GCU598S18
Solar Policy

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A review of recent federal policy decisions in the solar enterprise

January 17, 2018
The Decisions


- The new Federal Income Tax Law

- The Solar Module Manufacturer Trade Case Hearing before the International Trade Commission (ITC), or the Section 201 Case
Outline of the FERC NOPR case

1. Background
   • Definitions
   • Interested parties

2. Current State – nature of the dispute
   • DOE NOPR

3. Future State – resolution of the case
   • FERC findings
The Department of Energy is a cabinet level agency led by Secretary Rick Perry

- “The mission of the Energy Department is to ensure America’s security and prosperity by addressing its energy, environmental, and nuclear challenges through transformative science and technology solutions.”
- The DOE manages 17 National Laboratories including the National Renewable Energy Labs (NREL). It also runs the the Energy Information Administration (EIA)
The FERC NOPR case – Current State

- In August, 2017, the DOE released a review of the electricity markets in response to a memorandum by Secretary Perry is which he asked how “market-distorting” policies were threatening the reliability of the national electrical grid
  - Many in the renewable energy world had feared it was going to be a serious attempt to dismantle “decarbonization” policies (like Obama’s Clean Power Plan)
The FERC NOPR case – Current State

- The report does not condemn renewables and actually identifies natural gas as “the biggest contributor to coal and nuclear plant retirements.”
- However, it still cites renewable energy policies as responsible for negatively affecting the economics of baseload power plants.
- But it also points out that “a diversified electricity mix is good for the overall system and poses no threat to the system reliability”
The RE community response:

- Advanced Energy Economy pleased to see that the report recognizes the outsized influence of low-cost natural gas on baseload power plants”
- The California Independent System Operator (CAISO) stated that “they are facing no difficulty in managing an increasingly diverse set of resources.
The FERC NOPR case – Current State

- The tradition energy community response:
  - American Coalition for Clean Coal Electricity had hoped that the DOE would have “made a distinction between reliability and resilience in discussing the advantages and disadvantages of different electricity sources.”
  - The Edison Electric Institute claimed that “it supports a balanced and diverse energy mix,” but it also wants us to “recognize the vital role 24/7 energy sources play in a secure and reliable energy grid.”
The FERC NOPR case – Current State

- So maintaining (or reworking) the energy mix requires a close examination of market design.

- The Federal Energy Regulatory Commission (FERC) has to play a key role at this point
  - FERC is the successor agency to the Federal Power Commission established in 1920
  - The Energy Policy Act of 2005 gave FERC jurisdiction over electric reliability and authority to penalize participants that manipulate markets
In response to the report, Secretary Perry filed a seldom-used Notice of Public Rulemaking (NOPR) with FERC to “create market rules to provide compensation for power plants that have a 90-day supply of fuel on hand.”

He argues that the Grid Reliability report advocates that baseload power plants need compensation to shore up grid reliability.
The FERC NOPR case – Current State

- A very unusual coalition of advocacy groups immediately responded saying that the 60 day NOPR process was preposterous
  - American Council on Renewable Energy (ACORE)
  - AEE
  - Natural Gas Supply Association
  - American Petroleum Institute
  - National Rural Electric Cooperative Association
The FERC NOPR case – Current State

- Other folks weighed in too:
  - Former FERC chairman Jon Wellinghoff claimed that the DOE rule would “blow up the markets.”
  - Former FERC commissioner Nora Mead Brownell stated the DOE proposal “is the antithesis of good economics and will drive away investment in new, more efficient technologies.”
  - Dynergy CEO Bob Flexon called the NOPR a “red herring for subsidies for the nuclear and coal industries.”
Figure 1: Cause of major electricity disturbances in the US, 2012-2016

<table>
<thead>
<tr>
<th>Cause</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Other Severe Weather</td>
<td>64.5%</td>
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<tr>
<td>Hurricane Sandy</td>
<td>31.7%</td>
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<tr>
<td>Generation Inadequacy</td>
<td>0.00858%</td>
</tr>
<tr>
<td>Fuel Supply Emergencies</td>
<td>0.00007%</td>
</tr>
<tr>
<td>Other</td>
<td>3.8%</td>
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</table>

Source: EIA and Rhodium Group analysis
In response to the outcry, Secretary Perry continued to claim that the subsidies to be included in the implementation of the NOPR proposal would “rebalance the market.”

