



Renewable Industry Response to PPRP Interim RPS Study Report

February 7, 2019

Background

- The RPS Study Bill Interim Report (“Interim Report”) was due to the Maryland Legislature on Dec 1, 2018.
- On February 5, 2019, the results of the Interim Report were presented to the ECM Committee before any material had been provided for Committee review.
- PPRP’s presentation to ECM included numerous key conclusions and significant editorial content that were not reviewed or vetted by the RPS Working Group and included quantitative analysis that contradicted earlier analysis that was reviewed by the RPS Working Group.
- PPRP asserted numerous opinions as fact-based recommendations to the legislature without discussion or review by the RPS Working Group
- PPRP also presented flawed analysis that projected insufficient supply of Tier 1 RECs and SRECs to meet an increase of Maryland’s RPS to 50% by 2030 with a 14.5% solar carveout, analysis that was at odds with earlier analysis that was presented to and vetted by the RPS Working Group.
- In short, PPRP’s recommendations to the legislature are critically flawed as outlined below. Further, the contents and conclusions of the Interim Report appear to have been revised significantly without any degree of transparency between August 2018 and February 2019.

(Note: the below responses make reference to flawed analysis conducted and presented to the General Assembly by Exeter and PPRP, yet we realize that other authors may have had a hand in producing some of the contents of this Interim Report since August 2018, particularly the content that was not reviewed by or discussed with the RPS Working Group. However, given the lack of transparency in the Interim Report’s drafting between August 2018 and February 2019, we make reference below to Exeter and PPRP as the Interim Report’s primary authors)

Industry Response to PPRP Interim Report

Much of Interim Report’s narrative and conclusions unvetted by RPS Working Group

The RPS Working Group provided significant input and analysis to Exeter and PPRP that was instrumental in the outcome of Exeter’s initial Tier 1 inventory, the first draft of which was so fraught with methodological errors and flawed assumptions that the analysis had to be completely reproduced.

In August 2018, the RPS Working Group was provided an opportunity to provide feedback on the subsequent and improved version of the Tier 1 inventory analysis, but was given no opportunity to further scrutinize virtually any of the other analysis, content, and conclusions presented in the Interim Report, including the methodology used to estimate in-state solar supply projections upon which some of the Interim Report’s conclusions are based. Many of the critiques below would have undoubtedly been influential on the Interim Report had PPRP provided further opportunity for feedback by the RPS Working Group between August 2018 when the RPS Study Group last had an opportunity to review PPRP’s progress and February 2019 when the report was released to the General Assembly.

Similarly, the RPS Working Group was not provided an opportunity to weigh in on the “emerging issues” raised in the Interim Report, all of which conspicuously portray doubt and uncertainty about RPS expansion without discussion of similar emerging considerations which may give the General Assembly equal or greater reason to act now to expand the RPS.

Interim Report conclusions based on a single scenario vs. analysis of potential future scenarios

Rather than outlining and presenting to the General Assembly a number of scenarios based on a range of different assumptions, the Interim Report draws conclusions and recommendations based solely on a single scenario combining a range of largely conservative assumptions. While the Interim Report provides minimal discussion of variables that may impact renewable supply estimates, such considerations are not discussed in the report’s Conclusions or Executive Summary. As discussed below, reasonable revisions to a single conservative assumption reverses some of the Interim Report’s key conclusions and recommendations.

Arbitrary basis for Exeter in-state solar analysis

The Interim Report concludes that demand under a 14.5% solar carveout would exceed projected supply for solar in Maryland. The basis of these supply projections is a single arbitrary assumed annual solar growth rate of 15%, calculated by determining the average annual growth rate of solar across all PJM states from 2014 to 2017 and dividing that number by 2. This is a very conservative growth assumption that neither withstands scrutiny (given the precipitous cost declines and rapid growth of solar nationwide in that same time frame) nor considers the actual rate of solar capacity additions in Maryland and neighboring states. For example, the average annual growth rate of solar within Maryland from 2014 to 2017 was 70%, and an annual growth rate of just 30% would reverse Exeter/PPRP’s conclusions regarding the viability of the 14.5% solar carveout. Had Exeter/PPRP explored and presented a relevant range of growth assumptions around Maryland’s historic 70% annual growth rate, even a historically low annual growth rate as low as 30%, the Interim Report’s conclusions about the viability of a 14.5% solar carveout would have been reversed.

Exeter supply scenarios assume no difference in supply between 2.5% and 14.5%

Exeter’s analysis shows identical volumes of annual renewable supply under the 2.5% vs. 14.5% solar carveout scenarios, an obviously erroneous assumption that is all the more remarkable because of the significance of the conclusions that were drawn from the resulting estimate of SREC undersupply. It is reasonable to expect that market dynamics would produce different solar volumes under a 2.5% vs. 14.5% solar carveout, yet Exeter’s analysis assumed a flat 15% solar growth rate which is itself an arbitrary and irrelevant assumption as discussed above. PPRP presented conclusions and recommendations to the General Assembly based on this erroneous analysis without first vetting them with the RPS Working Group or assessing a range of potential assumptions and outcomes. This observation supports the assertion that Exeter’s analysis and PPRP’s resulting conclusions and recommendations to the General Assembly are erroneous and unreliable.

PJM capacity market changes

PPRP points to potential changes to PJM capacity markets initiated by a Trump-appointed majority of FERC Commissioners as reason for the Maryland General Assembly to delay of action on the RPS, yet these and other potential market changes that have the potential to impact power markets are always a possibility and have historically occurred with some frequency.

