



California ISO



Stakeholder Comments
Annual Interregional Coordination Meeting (AICM)
February 25, 2016

The Western Planning Regions (WPRs) received comments on the topics discussed at the February 25, 2016 stakeholder meeting from the following:

1. Pacific Gas and Electric Company (PG&E)
2. Powerex Corp.

The WPR's appreciate stakeholder participation in the process and the comments that have been submitted. The following are the WPR's responses to the comments:

No	Comment Submitted	WPR Response
1	PG&E Submitted by: Sony Dhaliwal	
1a	PG&E appreciates this opportunity to provide comments in response to the topics discussed in the Interregional Coordination Meeting on February 25, 2016. PG&E believes that the first Interregional Coordination Meeting was successful in setting the stage and meeting the objectives of information sharing among Western Planning Regions (WPRs), Western Electricity Coordinating Council (WECC), Participating Transmission Owners (PTOs), and Transmission Project Developers. PG&E commends the WPRs for taking the first step towards the development of an effective Interregional Coordination Process.	Thank you for your comments and for your participation in the first Interregional Coordination Meeting.
1b	PG&E understands that this process is expected to evolve with lessons learned over various planning cycles. However, the lack of clarity on joint Interregional Transmission Project (ITP) evaluation and cost allocation can potentially hinder the coordination efforts. PG&E believes that the following gaps should be addressed to ensure that the ITPs submitted in this planning cycle are not subject to a disadvantage due to the lack of a well-established process: 1. Each WPR uses a different methodology to evaluate economic-based ITPs. Based on the current coordination process, the ITPs that provide benefits	ITP evaluation coordination builds upon the transmission planning processes of each participating region. Each region has an open and transparent, and more importantly, a FERC-approved mechanism for evaluating the benefits of ITP projects to the region. The common tariff language provides for each Relevant Region to define regional benefits and allocate a pro rata share of ITP costs to each Relevant Region pursuant to its regional benefit calculation. That share of the costs of an ITP is then subjected to the cost/benefit



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	to multiple WPRs will be assessed using each Relevant Planning Region's (RPR's) evaluation methodology. This will create an inconsistent comparison of benefits and could potentially result in unfair cost allocation. RPRs should consider selecting an agreed upon evaluation methodology for joint evaluation of economic projects.	<p>requirements of each Relevant Region using its own benefit metrics. To do otherwise would override the regional tariff requirements for types and quantities of benefits required for determination of the more efficient or cost effective projects.</p> <p>The regions are committed to continue to coordinate and identify potential process improvements as they work through the initial implementation of Order 1000. In particular, during this first year of interregional coordination, the WPRs will continue to refine the joint evaluation coordination process for Interregional Transmission Projects (ITPs) and will provide additional process documentation as they gain experience with the first set of ITPs expected to be submitted this year.</p>
1c	2. Based on the current coordination process, the ITP must be submitted to each RPR and evaluated through the separate planning processes of each RPR. The timeline for these processes is not presently aligned. For example, CAISO's Transmission Planning Process (TPP) is annual and does not align with WestConnect, Northern Tier Transmission Group (NTTG), or Columbia Grid's (CG) biennial TPP. If an ITP were found needed in CAISO's 2016-17 TPP, it would not be able to move forward until the following year (i.e. 2018). In addition to requiring re-assessment of economic benefits, this could also impact the schedule, especially if the ITP is replacing a previously approved reliability project.	<p>While in general the regions' schedules align, the FERC approved Common Interregional Coordination and Cost Allocation Tariff Language acknowledges that joint evaluation of an ITP that has been properly submitted will commence in the calendar year of the ITP's submittal or the immediately following calendar year.</p>
1d	3. PG&E supports development of the Anchor Case with strong coordination of WPR's through the WECC processes that would provide a consistent and vetted western inter-connection wide dataset to support the inter-regional coordination efforts.	<p>Thank you for your comment. The WPR will continue to work with WECC to more fully develop the concept of the Anchor Case.</p>

