December 2, 2020

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

Re: Relating to Clean Energy Implementation Plans and Compliance with the Clean Energy Transformation Act, Docket UE-191023, and In the Matter of Amending, Adopting, and Repealing WAC 480-100-238, Relating to Integrated Resource Planning, Docket UE-190698

Dear Mr. Johnson,

The Western Power Trading Forum[1] (WPTF) appreciates the opportunity to provide input to the Washington Utilities and Transportation Commission (the Commission) on the appropriate interpretation of the term "use" in RCW 19.405.040(1)(a) of the Clean Energy Transformation Act (CETA).

To date, several western states have adopted 100% Clean Energy Standards, including California, Colorado, New Mexico and most recently, Arizona. In other states, while the target date for achieving 100% Clean Energy contemplates matching of renewable and non-emitting generation to load, none of these other states have adopted implementation rules requiring matching of generation to load in the interim period. California, which has the most aggressive Renewable Portfolio Standard in place (50% by 2026, and 60% by 2030) does not require matching of generation to load under its law. And while its IRP process requires load-serving entities regulated by the California Public Utilities Commission to project emissions associated with serving load on an hourly basis, this is to ensure that each entity is appropriately planning to meet electric sector greenhouse emissions goals (80% below 1990 levels by 2020) – it is not a retroactive compliance requirement.

Additionally, California is conducting a great deal of analyses[2] to understand the cost and technology needs in terms of grid planning and energy storage to achieve its Clean Energy Target before making additional determinations as to how to implement the law prior to 2045. No similar analyses has been done for Washington state, yet the Commission and the Department of Commerce (DOC) are actively considering the adoption of rules that would

[1] 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.
[2] https://www.energy.ca.gov/event/workshop/2020-09/senate-bill-100-draft-results-workshop

require utilities in the state to match renewable generation to load under the CETA beginning in 2030. Further, Washington's rules are being proposed without understanding of the implications for how they would be implemented under organized wholesale electricity markets, towards which the west is rapidly moving.

A narrow interpretation of use that requires demonstration of physical delivery of electricity to utility load and/or restricts the ability of utility to use renewable generation that is surplus to load in other periods will require overbuild of renewable resources, devalue electricity of individual renewable resources and increase costs for Washington electricity customers. A narrow interpretation is also incompatible with the operation of organized energy markets and long-established practices.

We urge the Commission to model and evaluate energy storage and transmission requirements before determining an appropriate glide path to get to 100% clean energy in 2045.

The remainder of our comments address the specific questions posed in the Commission's notice on use.

Response to Questions

The Commission requests comments on the rule language provided in Attachments A and B. Particularly, the Commission is interested in comments that focus on whether the proposed language adequately addresses leakage or resource shuffling, prevents double counting, and promotes servicing locational loads with a balanced, feasible schedule. Stakeholders may submit suggested redline edits to the suggested rule language provided in Attachments A and B.

WPTF has a strong preference for the language in Attachment A proposed by the utilities, as we believe this language best aligns CETA implementation with standard wholesale electricity market transactions and practices, including evolving organized electricity markets. Because the language in Attachment A would render renewable and nonemitting electricity invalid for CETA compliance if the electricity is resold under a specified transaction, any double-counting can be identified and prevented.

We do not consider resource-shuffling to be a valid concern. Resource shuffling is a concept that arose in the context of California's cap and trade program, and it refers to a plan to substitute lower emission power for higher emission power to reduce a compliance obligation for imports under California's cap and trade program. Because CETA is not an emission-based program and the explicit intent of CETA is for utilities to replace fossil generation with clean generation, UTC should not be concerned with resource shuffling occurring.

Emissions leakage is also not an appropriate concern. If load and generation in the Western Interconnect were fixed, then renewable electricity claimed by Washington utilities would mean that other resources, potentially emitting, would be serving load elsewhere. This could be considered emissions leakage but is unavoidable when one state within the interconnection undertakes clean energy regulation while most other states do not. Further, generation is not fixed; renewable generation is increasing as renewable capacity grows. So, for any given total interconnection load, incremental generation by renewable resources will usually displace an equivalent amount of fossil generation higher up the merit order stack, reducing overall interconnection emissions.

We strongly disagree with the stated goal of serving 'locational loads', as this implies physical delivery of renewable electricity to a utility's distribution system. Outside of organized markets, ensuring delivery of sufficient generation to a utility's distribution system to meet its load is essential. However, once a utility participates in an organized market, such as the Western Energy Imbalance Market (EIM), a day-ahead market or a regional transmission organization, delivery of sufficient electricity to the distribution system is no longer the responsibility of the utility (other than contracting for capacity). Rather, the market operator ensures that there is sufficient generation available to serve all load within the market footprint.

