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January 13, 2019

To: Oregon Public Utility Commission and Staff
From: Oregon Water Resources Congress, Farmers Conservation Alliance, Wallowa Resources Community Solutions Incorporated, NLine Energy, Community Renewable Energy Association

RE: OPUC General Capacity Investigation (Docket UM 2011)

Thank you for the opportunity to provide comments regarding the "General Capacity Investigation" under Docket UM 2011. The signatories support the PUC's interest in developing a methodology that fairly and comprehensively values the various capacity services that specific types of energy provide.

We are a group of organizations focused on advancing the role of locally-owned, clean energy generation in supporting the economies of Oregon's communities and improving the environment, with a particular focus on small, conduit[1] hydropower and other small-scale renewable energy projects, as well as energy efficiency, in rural and agricultural applications.

This investigation set out to develop "a common framework of understanding by parties and stakeholders of appropriate assumptions to value capacity. Staff envisions this investigation resulting in the establishment of a methodology that looks to the characteristics of capacity a resource provides. This methodology could then be used across multiple dockets and technologies for valuing capacity brought to the electric system."[2] How capacity is defined and valued will play a central role in developing an energy system for Oregon that is able to respond to and benefit from the rapid changes occurring in the electricity sector globally and regionally.

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[1] In conduit hydropower, existing tunnels, canals, pipelines, aqueducts and other manmade structures that carry water are fitted with electric generating equipment. Conduit projects often qualify as small hydro, and are able to extract power from water without the need for a large dam or reservoir. https://www.hydro.org/policy/technology/conduit/

[2] https://edocs.puc.state.or.us/efdocs/HAA/um2011haa105618.pdf

An investigation into capacity valuation is particularly timely given the emergent consensus that the Pacific Northwest is, or will soon be, capacity resource *inadequate*. The Northwest Power Pool (NWPP) found in their November 2019 report: “There is general consensus among regional studies that the Northwest is, or will soon be, short on capacity resources…A common finding …is that the Northwest electricity system is either not resource adequate today or will become so within the next two years.”[3]

The report went on to state: “The region’s planning challenges will be made more acute by impending thermal plant retirements. Forecasted deficits of this size suggest increased exposure to extraordinary price volatility and outage risks that far exceed historical standards. To avoid this outcome, utilities will need to replace thousands of megawatts of retiring capacity over the next five to 10 years…Doing so will require proactive planning by utilities and careful oversight by regulators during a period of transition for the region’s resource mix.”[4]

Distributed hydropower and solar plus storage projects that are “grid interactive” must play a role in the development of an electricity system that is resource adequate, resilient to climate change impacts, meets decarbonization goals and other environmental objectives, and supports strong local economies. The U.S. Department of Energy notes: “Because hydropower is flexible and can store energy [under certain circumstances], it’s complementary to other forms of generation…. [w]ith more forms of variable generation like wind and solar coming online, hydropower can make sure power supplies stay constant — even when the sun isn’t shining or the wind isn’t blowing. By contributing to a diverse energy mix, hydropower protects our energy independence and reduces America’s reliance on imported fossil fuels. It’s the ultimate guardian of the grid.”[5]

The Role of Agriculture and Hydropower in Future Energy Demand and Capacity Markets

Agriculture is projected to play a significant role in the region’s future electricity sector load and demand growth. The NWPP found: “After nearly two decades of relatively flat growth, both annual and peak electricity loads are forecasted to increase in the region, even after accounting for the impacts of energy efficiency. While load growth is uncertain, new loads from data centers and agriculture are emerging as substantial and tangible considerations.”[6]

The Northwest is home to abundant hydropower resources that can provide local, reliable and 24-hour generation capacity and other needed grid services and should be an integral element of the region’s future energy mix. The Department of Energy notes: “Hydropower is an extremely flexible resource. It can supply electricity or store it to meet real-time energy needs. In short, hydropower is the ultimate grid stabilizer — it quickly delivers power after an outage, addresses peak demands and maintains proper voltage levels and frequencies across the grid.”[7]

An Electric Power Research Institute (EPRI) led analysis funded by the U.S. Department of Energy found that: “The role and contribution of hydro resources are primarily driven by market structures...Hydropower resources

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[3] https://www.nwpp.org/private-media/documents/2019.09.30_E3_NWPP_RA_ExecSum.pdf

