U-210590

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Re: *The Commission's proceeding to develop a policy statement addressing alternatives to traditional cost of service ratemaking*, Docket U-210590.

I. INTRODUCTION

Renewable Northwest ("RNW") thanks the Washington Utilities and Transportation Commission ("the Commission") for this opportunity to file written comments in response to the April 18, 2024, Notice of Workshop and Opportunity to Comment ("the Notice") related to the ongoing effort to address alternatives to traditional cost of service ratemaking. Just before issuing the Notice, the Commission filed its interim policy statement to provide its general guidance and opinions of performance-based ratemaking ("PBR") and to set the guiding principles and goals for the docket as it moves into the next phase. RNW supports the Commission's effort to focus the docket on a PBR framework that can be reasonably integrated into existing ratemaking and utility planning efforts, and we support the narrowing of performance metrics to those that advance state policy and are outcomes-based. And while we understand that the next component of this work plan will not commence until 2025, we look forward to the Commission's May 28 workshop to polish off the early Phase 1 work that has set the stage for the phases to come.

The following comments address various topics highlighted in the Commission's interim policy statement, including the levels of performance metrics, the need for a PBR goal or metric that supports grid modernization, and the reference to modern alternatives to advanced metering infrastructure ("AMI") that would promote accurate data reporting. We also respond to various questions outlined in the Notice that directly address the prioritized metrics.

II. COMMENTS

A. Types of performance metrics

The Commission's interim policy statement outlines three levels of performance metrics that may be used to support a PBR framework: reported metrics, target metrics, and performance incentive metrics ("PIMs"). RNW supports the Commission's incremental approach to implementing PBR such that the first iteration of the framework be based on reporting alone, meaning a utility will not be held to a target and will not be subject to the reward/penalty structure that characterizes PIMs. We agree that reported metrics will allow the Commission to gather utility performance data that may eventually facilitate the implementation of target metrics, which would further spur competition across the utilities to improve performance. We appreciate the case made by The Energy Project to implement PBR iteratively, as one step informs the next and ultimately produces a PBR framework that more accurately tracks utility performance.[1]

However, we do not wholly agree with the Commission's statement that PIMs may "not always [be] the best incentive for utility action as there may be other motivators such as legal liability or reputational risk that provide adequate intrinsic motivation not advanced by an additional financial reward or penalty."[2] We have seen in other utility planning processes (*e.g.*, the Clean Energy Implementation Plan – a document that outlines a utility's plan to demonstrate progress toward meeting the Clean Energy Transformation Act mandates) that intrinsic motivation may not always play a major role in utility goal setting. Furthermore, many of the technologies and practices linked to the prioritized PBR metrics offer creative solutions to current utility concerns including system reliability, load growth, transmission capacity, and the intermittency of renewables. However, the influence of these technologies and practices in the traditional utility integrated resource planning ("IRP") process is limited and would likely benefit from further incentivization through a future PBR framework. The financial incentives offered by a PIMs structure would allow utilities to integrate a calculable benefit-cost ratio into their long-term planning practices. Therefore, we recommend that the natural progression of reported metrics to target metrics be extended to the eventual adoption of PIMs. We anticipate that industry best practices regarding a PIMs-based PBR framework will be much improved by that point.

B. Grid modernization

We agree with the Commission's seven guiding principles for creating performance measures, which were used in the interim policy statement to prioritize metrics for the first iteration of

[1] Feb. 7, 2024, Comments of The Energy Project (U-210590) at 4.
[2] UTC Interim Policy Statement on PBR, U-210590 (Apr. 12, 2024), at 8.

PBR. However, we do not agree with the Commission that grid-enhancing technologies ("GETs") should be a postponed consideration, as these technologies support all seven of the principles:

1. Directly related to policy goals and the public interest
   In 2023 the legislature passed SSB 5165, which incorporated into Washington utilities' integrated resource plans the requirement to assess "opportunities to make more effective use of existing transmission capacity through improved transmission system operating practices, energy efficiency, demand response, grid modernization, nonwires solutions, and other programs if applicable."[3]

2. Equity Forward
   GETs unlock additional capacity on the existing transmission system, thereby allowing utilities to defer costly investments on new transmission which would otherwise impact customer rates. Also, Grid Strategies conducted a study on the impact of GETs to market congestion costs, finding that the national estimated congestion cost savings could be over $20 million with the deployment of GETs.[4] Higher congestion costs often cause a utility to select a higher-cost resource than would be possible if there was sufficient transmission capacity available on the system. This would reduce the overall cost of compliance with CETA, to the benefit of Washington ratepayers.

3. Outcomes-based
   The measurable outcomes of GETs deployment include: amount of deferred transmission investments ($), renewable and nonemitting resource integration potential (MW); amount of congestion cost savings ($); transmission line utilization level (%); and reduction of outage events (frequency or duration).

