



April 2, 2021

To: NorthernGrid, California Independent System Operator, WestConnect

Re: Order 1000 Annual Interregional Coordination Meeting, Western Interconnection

Comments of NW Energy Coalition

The NW Energy Coalition (NVEC), founded in 1981, leads the Pacific Northwest's broadest alliance of energy interests in designing, promoting, and implementing clean, affordable, and equitable energy policy grounded in analytical expertise. The Coalition is an alliance of over 100 environmental, civic, and human service organizations, progressive utilities, and businesses in Oregon, Washington, Idaho, Montana and British Columbia. We envision a 21st century energy system that provides clean, reliable, and affordable energy, sustains our communities, and preserves the region's natural resources.

On March 30, 2021, the Western Planning Regions (WPRs) – NorthernGrid, the California Independent System Operator (CAISO) and WestConnect – conducted the 2021 Annual Interregional Coordination Meeting as part of their Order 1000 activities.

Although time was allotted in the published agenda for 25 minutes of Open Discussion, questions and answers from the presentations precluded general comments and the meeting time expired. Here, NVEC presents in narrative form an expanded version of the Open Discussion comment we intended to provide.

Since 2011, NVEC has been continually involved in the Order 1000 planning process in the Western Interconnection, primarily with ColumbiaGrid and Northern Tier Transmission Group, which combined a year ago into NorthernGrid. We have also actively participated in each annual interregional coordination meeting of the Western Planning Regions since their inception.

As we are now nearing the 10th anniversary of the issuance of Order No. 1000 by the Federal Energy Regulatory Commission on July 21, 2011, this is a suitable time to take stock of where the Order 1000 process has brought us and where it should now proceed.

Looking at our anticipated needs for improving the carrying capacity, reliability and resilience of the Western Interconnection bulk electric system for this coming decade, NWECC sees an urgent need for an expanded role for Order 1000 regional planning, and especially for enhanced interregional coordination. Key factors include:

- The changing resource mix, as a result of technology innovation and public policy.
- The increasing impacts of climate change, expressed through both general trends in temperature and precipitation patterns and increasing instances of extreme weather.
- Challenges to the performance of the existing bulk energy system, including increasing wildfire, seismic and cybersecurity exposure.
- The emergence of common mode failures including insecure natural gas supply for power generation (with recent examples in California, the Northwest and Texas), as well as instances of large dispersed resource failures, for example, the dropoff of inverter based solar resources resulting from the 2016 Blue Cut fire.¹ The latter is an important example of cooperative learning and ongoing response to stress events involving, in this instance, Southern California Edison, WECC, NERC and others.

NWECC foresees that the west will need several things to meet the challenges of the next decade and achieve a more reliable, clean and affordable power system:

- A substantial increase in customer side resource deployment, including advanced energy efficiency, distributed generation, and demand response/flexible demand.
- Many-fold increases in the deployment of grid-connected solar, wind and geothermal renewable resources, including the advent of Pacific coast offshore wind.
- Improvements in bulk electric system management through operations, information flow, grid-enhancing technologies, and more.
- A large increase in transmission expansion, both within the Western Planning Regions and interregionally, to bring in a dramatic increase of renewables as well as diversify the system topology in the fire-dependent landscapes that predominate in the west.

Key initial decisions about corridor selection and siting must be made in the next couple years in order for sufficient new transmission to be available in the latter half of this decade. This is where the work of the Western Planning Regions and the interregional coordination process must step up to a new level. Time is of the essence.

The Order 1000 process must be opened up to accelerate assessment of existing proposals by transmission owners and independent transmission developers alike. It also needs to be more receptive to scenario assessment and innovative transmission expansion concepts, and not

¹ North American Electric Reliability Corporation, *1,200 MW Fault Induced Solar Photovoltaic Resource Interruption Disturbance Report, Southern California, 8/16/2016 Event*, https://www.nerc.com/pa/rrm/ea/1200_MW_Fault_Induced_Solar_Photovoltaic_Resource_/1200_MW_Fault_Induced_Solar_Photovoltaic_Resource_Interruption_Final.pdf

reject them simply because they have not yet advanced to specific, sponsored project proposals.

NWEC has proposed several such assessments over the first decade of Order 1000. Two were accepted for study and others were rejected. The effort to achieve even the two studies was considerable and lengthy, though we feel the results justified both the planning region effort and our own.

