear in mind here. Prices have, indeed, fallen notwithstanding the tariffs over 6 the last several years. But, again, we're 7 talking about opportunity costs and what doesn't 8 9 get built because those prices haven't fallen 10 enough. 11 But we're also critically talking 12 about, and what I think you just heard about, is 13 the situation right now given the additional 14 costs that everyone is facing is that there, we're seeing, this industry is actually 15 16 experiencing that kind of inflationary effect. 17 CHAIR MARTYN: All right. Thank you. 18 Ms., Dr. Gorman, do you have a question? 19 I do. DR. GORMAN: Thank you. And 20 I'll pose this to all the panelists, so feel free 21 to respond as you see fit. 22 Just, we've learned a lot during COVID about the risks in global supply chains for critical industries and, in particular, the heavy reliance by any one industry on production in any one part of the world and the risks of disruption that this can cause.

And I think as all of you are aware the administration has been working to assess risks in a number of sectors that are vital to our economic recovery and our broader climate goals.

So, I'm just curious, how do you think about balancing cost versus managing risk in your supply chains? And has your, has recent experience with COVID-related disruptions changed your thinking at all whether it's regards to a diversity of supply or de-risking your operations? If it has changed, I'm curious how.

MR. REAGAN: I can start. Ron Reagan with NextEra.

Yes, we have looked at it very seriously. And, you know, our big goal at this point is to get more of the module manufacturers

to move their production to the United States.

So, we've talked to the top five module manufacturers in the world. And we've asked them point blank what's it going to take for you to move to the U.S.

And all of them have told us they need the incentives that are in the Build Back Better Act. They want legislation. They want certainty.

Safeguard measures are not certainty. Safeguard measures can change day to day with the stroke of a pen by the President. None of them are going to bring their capital investment to the United States when the rules can change from one president to the next president.

They want legislation. They want it written. They want long-term incentives. And that's what Build Back Better is going to give us.

And that's really what we've been working hard for is to get these top five or six folks to bring their operations here to the U.S.

And I think we're on the cusp of making that happen.

MR. HALL: I just want to add that, you know, China is the name on the headline from the other side of who we need to attack and defend against in our energy dependence and everything.

But the fact that we now are getting modules from a half a dozen to a dozen southeast Asian countries as well as other countries around the world, including on this hemisphere, is a good thing for diversifying our supply. And when factories in Cambodia were shut down, we could get stuff from Vietnam or Thailand and vice versa.

And so, you know, basically, high

level I just want to say putting a tariff on the

whole world, which is what this tariff does,

except one or two exceptions in the world, does

not help the diversity of supply of solar modules

in the United States at all.

And, of course, we don't believe this

safeguard is necessarily the answer to get the 1 2 domestic manufacturing piece of the puzzle solved either. 3 4 CHAIR MARTYN: All right. Thank you 5 Dr. Jones-Albertus, do you have a very much. question? 6 DR. JONES-ALBERTUS: 7 Thank you. And 8 thank you to all of the panelists. I know we heard from each of the 9 individual developers how the increase in costs 10 11 related to the tariffs would cause you to need to 12 reexamine your projects. 13 My question is for SEIA and ACP. Do 14 you have any aggregated estimates across the 15 industry of what a continued remedy, if the 16 recommendation by the ITC is put forward in 17 aggregate what that would mean for solar 18 deployment? 19 Matt, do you know if we MS. HOPPER: 20 -- I can't think of one. Thanks, Dr. Jones-21 Albertus. Are you aware of one that we've put in

our testimony? I'm not aware of one.

1 MR. NICELY: No. Sorry, the impact 2 that it would have --If they were continued. 3 MS. HOPPER: 4 MR. NICELY: No, I mean, what we've 5 talked about are the costs to the consumer. And that's set forth in our comments, which are 6 7 obviously significant. 8 And given the amount of duties that 9 would be collected and even the assumed or the planned for additional manufacturing that would 10 11 happen in the module sector, the amounts that 12 we'd be paying for each individual module-making 13 job would be massively higher than even the first 14 four years. 15 MS. HOPPER: Okay. 16 MR. NICELY: But that's the kind of 17 analysis we did in our comments. We didn't do 18 the other, what you specifically asked for. 19 Yeah, I would just --MS. HOPPER: 20 Becca, I'm sure you're aware of this. But what I 21 would point out is what I talked about in my

testimony, which is the most recent projections,

even just for '22, that included a 25 percent decrease in deployment in 2022 without the assumption that these tariffs would continue, and then sort of the stories that the developers have told about the incredible impact that additional costs will have.

But I think that a 25 percent decrease in projections over just a couple of months, right, from, in our projections tells you how truly sensitive the market is to those kinds of additional costs.

MR. NICELY: Vanessa, did you want to add anything?

MS. SCIARRA: I think the only thing
I would add is that we're talking headwinds on
headwinds on headwinds for the industry, right.
I mean, at some point solar just becomes
disfavored.

And I think there's been some testimony to that effect, that, you know, the developers have talked about how at some point projects just don't get built. And when projects

1 don't get built, it takes a long time for someone 2 to decide to rebuild it. So, you're just talking about further 3 4 and further putting our goals of reaching the 5 deployment goals the administration has set are getting further and further out of reach. 6 it's just one more headwind for the industry. 7 8 DR. JONES-ALBERTUS: Thank you. 9 CHAIR MARTYN: All right. Ms. Grewe, 10 you had a question. 11 MS. GREWE: No, sorry. Sorry, no, I 12 didn't have a question. Sorry, I hit the button 13 by --14 No problem. All right. CHAIR MARTYN: Ms. Hasandras, you had a question. 15 MS. HASANDRAS: Yes, thank you, Will. 16 And thank you, everyone, for your testimony 17 18 today. 19 I'm going to direct this question to 20 Ms. Nutting with Sunnova, although I'm sure other 21 folks may want to jump in. I'm going to revert 22 back to our advanced questions.

You noted certain bifacial module 1 2 limitations in residential applications such as the sloped roof and the darker color of the roof. 3 And I am wondering if certain, something such as 4 a carport or a ground mount system or an awning 5 that may already exist in a residential setting 6 7 would resolve some of those limitations. It could potentially. 8 MS. NUTTING: 9 We don't do carports, ground mounts. We do rooftops at homes, along with storage. So, for 10 our applications, our almost 200,000 customers, 11 12 bifacial panels aren't something we would use. 13 MR. RESOR: Also, I can comment on 14 that a bit because we've done some carports. 15 And, yeah, you could have carports with a 16 bifacial module. It might work. 17 But that's going to such a small drop 18 in the bucket compared to the utility-scale. Ι 19 mean, a big carport is one or two megawatts, just 20 to put it in perspective. So --21 MR. HALL: Even sticking in, within

residential, forget about utility-scale, a

1 carport percentage of the market versus rooftop 2 has got to be in a single-digit percentage --MR. RESOR: 3 Yeah. 4 MR. HALL: -- probably less than one 5 It's not a thing. You know, yes, you percent. could see one in a city maybe but not like two on 6 7 a block. 8 MR. RESOR: Yeah. 9 MS. HASANDRAS: Thank you. That was 10 my only question, Will. 11 All right. CHAIR MARTYN: Thank you. Do we have any -- I don't want to cut things off 12 13 just because of the schedule. Do we have any 14 more questions from our interagency colleagues? 15 Please raise hands if you do. 16 All right. I don't see any. I'm 17 going to take advantage of my chair's prerogative 18 and ask one last question then. I'll direct --19 Mr. Nicely, direct it wherever you think most 20 fitting. 21 Our friends in the first panel, many of them said that if the bifacial exclusion 22

continues any extension would have no effect whatsoever. Do you agree with that view?

MR. NICELY: Absolutely not. I mean, and by the way, I'm glad you asked that, Will. I mean, we did a detailed analysis of the best data we could comparing 72 cell to 60 cell. Had Tom Prusa from Rutgers University do that analysis to see what the relationship was. And he discovered that in fact there was not the kind of relationship that these folks are suggesting there is.

And in fact, by the way, they say the bottom fell out on the pricing. Prices have been falling every single year as everybody knows.

Swanson's law tells you that prices are going to fall. And they have done just that notwithstanding the safeguard.

And the extent of the price decline that happened even the year of the, when the bifacial panel was, bifacial panel exclusion was granted, the decline was the same that it had been previously.

And so, as a result, there isn't the proof either, including from -- using economic tools, there wasn't the proof to show that there was a relationship between the bifacial panel exclusion and what was happening with the pricing in the marketplace.

So, no, we don't think there's going to be the same effect. We think the bifacial, by and large, bifacial is being used in the utility-scale segment where this industry by and large is not servicing that industry.

