#1 - What is the purpose of the RPS?

Maryland's energy goals are inconsistent. The Greenhouse Gas Reduction Act (GGRA) should supersede the Renewable Portfolio Standard (RPS) because the GGRA is a technology neutral emission goal while the RPS mandates technology without system justification.

Professional system development begins with sound goals. A sound goal specifies a performance level (what to do) not a technology (how to do it). Kennedy stated we will put a man on the moon in 10 years (what to do). The Apollo Moon Project was successful in part because NASA had the discipline to spend one year up front to figure out how to achieve the goal (lunar orbit rendezvous). Likewise Maryland today needs the discipline to figure out how to build a reliable, sustainable, electric power system without fossil fuel.

Maryland's 2016 Greenhouse Gas Emissions Reduction Act requires a 40% overall reduction in greenhouse gas emissions by 2040. It also states {§ 2-1205(c)(3)} "That plans shall be developed in recognition of the finding by the IPCC that developed countries will need to reduce greenhouse gas emissions by between 80% and 95% from 1990 levels by 2050." The GGRA is a sound, technology agnostic, performance goal. Since some sectors like the chemical industry will be expensive to decarbonize the GGRA implies the need for zero (<5%) emission electric power. The ultimate requirement is essential to avoid committing big long term investments to permanent structures that may be a reasonable way to reach an interim stage but interfere with the ultimate goal (80-95% overall).

In contrast to the GGRA, the 2017 Renewable Portfolio Standard requires 25% of retail electricity sales to come from specified generator technologies by 2020. The RPS is a technology mandate with no system goals. While wind and solar are certain to have some role in a post fossil fuel economy, that role is unclear. There is no competent evidence that renewables are a practical way to achieve the GGRA goal. Stakeholders have the right to choose any technology they want, to reject nuclear power or even to compromise goals; but a rational choice is based on the cost/performance/risk of trustworthy options. These options do not exist today; Maryland needs to do its homework.

Given a clear and stable GGRA goal (80-95% by 2050), the traditional low-risk development method is to first conduct a PJM Concept Definition Study (analogous to first year Apollo tradeoffs). Ignoring legacy constraints the first question is: What will reliable power systems look like without fossil fuel? This concept study estimates the cost, performance and risk of electric power whole system alternatives as system emissions approach zero. Complexity and constraints are then added step by step to develop real system designs.

Based on the PJM Concept Definition Study, stakeholders then choose a path and a pace by balancing cost and risk. Most will find the choice to be obvious. Interim goals are not guesses but are derived from informed choices. This PJM Concept Definition Study becomes the basis for a Clean Electric Power Plan.

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Rational development requires a Clean Electric Power Plan before making large irrevocable investments. To create that plan, stakeholders need to see trustworthy practical options; a PJM Concept Definition Study. ***It is prudent to delay or suspend the RPS until the completion of a Clean Electric Power Plan.***

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