A key strength of the RPS’ reliance on a market mechanism – a liquid tradable market for RECs - to govern RPS compliance is the flexibility that such mechanisms offer to be responsive to market changes like a change in capacity market rules without the need for policy changes. For example, historic reductions in natural gas prices

have resulted in significant declines in wholesale power prices throughout PJM over the last decade, resulting in a transformation of the PJM grid away from coal and putting economic pressure on competing resources such as wind and solar. Over the same period, rapid reductions in wind and solar economics have allowed continued renewable additions despite the changing market elements. None of these market changes required delay or change to RPS policies because of the flexibility of tradable REC markets across PJM to respond to such market changes. Also, importantly, PJM capacity market changes do not impact the kinds of distributed solar additions, including community solar and rooftop solar, that are expected to make up the majority of Maryland's in-state solar carveout. Finally, PJM's most recent plan offers an avenue for states to limit capacity market reform impacts if they do occur.

PPRP overstates the importance of remaining study items on legislature's ability to act

PPRP has repeatedly referenced the number of topics that are to be included in the final RPS study report as justification for delay of any action on RPS policy. While many of the remaining topics address important issues of relevance to Maryland's RPS, in sum they do not in any way represent information required prior to making updates to the RPS, especially given the significant universe of information that is currently known about the RPS and implications for expansion vs. delay. For example, the final study report will estimate the economic impacts of the RPS and its expansion, and preliminary analysis shared by PPRP's consultant Metametrics in a November 2018 webinar indicate that a 14.5% solar carveout would add over \$400 million per year in economic benefit to the state, yet PPRP has essentially represented the fact that the quantification of this large positive economic impact and other analysis yet to be completed as reason to delay expansion of the RPS. Many of the outstanding study topics, such as an assessment of the efficacy of long-term contracts in other states, will be helpful in continuing to understand and adjust Maryland's energy and environmental policies in the future even after expansion of the RPS, yet should in no way be used to justify much-needed expansion of the existing RPS.

PPRP omitted from its "emerging issues" list those issues that support RPS expansion vs. delay

PPRP's list of "emerging issues" that impact the RPS were conspicuously limited to issues used to justify a delay for action on RPS expansion. A list of emerging issues that were similarly not addressed by the RPS Working Group but that would bolster the call for action on RPS expansion include:

- the November 2018 study for the Maryland PSC by Daymark Energy Advisors that used proprietary data from Maryland's utilities to conclude that Maryland has significantly more capacity for solar than is called for under a 14.5% solar carveout and that the economic benefits to Maryland of significant solar additions would be valued in excess of \$7 billion
- the pending phaseout of federal tax dollars through the Investment Tax Credit
- the continuing global decline in solar module costs over 2018
- the recent chorus of scientific reports assessing the high cost of climate change and urgent need for action
- the change in party control of the U.S. House of Representatives in January 2019 which is likely to frustrate further efforts by the Trump Administration to pass anti-renewable policies
- the cost savings to ratepayers due to the reduction in wholesale power prices observed in U.S. markets with high renewable penetration

Omission of these and other issues from the "emerging issues" section highlights PPRP's apparent efforts to use the Study Report not as a tool for information provision but as a political document designed to delay action on the RPS.

PPRP mischaracterized land use issues as basis for delay

Citing views expressed at state solar project permitting hearings, PPRP expressed the opinion that land use concerns expressed as part of solar permitting applications should be viewed by the legislature as justification for delay. Further, PPRP raised the prospect that “if the PSC’s authority is restricted or rescinded, it could be difficult to site renewable energy facilities.”

In fact, there are no proposals or efforts to restrict or rescind the PSC’s authority as PPRP contemplates. The PSC’s permitting authority has been consistently cited in rulings by public utility judges, by the PSC, and by the courts. Further, 2017 legislation that was the product of an agreement between MACo and the Maryland solar industry strengthened the role of local governments in the PSC’s state permitting process. As PPRP is well aware, numerous PSC permitting decisions both approving and rejecting proposed solar permits have cited both the PSC’s preemption authority and the increased weight given to local governments in solar permitting decisions by the 2017 legislation.

Finally, it is notable that PPRP’s testimony to the legislature references the concerns of opponents of solar developments as cause for delay while ignoring the support for solar developments by proponents of those same proposed projects. Further, numerous Maryland counties welcome solar but have limited or directed the nature of its development. PPRP’s recommendation to delay expansion of the RPS – an expansion that is necessary to prevent stagnation and contraction of Maryland’s solar industry and the jobs, wages, and investments it brings to localities and to the state – in order to further study a permitting system that is currently functioning as designed is unwarranted.

Regarding Electrical System Planning Comments in PPRP’s Executive Summary

PPRP raises potential cost and timing considerations associated with distribution and transmission system upgrades required to integrate large amounts of renewables in Maryland and across PJM and advises that the General Assembly consider changes, such as lowering the ACP for solar and Tier 1 resources, be made in any effort to increase the Maryland RPS in order to mitigate potential adverse impacts associated with electrical system planning. It should be noted that the proposed Clean Energy Jobs Act of 2019 includes precisely such changes to the RPS, including significant reductions of the ACP values for both the solar carveout and Tier 1 resources as well as delayed implementation of offshore wind additions to the second half of the next decade.