We've all talked about how Hanwha is using one of its lines for that industry, and it's able to serve a small, very small portion.

And in fact, Ron has talked about how he has purchased from them before.

But the fact is that there is so little available for that industry, for that segment of the industry from the domestic producers that as a result you're going to import anyway.

And so, if they're able to import

bifacial panels, which is what most of them are 1 2 using these days because that's where they get the greatest efficiency, we don't see the effect 3 4 that they suggest is going to happen. 5 Does anybody else want to --(Simultaneous speaking.) 6 MR. NICELY: 7 I guess not. 8 I think that answers CHAIR MARTYN: 9 the question. And we are I believe past when we said we were going to close down. So, Mike, what 10 do we have for our time to resume with panel 3? 11 12 MR. GAGAIN: Thanks, Will. The notional schedule indicates that we would resume 13 14 at 1:00 based on an end time of 12:20 for panel 2, so a 40-minute lunch break. But I would defer 15 16 to you on how much of a break you want to provide 17 before we resume. I was thinking maybe 1:15 --18 CHAIR MARTYN: 1:15 sounds logical. 19 MR. GAGAIN: Okay. 20 CHAIR MARTYN: Yes. All right. So, 21 we will resume at 1:15. I will see a new set of

But I hope those of you who can listen in

faces.

if you find it interesting.

So, with that, we'll close out panel 2 and thank all of you for being with us today and presenting us with a tremendous amount of useful information in responses to our questions. Thanks.

(Whereupon, the above-entitled matter went off the record at 12:32 p.m. and resumed at 1:16 p.m.)

MR. GAGAIN: Good afternoon, and welcome back. I hope everyone enjoyed their lunch. We will now continue this public hearing regarding the solar safeguard extension review, and we'll proceed to Panel 3.

Panel 3 will comprise Mr. Jonathan

Stoel of Hogan Lovells U.S. LLP -- then we'll

hear from Silfab Solar Incorporated, then Heliene

Incorporated, then Canadian Solar Solutions, and

finally from Maxeon Solar Technologies Limited.

The participants on this Panel have a combined 45 minutes to testify. Based on prior communications with them, we will start with Mr.

Stoel and then proceed to Silfab, Heliene, and Canadian Solar. They have a combined 30 minutes to testify. From there, we'll move to Maxeon, who has 15 minutes to testify. We'll then turn it to questions and answers from the Panel.

As of this morning, Ms. Ronalda Smith from USTR will be keeping your time, and she will indicate when you have two, one, and no minutes remaining. So, in regard to this morning, we request that you state your name and title before proceeding for the purposes of the transcript.

Mr. Stoel, are you ready?

MR. STOEL: Yes. Thank you.

MR. GAGAIN: Okay. Please proceed.

Thank you.

MR. STOEL: Good afternoon, and thank you, Mr. Chairman, for the opportunity to testify today to the Committee. My name is Jonathan Stoel. I'm a partner of Hogan Lovells representing the government of Canada and also Canadian industry in this expansion proceeding.

I'll be leading off this afternoon's

panel of Canadian and Mexican industry witnesses.

I will be followed by representatives of the three companies representing the Canadian solar industry: Paolo Maccario of Silfab Solar, Martin Pochtaruk of Heliene Inc., and Vincent Ambrose of Canadian Solar Solutions. Our final witness will be John Magnus of TradeWins, representing Maxeon for the Mexican solar industry.

We look forward to answering your questions at the conclusion of our testimony. The Canadian solar industry sits before you today as a proud partner of the U.S. solar industry and a strong supporter of the administration's Build Back Better agenda, including specifically its efforts to transition the U.S. economy to green energy and to combat climate change.

Heliene and Silfab employ hundreds of American manufacturing workers at four facilities in three states: Florida, Minnesota, and Washington state. And they will soon have the capacity to produce 1.7 gigawatts of solar modules right here in the USA.

Canadian solar has invested more than one billion dollars in the United States as a leading U.S. utility-scale solar and energy storage project developer for the project development portfolio of over four gigawatts of solar energy generation and nine gigawatts of battery storage projects. The company is completing detailed due diligence on the feasibility of investments in U.S. solar manufacturing.

I would like to make three points today to the Committee this afternoon. First, if the President determines to extend the safeguard measures to Canada, it should both grant an exclusion to Canada and terminate or expand substantially the tariff rate quota, or TRQ, currently being applied to U.S. import of solar cells.

Second, consistent with U.S. law, the U.S.-Mexico-Canada agreement, and the material facts, the Committee should recommend to the President that Canada be excluded from any

extended safeguard measure. And, finally, the President should either eliminate or expand substantially the TRQ currently being applied to U.S. imports of solar cells.

I would now like to turn to why U.S. law permits the President both to exclude Canada from any extended safeguard measure and also to eliminate or expand substantially the TRQ on solar cells.

First, the text of the safeguard extension statute, 19 U.S.C., Section 2253(e)(1)(b), is sparse and places few constraints on the President's authority to extend the safeguard measure. If the President finds that the two prescribed conditions have been met, this part of the law simply limits the total duration of the safeguard measure to eight years.

There is no prohibition on the

President's authority to craft the specifics of

an extended safeguard measure. This statutory

conferment of broad safeguard extension authority

on the President is reinforced by Section

203(a)(3)(i) of the Trade Act of 1974, which

directs the President to, quote, take any action

which may be considered by the President under

the authority of law and which the President

considers appropriate and feasible.

The President's broad authority to craft safeguard measures has also been recognized in several contexts by the U.S. Court of Appeals for the Federal Circuit and the Court of International Trade. Indeed, relying on this broad delegation of authority, President Trump determined in the recent washers extension measure to exclude imports from Canada and imports from a lengthy list of developing countries.

My second point is that Section

203(d)(5) of the Trade Act provides that an
extended safeguard action, like an original
safeguard action, quote, shall be phased down at
regular intervals during the period in which the
extended action is in effect.

This requirement would be met if the President determines both to exclude certain countries, such as Canada or Mexico, from the safeguard measure and also to eliminate or substantially expand the TRQ for solar cells. This is because both a country's specific exclusion and the elimination or expansion of the TRQ would be, quote, trade-liberalizing, unquote, actions by the President vis-a-vis the safeguard measures currently in place.

With respect to the exclusion of

Canada from an extended safeguard measure, there

are two additional reasons why the Committee

should recommend such an action to the President.

One, the Canadian solar industry is very small,

and its exports to the United States have been

minuscule and remained stable over the past four

years.

As a consequence, and a response to the Committee's advance question of the government of Canada, the share of Canadian exports to the United States has declined as a

share of U.S. market demand for solar products and as a share of total imports.

Furthermore, none of the three

Canadian solar producers appearing before you

today has plans to expand production capacity in

Canada, a logical outcome of the fact that today

the cost of producing solar products is lower

here in the United States than in Canada. Before

you today are the only three Canadian solar panel

producers and exporters. As such, there is no

threat that material quantities of solar panels

will be exported from Canada to the United States

in the foreseeable future.

Two, the United States' international obligations under the USMCA mandate an exclusion for Canada based on these facts. In fact, the current U.S. imposition of a safeguard tariff on Canadian solar modules is unlawful.

The safeguard chapter of the USMCA, which is reflected in the USMCA Implementation Act, mandates the exclusion of imports from a USMCA country, in this case Canada, from a U.S.

safeguard measure unless imports constitute a substantial share of U.S. imports and contribute importantly to the serious injury suffered by U.S. producers of solar products.

As I have already explained, the minuscule volume of Canadian exports of solar products does not constitute a substantial share of U.S. imports. This is confirmed by the fact that Canada is not one of the top five exporters to the United States. Moreover, imports from Canada do not contribute importantly to the challenges confronted today by U.S. solar manufacturers.

In fact, as you will hear from our witnesses, the exact opposite has occurred.

Canadian manufacturers Heliene and Silfab are together the second-largest manufacturer of solar products in the United States, and both companies have detailed for the Committee, and will again today, their exciting, concrete plans for further expansions of their U.S. production operations.

As a consequence, every dollar of

safeguard tariff paid by these Canadian producerexporters curtails their ability to invest in
additional solar production and accompanying
manufacturing jobs here in the United States. If
the President were to lift the tariff on imports
from Canada, the consequence will be millions of
dollars of additional investments in solar
manufacturing here in the United States.

Finally, I must reinforce that the President should avoid imposing a punitive task on U.S. solar module manufacturers that likewise will inhibit Canadian investments to develop a U.S. solar supply chain. The solar cell TRQ was exhausted in 2021, and U.S. solar module manufacturing is set to expand even further in 2022.

