

**BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON**

UM 2005

In the Matter of

PUBLIC UTILITY COMMISSION OF
OREGON,

Investigation into Distribution System
Planning.

RENEWABLE NORTHWEST’S
COMMENTS ON DRAFT
DISTRIBUTION SYSTEM
PLANNING GUIDELINES

October 29, 2020

I. INTRODUCTION

Renewable Northwest thanks the Oregon Public Utility Commission (“Commission”) and Commission Staff (“Staff”) for this opportunity to submit comments on Staff’s Draft Distribution System Planning (“DSP”) Guidelines (“Draft Guidelines” or “Guidelines”). In these comments we first review some of the regulatory and policy background that provides a foundation for review of the Draft Guidelines. We then provide high-level feedback on the document overall, commending Staff for producing a thoughtful and responsive framework for DSP efforts. Next, we discuss the timelines proposed by the Draft Guidelines, highlighting the need for swifter action based on current climate science and Oregon policy. After timing, we compare the Draft Guidelines to some third-party analysis of DSP potential and recommend some changes to ensure the process is as robust as possible. Finally, we walk through the discrete elements of the Draft Guidelines, offering brief feedback on each. We appreciate Staff’s and the Commission’s consideration of these comments, thank all stakeholders for the very engaging process that has gotten us to this point, and look forward to continued engagement both in the leadup to adoption of final DSP Guidelines and in the DSP processes that will take place thereafter.

II. COMMENTS

The Draft Guidelines are the result of years of process; a review of that process background may add some helpful context as the Commission considers adopting DSP Guidelines. Our August 30, 2019 comments in this docket discussed this background (to that point) in some detail; here, we offer an updated overview.

In January 2017, in comments on Portland General Electric’s (“PGE”) 2016 Integrated Resource Plan (“IRP”), Staff began exploring the potential for distribution system planning in Oregon, generally discussing “increased adoption of Distributed Energy Resources (DERs)” and specifically calling out the possibility of “two way managed power flow, with distributed generation, storage, and advanced controls” as well as the link between DSP and grid modernization efforts in other states.¹ Renewable Northwest filed comments in May 2017 “enthusiastically support[ing] Staff’s intent to investigate, define, and potentially implement Distribution System Plans.”² In Order No. 17-386, the Commission accordingly required that PGE “[w]ork with Staff to define a proposal for opening a distribution system planning investigation.”³

In January 2018, the Commission initiated a parallel process under SB 978 (2017), investigating “how developing industry trends, technologies and policy drivers in the electricity sector might impact the existing regulatory system and incentives currently employed by the Commission.”⁴ As part of the SB 978 process, Renewable Northwest discussed the potential of performance-based regulation (“PBR”) “to realign utility incentives with Oregon’s public policy goals.”⁵ In its final report to the legislature, the Commission committed to “launch a performance-based regulation process to align utility incentives with customer objectives,” inviting proposals “under the PUC’s existing ‘alternative form of regulation’ statute.”⁶ Specifically, the Commission pointed out that “[d]emand-side and distributed options, which might be less expensive than utility-scale investments, are ... disadvantaged in a regulatory system that rewards both utility capital investments and higher electricity sales.”⁷

In February 2019, Staff released a white paper as the first step in this DSP investigation.⁸ In the white paper, Staff centered the Governor’s Climate Agenda and the potential for DSP to help achieve Oregon’s climate goals.⁹ Then in addition to laying out a potential framework for this investigation and subsequent DSP processes, Staff highlighted ways DSP could serve as “a critical step in moving the state’s expectations for a modern grid forward,” namely by facilitating a “transition to a more responsive platform that is capable of minimizing the frequency and

¹ Oregon Public Utility Commission, Docket No. LC 66, Staff’s Initial Comments at 33 (Jan. 24, 2017).

² Oregon Public Utility Commission, Docket No. LC 66, Final Comments of Renewable Northwest at 16 (May 12, 2017).

³ Oregon Public Utility Commission, Docket No. LC 66, Order No. 17-386 at 19 (Oct. 9, 2017).

⁴ SB 978, section 1(1) (2017).

⁵ Oregon Public Utility Commission, SB 978, Written Comments of Renewable Northwest at 4 (July 10, 2018).

⁶ Oregon Public Utility Commission, *SB 978 Actively Adapting to the Changing Electricity Sector* at 3 (Sept. 2018).

⁷ *Id.* at 17.

