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Remarks of Stefanie Brand, Director, Division of Rate Counsel, Regarding A441 (Establishes Solar Power Incentive Program), Presented at the Assembly Telecommunications and Utilities Committee Meeting on January 12, 2017

Good morning. My name is Stefanie Brand, and I am the Director of the Division of Rate Counsel. I would like to thank Chairman DeAngelo and members of the committee for the opportunity to testify today regarding this bill. We have great concerns about this bill and its significant impact on ratepayers.

The Division of Rate Counsel represents and protects the interest of all utility consumers -- residential customers, small business customers, small and large industrial customers, schools, libraries and other institutions in our communities. Rate Counsel is a party in cases where New Jersey utilities seek changes in their rates and/or services. Rate Counsel also gives consumers a voice in setting energy, water and telecommunications policy that will affect the rendering of utility services well into the future.

A441 is a bill that provides unprecedented incentives to install solar panels in certain designated areas of the State with the aim of alleviating grid congestion. Rate Counsel is very concerned about the potential impact of these subsidies on ratepayers, who must pay the costs of these incentives. The subsidies in this bill are so large that, when combined with the 30% Federal Income Tax Credit for solar installations,

residential customers will be receiving subsidies equaling at least 80% to 90% of their installation costs. In the case of large commercial installations, the subsidies will exceed 100%.

Let me give you an example to illustrate just how large these subsidies are. A residential customer can, if they shop around for multiple quotes, likely find a solar installer who will charge $3.00/watt for a solar installation. The cost of a typical 10 kW system would be $30,000. That customer would receive a Federal Income Tax Credit of $9,000, and this bill would pay that customer an additional subsidy of $19,500 ($4,500 for the 15% subsidy plus $15,000 for the $1.50/watt subsidy). The customer's total subsidy would be $28,500 on a system that costs $30,000.

Attached is a chart that shows how the numbers would work out if the cost for a residential project is $3.00 per watt, $3.25 or $3.50. In these scenarios, combined with the Federal Income Tax Credit, the levels of subsidies range from 88% to 95%. For commercial projects costing $1.75 to $2.25 per watt, the range is 112% to 131%. In other words, the incentives in those cases would exceed the cost of the projects. When you consider that these customers will also own the SRECs that the systems generate, they will effectively be getting paid to install a solar system.

Ratepayers will pay for these incentives through the Societal Benefits Charge ("SBC"). However, customers with solar panels do not pay the SBC, leaving the burden of funding on all other ratepayers, particularly low-income customers and small commercial customers who cannot afford the upfront costs of such installations themselves.

Subsidies this high would be unsustainable in the long run. As set forth in the second chart attached to my testimony, Rate Counsel's consultants estimate that if this bill resulted in 100 MW of solar installations per year, ratepayers would be on the hook for $194 million annually. If it resulted in 500 MW of installations per year, ratepayer exposure would be $968 million annually. New Jersey ratepayers already pay some of the highest rates in the country, and simply cannot afford these additional costs.

Another very important point to consider is that ratepayers already pay for very generous solar subsidies. The Renewable Portfolio Standards mandate electric suppliers to purchase a certain percentage of electric supply from renewable sources, and those costs are passed on to ratepayers. If this bill were enacted into law, ratepayers will be forced to pay double -- the costs of procuring the renewable energy, and the costs of the solar installations themselves. There is only so much that customers can afford to subsidize. The more they spend on these incentives, the less we will have available for other worthy programs such as energy efficiency, infrastructure replacement and resiliency.

Finally, the purported goal of this legislation is to ease the cost of electricity transmission grid congestion. However, the cost of grid congestion has dropped significantly in the last several years due to new in-state electricity generation and transmission upgrades. Based on the 2015 PJM State of the Market report, only one zone in New Jersey -- the PSE&G Zone -- still pays for transmission congestion and those costs total about $40 million per year. Potentially spending $194 million per year to save $40 million per year is not cost effective.

For all of these reasons, Rate Counsel urges this committee to not pass this bill out of committee. I thank you for the opportunity to testify today. Rate Counsel looks forward to continued dialogue to achieving goals that meet the state's energy needs and protect utility customers. I am available to answer any questions you may have.

Analysis of A441, Solar Power Incentive Program, Installed Costs

>> Assuming the installed cost of a residential system ranges from $3.00 to $3.50 per watt, the resulting cost to homeowners would range from $0.15 to $.043 per watt. This is a discount of 88 to 95 percent.

>> Assuming the installed cost of a non-residential system ranges from $1.75 to $2.25 per watt, the resulting cost to non-residential installers would be a credit of $0.54 per watt to $0.26 per watt. This is a discount of 130 to 112 percent.

>> Note: This does not include the payment for SRECs generated by installed systems, which is currently over $200 per SREC.