As a consequence, if the Committee recommends that the President extend the safeguard, it should also recommend the 2.5 gigawatt TRQ on solar cells be enlarged significantly or eliminated altogether. That is, no tariff should be imposed on solar cells

destined for U.S. soil manufacturing of modules.

Both Heliene and Silfab must import solar cells in order to run their U.S. manufacturing plants, to employ their American workers, and to expand their U.S. production capacities. Solar module manufacturing is inherently a low-margin business, and neither company can afford another unnecessary tax on their American-made solar panels.

Thank you again. Our next witness is Paolo Maccario of Silfab.

MR. MACCARIO: Thank you.

Good afternoon and happy New Year. My name is Paolo Maccario. I'm the President and CEO of Silfab Solar Inc., a solar module producer based in Ontario, Canada, and of Silfab Solar Washington, a module producer located in the state of Washington.

I am here today to request that imports from Canada are excluded from the safeguard measure. Our small and stable imports of solar modules from Canada complement our

growing U.S. manufacturing. Indeed, our Canadian and our U.S. production are intertwined, and harm to Silfab on one side of the border harms our business on the other side.

On the other end, if the tariff is removed, Silfab will invest millions more dollars in U.S. production instead of paying the tariff. Furthermore, if the TPSC recommends that the President extend the safeguard measure, it should also recommend to increase the TRQ on solar cells to avoid imposing a harsh tariff on U.S. module manufacturers like Silfab.

A new tax on our U.S. manufacturing in the form of a safeguard tariff on cells would directly harm our U.S. manufacturing operation, the largest buyer of non-cell (phonetic) produced cells.

I am quite excited about the success of Silfab growing U.S. business. Since 2018, we have invested in U.S. solar manufacturing and created the second-largest manufacturer (audio interference) for CSPV modules in the United

States.

Silfab first invested in a solar manufacturing facility in Washington in 2018, saving the jobs of workers at the almost-bankrupt Itek facility. We have since invested a substantial amount in the facility, significantly increased capacity, and grown employment.

In August 2021, Silfab opened its second U.S. solar manufacturing facility in Burlington, Washington, creating American manufacturing jobs and doubling Silfab U.S. production capacity. We currently employ more than 270 Americans, and we have big plans to further expand our U.S. operations, make additional investment, and hire more U.S. workers.

We are very proud to be a major part of the American green energy theater. But I want to make very clear a few points: first, that our business plan is entirely predicated on Canada being excluded from the Section 201 tariffs; second, that our plan is based on no or an

increased TRQ on cells; third, that unlike other panelists, our plan is not only on paper, but with location, building, equipment, and hiring contracts for people ready to be signed.

The continued health of Silfab

Canadian manufacturing business is vital to our

U.S. production operation in Washington. Silfab

Canadian operation facilitates investment and

research that have benefitted our U.S. business.

The safeguard takes away from our ability to

continue investing millions of planet (phonetic)

dollar in U.S. manufacturing.

Quite simply, the tariff on imports from Canada makes it more difficult for us to continue to expand our U.S. production capacity or increase our American hiring. If the tariff is removed, we could put millions upon millions of dollars into the green economy in the United States. This should be quite an easy decision for you.

Silfab has a long history of partnering with U.S. solar industry. There is no

solar production in Canada, so we are required to import cells into Canada to make modules. So, we used to partner with Suniva to procure cells for our modules. Our Canadian business was one of Suniva's biggest customers in 2015 before Suniva went out of business. We were frequently ordering larger quantities of cells from Suniva than they could even provide to us.

Unfortunately, we encountered problems receiving enough cells on time. We also experienced quality problems, and then Suniva business failed and stopped supplying us altogether in 2016. We wanted to buy cells from the United States then, and we still would buy today from the United States if cells were available.

But, unfortunately, there are no cells in all of North America for purchase and no cell production coming online in the immediate future.

And even if it was, it would certainly be unable to make the type and format of cells Silfab needs in terms of size of the wafers or in terms of

beck count (phonetic) of cells.

This is why it's very important that if the safeguard is extended, then the TRQ on cells is also expanded or eliminated altogether. We cannot expand at the pace we are planning for 2022 and beyond if we are forced to pay a punitive tax on our major import, the solar cell.

It is unfortunate that certain U.S. competitors have asked the TPSC to recommend harming Silfab on both sides of the border. One of the companies, Suniva, previously failed to meet Silfab's requirement for solar cells, as I've already explained, and subsequently hasn't produced a single solar cell over the last five years. On the other hand, Silfab has delivered on its promise to expand solar manufacturing in the United States.

Another competitor, without citing any evidence, calls our import cells, small quantities of modules from Canada, as pernicious. This is absurd. There are only two companies opposing an exclusion for Canada and seeking a

tariff on imports of solar cells, which fuel our module business in the U.S.

I hope that the TPSC sees through those companies' rhetoric and understand that imports from Canada have never been large and have never been harmful to the U.S. industry.

Moreover, until there is a sufficient supply of solar cells, we need tariff-free cells, access to imported cells in order to support the solar manufacturing in the United States.

Silfab is ready and willing to work together with the U.S. government to build a full solar manufacturing supply chain in the United States. We have detailed our big plans in our confidential written comments. Tariffs on cells or imports from Canada are counterproductive to those goals.

The TPSC should recommend that

President Biden do what is best for American

manufacturing and our green energy theater: if

the TPSC recommends extension of the safeguard

measure, then it also recommend the exclusion of

Canada and an expansion or elimination altogether of the TRQ on solar cells.

Thank you, and I'd be pleased to answer all of your questions.

MR. POCHTARUK: Good afternoon. My name is Martin Pochtaruk, and I'm the President of Heliene. We manufacture solar modules in our facilities in the United States and Canada.

I'm here today for two reasons.

First, I request that the TPSC recommend that the safeguard tariff is removed on imports from Canada. Imports of solar modules from Canada do awfully benefit the U.S. solar industry. The small imports of solar modules from Canada are part of a North American supply chain that supports manufacturing to increase research and development, technical know-how, and investment dollars flowing from Canada to the United States.

Second, it is critical that the solar cells continue to be duty-free, as Paolo Maccario from Silfab was just saying. If the President extends the safeguard tariff without increasing

the TRQ on cells or eliminating it entirely, that will be devastating for Heliene and the rest of the U.S. module manufacturing industry.

I would like to provide a bit of background on Heliene and our commitment to manufacturing solar panels in the United States and Canada. Heliene began manufacturing solar modules in Canada in 2010, and four years ago, due to the safeguards, the solar modules manufactured in Canada that were primarily exported to the United States had to be curtailed.

Canadian modules were qualified by the U.S. Department of Defense for various projects, including of the Army and the Navy, since 2014. Prior to the safeguards, Heliene also invested in a laminate facility in Minnesota that was earlier operated by a company that went out of business.

When the safeguard was imposed in 2018, as I was saying, Heliene shuttered the Minnesota laminate operation and reduced the Canadian production. In April of 2018, Heliene

decided, repivoting on the safeguard decision, to reinvest in a new manufacturing facility in Minnesota, investing then 21 million dollars and hiring 90 American workers.

Our Minnesota production capacity in that building continues to be at 150 megawatts. But in September, we started construction for an additional factory on the same site for another 400 megawatts through an investment that also consists of 21 million dollars. This expansion will create yet another 60 jobs for that one location in Minnesota.

Prior to this, in the month of July, we opened a second manufacturing facility in Riviera Beach, Florida, after upgrading the 100-megawatt-capacity production line that was previously operated by SolarTech Universal. We began producing high-efficiency heterojunction cell modules out of that location one month ago.

This has created an additional 60 good-paying jobs -- for the clean energy manufacturing industry in the U.S. We are

planning at this time to add on the Florida facility a 250-megawatt manufacturing line that will be in place by the beginning of Q4.

These two expansions, the one in Minnesota and the one on Florida that I just mentioned, will position Heliene at 900 megawatts or slightly over 900 megawatts and slightly over 200 jobs within Minnesota and Florida. Our story is one of success even in the face of immense challenges.

Many U.S. manufacturers, such as SolarWorld, SunPower, Panasonic, and Tesla, have all shuttered since the safeguard (audio interference). Suniva, as Paolo was saying, has been out of business for the last five years.

Heliene, on the other hand, has expanded our U.S. production capacity by leaps and bounds, overcoming several challenges along the way, including -- which is something that I think is worth mentioning and reminding everybody -- Section 301.

Section 301 tariffs is actually making

our materials inputs more expensive and penalizing U.S. manufacturing of solar modules.