⁸ Oregon Public Utility Commission, Docket No. UM 2005, Staff Whitepaper: A Proposal for Electric Distribution System Planning (Feb. 19, 2019).

⁹ *Id.* at 3-4 (section titled “Governor’s Climate Agenda: Prioritizing a modern, affordable grid”); *see also* State of Oregon Office of the Governor, *Oregon Climate Agenda: A Strong, Innovative, Inclusive Economy While Achieving State Climate Emissions Goals* (2018).

impact of outages (e.g., automated outage restoration), supporting decarbonization (e.g., better integrating renewables), optimizing system performance (e.g., volt-var management), and enabling customers to deploy DERs in a manner that minimizes their costs while maximizing system benefits (e.g., more accessible hosting capacity data, advanced price signals).¹⁰ Staff called out decarbonization, transportation electrification, energy efficiency, and expanding access to clean energy as policy goals that DSP could help achieve.¹¹ The Commission opened this docket in March 2019.

In our August 30, 2019 comments, Renewable Northwest recommended that DSP adhere to several high-level principles:

- DSP should accurately account for and forecast not only the gross amount of DERs on a utility's system but also the locations of existing and expected DERs.
- DSP should affirmatively consider the potential for DERs or other changes or updates to the distribution system to allow a utility to avoid more costly large-scale capital investments.
- DSP should recognize the potential for two-way power flow to meet system needs as more DERs (including electric vehicles and smart appliances) interact with utilities' systems.
- DSP should identify new values and desired outcomes at the distribution level that utilities could be compensated for through PBR, provided they achieve certain metrics.
- DSP should consider whether customer incentives (including, for example, combining time-of-use rates and net-metering for distributed storage resources) might help to achieve identified values and outcomes.
- DSP should account for the potential of DERs and distribution-level investments to help utilities achieve Oregon's climate goals.
- DSP should provide cost transparency for utilities, customers, regulators, and clean energy developers.
- DSP should facilitate an efficient, transparent interconnection process that allows interconnection customers to site clean energy projects (including demand response, storage, and electric vehicles) so as to minimize system upgrade costs and maximize system value (for example, a hosting capacity analysis).
- DSP should allow non-wires alternatives (NWA) to be transparently selected in order to reduce costs and enable the increased penetration of clean energy at both the distribution and transmission system level.

¹⁰ *Id.* at 3.

¹¹ *Id.*

- DSP should allow for market-based approaches to reduce costs.¹²

In early 2020, Staff convened a series of workshops reviewing the current state of DSP among Oregon utilities, exploring DSP’s potential to achieve policy goals and facilitate the transition to a dynamic, modern electric grid, and examining related efforts in other states. Following those workshops, Renewable Northwest submitted responses to a Staff questionnaire on August 21, 2020, offering high-level principles for development of DSP Guidelines including (among other recommendations):

- Maintaining a holistic, “systems thinking” approach to DSP as a means of ensuring that the process serves as a pathway to achieving necessary policy goals;
- Developing quality data regarding greenhouse gas (“GHG”) impacts of distribution-system infrastructure and practices, understanding the costs, benefits, technical capacity, and useful life of infrastructure components, and correlating the data above to demographic information necessary to ensure equitable investments in utility distribution systems;
- Using a hybrid approach to DER forecasting that captures the key elements of both top-down and bottom-up approaches; and
- Centering GHG emission reductions as a core outcome of DSP processes and exploring the use of performance incentives to support investment in solutions that mitigate climate change.

At the same time, the Commission began work to implement Governor Kate Brown’s March 10, 2020 Executive Order 20-04 (“EO 20-04”), which directs state agencies including the Commission to “exercise any and all discretion and authority” to reduce Oregon’s GHG emissions 45% below 1990 levels by 2035 and 80% below 1990 levels by 2050.¹³ Throughout the implementation process, Renewable Northwest has recommended that the Commission prioritize this docket and particularly DSP solutions that promote decarbonization as key activities to carry out the Commission’s directive under EO 20-04. Accordingly, the Commission’s October 6, 2020 Draft Work Plans for implementation of EO 20-04 include as a near-term priority activity “[d]evelop[ing] and presenting guidelines for utility Distribution System Planning (DSP) filings that include an emphasis on activities directly supporting EO 20-04.”¹⁴

¹² Oregon Public Utility Commission, Docket No. UM 2005, Introductory Comments of Renewable Northwest at 3-4 (Aug. 30, 2019).