	Residential (< 25kW)			Commercial (< 200 kW)		
Assumed Installed Cost ($/watt)	**$ 3.00**	**$ 3.25**	**$ 3.50**	**$ 1.75**	**$ 2.00**	**$ 2.25**
Federal ITC (30% of installed cost)	-$ 0.90	-$ 0.98	-$ 1.05	-$ 0.53	-$ 0.60	-$ 0.68
NJ A441 Incentive (15% of installed cost)	-$ 0.45	-$ 0.49	-$ 0.53	-$ 0.26	-$ 0.30	-$ 0.34
NJ A441 Incentive ($/watt)	-$ 1.50	-$ 1.50	-$ 1.50	-$ 1.50	-$ 1.50	-$ 1.50
Total Installed Cost ($/watt)	$ 0.15	$ 0.23	$ 0.43	-$ 0.54	-$ 0.40	-$ 0.26
Discount	-95.0%	-92.2%	-87.8%	-130.7%	-120.0%	-111.7%

Analysis of A441, Solar Power Incentive Program, Potential Ratepayer Exposure

>> If A441 results in installations totaling 100 MW per year, the cost to ratepayers would total $194 million per year, or $580 million for the three-year program.

>> If A441 results in installations totaling 250 MW per year, the cost to ratepayers would total $484 million per year, or $1.5 billion for the three-year program.

>> If A441 results in installations totaling 500 MW per year, the cost to ratepayers would total $968 million per year, or $2.9 billion for the three-year program.

Annual Installations (MW)	100 MW	250 MW	500 MW
NJ A441 Incentive (15% of installed cost)			
Residential Incentive ($0.53/watt)	$ 26,500,000	$ 66,250,000	$ 132,500,000
Commercial Incentive ($0.34/watt)	$ 17,000,000	$ 42,500,000	$ 85,000,000
NJ A441 Incentive ($1.50/watt)	$ 150,000,000	$ 375,000,000	$ 750,000,000
Total Ratepayer Exposure (Annual)	$ 193,500,000	$ 483,750,000	$ 967,500,000
Total Ratepayer Exposure (3-Year Total)	$ 580,500,000	$ 1,451,250,000	$ 2,902,500,000

Note: This assumes installed costs of $3.50 per watt for residential systems; and $2.25 per watt for non-residential systems. It also assumes the program is split into 50 percent residential installations; and 50 percent non-residential installations.

Analysis of A441 (Amended), Solar Power Incentive Program, Installed Costs

>> Assuming the installed cost of a residential system ranges from $3.00 to $3.50 per watt, the resulting cost to homeowners would range from $1.65 to $1.93 per watt. This is a discount of 45 percent.

>> Assuming the installed cost of a non-residential system ranges from $1.75 to $2.25 per watt, the resulting cost to non-residential installers would be a credit of $0.96 per watt to $1.24 per watt. This is a discount of 45 percent.

>> Note: This does not include the payment for SRECs generated by installed systems, which is currently over $200 per SREC.

	Residential (< 25kW)			Commercial (< 200 kW)		
Assumed Installed Cost ($/watt)	**$ 3.00**	**$ 3.25**	**$ 3.50**	**$ 1.75**	**$ 2.00**	**$ 2.25**
Federal ITC (30% of installed cost)	-$ 0.90	-$ 0.98	-$ 1.05	-$ 0.53	-$ 0.60	-$ 0.68
NJ A441 Incentive (15% of installed cost)	-$ 0.45	-$ 0.49	-$ 0.53	-$ 0.26	-$ 0.30	-$ 0.34
Total Installed Cost ($/watt)	$ 1.65	$ 1.79	$ 1.93	$ 0.96	$ 1.10	$ 1.24
Discount	45.0%	45.0%	45.0%	45.0%	45.0%	45.0%

Analysis of A441 (Amended), Solar Power Incentive Program, Potential Ratepayer Exposure

>> If A441 (Amended) results in installations totaling 100 MW per year, the cost to ratepayers would total $44 million per year, or $131 million for the three-year program.

>> If A441 (Amended) results in installations totaling 250 MW per year, the cost to ratepayers would total $109 million per year, or $327 million for the three-year program.

>> If A441 (Amended) results in installations totaling 500 MW per year, the cost to ratepayers would total $218 million per year, or $653 million for the three-year program.

Annual Installations (MW)	100 MW	250 MW	500 MW
NJ A441 Incentive (15% of installed cost)			
Residential Incentive ($0.53/watt)	$ 26,500,000	$ 66,250,000	$ 132,500,000
Commercial Incentive ($0.34/watt)	$ 17,000,000	$ 42,500,000	$ 85,000,000
Total Ratepayer Exposure (Annual)	$ 43,500,000	$ 108,750,000	$ 217,500,000
Total Ratepayer Exposure (3-Year Total)	$ 130,500,000	$ 326,250,000	$ 652,500,000

Note: This assumes installed costs of $3.50 per watt for residential systems; and $2.25 per watt for non-residential systems. It also assumes the program is split into 50 percent residential installations; and 50 percent non-residential installations.