On top of that, we have had big global supply chain crisis and COVID-19. So there has been no lack of entertainment for sure.

In addition, other U.S. manufacturers such as Hanwha, LG, and Jinko do have their own cell manufacturing in Asia, while in our case, we suffer the logistical disadvantage of needing to purchase foreign-made solar cells.

As we mentioned already, and let me emphasize, the safeguard tariff on imports from Canada has harmed Heliene's operations on both sides of the border. This is because Heliene USA depends on capital and know-how from Heliene Canada. Heliene Canada has suffered from reduced sales and profit only as a result of the safeguard, limiting its ability to provide capital to Heliene USA.

In turn, this has slowed Heliene USA's ability to invest farther in U.S. solar manufacturing. Quite simply, the tariff imposes

a burdensome tax on Heliene that reduces our U.S. investment dollars, keeps us from hiring more U.S. workers, and forces the production of more U.S.-made solar panels.

For these reasons, if the TPSC recommends extension of the safeguard measure, then it should also recommend that imports from Canada be excluded. In addition, if the TPSC recommends that the President extends the safeguard, it should also recommend that the TRQ of solar cells be expanded significantly or eliminated altogether.

The TRQ has been exhausted for this year, as was mentioned already. We will soon need to pay the safeguard tariff on solar cells. So, let me say it again and repeat myself by saying that there is no near term availability of U.S. cells. So Heliene is required to import cells to run our factories and to support the jobs of American workers.

If the TRQ stays at 2.5 gigawatts next year and we're forced to pay the tariff, then

this will simply stifle our progress over the last four years. And by our progress, I mean not only Heliene, but the entire U.S. solar panel manufacturing industry will be forced to slow our expansion counts. We're already running on thin margins and simply cannot afford another tax on American-made solar panels and, as I mentioned, the said 301 safeguard among them.

Finally, I'm compelled to say something about the highly inaccurate comments of two of my U.S. competitors. Particularly galling is that these two companies urge the TPSC not to expand the TRQ for solar cells that is essential to the financial ability of Heliene and other U.S. solar module producers.

One of these companies hasn't ever made a solar cell, and the other one hasn't made a single solar cell in five years. And when they were making them, they weren't even good. This is an industry where the technology improves every month.

Heliene and its workers have been

manufacturing solar panels here in the United

States over the last four years and in Canada for

11. In the face of immense challenges, we have

expanded and succeeded. Do not impose an

unnecessary tax on blossoming American

manufacturers of (audio interference) modules on

the basis of these unfounded comments.

Moreover, most companies argue that there is something -- theoretical harm caused by imports from Canada. And, as Paolo just commented, one of them calls its imports pernicious. If you haven't noticed, I'm outraged by these comments. Imports from Canada have always been tiny, and no other competitor opposes an exemption for Canada.

And, as I already explained,
maintaining the tariff on U.S. imports from
Canada would only serve to punish Heliene with
millions of dollars of investments and hundreds
of U.S. workers that work for Heliene and
actually make solar panels.

Thank you, and I'll be pleased to

answer your questions.

MR. AMBROSE: Good afternoon. My name is Vincent Ambrose. I'm the General Manager for North America of Canadian Solar Incorporated.

Canadian Solar is a global solar company headquartered in Ontario, Canada. We have invested about one billion dollars in the U.S. solar industry. We are responsible for many gigawatt hours of deployment of utility-scale solar energy across the United States through Recurrent Energy, which is our U.S. solar development arm.

We also have roots in Canada, hence our name. Our Canadian manufacturing facility, Canadian Solar Solutions Inc., is located in Guelph, Ontario, and produces very small quantities of solar modules, not solar cells. Canadian Solar today produces very few solar modules in Canada.

Our U.S. imports of solar modules

manufactured in Canada declined prior to the

Commission's initial safeguard investigation and

have continued to decline since the imposition of the safeguard measure in 2018. This was primarily due to high production costs in Canada that have caused the Guelph facility to no longer be commercially viable and competitive.

We have thus shifted our Canadian operations primarily towards research and development and have been forced to reduce significantly our Canadian workforce and our production capacities.

Today, Canadian Solar has no business plans to import commercial quantities of CSPV modules from Canada into the United States in the foreseeable future. This is irrespective of whether the safeguard measure is extended beyond February '22, and these plans are highly unlikely to change.

In 2017, the Commission recommended the exclusion of U.S. imports of solar products from Canada from the President's safeguard measure. That was the correct recommendation, and yet President Trump ignored the Commission's

recommendation. President Biden now has the opportunity to fix President Trump's mistake and issue an exclusion for Canada.

Finally, I'd like to address some of the statements made by Suniva in its written submission to the TPSC. Suniva argues that because Canadian Solar manufactures in Asia that its small Canadian operations are a threat to the U.S. industry. This is just false.

Our Canadian operations are very small, and there's no evidence that our Canadian manufacturing arm could harm the U.S. industry.

As you've heard from Heliene and from Silfab, the exact opposite is actually true. Removing the tariffs on imports from Canada would actually benefit the U.S. industry.

For these reasons, I ask that the TPSC recommend to the President that imports from Canada be excluded from the safeguard measure.

Thank you, and I'd be pleased to answer any of your questions.

MR. MAGNUS: I guess that's me now.

Good afternoon, members of the Committee. I'm

John Magnus, TradeWins LLC, appearing for Maxeon.

We appreciate this opportunity to testify.

Maxeon spun out of SunPower in August 2020 and is a global CSPV solar manufacturer. It is currently assembling interdigitated back contact panels in Mexico IBC for the U.S. market and has announced plans to resume assembling shingled cell panels in Mexico for the U.S. market.

Maxeon has also announced its intention to produce CSPV cells and modules in the United States. This is a plan to produce atscale three gigawatts a year of both cells and modules. A three-gigawatts-per year MODCO would be nearly twice as large as the largest existing U.S. MODCO Q cells facility in Dalton, Georgia.

I can't compare the three-gigawattper-year cell fab to any existing U.S. cell
production because there is none. I have some
more detail in a moment on our concrete progress
with respect to that manufacturing investment.

We have two messages today. First,

Mexico should be excluded if the safeguard

measure is extended. And, second, an extended

safeguard measure should not apply to unassembled

CSPV cells. We'll start with Mexico. I'll

answer the Committee's prepared questions as I

go. I'm going to try to do a screen-share here.

This worked yesterday, so I hope it will also

work today.

Some statistics -- these are based on DataWeb data rather than the confidential figures developed by the ITC and its extension investigation. But the percentages are valid.

Over the four-year period preceding the safeguard measure, 2014 to 2017, imports from Mexico accounted for roughly one-tenth of total U.S. imports in the relevant tariff category. By 2020, after a couple of years of safeguard relief, imports from Mexico had declined so much that they accounted for just one percent of total U.S. imports.

Essentially, all of what you see here

in the Mexico line since 2017 comes from Maxeon's factories. What this means is that the small remaining flow from Mexico to the United States consists entirely of exempt IBC modules. IBC modules have never been made in the United States. They command market prices well above those of conventional CSPV modules.

These small numbers speak for themselves. In practical terms, Mexico is not and could not possibly be part of an import competition problem for the U.S. industry.

Legally, imports from Mexico are well below the threshold for current coverage, much less extended coverage, the safeguard measure.

For example, in referencing the NAFTA USMCA criteria that Jonathan spoke about, Mexico is not among the top-five suppliers, and imports from Mexico have been falling in absolute terms while total U.S. imports have been growing.

Accordingly, if the safeguard measure is extended, Mexico should be exempted from it.

I should add that the trade

compensation owed to Mexico given its historic share of U.S. imports during the pre-safeguard period is in the neighborhood of one billion dollars a year. Under NAFTA and now USMCA,

Mexico has an automatic right to suspend concessions at that same level and as much as compensation isn't being provided. It's a big bilateral trade relationship, but suspended concessions of that magnitude would not likely go unnoticed.

The Committee has asked why -- if our IBC panels assembled in Mexico already benefit from a product exclusion, why would we support a country exclusion for Mexico? The Committee also asked whether our announced plans to ramp up production in Mexico involve IBC panels or covered products.

As publicly announced, Maxeon's expanded production in Mexico will not involve excluded IBC products. Rather, it will feature shingled cell panels. The shingling technology, although proprietary, uses conventional CSPV

cells, and it falls inside the safeguard measure's product coverage.

Excluding Mexico is critical, and even with Maxeon's expanded shingled cell panel production, shipments from Mexico will remain far below the legal threshold I referenced moments ago for maintaining Mexico's coverage under a global safeguard measure.