[4] https://www.nwpp.org/private-media/documents/2019.09.30_E3_NWPP_RA_ExecSum.pdf

[5] https://www.energy.gov/eere/articles/4-reasons-why-hydropower-guardian-grid

[6] https://www.nwpp.org/private-media/documents/2019.09.30_E3_NWPP_RA_ExecSum.pdf

[7] https://www.energy.gov/eere/articles/4-reasons-why-hydropower-guardian-grid

across the U.S. contribute significantly to grid reliability in terms of energy, capacity and ancillary services. Hydro plants have been used to provide spinning and non-spinning reserve, replacement reserve, and regulation or load following. Revenues from these services are not fully captured in the current non-market areas due to the lack of markets for ancillary services."[8]

Local conduit hydropower capacity could be particularly valuable in hard-to-reach rural areas that currently suffer from unreliable access to electricity on the edges of the distribution system and in parts of the grid projected to see increased demand for electricity above historical levels. Since hydropower provides reactive (e.g. non-inverter) power to the local electric grid, hydropower provides vital, local grid support, yet currently receives no credit for this service. Ensuring that incentive structures are in place to advance energy efficiency measures and to support generation resources located close to load will help address potential capacity challenges while building a stronger, more resilient electricity system.

Ongoing efforts across the State to modernize existing irrigation infrastructure[9] presents new opportunities to introduce aggressive energy and water efficiency measures that can significantly reduce future energy demand from agriculture and deploy local, clean energy across rural Oregon. Modernizing just eleven of the 50 largest irrigation districts across Oregon represents approximately 38 MWs of potential energy generation and nearly 60,000 MWh/year of energy conservation potential.[10] Seven irrigation districts working to modernize their infrastructure in central Oregon are leveraging over $100M in federal funding to pipe and pressurize their canal systems. As these piping projects move forward they will produce energy savings benefits by reducing or eliminating pumping and enable conduit hydropower in areas with surplus gravity pressure.

The limited paths to market for small-scale hydropower generators in Oregon (currently predominantly through PURPA) and very low future avoided cost rates set by the OPUC and the utilities, mean that most small-scale hydro is not economic to build and is being sidelined. Further, a number of legacy small hydropower facilities operating in irrigation districts around the state today are nearing the end of their existing Power Purchase Agreement (PPA) terms. Existing small hydropower plants serve as critical revenue generators for irrigation districts and other project sponsors and enable them to advance other conservation goals, such as irrigation system modernization. Under current avoided cost rates, the value proposition of small hydropower for local project sponsors is significantly lessened, and new hydropower development is infeasible in the State without significant external funding support or subsidies, such as incentives provided by Energy Trust of Oregon or other grants. Importantly, however, external funding support is not currently available for existing projects. Further, the current market structure does not provide compensation for the important ancillary services that hydropower provides to Oregon's electric system. As a result, valuable capacity will be lost and/or not constructed during a time when the system needs it the most. Appropriately structured capacity payment methodologies for these resources will provide needed capacity for the grid and ensure that the substantial local economic development impacts and benefits of these plants are retained.

Many other small-scale clean energy projects--including other small, conduit hydropower plants located outside irrigation districts, as well as solar projects--face similar challenges to irrigation district-sponsored projects and

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[8] https://www.hydroreview.com/2013/04/01/valuing-hydropower-grid-services-in-the-future-electricity-grid/#gref

[9] Modernization typically includes implementation of piping existing irrigation water conveyance canals

[10] Data provided by Farmers Conservation Alliance

report substantial challenges coming online due to a combination of interconnection challenges and low avoided cost rates.

Input from this docket should be carefully considered and integrated into the broader distribution system planning efforts currently underway (Docket UM 2005), discussions on the Resource Value of Solar (UM 1716), PURPA Reform efforts (UM 2001 and 2002), and the community solar docket (UM 1930). Furthermore, comprehensive valuation methodologies that result in more favorable pricing structures for various capacity resources can help support the achievement of other important state policy objectives, including, but not limited to: water and energy conservation, local community resilience during grid outages, natural disaster preparedness, greenhouse gas reduction, and rural economic development, among others.

Hydropower is a critical element of the Northwest's energy past and energy future and a valuation methodology that reflects the full range of benefits and services it provides should be developed.