The Obama administration support for renewable energy was unfair as they “clearly had their thumb on the scale.”

He admits that the proposed subsidies probably will produce price increases, but that’s part of “the cost to keep America free.”
On January 05, FERC commissioners unanimously “rejected Energy Secretary Rick Perry’s plan to rewrite energy market regulations that would favor the coal industry in the name of grid reliability, delivering a stark rebuke to what has largely been seen as an effort to reward the coal industry at the expense of ratepayers and the environment.”
Outline of the ITC case

1. Background
   - Historical perspective
   - Definitions
2. Current State – parties to the dispute
   - Suniva and SolarWorld
   - SEIA
3. Update
   - ITC findings
   - ITC remedies
The ITC case - Definitions

- International Trade Commission – ITC
- World Trade Organization – WTO
- Solar Energy Industries Association – SEIA
- Office of the US Trade Representative
The ITC case - Section 201

- Section 201 is a section of the Trade Act of 1974 “that permits the US President to grant temporary import relief, by raising import duties or imposing nontariff barriers on goods entering the United States that injure or threaten to injure domestic industries producing like goods.”

- The point is “to provide relief from injurious competition when temporary protection will enable the domestic industry to make adjustments to meet the competition.”

Wikipedia
The ITC case - Section 201

- Section 201 is rarely invoked, but.....

- In April 2017, Suniva, a solar module manufacturer based in Atlanta, Ga., declared bankruptcy, and within a week had filed a trade complaint using Section 201 as its primary basis
The ITC case - Section 201

Section 201 Trade Petition Timeline

**APRIL 26, 2017**
Suniva files a petition under Section 201 of the Trade Act of 1974. The action prompts the ITC to determine whether there has been serious injury or potential for serious injury to the domestic industry.

**MAY 23, 2017**
US ITC decides to initiate the case.

**SEPTEMBER 22, 2017**
Deadline for the US ITC's decision on the first phase (determination of injury). This deadline was scheduled as such on a determination that the case is "extraordinarily complicated."

**NOVEMBER 13, 2017**
Should the ITC find that substantial injury has occurred primarily because of imports, the Commission will then enter the second phase (determination of remedy) with a recommendation for action delivered to President Trump no later than this date. The president then has sixty days to act, per statute.
Suniva, Inc. makes solar cells and panels. It is headquartered in the Atlanta metro area. Suniva declared bankruptcy in April 2017 after laying off more than 230 employees and closing its factory in Michigan earlier this year. Suniva’s actions are now controlled by a New York and London based finance firm, SQN. Suniva is majority-owned by Shunfeng International Clean Energy, a Chinese company that holds 63 percent of Suniva’s stock and publicly opposes the petition.
Section 201 Trade Case - Plaintiffs

- SolarWorld, based in Hillsboro, Oregon, manufactures solar cells and panels. SolarWorld’s decision to join the petition helps Suniva, but it is unclear what remedy SolarWorld wants, since it suggested a different approach in its press release. SolarWorld is owned by a German parent company that has said it is insolvent, which is similar to bankruptcy.
Section 201 Trade Case - Interveners

- SEIA, the Solar Energy Industries Association, based in Washington DC, has taken a lead role in challenging the complaint.
- SEIA has over 800 industrial members represents 260,000 workers.
- SEIA claims that to demonstrate “injury”, Suniva and Solar World must show more than imports contributed to the industry’s material injury – they must show that increased imports were the substantial cause of the industry’s serious injury.
Section 201 Trade Case – Interveners, cont.