¹³ EO 20-04, sections 2 & 3(A).

¹⁴ Oregon Public Utility Commission, Draft Executive Order 20-04 Work Plans at 13 (Oct. 6, 2020).

Against this fairly lengthy and complex background and addressing a similarly complex subject, Staff released the Draft Guidelines on October 1, 2020. Renewable Northwest's responses to the Draft Guidelines follow.

1. The Draft Guidelines present a thoughtful reflection of stakeholder feedback and a reasonable framework for DSP.

Renewable Northwest commends Commission Staff for developing thoughtful Draft Guidelines that integrate many of the considerations set forth above and establish a detailed but actionable framework for a new approach to distribution system planning in Oregon. The Commission's DSP investigation has been wide-ranging, covering both detailed technical information and the interaction between technical system elements and regulatory drivers, with an eye to fostering change against a rapidly evolving policy backdrop. This has been no small undertaking, and the care Staff has taken throughout the process is evident in the Draft Guidelines.

Not only do the Draft Guidelines reflect thoughtful engagement with complex substantive issues, but they also demonstrate a conscious effort by Staff to incorporate stakeholders' input into the draft proposal. We have reviewed the Draft Guidelines against the body of written feedback submitted by stakeholders and are grateful for Staff's very evident responsiveness to the myriad of stakeholders who have engaged in this process.

Finally, given the complexity of the issues raised by DSP, Staff's proposed phased approach to implementation with an evolution of planning requirements is an appropriate choice. We appreciate Staff's willingness to balance the efforts involved in implementing a new approach to DSP, utilities' and stakeholders' ability to learn by doing, and the need for a strong framework requiring utilities to undertake new processes and practices that represent a significant shift from traditional DSP approaches. Overall, the Draft Guidelines establish a solid framework not only for the initial plan, but also for how future plans will build on each other to improve both the planning process and the distribution system overall.

2. Executive Order 20-04, climate science, and the long life of infrastructure investments counsel in favor of an accelerated timeline.

Governor Brown's EO 20-04 provides an essential policy grounding for the Commission's DSP efforts. As noted above, EO 20-04 establishes GHG emission reduction targets and directs state agencies to "exercise any and all discretion and authority" to achieve those targets.¹⁵ In a "whereas" clause, EO 20-04 explains why achieving these targets is so important:

¹⁵ EO 20-04, sections 2 & 3A.

[G]iven the urgency and severity of the risks from climate change and ocean acidification, and the failure of the Legislature to address these immediate harms, the executive branch has a responsibility to the electorate, and a scientific, economic, and moral imperative to reduce GHG emissions and to reduce the worst risks of climate change and ocean acidification for future generations, to the greatest extent possible within existing laws[.]¹⁶

The EO's directives are consistent with and reflective of the best climate science currently available. The Intergovernmental Panel on Climate Change ("IPCC") lays out in its 2018 reports that a 2°C increase scenario would result in significantly worse impacts than a 1.5°C increase scenario.¹⁷ Moreover, Sherwood *et al*¹⁸ recently published findings that warming well in excess of 2°C is highly likely if emissions remain unchanged. Both the IPCC's assessment and the Sherwood study raise the urgency of action to a new level. To frame the issue in a tangible manner, at our current rate of emissions, the Mercator Research Institute on Global Commons and Climate Change ("MCC") carbon clock¹⁹ calculates we would need to achieve net zero emissions globally in just seven years to stay at the 1.5°C level of warming.

These facts have a fundamental impact on DSP in part because of their interaction with decisions about investment in long-lived grid infrastructure. One of the main goals of the DSP process is to ensure that distribution systems evolve in a least-cost, least-risk manner. The lifetime of grid infrastructure is typically measured in decades, so investments in the distribution grid enabled by this new DSP process will need to not just allow but in fact actively facilitate full decarbonization of our electricity grid: even for 2°C warming, our global carbon budget will be depleted in 25 years, a timeline that is on par with the life of new grid infrastructure.

Against this policy and science background, the Draft Guidelines' timeline of three phases over about ten years is too long. We recommend compressing the proposed timeline, not only given the crucial decarbonization that needs to happen this decade, but also to create the ability for infrastructure investments based on the Draft Guidelines' Phase 3 goals. We note, however, that operating on a faster timeline may require additional early focus on stakeholder engagement and

¹⁶ *Id.* at p. 3.