Questionnaire Answers

Part A-

3. **Are there distinct types of capacity that could be separately compensated, assuming that adequate information, communications and control systems are in place? For example, should capacity that has the following capabilities be considered distinctly:**
    a. **Available to meet system Resource Adequacy (RA) needs?**
    b. **Available to meet system flexibility needs?**
    c. **Available in a certain time frame?**
    d. **Available in a certain location?**

Developing a methodology that comprehensively values different types of capacity will be central to an electricity sector that is able to meet the challenges of climate change and address the resource adequacy needs of the region in the future. Generation capacity located in areas of the grid that are vulnerable to climate change driven impacts (e.g. wildfire, extreme heat, high winds, snowstorms, etc.) and can be dispatched both to support larger grid operations and services as well as in climate change response circumstances should reflect the additional resilience benefits they offer. The capacity that solar plus storage and small hydropower resources that are located near loads in counties that will be impacted by public safety power shutoffs (PSPS), such as those that PacificCorp announced in mid-2019[11], should be valued for the "normal" grid capacity services they provide and—if equipped with islanding capability —the emergency or PSPS capacity they provide. Owners of those capacity services should be compensated for the value that those distributed resources bring to ensuring that utilities can reliably meet load as well as for any other ancillary services that the systems can provide. Further, distributed generation or energy efficiency that can be sited to address load pockets and defer investment in long distance transmission and distribution upgrades/expansion should reflect those deferrals in their valuation.

B. How Should Capacity Be Valued?

Capacity Value as a Function of Resource Type

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[11] https://www.pacificpower.net/outages-safety/wildfire-safety/public-safety-power-shutoff.html

6. Does capacity value compensation require a capacity resource to be available to meet all reliability needs in all time frames?

1. **Can a dedicated physical asset qualify to meet all reliability needs, or does it need to be supplemented with other resources?**
2. **Can a portfolio of resources that meet the availability requirement qualify for the same or better compensation than a dedicated physical asset?**
3. **Can a financial contract qualify for the same or better compensation than a physical asset?**

6.1. Capacity value compensation does not require a capacity resource to be available to meet all reliability needs in all time frames. An efficient and cost-effective grid utilizes its least cost generation assets to meet a given amount of demand at a given time. Even with large fossil-based generation sources reliability has historically been addressed through a variety of resource types (e.g. coal for baseload and natural gas for peaking). In almost all cases, a portfolio approach should be utilized to address capacity and reliability. This will become increasingly important as the region moves towards addressing decarbonization objectives and integrates larger amounts of intermittent renewable resources such as wind and solar.

6.2. Capacity value should be based on a generating asset's ability to provide power in a *predictable* and *reliable* manner to address a given energy need at a given time. A grid that has multiple generating resources is inherently more reliable and less prone to outages, as well as less vulnerable to disruptions and attacks. EPRI recommended that regulators: "Recognize hydro for allowing more generation diversity and options, thus enhancing energy security and maintaining power supply reliability in the face of future uncertainties."[12] Further, a grid that utilizes a portfolio approach to meeting its generation needs is able to utilize the lowest-cost source of energy at a given time and to appropriately reflect the overall value to the grid that "negawatt" investments in energy efficiency, demand side management and "poles and wires" alternatives offer. Valuation methodologies that reflect both seasonal variations in *demand* and in *generation capacity* should be carefully considered and developed.

7. **Regarding the capabilities listed in question 4 above, what should be the qualification criteria for determining if a resource can meet these needs, assuming the information, communications and control systems are in place to support development of qualification criteria?**

7. The elements listed in question 4 include: a) availability to meet system resource adequacy needs, b) availability to meet system flexibility needs, c) availability in a certain time frame, d) availability in a certain location.

Emergent capacity valuation procedures should ensure power availability from the lowest cost and cleanest sources available to meet the system's power needs at a given time. Given the Pacific Northwest's impending resource adequacy challenges, combined with regional decarbonization efforts and the need to develop a system able to operate under increasingly challenging and variable conditions due to climate change impacts, developing a more sophisticated and targeted resource acquisition and

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[12] https://www.hydroreview.com/2013/04/01/valuing-hydropower-grid-services-in-the-future-electricity-grid/#gref

valuation strategy is of paramount importance. If properly valued and incentivized small hydropower generation can be a valuable complement to solar and wind resources.