This ties directly to one of the questions posed by the government of Mexico by the Committee asking whether a reduction in installed capacity to produce modules might be responsible for the decrease in imports of modules from Mexico to the United States. It appears that the drafter of this question has the cause and effect reversed, at least as it relates to Maxeon.

Our decision to stop producing shingled cell CSPV products in Mexico was made in part because the U.S. safeguard measure made it uneconomic to continue assembling these products in Mexico for sale in the U.S. market. With the

end of the safeguard measure or Mexico's coverage under that measure approaching, Maxeon now plans to reinstate production of shingled cell modules in the same facility. That's the first point: exclude Mexico.

The second point has to do with unassembled cells. And our message here rests on the premise that in assessing the domestic industry's adjustment, the Committee should focus on the industry that exists today. The U.S. industry trying to adjust is a module assembly industry. The failure of prior U.S. cell fabs, none of which was built, much less operated, anywhere at scale, can't be considered surprising.

In any event, closing uneconomic facilities and exiting uneconomic segments are consistent with -- actually, they are a form of positive adjustment as that term is defined in the safeguard statute.

We respectfully submit that in this extension review, the Committee should not

indulge in nostalgia or in blue-sky industrial policy musing. Rather, its task is tightly framed as determining whether safeguard relief remains necessary in the context of positive adjustment. This requires staying focused on the MODCO industry and its near-term needs. One of those needs is an unconstrained supply of duty-free unassembled cells.

The Committee has asked by how much we recommend expanding the TRQ. For the reasons already stated, we see no reason to have import relief on unassembled cells at all. If it's going to continue, the allowance for duty-free entry should expand by at least enough -- cover all existing and announced MODCO capacity in the United States.

The Committee also asked about concrete steps Maxeon has taken to begin cell production in the United States, when it's expected to start, and whether Maxeon would be supplying cells only to its own module factory. I can report in this public setting four things.

First of all, site selection is very well advanced. It's down to three locations.

Maxeon's application to the Energy Department's

Loan Programs Office is also advancing well. And
the expected operational date for the cell line
is early 2024, of course subject to final site
selection, passage of SEMA, and successful
project financing. And, lastly, Maxeon plans to
internally consume the entire three gigawatts per
year of cell production.

The Committee's last question is whether we really are confident that import relief on unassembled cells would not help on its own to facilitate cell production in the United States. The answer is yes. After intensive review, that is our confidently held view.

Import relief on cells does not provide sufficient incentive for Maxeon or, in our view, any other large-scale CSPV producer to implement U.S. cell production. If import relief were going to catalyze production of cells in the United States, that would have happened already.

As for Maxeon, our planned U.S. cell-making investment is SEMA contingent. It is not import relief contingent.

In conclusion, the case for excluding Mexico is unassailable. The case for excluding unassembled cells is also compelling in our view. We thank the Committee for allowing us to testify and look forward to fielding any additional questions you might have.

MR. GAGAIN: Thank you very much, everybody, for your testimony.

So, we'll now go into the question and answer session, and I thought I would start by following up on a few of the prepared questions that we had sent in advance to all of you on this panel today.

My first question is for Mr. Stoel, and it's really for the Canadian industry. We just heard from Mr. Magnus regarding potential expansion of the TRQ and how the Mexican industry sees that. You mentioned in your testimony -- and this was for Canadian Solar, Silfab, and

Heliene and also Mr. Stoel -- to expand significantly or eliminate the TRQ on cells.

If the TPSC were to recommend

expanding the TRQ on cells, by how much would you recommend, and what's the basis for that recommendation?

MR. STOEL: Thank you very much, Mike. This is Jonathan Stoel, for the record. As you heard, on behalf of Canadian industry, we do support expanding the TRQ. I think you heard this morning from Hanwha that they supported, I believe, five gigawatts as the -- and, to be fair, we're talking about no tariff on solar cells up to five gigawatts.

We would concur that that should be the minimum amount. We think the key here is to align the TRQ with expected solar module capacity. As I think both Heliene and Silfab have testified, what we really don't want is to have another tax on U.S. manufacturing.

I mean, these companies are already manufacturing in the United States. Both

companies have announced expansions of their capacity and also new hirings of U.S. workers. We don't want to make that more difficult. And just to make sure I emphasize so Mr. Pochtaruk is happy, that's the same with the Section 301 tariffs. We've applied to have 301 tariffs on certain key inputs removed.

Again, those are taxes on U.S.

manufacturing. I think as the Committee looks

holistically at how to improve U.S. manufacturing

of solar products, we ought to think about how to

eliminate all those taxes that inhibit our

ability to do that.

I hope that answers your question.

MR. GAGAIN: It does. Thank you very

And I have a follow-up question for Silfab and Heliene. We had posed in writing that if the President were to take no action to extend the solar safeguard measure, I was wondering what impact you would expect that to have on your U.S. module production operations.

much.

MR. MACCARIO: Well, I believe I testified, obviously, not having tariffs on our Canadian operation would be extremely beneficial because we'll generate a significant amount, double digits of millions, that we would be investing in the U.S.

MR. POCHTARUK: However, not having tariffs on the rest of the world -- right? So, if the safeguard would be not renewed, then despite the direct benefit to Canada, which is a benefit to Heliene and Silfab, what we see is that the price in the U.S. will adjust down, therefore compressing margins overall.

So that is something that we'll need to consider in our business plans and how it would -- in the possible presence of no tariffs for the rest of the world, what would that do in terms of demand and supply and compression of margins?

MR. STOEL: Mike, I want to emphasize that I think both companies are planning on expanding their investments in the United States,

1 but just being in Canada, the tariff on Canada 2 takes away monies that are destined for U.S. manufacturing. 3 4 There's no plan from any of the 5 companies, including, as you heard from Mr. 6 Ambrose earlier, for Canadian Solar, to expand the production capacity in Canada. So, all the 7 8 dollars that are being paid in tariffs, whether 9 it's on solar cells if the TRQ is expanded or if the tariff is not rescinded with respect to 10 Canadian exports, those are simply taxes on 11 12 American manufacturing. 13 MR. POCHTARUK: Does that respond to 14 your question? MR. GAGAIN: Yes, that was responsive. 15 16 Thank you very much. 17 I think at this point, I don't have 18 any further questions. So, I'm going to turn it 19 over to Mr. Martyn from USTR at this point. Thanks. 20 21 CHAIR MARTYN: All right. Thank you 22 very much. I just have one question. It sounds

to me like your proposal for a TRQ is to set the 1 2 TRQ at a level where the tariff would never apply to a single imported cell. So, if that is the 3 4 objective, what is the point of having a TRQ? 5 Shouldn't you be recommending that we just eliminate the tariff on cells? 6 MR. MAGNUS: John Magnus from Maxeon. 7 8 That's certainly what we've recommended. And if 9 you feel obliged to stick with the TRQ structure, then it should be expanded to account for all 10 11 existing and announced MODCO capacity in the 12 United States. 13 MR. STOEL: We would agree with Mr. 14 Magnus's comments. Thank you. CHAIR MARTYN: All right. 15 Thank you. 16 That's the end of my questions. I see that Mr. 17 Mroczka has a question, so please go ahead. 18 MR. MROCZKA: Oops. Sorry about that. 19 Yeah, my question is for Mr. Ambrose. Where I 20 thought you were going in your testimony was in 21 addressing Petitioner's comments about some of

the concerns raised about Canadian Solar, but you

didn't quite get there.

And so, I do want to kind of circle back to that. I think the main concern that is out there is about a potential circumvention threat should an exclusion be given to Canada through Canadian Solar.

Kind of to put you on the spot, but what assurances can you provide that that will not be the case or that will not happen should there be an exclusion granted?

MR. STOEL: Hi, Victor. Good to see you. This is Jonathan.

MR. MROCZKA: Hey, John.

MR. STOEL: Happy New Year to you, my friend. Wanted to just answer briefly, just because some of this information is confidential, but it is in the ITC record. And that is the size of the Canadian Solar facility in Canada had already diminished before the ITC's original investigation. So, we're talking about a very small facility up there.

And, as Mr. Ambrose testified, the

company really has been focused almost entirely on research and development in Canada. So, I don't want to repeat some of my clients' rhetoric from their testimony. The other clients are good to use rhetoric. I'm the studious lawyer here before you.

But the idea Canadian Solar is

preparing to make some big move in Canada that

would somehow threaten the U.S. industry, it's

not logical and it's not true. And, as you heard

from Mr. Ambrose, in fact, the company is very

focused on the U.S. industry and developing and

promoting the U.S. solar industry, including

looking at U.S. manufacturing operations.

