

June 17, 2021

Mark L. Johnson, Executive Director and Secretary  
Washington Utilities and Transportation Commission  
621 Woodland Square Loop SE  
Lacey, WA 98503

**RE: Docket UE-210183: Comments of the Western Power Trading Forum Relating to Accounting of Energy Storage**

Dear Mr. Johnson,

The Western Power Trading Forum<sup>1</sup> (WPTF) appreciates the opportunity to provide input to the Washington Department of Commerce and the Utilities and Transportation Commission on its request for comments on Energy Storage Accounting Issues under the Clean Energy Transformation Act (CETA).

**Introduction**

In previous comments, WPTF suggested that energy storage should be considered load-modifying resources and addressed on the load side of a utility's accounting ledger. Upon further reflection, we now recommend that energy storage be accounted separately from both generation and load. Strictly speaking, accounting of energy storage is not necessary to demonstrate compliance with the CETA's GHG Neutral and 100% clean standards compliance, as this will depend on the accurate accounting of renewable and non-emitting generation applied toward utility retail load. However, we believe that transparent reporting may be important for energy transformation projects or crediting under the Clean Fuels Standard that utilize energy storage. We believe that reporting by utilities of information on their use of energy would also be important to facilitate any future consideration of policies to incentivize and support storage development within Washington.

For this reason, WPTF proposes that utilities separately report the total charging of storage resources and the total discharge of energy used for retail load. This approach has several advantages. First, there would be no need to track the type of generation used to charge energy storage. Instead, utilities would simply track, and report renewable and non-emitting generation used for CETA compliance as normal. Storage resources themselves would not be categorized as renewable/non-emitting or non-renewable/emitting. Second, the reporting approach could be used regardless of the final disposition of the discharged energy. For instance, green hydrogen may be used in grid-connected fuel cells to provide electricity to serve retail load, or it might be sold for use under a Clean Fuel Standard in Washington or elsewhere. If the hydrogen is not used for utility retail load, its 'discharge' would simply not be reported

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<sup>1</sup> WPTF is a diverse organization of over 90 members comprising power marketers, generators, investment banks, public utilities and energy service providers, whose common interest is the development of competitive electricity markets in the West.

under CETA. Lastly, this approach correctly accounts for storage energy losses. If energy discharged by storage is used to serve load, the storage energy loss will result in a slight increase in the amount of generation needed by the utility but will not change its retail load. Provided that the utility correctly reports load, and the quantity of renewable energy used toward that load, CETA compliance accounting will be correct.

1. ***What information regarding the use of storage in meeting its CETA requirements should be included in the utility's CETA compliance report?***

Utilities should report on the capacity, and type, of storage used as well as the the total energy charged in megawatt hours (MWh) over the reporting period. On the discharge side, utilities would report only the total discharge of energy *used to serve retail load* during the period.

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?***

Separately reporting charging and discharging of storage would not affect accounting of nonpower attributes in any way. Utilities would still report, and retire, renewable energy credits (RECs) and nonpower attributes of non-emitting generation used to serve retail load. Neither charging of a storage resource by renewable generation nor discharging to serve retail load would result in the creation of RECs. Thus, there is no potential for double counting, which would occur if RECs were issued for both renewable generation and again for discharge of the storage resource.

If discharged stored energy is not used for retail load, but used for another purpose, such as for crediting under a clean fuel standard, and if the RECs must be retired under that program to qualify for crediting<sup>2</sup>, WREGIS retirement procedures would prevent double counting of the RECs under the two programs.

3. ***Should compliance and reporting rules related to energy storage be differentiated based on any of the following:***

a. ***The storage technology, such as battery storage or pumped hydro storage?***

The reporting approach should be the same regardless of whether the energy storage used

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<sup>2</sup> For instance, California's LCFS programs requires that RECs retired for electricity pathways under that program must be additional to state RPS requirements.

is battery, pumped storage, renewable hydrogen, or some other emerging technology. WPTF notes that the CETA defines “Renewable hydrogen” and provides that electricity generated using renewable hydrogen qualifies as renewable generation. This provision anticipates that conversion of hydrogen to electricity through a fuel cell would itself create RECs. However, if the RECs created by the renewable generation used to produce the hydrogen are not retired by the hydrogen producing facility, the creation of new RECs would lead to double counting. WPTF therefore suggests that utilities have the option of treating renewable hydrogen as energy storage, instead of as renewable generation.

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?***

The reporting approach should not differentiate between storage resources based on their location, but rather on their ownership or control.

c. ***The ownership of the storage resource, such as a utility subject to CETA, a non-utility operator, or a retail end use customer.***

All energy storage owned or contracted by a utility should be reported, even if located on a retail customer’s premises. However, if storage is owned by a retail customer, charging and discharging should not be reported under the CETA, but would be reflected in the utility’s load.

4. ***For a storage resource that is interconnected in the power grid, one possible approach to compliance 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 renewable energy credits (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.***

Energy storage does not create new energy, but rather stores it for future use. Further, some storage resource may be charged by different generation at different points in time. For these reasons, energy storage should not be treated as generating resources and should not be characterized as renewable/non-renewable.

With respect to the proposal to use WREGIS to effectively ‘recycle’ RECs associated with stored renewable energy, we consider to be overly complicated and unnecessary.

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?***

RECs should be created based on electricity generated by a renewable resource. Although the quantity of energy delivered to the grid by the storage resource will be less than that of the renewable generation, that loss will not affect the output of the renewable resource, nor retail load of the utility that owns or contracts the co-located renewable generation and storage. The RECs generated by the renewable resource should thus be fully usable for CETA compliance.

- b. ***How should power from the grid used to charge the storage resource be accounted for?***

While the MWh of energy stored should be reported, the grid energy used to charge the storage will be considered unspecified and cannot be used toward compliance with the CETA's GHG neutral or 100% clean requirements.

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?***

We understand this question to refer to a resource that is not only located at a retail customer's premises, but also owned by that customer. If the customer owns the storage resource and it is charged by grid power (as opposed to behind-the-meter generation), energy used to charge that resource, whether the storage is in front of or behind the meter, will be included in that customer's load. If the customer returns electricity to the grid, including from behind-the-meter generation, presumably the utility would deduct that amount from that customer's load. The customer's total load would be included in the utility's retail load.

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?***

As explained above, under our proposed framework, the use of energy storage does not impact accounting of renewable generation or utility load. Thus, current WREGIS practice of

vintaging RECs based on month and year is sufficient to ensure accurate accounting of renewable energy for CETA compliance.

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?***

Demonstration of compliance with the GHG neutral and 100% clean standard requires accurate accounting of renewable and non-emitting generation and retail load only. Reporting charging and discharging of storage separately from generation and load does not alter compliance accounting in any way and does not necessitate additional accounting rules.

9. ***Are there any energy storage accounting requirements used by other jurisdictions or by voluntary programs or protocols that the Commission should consider, either as guidance in adopting rules for CETA or to avoid potential conflicts in approaches?***

UTC and Commerce should coordinate with the Department of Ecology as Ecology develops rules for implementation of the Clean Fuels Standard to ensure that storage is treated consistently across the programs in a way that recognizes the value of energy storage in decarbonizing both the electricity grid and other sectors.