Each type of generating resource should be mapped against the elements included above to understand its "capacity characteristics", which can then be used to consider the most appropriate valuation methodology. For example, some small hydropower generators peak during winter months, offering valuable "winter peak" generation capacity and balancing lower solar output on cloudy or inclement days. Other small hydropower generators peak during summer months, offering the ability to help fill in the gap when solar ramps down during an evening peak hour. In many instances, small hydropower generation is available 24 hours per day and during times that solar is not. Interactions between and among various generating capacity resources should also be considered, for example hydropower paired with battery energy storage can optimize for grid services and base load capacity as well as provide ancillary services such as voltage and frequency regulation and ramping capacity.

Current pricing schedules for small hydropower only include "peak and off peak" under resource adequate and resource inadequate scenarios, but a more granular payment structure that reflects the value of power to the system in particular locations at a given time will enable the system to operate most effectively and efficiently over time. New technologies make the dynamic and interactive grid management services that multiple distributed resources can provide both possible and cost-effective. Developing capacity valuation methodologies that enable both the utility system and generators to benefit will be central.

Where generation capacity is located will have increasingly large system impacts as the transmission and distribution system continues to age, climate change impacts-particularly wildfire-become more acute, and load growth increases in rural areas through both agricultural activity and data center siting.

Examples of qualification criteria for a given generation type could include:

1. Available in a reliable and predictable manner
2. Available in areas of the grid that are: vulnerable to outages (both natural and imposed, e.g. through Public Safety Power Shutoffs), on the grid edge, have existing load pockets, have transmission and distribution upgrade/investment deferral/elimination benefits, and have "grid interactive benefits" meaning that the generating source is equipped with inverters that enable it to provide grid management services such as frequency regulation, voltage regulation, blackstart, and other bi-directional services that serve to increase the resilience and efficiency of the grid's operations.
3. Available at times when the system needs it (e.g. both baseload and peaking times): Hydropower can serve both of these needs.
4. Able to adjust its output during certain time periods and under particular conditions (e.g. winter and summer peak). Hydropower could be a particularly valuable resource during peak periods and could potentially increase or decrease production during certain times of the day. Valuation methodologies that reflect both seasonal variations in demand and in generation capacity should be carefully considered and developed.

8. Should supply-side and demand-side resources that demonstrate the capability to satisfy the qualification criteria for that type of capacity be valued in the same way?

Any resource type that meets the agreed capacity qualification criteria should be compensated based on the capacity services it is providing.

Capacity Value as a Function of Temporal, Durational, Locational and Size Attributes of Resources

9. **How should the value of each type of capacity be calculated and how should its temporal availability (e.g. short vs. long-term capacity) affect the valuation? *In response to stakeholder requests for clarification, this question refers to the time period and duration for which a resource is committed by contract, ownership by a utility, or other arrangement.***

   N/A

10. **How should temporal and durational attributes of capacity be calculated? *In response to stakeholder requests for clarification, this question refers 'temporal availability' in a different sense: when and how a resource is capable of serving load, regardless of its ownership structure or contractual arrangements.***
    1. **How could temporal and durational availability affect the valuation?**
        - **i. How could availability of a system peak capacity product at critical times affect its valuation?**
        - **ii. How could availability and sustained duration of ramping capability affect valuation of a capacity product?**
        - **iii. How could seasonal availability affect valuation for a capacity product?**
        - **iv. How could ability to provide ancillary services at times of system stress affect valuation?**

10.1. As noted in the answer to question 7, *when and how a resource is capable of serving load* will become a central question as Distributed Energy Resources (DERs) become more widespread, existing transmission and distribution system infrastructure ages, and climate change impacts effect different parts of the grid in different ways. Further, given that future increases in demand for energy will be influenced by data centers and agricultural load, significant efficiencies could be realized by siting future energy generating facilities near areas projected to see increased load growth.

10.1.i. and iii. As the Northwest's energy system continues to evolve, availability of a system peak capacity product should be valued in accordance with the value it offers the grid. The NWPP notes that seasonal variation and addressing system peaks will be increasingly important: "Although the winter period shows improvement, serving winter peak demand remains a concern. And summertime peak demand continues to increase, focusing planners on peak capacity needs."[13] Small-scale and in-conduit hydro resources can play a valuable role in providing system peak relief. Further, integrated demand side management and efficiency programs deployed in agricultural systems could contribute substantially to shaving peak loads and reducing overall strain on the system. However, these services

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[13] https://www.northwesternenergy.com/docs/default-source/documents/defaultsupply/plan19/volume2/pnucc-2019-forecast.pdf

must be properly valued and compensated through targeted price signals in order to drive behavior change and incentivize the development of additional generating capacity in key load growth areas. This could be accomplished either through real-time market pricing or through long-term power purchase agreements, or some combination thereof. Availability during different seasons-particularly during winter and summer peak periods-should be compensated for the value it provides to grid stabilization and cost management during these times.

