

**Supplemental Comments of Powerex Corp. on
Consolidated EIM Initiatives from 2017 Roadmap
Issue Paper**

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Powerex submits these supplemental comments to address a discrete issue regarding EIM use of transmission service made available by EIM participants.

While some EIM transfers are scheduled over facilities that are part of an EIM Entity’s transmission system, other EIM transfers are scheduled on non-EIM Entity transmission systems using OATT transmission reservations made available to the EIM. The latter scheduling arrangement currently occurs for EIM transfers between Puget Sound Energy (“Puget”) and PacifiCorp, which utilize Bonneville transmission service reserved and paid for by Puget. This same situation is also expected to exist for EIM transfers between Powerex and the CAISO BAA, which will utilize Bonneville transmission service reserved and paid for by Powerex.

Recognizing that the EIM was designed to utilize existing or “sunk” transmission capability that would otherwise go unused in a particular interval, the CAISO has taken the position that it would be both unnecessary and inefficient to introduce a material variable hurdle rate into EIM dispatch to attempt to recover the cost of reserving transmission service over non-EIM providers’ systems. Powerex agrees as a general matter. At the same time, for the reasons explained below, Powerex believes that it would be efficient, equitable, and fully consistent with the design principles of the EIM to include in the EIM market solution the **variable transmission charges** charged by non-EIM transmission providers.

In addition to the cost of reserving transmission service over non-EIM providers’ systems, OATT transmission customers also face a *variable* charge to compensate for transmission losses. Unlike marginal losses calculated for flows in the EIM Area (and included, appropriately, as a hurdle rate in EIM dispatch decisions), this charge is expressed as a percentage of the quantity that is scheduled over non-EIM providers’ system; the greater the quantity that is scheduled, the higher the charge to the transmission customer. For example, Bonneville’s OATT specifies a transmission loss factor of 1.9% of the scheduled energy volume on its primary network (e.g., between the Puget boundary and the PacifiCorp boundary) and 3.0% of the scheduled volume on

the Southern Intertie (e.g., between John Day and COB).¹ These charges are additive, meaning EIM transfers scheduled on the Bonneville rights from the BC-US border to Malin will result in a charge to Powerex of 4.9%.²

Unlike the cost of reserving OATT transmission service, which is sunk in a given dispatch interval, contractual transmission loss charges vary directly with the quantity of EIM transfers that are scheduled on a path utilizing rights subject to such charges. Moreover, this variable cost cannot be reflected in the price of bids or offers submitted by EIM participants, since the dispatch of bids and offers in the EIM is independent of the scheduling of EIM transfers. In other words, EIM transfers may be scheduled on Powerex's donated Bonneville rights between the BC-US Border and COB without any of Powerex's bids or offers being dispatched at all. The same circumstances exist for EIM transfers scheduled on Puget's donated Bonneville rights between the Puget BAA and the PacifiCorp West BAA; the quantity of such transfers will not necessarily have any relation to whether or not Puget's EIM bids and offers were accepted (and hence whether or not Puget receives any benefits from the scheduled use of its Bonneville rights for EIM Transfers). As a result, entities such as Puget and Powerex that provide third-party transmission rights to support EIM Transfers will often face incremental costs to support EIM Transfers that benefit other entities.

For the foregoing reasons, Powerex believes that it is efficient, equitable, and fully consistent with the design principles of the EIM to include variable transmission charges charged by non-EIM transmission providers in the EIM market solution. These are genuine variable costs associated with the EIM algorithm's scheduling of EIM transfers on paths that are subject to such charges. Taking into account the variable costs of scheduling EIM transfers on affected paths would appropriately reflect the cost of scheduling on that path, ensuring efficient dispatch and scheduling decisions in the EIM. This would also ensure these genuine costs are reflected in EIM prices, recovered by the CAISO through the market settlement, and distributed to the entity that provides the respective third-party transmission rights, and bears the associated variable costs. Powerex thus requests that CAISO include, as an EIM enhancement in the Consolidated EIM Initiatives stakeholder process, the inclusion of third-party variable transmission costs in the EIM dispatch and settlement processes.

¹ See Bonneville Power Administration Open Access Transmission Tariff (effective date February 2, 2016) at Schedule 9 ("Real Power Loss Calculation"). Available at: https://www.bpa.gov/transmission/Doing%20Business/Tariff/Documents/bpa_oatt.pdf

² Bonneville treats the Southern Intertie as a distinct segment, separate from its primary network, for ratemaking purposes. Hence a EIM transfer from the BC-US border to COB involves two separate transmission reservations on Bonneville's system: one reservation on Bonneville's primary network (from BC-US border to John Day) and a second reservation on Bonneville's Southern Intertie (from John Day to COB). Each reservation incurs its own variable charges for transmission losses.