¹⁷ IPCC, 2018: *Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty* [Masson-Delmotte, V., P. Zhai, H.-O. Pörtner, D. Roberts, J. Skea, P.R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J.B.R. Matthews, Y. Chen, X. Zhou, M.I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, and T. Waterfield (eds.)]. Available at <https://www.ipcc.ch/sr15/>.

¹⁸ Sherwood, S.C., Webb, M.J., Annan, J.D., Armour, K.C., Forster, P.M., Hargreaves, J.C., Hegerl, G., Klein, S.A., Marvel, K.D., Rohling, E.J., Watanabe, M., Andrews, T., Braconnot, P., Bretherton, C.S., Foster, G.L., Hausfather, Z., Heydt, A.S., Knutti, R., Mauritsen, T., Norris, J.R., Proistosescu, C., Rugenstein, M., Schmidt, G.A., Tokarska, K.B., Zelinka, M.D., 2020. An Assessment of Earth's Climate Sensitivity Using Multiple Lines of Evidence. *Reviews of Geophysics*. doi:10.1029/2019rg000678

¹⁹ Available at <https://www.mcc-berlin.net/en/research/co2-budget.html>. The MCC clock is based on the 2017 rate of global GHG emissions.

trust-building to ensure that the resulting process is inclusive and benefits from a broad range of stakeholder input.

3. Additional structural clarity and opportunities for collaboration could help the Draft Guidelines achieve the full potential of distribution system planning.

The literature overwhelmingly supports the premise that the future of the distribution grid will be defined by multi-path flow of information, electrons, and compensation,²⁰ and grid architecture provides a path for the transition to happen in an efficient, least-cost manner. The vision for the modern distribution system laid out by Staff in their 2019 white paper -- the operational outcome, as they term it -- is in line with that premise. Staff refers to the drivers for the DSP process as either procedural (provide insight) or operational (optimize), and Renewable Northwest appreciates the distinction.

We recommend that the Commission consider adopting a similar approach in the long-term goals set forth in the Draft Guidelines.²¹ Distinguishing between goals related to what the DSP process would ideally achieve (procedural goals) and goals for the resulting distribution system (operational goals) would provide better clarity. In particular, creating a strong link between the operational goals and Staff's vision for the future distribution system would help keep stakeholders aligned on long-term outcomes. Explicitly defining operational outcomes in terms of this future, architected state, as well as setting forth how each phase is intended to bring the system closer to that end state, will provide valuable context to understand how each phase fits into the overall picture. Additionally, the Guidelines would be more impactful if they set forth a stronger or more direct connection between a given activity and the overarching outcome goals (similar to the approach reflected in the Commission's Draft EO 20-04 Work Plans). Such an approach would again help stakeholders stay grounded in the big picture while they dig into the many specific details and action plans DSP entails.

We agree with Staff's approach to have utilities' first DSP plans focus on establishing a solid baseline, and we recognize that the three phases in the guidelines have the potential to markedly modernize Oregon's distribution grid. However, in the overall grid evolution scheme, there will be a significant amount of further work needed beyond what Staff has laid out. Lawrence Berkeley National Laboratory's ("LBNL") report "Distribution Systems in a

²⁰ See, e.g., GridWise Architecture Council, "Transactive Energy Systems Research, Development and Deployment Roadmap" (2018), available at https://www.gridwiseac.org/pdfs/pnnl_26778_te_roadmap_dec_2018.pdf or Sharon Thomas, NARUC, "Evolution of the Distribution System & the Potential for Distribution-level Markets: A Primer for State Utility Regulators" (2018), available at <https://pubs.naruc.org/pub/C0B3BA7C-0CBB-CB2A-E2B1-00A3756340BA>.

²¹ See Draft Guidelines at 4, section 3.

high Distributed Energy Resource Future”²² envisions the details of a fully evolved distribution grid with a market-based transactional operating mode and full penetration of DERs as shown in Figure 1.