10.1.ii. Micro hydro can address ramping needs as long as it's operating at less than 100% production. It can also help reduce the need for ramping capacity through the provision of 24-hour capacity, particularly during periods of time of lower production for solar resources (e.g. early morning, late afternoon/evening and during times of heavy rainfall or precipitation).

10.1.iv. Planned changes to the region's resource generating mix and unknowable changes that may arise from climate change impacts will likely result in greater price and grid operations variability in the coming years. EPRI recommended: "Credit hydro for normally fast regulation response in situations where resource adequacy is a power system reliability issue... There is a potential value that hydropower could gain from providing dynamic reactive power support, primary frequency response and within-hour deployment services."[14]

11. If locational capacity is something that should be compensated, which factors should be used to inform the locational value of capacity?
  a. Avoided transmission costs (or needed upgrades),
  b. Avoided distribution costs (or needed upgrades),
  c. Impact of new capacity in a "load pocket," if applicable, or
  d. Other factors

All of these factors should be clearly and transparently analyzed on an individual basis and valued accordingly. As discussed above, hydropower and other distributed energy resources located in irrigation districts and in rural areas provide substantial value across all three of the areas indicated in question 11. Further, the resilience benefits of distributed generation resources should also be taken into account and valued. This will require the development of new methodologies for quantifying and assessing these values to the grid and to local communities, but is work that can and must be completed as quickly as possible. The National Association of Regulatory Utility Commissioners' (NARUC) recent analysis of "the Value of Resilience for Distributed Energy Resources: An Overview of Current Analytical Practices" provides a useful starting point for framing the methodology and quantification elements of assessing and valuing resilience services for the grid in the context of capacity, including the value of avoided power interruptions.[15]

12. How does the scale of a given resource affect its value?
  a. Is there a threshold size of a project, above or below which its value to the system as a whole changes categorically, or out of proportion to an increase or decrease the number of MWs of power it can produce?
  b. Could a threshold size in a specific location sometimes affect valuation?

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[14] https://www.hydroreview.com/2013/04/01/valuing-hydropower-grid-services-in-the-future-electricity-grid/#gref

[15] https://pubs.naruc.org/pub/531AD059-9CC0-BAF6-127B-99BCB5F02198

c. **Could a threshold size affect whether MW-year or MWh compensation is appropriate.**

Definitions of "value to the system" are challenging to develop. "The System" is comprised of many stakeholders and beneficiaries, including utilities, ratepayers, regulators, independent and merchant power generators and developers, as well as society as a whole. Each of these stakeholders in the system has a different cost-benefit calculus and ability to benefit from different types of resources located in different parts of the grid at different thresholds. While a 2 MW hydro generating facility might be seen as inconsequential to a utility operating thousands of hours of generating capacity, that same facility is a critical piece of operational infrastructure to an irrigation district (which is also both a system ratepayer and independent power producer) and provides important economic development and environmental benefits to irrigation district patrons (who are also ratepayers and system beneficiaries). When considering value to the system, multiple definitions and perspectives related to that value should be considered; a balanced methodology should be developed that reflects those different values.

Recent technological advances have fundamentally changed the value proposition that small-scale generating resources can provide to the grid. Virtual Power Plants, Demand Side Response programs and other technologies have forever changed the equation when considering investment into new generating resources. Even relatively small numbers of distributed generation projects with very low generating capacity can have huge impacts on grid operations, as illustrated by the recent case in Australia where less than 1,000 residential Tesla rooftop solar plus storage units that were aggregated into a Virtual Power Plant provided critical grid stabilization services when a 700+MW coal fired power plant tripped offline.[16] Distributed resources, when equipped with grid interactive inverters, can also make substantial contributions to ensuring energy services continuity in the event of natural disasters and localized power outages, as in the case of Public Safety Power Shutoffs.

Integrated system planning could influence a threshold size valuation in a specific location when, for example, additional generation or targeted energy efficiency or demand side management programs could defer investment in transmission and distribution system upgrades and investments in particular areas of the grid.