So, I think that's really the important points for the Committee to consider. But with that, I want to make sure Mr. Ambrose has a chance to respond as well.

MR. AMBROSE: Sure. I would be happy to. I think, first and foremost, circumvention is illegal. And I think we dealt with that anticircumvention policy issue earlier this year as

part of the industry. So, first and foremost, we 1 2 don't do anything that's illegal. Secondarily, we wound down our 3 4 manufacturing operations to just an R&D facility. 5 So, any threat we could pose would entail an entire rebuild of our manufacturing facility, 6 7 which we have no intentions of doing. 8 As was articulated earlier in the 9 testimony, it's actually more cost-effective to do business in the U.S. than it is in Canada. 10 So, for those reasons, we should pose no threat 11 12 to the U.S. marketplace. 13 MR. MAGNUS: John Magnus from Maxeon 14 just adding that the very same considerations apply in Mexico. The size of Maxeon's -- the 15 16 factory there is a publicly known thing, and it 17 is threatening to exactly nobody in the domestic 18 industry. 19 CHAIR MARTYN: All right. Thank you 20 very much. 21 Dr. Heerman, you're the next in line. 22 DR. HEERMAN: Thanks, Mr. Martyn.

Just want to follow up on some of the comments that you all have just recently made about domestic production both in Canada and then Mexico. You both talked about it being more cost-efficient, or at least the Canadians have talked about it being more cost-efficient, to invest in production in the United States.

Mr. -- I'm sorry; I forget the name of the gentleman from Maxeon -- talked about investing in production in the U.S. as well as investing in production in Mexico. How do those safeguard tariffs play into the decisions for Maxeon to expand in both the U.S. and in Mexico? And then, also, can you talk about some of the factors that make it more cost-effective to invest in the United States for manufacturing? Thank you.

MR. MAGNUS: John Magnus from Maxeon.

The biggest factor with respect to the United

States is the tax incentives that Congress is

trying to enact at the moment. And should that

happen, it would justify substantial investments

in U.S. production. The location of those investments could certainly be affected by what happens with respect to the safeguard measure.

And the ability to serve the market in the southwestern United States with modules assembled across the border in Mexico is a very important puzzle piece.

MR. STOEL: This is Jonathan Stoel.

Ms. Heerman, just responding as well. I mean,

two things. One, I think, as John very well

said, we really are supporters of the

administration's efforts with Build Back Better.

We think that's critical, as SEIA and ACP

testified very well this morning, and I really

hope that gets done. All the companies on the

Zoom today with you are strongly supportive of

that.

And then the second thing is you really do need to take a holistic approach at what supports U.S. manufacturing. As Mr.

Pochtaruk talked about and I did, the Section 301 tariffs are really tough. That's a really big

tax on American manufacturing.

There are certain products like solar glass and other things that we've explained to USTR and to the administration you simply can't get from other sources. And so, you're just imposing a tax on American manufacturing through those taxes. And I commend USTR Tai and others as you look at that, possible new exclusions under 301.

So, I think you need a holistic approach to what makes sense for U.S. manufacturing. And I can say for the three companies from Canada, all of us would be very pleased to discuss that with the Committee moving forward and try to provide suggestions if those would be helpful to you. Thanks so much.

DR. HEERMAN: So, just to clarify, in the absence of other policy changes, the safeguard tariff itself isn't what makes production in the United States more cost competitive or not? It isn't a driving factor on U.S. investments?

I may be able to add 1 MR. MACCARIO: 2 something, Dr. Heerman. So, in our case, most of our customers are U.S. residential. 3 They want a 4 U.S.-made product. Most of them are aware that 5 Canada is not part of the United States yet, and 6 they do want something produced in the U.S. it's as simple as that, serving what the customer 7 8 wants. 9 MR. MAGNUS: John Magnus for Maxeon. 10 I think what you've seen over nearly four years 11 is that import relief was sufficient to catalyze 12 some investment in module assembly and none in cell-making. In fact, cell-making, you saw 13 14 disinvestment and fab closures. And that's a pretty good indication of 15 16 what import relief can get you. 17 announcements that you're hearing, which are SEMA 18 dependent, are a pretty good indication of what 19 affirmative incentives can get you. 20 CHAIR MARTYN: All right. Thank you. 21 Ms. Negus? This is Olivia 22 MS. NEGUS: Hi. Yes.

Negus representing Department of Labor. 1 I had a 2 question specifically for Mr. Magnus from Maxeon. I was wondering if you had any job creation 3 4 figures associated with your planned expansion of production of cells and modules in the U.S. 5 Thank you. 6 I should have -- they're 7 MR. MAGNUS: 8 not in my notes for this, but I will collect that 9 before this Panel is over and either speak up 10 again or put it in the chat. It's a large 11 number, but I don't want to get it wrong. I may have about 60 seconds, I'll dig it out. 12 13 MS. NEGUS: Okay. Thank you. 14 CHAIR MARTYN: All right. Mr. Amdur? 15 MR. AMDUR: Thank you. I just want to 16 go back to one of the questions that was provided 17 to the Panel participants prior to the Panel. 18 And it's probably more relevant to the 19 representatives from Silfab and Heliene since 20 they're -- so I understand you're a module

And, basically, the question was about

producer in the United States.

21

how the ITC in its extension review report recommended changing the tariff rate quota on solar cells from an annual quota to quarterly quotas. And how would you expect that to affect imports of solar products in the United States and prices in the U.S. market?

MR. POCHTARUK: If I may, I don't think it makes a difference to us. You know, it's really up to you if you need to administer it quarterly versus yearly. When you look at the imports monthly, I would say they're pretty regular. There is no seasonality to it.

So, in our case, we don't see any difference, really, of having that volume allocation be quarterly or yearly. I mean, for example, right now we are in the beginning of January, and we are selling May. Right? So, we are already buying cells that will be shipped by container to the U.S. that will arrive in late April for manufacturing in May. So, our planning goes four to five months ahead.

MR. MACCARIO: Yeah. I just want to

add that we are purchasing a lot of cells that currently we are not making. So, there is the possibility for others that are fully integrated to perhaps try to game the system and to go first past the post and introduce a lot of product and taking all the quota.

I don't know which one of the two is a better -- perhaps the quarterly is better, but I don't really have a solution to that problem.

MR. AMDUR: Okay. Thank you.

MR. STOEL: Mr. Amdur, this is

Jonathan Stoel. Just one point because of Mr.

Maccario's testimony. I mean, if you had a

binding TRQ, to Mr. Martyn's question earlier,

where unfortunately you started having attacks,

then I think, frankly, having some mechanism to

ensure that folks like the two gentlemen on the

call don't have pending attacks is key.

So, I think if having something quarterly would give you more flexibility to avoid that situation, that would obviously be helpful for the broader U.S. manufacturing

1	industry. And we thank you for thinking about
2	this in advance. We know how much work Customs
3	has to do to administer all these things. So,
4	thanks so much.
5	MR. AMDUR: No, thank you.
6	CHAIR MARTYN: All right. I think
7	that's the end of our questions. Is there
8	anybody else from the TPSC who has a question? I
9	said from the TPSC, John.
10	All right
11	(Simultaneous speaking.)
12	MR. MAGNUS: I hit the wrong button.
13	I have a jobs number if this is an okay time for
14	that.
15	(Simultaneous speaking.)
16	MR. MAGNUS: direct jobs, estimated
17	direct jobs, 1,700.
18	CHAIR MARTYN: Thank you very much.
19	MR. AMBROSE: You're on mute, sir.
20	CHAIR MARTYN: Thank you. With that,
21	we will end Panel 3 and move on to Panel 4. So,
22	thank you very much, gentlemen, for coming to

speak with us today and for all -- yes? 1 Ι 2 That was a wave. All right. see. Thank you for coming to talk to us and 3 4 for your testimony, which has given us a lot to 5 think about. And so, thank you, and have a good rest of the afternoon. 6 MR. STOEL: 7 Thanks so much. 8 Thanks, everyone. MR. GAGAIN: And 9 now we'll pause for about three minutes while we change to Panel 4. 10 Thanks. 11 (Whereupon, the above-entitled matter 12 went off the record at 2:09 p.m. and resumed at 13 2:12 p.m.) 14 MR. GAGAIN: Thanks. Let's resume. So, we'll now proceed with our last 15 16 panel for today, which is Panel 4. We will hear 17 from the Embassy of Canada, Government of Canada. 18 We'll hear from the Government of Mexico. we'll hear from the Trade Remedies Authority of 19 20 Vietnam, Government of Vietnam. 21 We will proceed in that order. 22 Each of the three participants has 10

minutes to provide testimony. Ronalda Smith from the USTR will track your time. As you proceed we request once again that you identify your name and title, similar to how we proceeded with the earlier panels.