4. Use reasonably available and verifiable data with clearly defined calculations
   These technologies are well studied, and the performance measurements are easily obtained and analyzed. One example of a successful and expanded project is by National Grid in the United Kingdom. National Grid is installing GETs at three substations with the estimated savings of £390 million over a seven-year period "due to reduced constraint costs and avoided expenditure on new infrastructure build, with over 2GW of north-south power flow capacity being unlocked."[5]

5. Allow for regular, consistent, accessible reporting and periodic evaluation

[3] SSB 5165 sec. 2 (2023).
[4] Grid Strategies, "Transmission congestion costs rise again in the U.S. RTOs," July 2023, *available at* https://gridstrategiesllc.com/wp-content/uploads/2023/07/GS_Transmission-Congestion-Costs-in-the-U.S.-RTOs1.pdf.
[5] "National Grid and Smart Wires aim to reduce grid bottlenecks with innovative software tool" (May 2, 2024), press release *available at* https://www.nationalgrid.com/national-grid-and-smart-wires-aim-reduce-grid-bottlenecks-innovative-software-tool.

These different technologies – which include advanced controllers, dynamic line ratings, power flow controllers, and topology optimization – rely sometimes on hardware, sometimes software, but always in a trackable manner that allows the operator to understand the extent to which transmission congestion is relieved. So far most of the real-world examples of GETs implementation are in Europe and Australia, typically with the results being reported as unlocked grid capacity and/or congestion-related cost savings. And for a utility looking to regularly access additional data relevant to GETs utilization on its system, GETs providers typically offer auditable results that allow for easy integration into utility system planning.[6]

6. Reasonably within the utility's control
   GETs providers work directly with utilities to identify transmission needs and offer tailored solutions. These providers also offer continued support upon installation of the equipment and can provide remote and on-system services.

7. Promote regulatory efficiency
   The Commission wishes to limit the overall number of metrics such that they do not exceed an amount "necessary to measure performance towards major goals and outcomes while ensuring the ability to obtain valuable data in the public interest."[7] However, the ability of GETs to reduce the region's transmission needs and therefore make electric decarbonization more affordable for Washington ratepayers makes these technologies essential to include in the first iteration of PBR.

We understand that the Commission ultimately supports the integration of GETs into the metrics but wants to allow for more consideration than the May 28 workshop will allow. Still, our February 7 recommendation to consider GETs separately from DERs was in an effort to *amplify* the status of GETs to its own category, considering this suite of tools offers unique benefits that can be tied directly to the state's transmission goals. We feel that the removal of GETs from the first iteration of PBR, as discussed throughout the interim policy statement, is actually a demotion of these technologies at a time when transmission constraints in the region are very real and GETs have significant potential to offer a pressure release valve.

Because the traditional cost of service model does not incentivize utilities to innovate the existing transmission system,[8] the PBR framework offers an opportunity for regulators to signal

[6] For example, Smart Wires offers an advanced power flow control (SmartValve™) that can be monitored by the company's power system engineers who "provide a range of advisory services…including guidance on modelling SmartValve in network planning software, conducting studies for generation and load connections, power system planning, and technology integration." More information *available here* https://www.smartwires.com/smartvalve/.
[7] UTC Interim Policy Statement on PBR, U-210590 (Apr. 12, 2024), at 10.
[8] *See, e.g.*, Carey, J. "Grid-enhancing technologies" can squeeze a lot more power from the existing electric grid" (Jan. 18, 2024), PNAS. The report explains why GETs have been widely deployed in Europe and Australia and not yet the U.S., given the current rate of return structure which incentivizes large investments in new transmission

that utilities should be modernizing their approach to transmission planning. And given the future potential to financially incentivize these investments via PBR, we urge the Commission to find a place for GETs within the prioritized metrics.

We again share our proposal for integrating GETs into the metrics, and we welcome the Commission's thoughts on where best to place the metric if not within its own separate goal of grid modernization:

	Metric title	Metric calculation
Goal X: Grid Modernization		
Outcome 1: Increase the capacity for integration of renewable and nonemitting generation onto existing grid infrastructure		
16	GETs Utilization	MW capacity of renewable and nonemitting generation enabled by GETs;[9] *or* amount of deferred investments ($) in new T&D infrastructure enabled by GETs.
Outcome 2: Increase grid safety and flexibility		
17	Deployment of storage and hybrid resources	MWs of storage systems procured

C. AMI alternatives

We appreciate that the Commission's interim policy statement provides guidance that "utilities should continue to evaluate future technology that minimizes any current operational challenges to support" the complexities of meeting Washington's energy mandates.[10] Our February 7 comments flagged various reports that AMI investments have not delivered their promised

projects over the innovation of the current system. Report *available at* https://www.pnas.org/doi/10.1073/pnas.2322803121.

[9] The 2021 Brattle study, "Unlocking the Queue with Grid-Enhancing Technologies," found that the combined impact of three technologies (Advanced Power Flow Control, Dynamic Line Ratings, and Topology Optimization) doubled the amount of additional new renewables integrated in the SPP footprint study area. The full report is *available at* https://watt-transmission.org/wp-content/uploads/2021/02/Brattle__Unlocking-the-Queue-with-Grid-Enhancing-Technologies__Final-Report_Public-Version.pdf90.pdf.

