

SB526/HB622 Favorable with Amendment

The amendment proposes an additional task for the Maryland 100% Study.

The Clean Energy Jobs Act ([CEJA2019](#)) authorizes the Power Plant Research Program (PPRP) to conduct a study on the impact of increasing the RPS to 100%. PPRP has initiated a [Maryland 100% Study](#). The Study goal is to evaluate and compare 100% RPS with a 100% clean energy policy based on the Governor's proposed Clean and Renewable Energy Standard (CARES) legislation.

The Legislature has tasked PPRP with a policy analysis. That is the wrong first question for a strategic problem. The Legislature should be tasking PPRP to quantify constraints, what do physics, and economics have to say about practical options reliable, fully decarbonized electric power systems. Those constraints then become the factual base for subsequent policy choice.

The flaw with 100% RPS and 100% CARES as Study goals is that they both require generation from specified clean technologies to equal average consumption, not hour/hour. They both allow State electricity imports/exports whereby West Virginia coal can provide backup and somebody else maintains system reliability. It is important to realistically quantify the cost of managing intermittency in a fully decarbonized system. This can be accomplished by the addition of the following concept definition task to the CEJA2019:

7-714 (F) (2) (IV) An early task for the 100% Study is concept definition, to broadly quantify whole system configurations. Specifically: *What are optimal cost combinations of wind, PV, baseload and storage that satisfy Maryland's need for reliable, fully decarbonized electric power systems?* This task will capture all major system costs (a functionally closed boundary); be independent of transmission details (a "copper plate," zero cost, zero loss, assumption is adequate); and be clean generation technology agnostic (include both tier 1 sources as well as Gen IV nuclear technologies). The task will be independent of current policy constraints (including Maryland, neighboring State, and Federal policies). The task will provide constraints and guidance for subsequent policy analysis.