- SEIA claims that the plaintiffs were already poor performers in the solar marketplace:
  - Suniva’s ion implant cell technology was a commercial failure
  - Suniva shipped its cells to other countries to assemble into modules because its own module assembling facility in Michigan was poorly designed
  - Suniva and SolarWorld both failed to take advantage of opportunities to sell to some of the largest residential solar developers in the country
  - Both companies failed to meet basic delivery and product quality standards, leading to a loss of repeat business
  - SolarWorld had the opportunity to sell American-made 72-cell modules to utility-scale developers but filled those orders with imports instead, because they clearly didn’t have the capacity to meet U.S. demand for these products.

SEIA
Section 201 Trade Case

- **SolarWorld claims**
  - The tariffs should be the following - $0.40/W with a minimum import price of $0.78/W
  - The proposed tariffs would add 100,000 new non-manufacturing jobs in the Solar Industry, including 65,000 in installation
  - They would also add 45,000 new manufacturing jobs
  - PV capacity would double by 2022

- **SEIA claims**
  - The proposed tariffs would produce the loss of 88,000 jobs in the Solar Industry
  - This is backed up by analyses by Bloomberg, Goldman Sachs, and GTM
  - Abigail Ross Harper: “The notion that doubling the price of solar panels would somehow increase demand and create jobs is preposterous”

SEIA
## ITC recommendations

<table>
<thead>
<tr>
<th>Commissioner Schmidtlein</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
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<tbody>
<tr>
<td>Cell Quota Volume</td>
<td>0.5 GW</td>
<td>0.6 GW</td>
<td>0.7 GW</td>
<td>0.8 GW</td>
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<tr>
<td>Cell Tariffs below Quota</td>
<td>10.0%</td>
<td>9.5%</td>
<td>9.0%</td>
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<tr>
<td>Cells Tariffs above Quota</td>
<td>30%</td>
<td>29%</td>
<td>28%</td>
<td>27%</td>
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<tr>
<td>Module Tariffs</td>
<td>35%</td>
<td>34%</td>
<td>33%</td>
<td>32%</td>
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GTM – 01/03/18
ITC recommendations

<table>
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<tr>
<th>Commissioner Williamson and Johnson</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
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<tbody>
<tr>
<td>Cell Quota Volume</td>
<td>1 GW</td>
<td>1.2 GW</td>
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<tr>
<td>Cell Tariffs below Quota</td>
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<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Cells Tariffs above Quota</td>
<td>30%</td>
<td>25%</td>
<td>20%</td>
<td>15%</td>
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<td>30%</td>
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ITC recommendations

Tariff Premiums Scale to as Little as $0.04/W as Both Rates and Prices Step Down

Volume Tier 1 Multicrystalline Silicon Modules Pricing in U.S. ($/Wdc)

Source: GTM Research

GTM 12/07/17
The U.S. International Trade Commission released a new report on the Section 201 trade case this week that the Trump administration could use to defend new solar tariffs, if challenged at the World Trade Organization.

- Ambassador Robert Lighthizer, head of the Office of the U.S. Trade Representative, requested the supplemental report in November “to assist the president in determining the appropriate and feasible action to take.”
ITC Report

- Lighthizer specifically asked the U.S. ITC to identify any “unforeseen developments” that led to crystalline silicon photovoltaic (CSPV) cells and modules being imported in such high quantities as to harm U.S. domestic solar manufacturers.
- The latest ITC report bolsters claims that China violated free-trade practices to the detriment of U.S. industry.
• It states that China implemented a series of policy measures and government support programs favoring renewable energy product manufacturing, including CSPV cells and modules, that “directly contradicted the obligations that China committed to undertake as part of its WTO accession.”

• “The government of China’s industrial policies, plans, and support programs took advantage of the existence of programs implemented by the U.S. government to encourage renewable energy consumption that, consistent with U.S. WTO obligations, did not favor U.S. manufacturers but instead were directed at owners of renewable energy systems.”

GTM – 01/05/18
Trump to Decide

- January 26, 2018 – the deadline for a decision

- E&E News reported that Trump is expected to receive a formal recommendation to move forward with trade penalties as early as Friday, according to industry sources.

- President Trump can choose to adopt some or none of the proposals put forward by commissioners. At the end of the day, the severity of the trade measures will be entirely up to him.
Outline of the Income Tax case

1. Background
2. Current State
3. Future State