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2	Powerex Corp. Submitted by: Mike Benn	
2a	Powerex appreciates the opportunity to provide comments on the Interregional Transmission Planning stakeholder process. In particular, Powerex provides comments on the February 23, 2016 proposal by NW Energy Coalition (NWECC) to upgrade the Pacific DC Intertie (PDCI) from its current rating of 3,220 MW to a rating of 3,820 MW.	Thank you for your comments and for your participation in the first Interregional Coordination Meeting.
2b	<p>Powerex agrees with NWECC that the PDCI is a vital link between the Pacific Northwest and California. Historically, the PDCI has been heavily relied upon to deliver lower-cost wholesale energy from the Northwest into California, displacing higher-cost generation resources. Most of these deliveries have been, and continue to be, arranged and scheduled in hourly increments, predominantly on a day-ahead basis. Expansion of the PDCI could make additional conventional imports into CAISO possible, but this is not the primary activity cited by NWECC in support of its proposal. Rather, NWECC's proposal highlights the potential to use the PDCI to help meet California's renewable energy challenges. In Powerex's view, the PDCI facilities indeed seem ideally suited for such purpose, and could be used in at least three distinct ways to help meet this objective:</p> <ul style="list-style-type: none"> • The PDCI could be used to deliver additional Pacific Northwest renewable energy to California, directly helping to meet the state's 50% renewable portfolio requirement. • The PDCI could be used to access flexible generation capacity from the hydro-rich Pacific Northwest region, providing valuable renewable integration services. • The PDCI could also facilitate the export and re-delivery of oversupply energy, effectively using a combination of the flexible hydro generation, associated storage reservoirs, and demand in the Pacific Northwest as an intra-day "virtual battery" to help balance the net load challenges arising from California's growing renewable fleet. Indeed, the PDCI is the only intertie that directly connects the Pacific Northwest with California's SP15 region, where oversupply conditions are expected to be most acute. 	<p>Thank you for your comments on NWECC's conceptual proposal. As you know, an important objective of the annual interregional transmission coordination stakeholder meeting is to provide opportunity for stakeholders to discuss interregional solutions that may meet regional transmission needs in each of two or more planning regions more cost effectively or efficiently. However, the opportunity to "discuss" an interregional solution does not meet the requirement of a "properly submitted ITP" into the respective relevant planning regions. As such, NWECC's conceptual proposal is the starting point of some entity's development of a project designed to meet recognized regional needs. To be evaluated as an ITP proposal under any region's Order 1000 planning process, it must be properly submitted to each relevant planning region as defined by those processes.</p> <p>It is also worthwhile to mention that California has initiated its RETI 2.0 Statewide, non-regulatory planning effort to help meet statewide GHG and renewable energy goals in California. As established by the representative California entities the RETI 2.0 effort will explore combinations of renewable generation resources in California and throughout the West that can best meet goals so that this information can inform future California planning and regulatory proceedings. The WPR suggests that Powerex participate in the RETI 2.0 process to present your thoughts on the value of NWECC's conceptual proposal.</p>
2c	Powerex strongly supports efforts that enable Northwest resources to be used to help meet California's renewable energy challenge. But in Powerex's view,	See answer to 2b

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	<p>upgrading the PDCI's transfer capability, on its own, will not advance this objective. This is largely due to pre-existing barriers that prevent and/or discourage the PDCI from being used for this purpose. For example, 15-minute scheduling has not yet been implemented on the PDCI, and use of the PDCI on an hourly basis provides limited value toward meeting California's renewable challenges. In Powerex's view, requiring transfers to be in hourly blocks is a critical barrier to providing flexible capacity and intra-day storage services on the PDCI, as well as to using PDCI transfer capability to deliver renewable resources from the Pacific Northwest. Powerex understands that recent physical upgrades on the PDCI by Bonneville Power Administration (BPA) makes 15-minute scheduling technically feasible, and at a relatively low cost. We therefore urge BPA, Los Angeles Department of Water and Power and the CAISO to explore enabling this increasingly valuable service as soon as possible.</p>	
2d	<p>An additional impediment to facilitating efficient exports from the CAISO on the PDCI is the current CAISO policy of applying CAISO's Transmission Access Charge (TAC), as well as unpredictable uplift charges, to all export schedules. TAC and uplift charges impose a variable hurdle rate on all exports, which can block otherwise efficient energy transfers. And since TAC and uplift will make economic opportunities to purchase California oversupply relatively rare, few external entities will likely have sufficient incentive to take the steps necessary to be positioned to respond to real-time oversupply conditions when they do occur.</p>	<p>The WPR cannot address your comment and suggests that Powerex utilize the CAISO regional processes to provide your input on the issues you have identified.</p>
2e	<p>To be clear, Powerex is not suggesting that CAISO should pursue a policy of waiving TAC and uplift for all exports. Powerex has consistently supported ensuring that external entities relying on CAISO exports to meet firm load bear an appropriate share of the cost of the CAISO grid. But exports that are for economic displacement only, and that effectively provide "battery-like" storage services to CAISO, are needlessly impeded by the blanket approach of applying TAC and uplift to every export schedule. Energy exports from California on the PDCI are unlikely to be of significant value until such time as the very substantial TAC and uplift hurdle rates on economic displacement export activities are removed.</p>	<p>See answer to 2d.</p>
2f	<p>Finally, use of the PDCI to provide flexible capacity from the Pacific Northwest to CAISO is also unlikely to occur at a level that supports expansion of the PDCI absent CAISO market enhancements that permit the commitment of external flexible capacity well ahead of real time energy deliveries. Some of these</p>	<p>See answer to 2d.</p>



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	enhancements are currently being explored, such as enhancements to the CAISO's FRAC-MOO program. These and related efforts are vital to creating a market in which 15-minute transactions with external flexible resources are not only technically feasible, but economically viable.	
2g	Powerex believes that the transfer capability of the PDCI is not currently an important limiting factor in the use of the intertie to support California's renewable energy goals. Rather, it is the existing technical and market design limitations that pose the most significant barriers. Measures addressing these technical and market design impediments are needed to enable the existing transfer capability of the PDCI to play an important role in meeting California's renewable energy challenge. Importantly, these measures could be implemented at a small fraction of the cost of upgrading the PDCI. Powerex therefore believes that expanding the PDCI transfer capability would be of limited value without first implementing all of these other measures.	See answers to 2b and 2d.