



ENERGY STORAGE ACCOUNTING ISSUES

May 3, 2021

(Written Comments Due May 31, 2021)

As part of its rulemaking to implement the Clean Energy Transformation Act (CETA),¹ the Washington Department of Commerce is considering whether to adopt rules concerning the tracking and accounting of electricity used and provided in energy storage resources. Commerce is coordinating with the Washington Utilities and Transportation Commission (UTC) in this inquiry.

Commerce requests written comments by May 31, 2021. Comments may be submitted by email to ceta@commerce.wa.gov. Commerce and the UTC expect to conduct one or more stakeholder workshops to discuss the issues raised here.

Background

Energy storage is likely to play an important role in Washington's transition to a carbon-neutral, then carbon-free electric system, and CETA includes a provision favoring storage resources, along with renewable generating resources, in the acquisition of new resources.² However, potentially significant complications arise when considering energy storage in the context of compliance and verification of CETA requirements under Chapter 19.405 RCW. Two primary sources of complication are (a) tracking the sources of electricity used in charging storage resources, and (b) accounting for the energy losses in charging and discharging the storage resources.

Under the existing renewable portfolio standard,³ there is no explicit accounting of electricity that is used, consumed, or discharged from a storage resource. The standard accounts for renewable electricity at the point of generation and accounts for retail load at the customer meter. Storage losses, as with transmission losses, are not accounted for in comparing generation to a target based on retail load. With a substantially higher clean energy target under CETA and

¹ Chapter 19.405 RCW.

² RCW 19.405.040(6).

³ Chapter 19.285 RCW.

potentially much greater use of storage resources, specific energy or nonpower attribute⁴ accounting may be appropriate under CETA.

Questions for Stakeholders

1. What information regarding the use of storage in meeting its CETA requirements should be included in the utility's CETA compliance report?
2. How should the energy used and provided by energy storage resources be accounted for to ensure that nonpower attributes of renewable generation are not double-counted? What compliance and reporting requirements would assure verification and prevent double-counting?
3. Should compliance and reporting rules related to energy storage differentiate based on:
 - a. The storage technology, such as battery storage or pumped hydro storage?
 - b. The location of the storage resource within the grid, such as collocated with a generating resource, interconnected in the transmission or distribution system, or at a retail customer's premise?
 - c. The ownership of the storage resource, such as a utility subject to CETA, a non-utility operator, or a retail end use customer.

If so, please explain why and provide suggested rule language.

4. For a storage resource that is interconnected in the power grid, one possible approach is to treat it like a generating resource. The storage resource would be registered in the Western Renewable Energy Generation Information System (WREGIS). It would retire RECs for the renewable electricity used to charge the storage device and report verified data on discharge of electricity into the grid. WREGIS would create RECs for the electricity discharged into the grid. If it used a combination of renewable and fossil sources for charging, a multi-fuel calculation would be applied to ensure that RECs are created only for the renewable portion of electricity generated into the grid. Please comment on the advantages, disadvantages, and necessary elements of this approach.
5. For a storage resource that is collocated with a renewable generating facility:
 - a. Should the storage accounting rules specify that RECs are created based on the amount of electricity generated or on the amount of electricity delivered into the grid?
 - b. How should power from the grid used to charge the storage resource be accounted for?

⁴ "Nonpower attributes" means all environmentally related characteristics, exclusive of energy, capacity reliability, and other electrical power service attributes, that are associated with the generation of electricity, including but not limited to the facility's fuel type, geographic location, vintage, qualification as a renewable resource, and avoided emissions of pollutants to the air, soil, or water, and avoided emissions of carbon dioxide and other greenhouse gases. When a renewable energy certificate (REC) is created for a unit of electricity, all of the nonpower attributes are included in the REC. RCW 19.405.020

6. For a storage resource located at a retail customer's premise, should the electricity used to charge the resource be included in the load of the utility for purposes of CETA? If the storage resource returns electricity to the grid, should this electricity be subtracted from the load of the utility for purposes of CETA?
7. Use of a storage resource will result in electricity being delivered to load at a different time than the electricity was generated. WREGIS creates RECs with a vintage specified as month and year. Is month and year vintage information sufficient to ensure that renewable energy claims are accurate and that double-counting of renewable generation does not occur? If not, what vintage detail should be required and why?
8. If a storage facility operator charges an energy storage facility with a combination of renewable and non-renewable electricity, what verification, documentation, or calculation requirements would ensure that the output of the storage resource is accurately accounted for as renewable or non-renewable?
9. Are there any energy storage accounting requirements used by other jurisdictions or by voluntary programs or protocols that should be considered, either as guidance in adopting rules for CETA or to avoid potential conflicts in approaches?