Ms. Ouellet, is the Government of Canada ready to proceed?

MS. OUELLET: Yes, we are. Thank you.

MR. GAGAIN: Okay. Please go ahead.

MS. OUELLET: Good afternoon. My name is Annie Ouellet. I'm the Counsel for Trade

Policy at the Embassy of Canada here in

Washington. I'm appearing today to provide

Canada's views on this matter. My appearance does not constitute an express or implied waiver by the Government of Canada of any applicable diplomatic immunities or privileges.

The Government of Canada's clear position in this investigation is that if the Trade Policy Staff Committee recommends that the President extend the safeguard measure, then it should also recommend to the President that

imports from Canada be excluded from any extension.

Today I would like to begin by
underscoring that President Biden and Prime
Minister Trudeau have expressed their commitment
to work together to address the climate crisis
and facilitate secure and resilient North
American supply chains for critical growth in
industry. We are like-minded partners, building
a competitive and innovative North American green
energy future.

The solar sector is a key example of how a strong partnership between Canada and the U.S. can lead to de facto deployment of nuclear technology, to the development of a robust manufacturing sector, and to the creation of new jobs. This is evidenced by the fact that over the past four years the Canadian solar industry has invested more than \$100 million to develop manufacturing facilities in the United States, creating hundreds of American jobs, and including U.S. solar module technology.

These investments will create an additional 1.7 gigawatts of solar module production capacity in the U.S. by next year. It is our sincere hope that the Canadian and U.S. solar industries will continue to expand their partnerships for years to come.

However, the safeguard tariff imposed by President Trump in February 2018 threatens our industries' job prosperity. To start, President Trump should never have imposed a safeguard tariff on imports from Canada.

In the original investigation, the U.S. International Trade Commission found under the NAFTA Implementation Act that imports from Canada did not constitute a substantial share of total imports, and that they did not contribute importantly to any serious injury caused by total imports.

As a result, the Commission's majority recommended that Canada be excluded from any safeguard action. But President Trump disregarded this finding and unilaterally imposed

a tariff on Canada.

Moreover, for the past four years,

Canadian and U.S. module manufacturers alike have
been hurt by the tariff. You heard earlier this
afternoon from Heliene and Silfab, Canadian
companies that manufacture solar modules in

Canada and in the United States. Both companies
sell small quantities of their Canadian-made
modules into the United States.

These companies also have invested in and support U.S. module manufacturing facilities in Minnesota, Washington State, and Florida.

Unfortunately, the tariff currently being applied hinders potential future investments from Canadian companies in U.S. solar manufacturing.

This extension proceeding now provides an important opportunity for the Biden

Administration to revisit this issue and, by doing so, to help both industries. The President has the authority under U.S. law to exclude imports from Canada from the safeguard measure.

Moreover, under the Canada-United States mutual

agreement, the United States is in fact required to exclude imports from Canada. We have detailed in our written comments submitted on December 15th, the legal basis for such an exclusion.

In addition, there is even stronger factual support now than in the original investigation to exclude Canada from extended safeguards, which I will take the opportunity to speak to now.

First, Canada's share of total imports is minimal and declining. Once again, imports from Canada do not constitute a substantial share of imports.

Second, there has been no injury, serious or otherwise, caused by imports from Canada. On the contrary, as I've already mentioned, Canadian companies have invested millions of dollars in the U.S. economy, built and expanded U.S. solar manufacturing, and created hundreds of American jobs. Lifting the safeguard tariff on imports from Canada would benefit the U.S. industry producing solar

products to additional investment opportunities from Canada.

Third, Canadian modules are highvalued products made in a U.S. ally country by
industry partners employing high labor standards.
These Canadian products present no threat to the
U.S. industry.

This illegal and harmful tariff on solar panels from Canada is a critical issue for my government and is even more pressing now than four years ago. In fact, the safeguard tariff is the subject of Canada's first state-to-state dispute against the United States under Chapter 31 of the Canada-United States-Mexico Agreement. Canada urges the United States to act quickly to comply with its legal commitments and remove the tariff.

For all of these reasons, the

Government of Canada renews its request to be
excluded from any extended safeguard measures.

Our industries are linked. Our companies, our
workers, our clean energy goals, and our

challenges are similar. Our measures must be, 1 2 too. Thank you for the opportunity to 3 appear today. Counsel for the Canadian industry 4 5 and the Government of Canada provided answers to the advance questions posed to Canada earlier 6 7 this afternoon. 8 I'm available to answer any additional 9 questions alongside our outside counsel, Jonathan Stoel of Hogan Lovells. 10 11 Thank you. 12 MR. GAGAIN: All right. I apologize, 13 I had some connectivity issues just then. 14 If the Government of Canada has concluded, we will move to the Government of 15 16 Mexico now. MR. REMIS: Can I start? Can you hear 17 18 me? 19 MR. GAGAIN: Yes. Please proceed. 20 MR. REMIS: Okay, thank you very much. 21 And thank you for the opportunity to testify before the United States Trade Policy Staff 22

Committee today.

My name is Cesar Remis, and I am the head of Mexico's Office for the Implementation of the USMCA at the Embassy of Mexico in the U.S.

In my brief statement I plan to focus on two main issues:

First, that currently exports from Mexico to the U.S. are minimal, therefore do not constitute a threat to the U.S. industry.

Second, we will show that the imports from Mexico do not meet the requirements established in the USMCA to impose them as safeguards. Therefore, they must be excluded.

The actual levels and downward strength of imports from Mexico indicate that they do not represent a threat to the domestic industry in the U.S. For instance, in 2020, Mexico's share of total U.S. imports of CSPV product represented only 1 percent of imports. And between 2015 and 2020, U.S. imports from Mexico decreased in terms of value by more than 90 percent.

Mexico's position is that if the U.S.

decides to extend the safeguard, it must carry

out exclusion analysis provided for in the USMCA

and Section 301(a) and 301(b) of the USMCA

Implementation Act, which established the

obligation to exclude imports from other parties

from the application of a safeguard unless

affirmative determinations are made concerning

two conditions:

First, that imports from that party

First, that imports from that party account for a substantial share of total imports, and;

Second, that those imports also contribute importantly to the serious injury.

Imports from Mexico did not meet any of those requirements. Imports from a party account for a substantial share of total imports if that party is one of the top five suppliers of the investigated product.

From 2018 to 2020, imports from Mexico did not represent a substantial share of total imports because Mexico was not among the top five

suppliers in two of these three years, 2019 and 2020, and moved further away from the five suppliers each year.

In 2018, Mexico was the fifth largest supplies. In 2019, it was the sixth largest supplier. And in 2020, it was at the eighth place.

To decide if imports from a party contributes to quotas to the serious injury, investigating authorities shall carry out a 4-step analysis.

The first step is to analyze the import share and its changes, and the level of imports and its changes.

During the three years following the imposition of the safeguard measure, 2018 to 2020, the value of imports from Mexico decreased considerably in terms of value reaching their lowest point in 2020. However, the decreasing trend of imports from Mexico did not begin with the imposition of the measure in 2018 but, rather, it started in 2015.

The value of imports from Mexico continued to decline during the three years following imposition of the measure at significant rate, going from \$301 million in 2018 to \$89 million in 2020, a 70.6 percent decrease.

Moreover, between 2015, the year when the decline of Mexican imports started, and 2020, the decrease in the value of imports from Mexico reached 90.3 percent.

Furthermore, Mexico's share of total U.S. imports also decreased drastically from 11.4 percent in 2018 to 1.3 percent in 2020.

In the final report of essential review, the ITC agreed that the import of CSPV modules from Mexico and Mexico's market share declined from 2018 to 2020.

The second step to decide if imports from a party contribute importantly to serious injury requires an additional examination that involves comparing the import trend from a party and the total imports. Specifically, the USMCA provides that the party normally shall not be

deemed to contribute importantly to serious injury if the growth rate of imports from a party is officially lower than the growth rate of total imports from all sources.

This is clearly the case. While imports from Mexico decreased by 70 percent between 2018 and 2020, total imports grew by 154 percent, 154 percent in the same period.

Therefore, the growth rate of Mexican imports was officially lower than the growth rate of total imports in that period.

Mexican imports did not contribute a substantial share of total imports, and did not contribute importantly to any serious injury caused by total imports. Therefore, according to the U.S. law and the USMCA, the committee should recommend to the President that Mexico be excluded from any extended safeguard measures.