Benchmarking and Other Valuation Techniques for Capacity

13. **Currently, simple-cycle gas plant costs are generally used to value capacity. Is this method still appropriate for some types or categories of capacity?**
    a. **If yes, for which types?**
    b. **If no, for which types?**
    c. **Further, is a new or different benchmark or proxy more appropriate? If so, for which types/categories of capacity?**

As the cost of generating resources changes, simple cycle gas plants may not be an appropriate capacity valuation benchmark. Capacity valuation should be based on the overall needs of the system and adjusted on a predictable and regular schedule to provide market continuity. Small, distributed hydropower's capacity value should be based on locational value given proximity to local electrical infrastructure. While

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[16] https://www.utilitydive.com/news/teslas-australian-virtual-power-plant-propped-up-grid-during-coal-outage/568812/

these projects are typically smaller than a simple-cycle gas plant, their locational attributes may be of greater value given an aggregated, distributed set of small hydropower plants responding to a variety of capacity requirements.

14. Should capacity compensation for Distributed Energy Resources (DER) be based solely upon contribution to meeting an identified system need, or should it be supplemented with other factors considered in DER valuation? How relevant are the following factors for capacity valuation, and which are missing?

a. Avoided environmental costs
b. Avoided fuel costs
c. Avoided plant O & M costs
d. Avoided generation capacity costs (capex)
e. Avoided cost of transmission upgrade
f. Avoided distribution capacity costs
g. New costs for new distribution system technologies
h. Costs associated with forecasting (variable renewables)
i. Ability to dispatch (i.e. small turbines, gen sets, storage) vs. lack of ability to dispatch (i.e. variable renewables)
j. Avoided (or differently calculated) costs of reserve capacity

Meeting system capacity needs over the long term will require availability of capacity resources that are able to meet the needs of the "system" now and into the future. As new capacity acquisitions are considered-with an average operating life of 20-50 years-those assets must address the full range of considerations that will be necessary to ensure a functional and reliable electricity system. All of the elements listed above should be considered in the development of valuation methodologies for new capacity resources. Avoided costs, in particular, should be considered and integrated into capacity methodologies more comprehensively than they have been to date. Energy efficiency, distributed energy resources, demand side management and poles and wires alternatives must be fully and appropriately priced to reflect the full range of benefits and impacts to the system they offer. This should include:

1. **generation capacity deferral value** (for non-generating assets)
2. **Transmission and distribution deferral value**
3. **Risk reduction value-** this should include the full range of risk-reduction benefits that these assets offer, including the value that energy savings brings to utilities by reducing uncertainty that could result in price volatility if the utilities' have to go to market to fill-in shortfalls in their ability to provide energy through their existing supply and distribution infrastructure. PG&E is estimating more than $30B in damages and liability resulting from the fires that were started by its under-maintained transmission and distribution system in 2017. Who ultimately bears those costs is still to be determined by regulators, bankruptcy courts and policy makers, but these costs are real and must be accounted for.
4. **Resilience value-** avoided damages that would be incurred in the event of an extended grid outage due to climate change response (e.g. public safety power shut off) to the system and ratepayers. The Stanford Woods Institute for the Environment estimated the costs of PG&E's recent power cuts in Northern California to be upwards of $2 Billion[17], largely stemming from negative impacts on

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[17] https://www.cnbc.com/2019/10/10/pge-power-outage-could-cost-the-california-economy-more-than-2-billion.html

businesses and the local economy. The tools in the toolbox for developing a more democratic, distributed, resilient and efficient electricity system has never been greater. The OPUC should avail itself of all of those tools to ensure development of a more reliable, cleaner and safer grid.

15. How can proper calculation of RA capacity help to cost effectively address the region's RA issues?

As explained in the answers provided above, small-scale distributed energy resources, coupled with energy storage, demand side response, and other resources present a valuable opportunity to address fundamental challenges the electricity system is facing now and in the future.

Rapid integration of distributed clean energy generation and storage resources, coupled with aggressive demand side management and response programs, can and should play a central role in addressing the looming capacity deficit and resource inadequacy issues that threaten the lives, safety and economy of the residents of the Pacific Northwest. The signatories look forward to engaging in future workshops and continued discussions and efforts to advance clean, distributed energy across the state through capacity valuation methodologies that reflect the full range of benefits different resources provide.

Sincerely,

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April Snell, Executive Director
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Brian Skeahan - Executive Director
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