1. ***Do the rules provided in Attachment A or B allow CETA to be enforced as an offset program?***

    a. ***If no, which portion of the rule language prevents CETA compliance from functioning as an offset program?***

    b. ***If yes, which portion of the rule language permits CETA compliance to function as an offset program?***

WPTF does not consider this question relevant to the interpretation of "use" under RCW 19.405.040(1)(a). This provision requires utilities to acquire and retire bundled renewable energy credits (RECs). Because the utility is claiming both the REC and the associated renewable electricity, there is no offsetting of fossil generation, nor any emission credit to be claimed.

2. ***Do the rules in Attachment A or B allow a utility to produce renewable electricity in excess of the amount required to serve its load and use the RECs from that excess renewable electricity, sold off system, to cover periods of load in which more than 20 percent of its load is served by GHG emitting resources as a means of complying with RCW 19.405.040(1)(b)(ii)? For example, can a utility comply with the 80 percent requirement through buying 1000 MWh of hydroelectricity in excess of its load service needs in every***

hour of the day during the spring runoff and resell that power while retaining the nonpower attributes for compliance?

A plain English interpretation of CETA's multi-year compliance periods prior to 2045 suggests that utilities *can* count renewable and non-emitting generation in excess of retail load in one period against a shortage in another period.[3] Regarding the scenario laid out in the question, provided the energy is not resold as specified, we would view this as a legitimate means of compliance under RCW 19.405.040(1)(a) -- not RCW 19.405.040(1)(b)(ii). The fact that a utility can use alternate compliance options for up to 20% of its load does not imply any limitation on carryover of surplus in one period against shortage in another under RCW 19.405.040(1)(a). Rather, these provisions mean only that the utility may use alternative compliance for any portion of its load up to 20% that cannot be met with bundled RECs.

The rules in Attachment B would not appear to allow a utility to produce (or procure) renewable electricity in excess of the amount required to serve its load and use the RECs from that excess renewable electricity to cover periods of load in which more than 20 percent of its load is served by GHG emitting resources as a means of complying with RCW 19.405.040(1)(a). For this reason, WPTF opposes the language in Attachment B.

3. ***Attachment A states in (2)(C)(ii)(4) that the delivery of resources used for compliance may occur at "another point of delivery designated by an electric utility for the purpose of subsequent delivery to the utility [emphasis added]."***

    a. ***Does the term "purpose of subsequent delivery" mean that the electricity must be delivered to the utility, or only that it was intended to be delivered?***

    b. ***What constitutes "delivery to the utility"?***

WPTF reiterates that delivery from a resource to a utility distribution system has meaning only outside of organized wholesale electricity markets. Within an organized market, resources are dispatched to serve load across the entire market footprint.

4. ***How will the suggested rules in Attachment A and B affect long-term portfolio planning and acquisition?***

WPTF has no comment on this question.

[3] In RCW 19.405.040(1)(a) the phrase, "in an amount equal to," would be meaningless unless the compliance obligation reflects the multi-year sum of the loads and the multi-year sum of nonemitting and renewable electricity generation.

a. ***CETA requires that all of a utility's load be served by renewables or nonemitting resources by 2045. Do the rules in Attachment A or B support this objective? Do they allow compliance with the 2030 goal in a manner that diverges from the 2045 goal?***

CETA establishes multi-year compliance periods from 2030 through 2044. During this period, each utility should be able to credit renewable and non-emitting generation in excess of its load in one year, against a shortage in another year of the same compliance period. As of 2045, any surplus generation in one period must be credited against a shortage within the same compliance year. The language in Attachment A would allow for this.

b. ***Do the suggested rules in Attachment A or B support a long-term resource portfolio plan that matches the production of renewable electricity with the utility's load and has sufficient transmission service between the point of injection of its planned source of renewable electricity and the utility's load to enable the renewable electricity to serve that load?***

The CETA's requirement that utilities meet 100% of load with renewable and nonemitting generation by 2045 is in and of itself enough to drive long-term resource portfolio plan to comply with this outcome. The rules in Attachment A provide flexibility for Washington utilities to transition to 100% clean resources in a cost-effective manner. In contrast, because the rules in Attachment B provide less compliance flexibility in the period until 2045, they have a higher likelihood of breaching CETA's cost limitation.

It is unclear whether transmission service is sufficient to support the 2045 goal because no modeling has been done.

5. ***Could the Energy Imbalance Market (EIM) provide a prorated share of the attributes of the resources that provided energy in a market interval to the loads that received energy in that market interval?***

This question seems to be predicated on several invalid assumptions. First, it seems to assume that the volume of energy that a participating utility receives from the EIM is controlled by the participating utility. This is not the case. Because generator dispatch has not been optimized prior to any given EIM interval (except for resources with the footprint of the California Independent System Operator), the EIM optimization may change the dispatch of a utility's resources relative to the base dispatch schedule of those resources. If a utility's resources are relatively more efficient than those in other areas, or if there is congestion, the EIM may increase dispatch of the utility's own resources with the result that a utility does not end up receiving EIM energy from other BAAs in that interval.