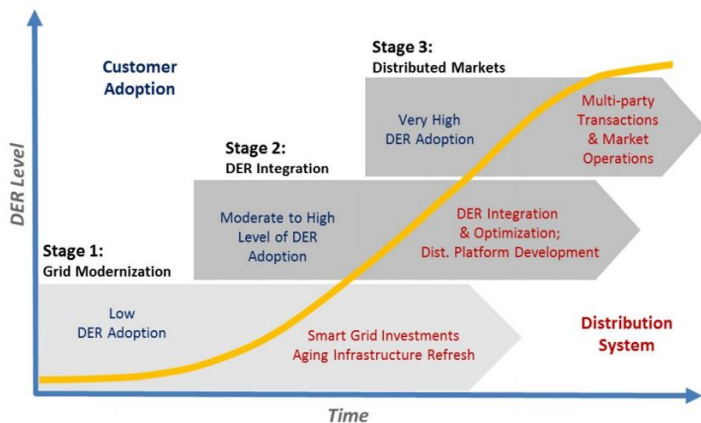


Figure 1: Framework for evolution of the distribution system.

The LBNL authors describe the first stage shown in Figure 1 as being characterized by relatively low levels of DER that do not yet impact the overall operation or planning; accordingly, stage 1 is focused on planning for greater DER penetration. Stage 2 requires new operational capabilities to accommodate multi-directional flows and more variable grid

conditions. The final stage 3 is characterized by peer-to-peer transactions and requires a distribution-level market structure, market services, and a new regulatory framework. Analyzing the Draft Guidelines and their evolution from phase 1 through phase 3 against these three stages, it appears that they will only help Oregon move through stage 1 and partially into stage 2, without reaching stage 3. We therefore recommend that, either beyond adoption of the Guidelines or as an element of the Guidelines and future DSP processes, the Commission consider providing additional opportunities for Staff to continue their collaboration with subject matter experts and stakeholders to ensure that we are able to develop a robust regulatory framework. This additional collaboration may be necessary to create the macro grid architecture that will be necessary to avoid “loss of future opportunities, stranding of assets, and reductions in achievable reliability and robustness of the grid” and to enable the full transformation of the distribution grid ecosystem.²³ Our recommendations are grounded in the notion that grid architecture is a powerful tool to aid in the management of complexity.²⁴

4. Specific feedback on discrete elements of the Draft Guidelines

In addition to the broad feedback above, we offer the following feedback on specific, discrete elements of the Draft Guidelines, with comments on baseline data, forecasting, hosting capacity analysis, community engagement, grid needs and solution identification, and action plans.

²² Available at <https://emp.lbl.gov/sites/default/files/lbnl-1003797.pdf>.

²³ Jeffrey Taft and Paul DeMartini, “Ultra-large Scale Power System Control and Coordination” (2014), p 12-13, available at <https://gridarchitecture.pnnl.gov/media/advanced/ULS%20Grid%20Control%20v3.pdf>.

²⁴ Jeffrey Taft and A Becker-Dippmann, “Grid Architecture” (2015), available at <https://gridarchitecture.pnnl.gov/media/white-papers/Grid%20Architecture%20%20-%20DOE%20QER.pdf>.

a. Baseline data

Renewable Northwest appreciates the detailed baseline information requirements that Staff has included in the Draft Guidelines. We would like to reiterate the need to have insight into climate costs and benefits in addition to the monetary costs by including GHG emissions in the data relating to existing distribution system infrastructure (including DERs). Furthermore, there is some confusion created by having the overall guideline requirement prescribe identifying “existing grid equipment inventory and financial data with locational granularity and DER-related data” but the list of minimum requirements include items that are summarized by asset class. Based on our original input,²⁵ we call out the following examples as representative of the general stakeholder need for locational granularity:

- Locational granularity regarding the age of various assets -- including the life expectancy -- could be helpful for stakeholders to engage with possible needs and solutions, but the Draft Guidelines’ action plan only requires average age and life by asset class.
- Understanding where distribution system investments have occurred can help stakeholders understand not only needs and solutions but also equity considerations, but the Draft Guidelines’ minimum requirements only again call for spending by category.
- Finally, for DERs, the granularity specified in the guidelines -- ‘by substation’ -- may limit stakeholders’ ability for analysis and insight. We recommend that the Draft Guidelines include DER information at the feeder level, as this approach may enable greater value to be realized from the data.

