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Options for Defining Eligible Electricity Resources under SB 100

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SB 100 Language

- “Section 1 (b) The Legislature finds and declares that the Public Utilities Commission, State Energy Resources Conservation and Development Commission, and State Air Resources Board should plan for 100 percent of total retail sales of electricity in California to come from eligible renewable energy resources and zero-carbon resources by December 31, 2045.” [emphasis added]

Considerations for Defining Eligible Electricity Sources under SB 100

- What counts as eligible renewable energy resources today?
- What should count as zero-carbon resources under SB 100?
- What inconsistencies are there between what counts as renewable energy resources today and what could count as zero-carbon resources?
- Will be informed by modeling work and stakeholder input; resource scenarios outlined today are for discussion purposes

Resource Scenario 1: “RPS+”

- Eligible resources types
 - Current Renewables Portfolio Standard (RPS)-eligible resource types
 - Large hydroelectric
 - Nuclear generation
 - Natural gas generation with CCS where GHG emissions=0
- Aligns with current RPS resource types and additional generation types that count as zero fossil emissions under the State’s greenhouse gas inventory

Resource Scenario 2: “No Combustion”

- Same as Option 1 except would not allow for resources that combust fuel
- Examples of resources *not* allowed under this scenario
 - Biomass or biomethane combustion
 - Natural gas-fired generation with CCS where $\text{GHGs}=0$
 - Natural gas combusted at a (currently) RPS-eligible resource (e.g., solar-thermal facilities)
- Examples of resources allowed under this scenario
 - Biomethane reformation
 - Natural gas reformation with CCS where $\text{GHGs}=0$

Accounting Considerations

- Different accounting methodologies exist for RPS Program and the Mandatory Greenhouse Gas Reporting Regulation (MRR; basis for the State's GHG inventory)
 - RPS: utilizes Renewable Energy Credits (REC) that have differing levels of attachment to the electricity that may or may not enter California
 - MRR: relies on the emissions profile of the electricity generation resource with no consideration of RECs
- These accounting differences mean that the same electricity source type might be considered very differently under the different methodologies
- Is it advisable to consider alignment of accounting methodologies under SB 100?
- How to handle electricity storage?
 - Whatever produces the energy that is stored needs to itself be one of the eligible resources