If Mexico remains covered by the measure and is not compensated, my Government will not -- will have no alternative but to (audio interference) at the level of our trade

damages according to Article 10.2.6 of the USMCA. 1 2 Finally, Mexico understands that for the Biden Administration climate considerations 3 4 are an essential element of U.S. foreign policy 5 and national security. Nevertheless, extending the safeguard measure to USMCA trading partners 6 would put the U.S. climate agenda at risk. 7 8 believe that the only way for the North American 9 region to remain competitive is by deepening the integration of our supply chain, rather than 10 11 isolating production. 12 Therefore, our manufacturing platform 13 must continue to complement each other by working 14 together to make trade easier. Thank you for the opportunity to 15 16 address you today. 17 MR. GAGAIN: And thank you very much 18 for your testimony. 19 Mr. Son, please, from the Government 20 of Vietnam, are you ready to proceed? MR. SON: Yes. Thank you. 21 22 MR. GAGAIN: Okay, thank you.

go ahead.

MR. SON: Thank you very much, Michael.

Good afternoon, everyone. My name is

Son Bui from the Trade Office, Embassy of

Vietnam.

And, first of all, we would like to appreciate the opportunity to provide comment on behalf of the Government of Vietnam for the consideration by the USTR to TPSC hearing today concerning the safeguard measure on CSP sales and modules.

Firstly, it should be emphasized that any expansion made by the USTR must be consistent with the U.S. obligation under the WTO.

In this regard, we would like to note that in case the U.S. decides to expand the current safeguard measure, other WTO measures, including Vietnam, can exercise our right of suspension for compensation on the adverse effect of the measures on trade in accordance with Article 8 of the WTO Agreement on Safeguards, which might negatively impact U.S. exports.

More importantly, both safeguard expansion and retaliatory were supposed to be on a variety of different industries, would interrupt our efforts to recover from the pandemic losses both in the U.S. and relevant economies.

Secondly, the safeguard carried on solar panels is a no-win measure which not only adversely affects the exporting countries to the U.S., but also causes detrimental influence on the market -- on the U.S. market. Owing in part to the safeguard tariff, solar panel prices in the U.S. are the highest in the world.

The U.S. domestic industry can supply only a fraction of the demand for solar panels in the U.S. And most of the U.S. production is dedicated to residential and commercial applications. Utilities tell developers those are reliant on imported solar panels.

The continued application of safeguard duties on imported solar cells and panels hinders growth in the U.S. solar energy sector.

Furthermore, the tariff then cut growth not only in the solar cell sector but also in the broader solar industry that depends on the deployment of solar energy.

The short-term protection given to domestic solar cells and panel manufacturers in the form of tariffs might become a trade-off for the long-term goals of development.

Finally, we are aware that the

President committed to achieve a carbon-free

power sector by 2035 and net zero emissions by no

later than 2050. To meet this goal, the

Administration plans to increase clean

electricity from current 38 percent to 100

percent in 15 years, not only within U.S.

borders.

The Administration also needs and encourages global development of clean, renewable energy in a common effort to address climate change challenges, as said clearly at the COP26 meeting recently in Glasgow, Scotland.

Toward achieving this goal, it is

critical to ensure solar energy is an economically viable energy source with aggressive growth. The proposed expansion of the current safeguard, with harmful impact on solar energy sector, both in the U.S. and other countries, would hinder the present administration's plan to realize the promise.

From today's hearing I guess the option is now between requests of some companies proposing expansion, and the other side is economic and environmental benefits of opposing parties, which are more than double in number.

In the broader context of the whole economy, I believe today's participation pattern really reflects significantly different levels of interest which grow and impact on them. Taking into consideration only above agreements, Vietnam respectfully requests that the TPSC not expand the current safeguard measures against CSPV cells and modules.

We received two questions from TPSC, and we will be happy to share answer today or

email you later for your kind consideration.

Again, thank you very much for this opportunity to provide our comments.

Thank you.

MR. GAGAIN: Thank you very much for your testimony.

We'll now move to the question and answer session. And I want to begin with the Government of Vietnam.

As you indicated at the end of your testimony, we did pose two advance written questions to the Government of Vietnam. And we would like to hear your answers to those questions during this hearing. So, if you could please provide some detail.

Just as a quick recollection, the first question was, in your written comments at page 2 you contend that the safeguard measures applied to solar panels is not saving U.S. jobs, and that these duties prevent job growth in the cell sector and the power industry that's depending on the deployment of solar energy, when

in its report the ITC found that the domestic industry's employment indicators for module production all increased between 2018 and 2020.

So, I was just wondering if you could reconcile your position that the safeguard measure applied to solar panels is not saving U.S. jobs in light of the ITC's findings that employment indicators for module productions increased during the past few years?

Thanks.

MR. SON: Sure. I would like to share answers to those two questions at the same time.

Firstly, it should be noted that the U.S. ITC findings on the domestic industry's employment indicators are compiled from data submitted in response to the Commission's questionnaires. In the page 36 of the U.S. ITC's report, the Commission indicated that the Commission sent U.S. producers' questionnaires to 64 firms, but the Commission received usable response from 14 firms only.

And, thus, it is doubtful that the

U.S. ITC's data may not be representative enough for the whole U.S. solar industry.

Secondly, the Government of Vietnam we refer to the national solar jobs census by the Solar Foundation as the main source for our dealing. Accordingly, we formed the safeguard investigation in 2017.

industry were expanding rapidly, growing by 178 percent from 2010 to 2016, or by more than 160,000 jobs; to be precise, from 93,502 to 260,077 jobs. And the Solar Foundation has predicted the trend to continue, expecting solar employment to reach 263,293 jobs by the end of 2018.

However, under the safeguard action, the U.S. solar industry did not reach its full potential. In 2017 and '18, the U.S. solar industry lost jobs for the first time since 2010. The total number of jobs increased modestly in '19, but declined again in 2020.

The COVID pandemic no doubt

contributed to the more rising job losses, but the overall trend following the high mark of 2016, the year before the safeguard petition was filed, reserved -- reversed years of significant growth in solar industry employment.

And that is the reason why the Government of Vietnam views that safeguard tariff on solar panel are not saving U.S. jobs. In fact, the tariff prevents growth not only in the solar sector but also in relevant sector.

So, those are our replies to your questions. Thank you. And we'll be happy to email you details later.

MR. GAGAIN: Okay. Thank you for your responses.

At this point I do not have further questions for the panel, so I'm going to turn it over to Mr. Martyn now. Thank you.

CHAIR MARTYN: I do not have any questions either. So, I will look to our colleagues from the TPSC to see if any of them have questions. Please raise your hands if you

do.

All right. I am seeing no hands. So,
I will take that to mean that there are no
further questions.

And, therefore, I will thank the members of this panel, the representatives of the Governments of Canada, Mexico, and Vietnam for their presentations today. And hope that you all have a good rest of the day.

And, with that, I think that also ends this hearing. So, I will once again at this point not thank individual panels but all of our witnesses and all of the interagency participants who have listened and asked questions.

All of the testimony has been very useful to us. We will be considering it very carefully and moving quickly to make a recommendation to the President.

Repeating what we said at the beginning of the session, we will not be asking for or accepting additional submissions of factual information after the end of this hearing

other than what has been recorded by the court 1 2 reporter, so we do not need anything more. And, with that, we are finished. 3 So, 4 again, thank you everyone. 5 Mike, are there any more administrative details or is that from your 6 perspective as well? 7 8 MR. GAGAIN: No, I believe that's it. 9 Well, do we want to mention anything about post-hearing submissions because there were 10 11 certain suggestions throughout the hearing about 12 that? 13 CHAIR MARTYN: Thank you, yes. We will 14 not be, again, asking for post-hearing 15 submissions or accepting post-hearing 16 submissions. 17 The one exception will be that two of 18 SEIA's witnesses had their testimony seriously 19 garbled by transmission problems. And for those 20 two individuals we will be taking a copy of the 21 written statements so that the transcriber can 22 make use of those to correct any problems that

1	crept up because of the transmission
2	difficulties.
3	So, again, I want to thank you very
4	much. And I do not have a gavel, so I will just,
5	I guess, metaphorically gavel us out and say
6	thank you to everyone. Bye.
7	(Whereupon, the above-entitled matter
8	went off the record at 2:39 p.m.)
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II		

<u>C E R T I F I C A T E</u>

This is to certify that the foregoing transcript

In the matter of: Safeguard Action on Crystalline

Silicon Photovoltaic Products

Before: USTR

Date: 01-04-22

Place: teleconference

was duly recorded and accurately transcribed under my direction; further, that said transcript is a true and accurate record of the proceedings.

Court Reporter

near Nous 8