Second, the question assumes that the EIM dispatches resources to meet particular loads -- it does not. Rather, it dispatches generation to meet load for the entire market footprint at lowest overall cost.

Even in the case of attributing resources to load within California, this attribution is not tied to the actual physical flow of energy between a specific generator into California.

Third, the question seems to assume that RECs can be temporally matched to periods when a utility has received energy from the EIM. The EIM is a five-minute market. In contrast, RECs are issued in monthly blocks. In any given month, some of the RECs created by a renewable resource that participates in the EIM would be associated with generation dispatched by the EIM, and some associated with generation scheduled for dispatch in advance. (Only incremental dispatch relative to a resource's base schedule is considered dispatched by the EIM.)

For these reasons, it would be inappropriate to restrict use of electricity from renewable resources dispatched via the EIM to the quantity of energy that a utility takes from the EIM. Instead, rules should enable any renewable resources that is dispatched by the EIM, and from which the utility has purchased both the RECs and associated energy, to be 'used' by that utility under RCW 19.405.040(1)(a), provided that the output of the resource is not deemed delivered to California.

a. ***If EIM loads were to receive the attributes of the generators providing energy in the market, should constraints in the dynamic transfer capacity be incorporated into the calculation of the distribution of those attributes to load? Is it possible to reflect those constraints in the distribution of attributes to locational loads?***

As explained above, there is no direct nexus between dispatch of a particular resource and a particular load within the EIM. The answer to both questions is no.

b. ***If EIM loads could receive the attributes of the generators providing energy in the market, is there a means of allocating those attributes by a bid price mechanism?***

There is already a well-functioning mechanism for allocating renewable energy credits and associated attributes through a bid price mechanism – competitive bidding for power purchase agreements with renewable generators. RECs were conceived to promote renewable energy generation and investment in the context of organized energy markets[4] and are used for compliance within RPS programs of multiple states within organized energy markets. There is no need for Washington to attempt to reinvent the wheel when the existing approach works well.

6. ***Energy serving load in a day-ahead market (DAM) is unspecified. If the DAM bid awards were mostly surplus hydro, would the loads receiving energy from the DAM only receive unspecified energy under the rules in Attachments A and B? Does this mean that a utility***

[4] In 1999, Texas was the first state to adopt an RPS using REC tracking. The same legislation established the centralized energy market that became ERCOT.

that was a net buyer from the DAM at a time of excess hydroelectric generation would only receive unspecified power?

WPTF understands the term 'surplus' here to mean hydro generation in excess of a utility's own load. If Washington utility with hydroelectric resources participates in a future day-ahead market, all output of those resources, including that needed for the utility's load, will need to be bid into the market. Thus, from the perspective of the market, there is no distinction between hydro generation for the utility's load and surplus hydro.

A Washington utility that participates in the DAM can claim hydro generation for its own use under the CETA by retaining RECs associated with generation needed to be applied to their own load, and by ensuring that the generation is not deemed delivered to California. For any hydro generation that a utility does not wish to use under the CETA, the utility can choose to sell the RECs with the associated electricity. Any buyer that has purchased RECs and associated electricity from the selling utility has purchased bundled renewable energy and should be able to use those RECs for compliance under RCW 19.405.040(1)(a). Attachment A allows for this.

7. ***Rules in Attachment B, part (2)(b), state that a utility must make a demonstration that the electricity used for compliance was generated by the utility or acquired by the utility with the nonpower attributes and not resold.***

    a. ***How would a utility make such a demonstration?***

    b. ***How would power generated and purchased by the utility be identified as sold, which documents would be used, and what process would be followed to reconcile purchases and sales?***

    c. ***How would Commission staff conduct audits under this proposal?***

WPTF provides no comment on this question, as we have a strong preference for the language in Attachment A.

8. ***Please explain how double counting is prevented under the suggested rules in Attachment A and B?***

The rules in Attachment A provide: "Nonpower attributes used to satisfy compliance with RCW 19.405.040(1)(a)(ii) may not be double counted. If a utility claiming a renewable resource or nonemitting generation as provided in subsection (1) sells or transfers ownership of the electricity in a transaction that contractually specifies the generation source, it may not use the nonpower attributes associated with that specified-source sale of electricity for compliance with RCW 19.405.040(1)(a)(ii)."

Although it is not stated in Attachment A, a utility would need to provide documentation of its specified and unspecified sales to an auditor to show that electricity claimed for use under the CETA has not been sold (or resold) as specified. Additionally, the Commission could establish cooperative data sharing arrangements with the California Air Resources Board to verify that electricity that has been used for CETA compliance has not been claimed as specified under the California cap and trade program.