[10] UTC Interim Policy Statement on PBR, U-210590 (Apr. 12, 2024), at 17.

benefits,[11] and we appreciate the additional citations provided in the policy statement regarding this issue. While we agree that utilities can be doing more to enable access to more accurate data reporting, we offer two recommendations for Commission consideration to further spur new technology adoption. First, we flag Connecticut's early 2024 order on AMI, which offers a reconsideration of AMI procurement regulation in order to increase transparency, promote competition, and specify the use cases and capabilities of the procurement.[12] In the context of PBR, an order of this sort could more directly require AMI to support the state's PBR objectives. Second, we offer a recommendation which likely does not fit within the objectives of the PBR docket but may be helpful for future consideration. Essentially, this would be the establishment of a "regulatory sandbox" which promotes innovation in the rapidly changing energy system. Programs of this type are currently in place in Vermont, Michigan, Connecticut, Hawaii and Oregon.[13]

D. Responses to the Notice

Goal 2: Customer Affordability

7. Net Benefits of DERs and GETs
    a. We appreciate the Commission's recognition that GETs would be best represented in a separate metric to DERs. We understand that the May 28 workshop has a full agenda, but we ask the Commission to reconsider striking GETs from near-term consideration. Given the need for regional transmission expansion that is directly correlated to utilities' ability to comply with CETA, there is an urgent need to consider non-wires solutions to mitigate the lengthy nature of traditional transmission project planning. GETs increase the renewables integration potential of the existing transmission system by maximizing grid transfer capacity, and these technologies can be installed in less than a year to relieve congestion

[11] *See, e.g.*, Mission: Data, "How Electric Utilities Turned Off the Data Sharing Features of Smart Meters" (Sept. 2022). *Available at* https://static1.squarespace.com/static/52d5c817e4b062861277ea97/t/631253069bdd82629d3ea079/1662145291709/Deactivated_white_paper.pdf

[12] Connecticut Public Utilities Regulatory Authority, Docket No. 17-12-03RE02, "PURA Investigation into Distribution System Planning of the Electric Distribution Companies -- Advanced Metering Infrastructure" (Jan. 2024). Final Order. *Available at* https://www.dpuc.state.ct.us/2nddockcurr.nsf/8e6fc37a54110e3e852576190052b64d/4e2d687f29bed43c85258a99005b3232/$FILE/171203RE02-010324.pdf

[13] Michigan: https://blog.ucsusa.org/guillermo-pereira/fast-tracking-pilots-the-right-way-can-ensure-michigans-clean-energy-transition/; Oregon: Smart Grid Test Bed: https://portlandgeneral.com/about/who-we-are/innovative-energy/smart-grid-test-bed; Connecticut: Innovative Energy Solutions Sandbox: https://www.dpuc.state.ct.us/2nddockcurr.nsf/8e6fc37a54110e3e852576190052b64d/146129694f238860852587520007994e2/$FILE/17-12-03RE05%20Innovation%20Pilots%20Framework%20-%20Final%20Proposal.pdf ; Vermont: Innovative Pilot Program: https://epuc.vermont.gov/?q=downloadfile/270661/132296

throughout the development of new transmission projects. Additionally, GETs are scalable and reversible, meaning the installation can be relocated at any point, and utilities making these investments will likely see a quick return on their investments given the active congestion management the technologies enable. Developing a PBR metric regarding adoption of Grid Enhancing Technologies (GETs) would also support the business case development for these technologies.

b. Below we provide our primary suggestions for defining a GETs metric, though we discuss more options earlier in these comments:
    i. Deferred investments in new transmission ($)
    ii. Renewable and nonemitting resource integration potential (MW)
c. RNW has no comment at this time.
d. We support the itemized reporting of DERs by type.
e. RNW's comments are only relevant to the applicability of these metrics to electric utilities.

8. DER Utilization
    a. Yes, we support the revised metric and particularly the inclusion of DER utilization. Measuring DER utilization (rather than solely installed capacity) is an important distinction to promote the optimization and maximization of these resources.
    b. Utilizing DERs provides an opportunity for these resources to be operated in a way that provides grid services and an opportunity for residents to be compensated for those grid services. DERs installed in Named Communities should be equally accounted for.
    c. Reporting by DER type may provide insight into the degree of interoperability of different types of flexible DERs. This insight may be valuable in helping drive the development of virtual power plants ("VPP") which incorporate many different types of DERs and optimize DERs on the system collectively. Additionally, we support the February 7 comments by The Energy Project which make a case for the disaggregation of DER program data.[14]
    d. We support the recommendation by the NW Energy Coalition ("NWEC").

[14] Feb. 7, 2024, Comments of The Energy Project (U-210590), at 5.

III. CONCLUSION

Renewable Northwest thanks the Commission for its continued pursuit of alternatives to traditional cost of service ratemaking. We look forward to further participation in this process.

Sincerely,

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