As our past comments and others’ have also indicated, we recommend that Draft Guidelines require baseline system data to be correlated with customer demographics and socio-economic status. This correlation is key to helping stakeholders identify vulnerable and at-risk communities as they work on equity efforts.

b. Forecasting

There appears to be broad agreement that a hybrid approach to load forecasting is the appropriate choice. All non-utility stakeholders agree that a bottom-up approach will provide better locational analysis that will allow DSP to become more community focused. We recommend that Staff establish locational granularity guidelines for all except the first DSP filings in order to maximize the utility of the forecasting data and enable more detailed, bottom-up forecasting in the future. Moreover, as the forecasting capabilities increase in locational granularity, they will

²⁵ Available at <https://edocs.puc.state.or.us/efdocs/HAC/um2005hac162835.pdf>.

provide valuable data for use-cases in the hosting capacity analysis²⁶. Having robust forecasting as part of the planning process has been identified by third-party experts as an essential ingredients for successful distribution system planning²⁷.

c. Hosting capacity analysis

We appreciate that staff included significant details on expectations for Hosting Capacity Analysis (“HCA”) requirements. Developing this capability is one of the key ingredients in moving to the modern grid as it helps increase transparency and offer stakeholders insight into the distribution grid²⁸ as well as enabling optimization of DER benefits without impacting reliability.²⁹ One of the benefits of HCA is stakeholder-facing; HCA can improve stakeholders’ ability to plan for future investments, an outcome that was cited in several responses to Staff’s questions.³⁰ The evolution of this capability through the Draft Guidelines’ three stages is reasonable; however, as we already stressed above, we recommend that these three stages happen much more quickly than currently put forth in the guidelines in order to meet Oregon’s science-based GHG emission-reduction targets.

d. Community Engagement

While we defer to community-based organizations for specific feedback on the Draft Guidelines’ community-engagement elements, we do reiterate that accelerating the Draft Guidelines’ timelines to align DSP with the transformation that climate science tells us is necessary will likely require a particularly strong front-end effort at community engagement and trust-building.

e. Grid needs and solution identification

As we have already stated in the section on baseline data, the addition of customer demographics and socio-economic data will enable the integration of equity analysis with the grid and community needs. We appreciate that Staff included it as part of the evolution but feel that making it part of the first plan would help empathize the goal of creating equity among the customers is an indispensable part of the guidelines. Similarly, we would like to see an accelerated adoption of non-wires solutions to defer distribution system upgrades in order to avoid gold-plating the system that will become superfluous as the grid evolves. This will be

²⁶ <https://www.icf.com/insights/energy/hosting-capacity-analysis>, site visited on 10/28/2020

²⁷ IREC, “Cornerstone for Next Generation Grid Activities: Forecasting DER Growth” (2018), <https://irecusa.org/2018/02/cornerstone-for-next-generation-grid-activities-forecasting-der-growth/>, visited on 10/28/2020

²⁸ <https://irecusa.org/2017/12/tools-to-build-the-modern-grid/>, visited on 10/28/2020

²⁹ Sky Stanfield and Stephanie Safdi (IREC), “Optimizing the Grid: A Regulator’s Guide to Hosting Capacity Analyses for Distributed Energy Resources”, (2017), available at https://irecusa.org/wp-content/uploads/2017/12/Optimizing-the-Grid_121517_FINAL.pdf

³⁰ OET, RNW, OSEIA, CUB. PDFs can be found on UM 2005 docket site: <https://apps.puc.state.or.us/edockets/docket.asp?DocketID=21850>

enabled by expedient regulatory action that clearly establishes metrics for evaluation and mechanisms for cost recovery. The metrics used for evaluation will need to be carefully reviewed so that the full stack of benefits is valued (including climate, social, economic, and strategic). Encouraging utilities to approach the demand side reduction in load (EE, DR pilots focused on only one appliance) more holistically creates opportunity to streamline approaches to these non-wire solutions and take advantage of the many synergies and operational efficiencies enabled by not treating each in its own separate silo.

f. Action Plans

For both the near-term and long-term action plans, we recommend that the Draft Guidelines require utilities to frame how each solution is identified and incorporated into an action plan that helps that utility's distribution system evolve along the trajectory towards the operational outcome. As we discussed in Section 3 above, keeping all stakeholders aligned on overarching goals for the distribution system evolution will help stakeholders focus on the actions that move the grid in the needed direction and jettison those activities that do not. We recommend the use of the grid evolution framework, referenced in Section 3, for long-term action plans. Within the long-term plan, utilities can lay out how their roadmap will enable us to expediently move through each stage over the next 5-10 years.

III. CONCLUSION

Renewable Northwest again thanks Staff for this opportunity to respond to the Draft Guidelines. We look forward to further engagement with Staff, utilities, and other stakeholders as this investigation takes its final steps toward formal guidelines for utility distribution system plans.

Respectfully submitted this 29th day of October, 2020.

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