Yet such studies are very few and far between. It is notable that across all three planning region reports in this year's interregional coordination meeting, it does not appear that any stakeholder proposed studies (under the rubric of public policy driven projects, scenarios, or otherwise) are currently being contemplated or conducted. The WPRs provide open but limited opportunities to propose such studies, so the question must be asked, a decade into Order 1000 planning, whether sufficient effort is being made to encourage such input.

In addition, the Order 1000 process has mostly been conducted for purposes defined by TOs relating to their own projects. Only the CAISO conducts competitive solicitations, and only for a limited range of projects.

Many TO-sponsored projects deserve full inclusion in their respective Order 1000 region plans, but it is notable that credible projects like Trans West Express and LS Power's SWIP North have been slow-walked through several Order 1000 planning cycles. Yet in the current cycle, a notional transmission project has been accepted from data submitted by a planning region member to serve a generator resource type which does not yet have a federal license to be constructed or connected to any grid.

Among the innovative ideas NWEC favors for review are the long-projected upgrade of the Pacific DC Intertie (Path 65), HVDC ties and dual-connected storage resources shared with other interconnections, and a Pacific offshore HVDC loop to pick up prospective floating wind generation and provide a reliability backstop to the beleaguered Pacific AC and DC Intertie system. We are certain that many other potential transmission expansion projects and scenarios that are not currently under review in the three WPR study processes can be brought forward in short order, if there is a willingness to consider them in the next planning cycle.

Furthermore, it is noteworthy that after numerous WPR Order 1000 planning cycles, not a single project has ever advanced to the stage of consideration for interregional cost allocation, despite the existence of several proposed projects with that potential.

All that said, NWEC also recognizes that important progress has been made in recent years. In particular, we applaud the evolving collaboration of the WPRs with the Western Electricity Coordinating Council to create and enhance the WECC Anchor Data Set. The ADS is an authoritative data repository representing the loads, resources, system topology and other relevant aspects of the Western Interconnection. It is a foundational accomplishment to

provide a consistent starting point for study work and reliability assessment across the interconnection.

More broadly, the effort and dedication of the many people and organizations involved with Order 1000 planning and interregional coordination in the west are undeniable. But the current level of effort is also insufficient for the time ahead.

To sum up, it is time to go back to basics:

While focused on discrete aspects of the transmission planning and cost allocation processes, the specific reforms adopted in this Final Rule are intended to achieve two primary objectives: (1) ensure that transmission planning processes at the regional level consider and evaluate, on a non-discriminatory basis, possible transmission alternatives and produce a transmission plan that can meet transmission needs more efficiently and cost-effectively; and (2) ensure that the costs of transmission solutions chosen to meet regional transmission needs are allocated fairly to those who receive benefits from them. In addition, this Final Rule addresses interregional coordination and cost allocation, to achieve the same objectives with respect to possible transmission solutions that may be located in a neighboring transmission planning region.

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With the urgency of enhancing and accelerating the capacity of both the Order 1000 process and WECC's reliability assessment and planning function, new financial and technical resources are needed for the WPRs and WECC, regional organizations including the Western Interconnection Regional Advisory Body (WIRAB) and Western Interstate Energy Board (WIEB), and relevant state agencies.

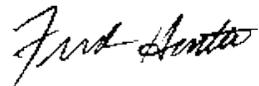
NWEC is advocating for Congress and the US Department of Energy to provide such resources as the nation considers the need for a public investment-led strategy in infrastructure development and modernization.

Recent grid outages in California and Texas, as well as near misses almost everywhere, underscore the importance of providing financial and technical support not only for "steel in the ground" but also for enhanced bulk electric system planning under Order 1000, as well as other regional and state level processes, to help make the right choices for equipment, operations and new transmission.

Finally, the close of the first decade of regional planning and interregional coordination is an appropriate time for the WPRs, TOs and all stakeholders to provide ideas to the Federal Energy Regulatory Commission about the reforms that are now needed to open up, improve and accelerate outcomes under Order 1000. We need changes that make the Commission's

directive fit the western context better, and to accelerate assessment and coordination both within the Order 1000 context and with other work across the Western Interconnection.

Unless we take up these challenges, we run the risk of holding back bulk electric system modernization, optimization and expansion that will put grid reliability and all that depends on it in much greater jeopardy.



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