



**Comments of EDF Renewable Energy on the  
Energy Imbalance Market Year 1 Enhancements  
Phase 2 Issue Paper & Straw Proposal  
Dated: July 22, 2015**

EDF Renewable Energy, Inc. (“EDF Renewable Energy”) offers the following comments on the California Independent System Operator Corporation’s (“CAISO”) *Energy Imbalance Market (“EIM”) Year 1 Enhancements Phase 2 Issue Paper & Straw Proposal*, dated June 30, 2015 (the “Proposal”), specifically with respect to the transmission rate issues the Proposal discusses. EDF Renewable Energy is a developer, owner, and operator of wind, solar, hydro, biomass, and biogas resources, and it has developed numerous wind and solar projects throughout California and neighboring states. EDF Renewable Energy generally supports the development and refinement of the EIM, and it appreciates the opportunity to participate in the Phase 2 stakeholder process concerning potential EIM changes.

The Proposal presents an overview of several potential alternatives (“Alternatives”) for setting EIM-wide transmission service rates.<sup>1</sup> EDF Renewable Energy’s comments focus on these Alternatives.<sup>2</sup> The Proposal does not offer significant detail regarding how any of the proposed Alternatives would apply to the EIM, and EDF Renewable Energy’s comments are therefore limited to its current understanding of the Alternatives the Proposal describes.

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<sup>1</sup> See Proposal, at 6-10.

<sup>2</sup> EDF Renewable Energy is continuing to review the Proposal and may provide supplemental comments with respect to transmission service charges or other issues outlined in the Proposal. EDF Renewable Energy reserves its right to revise its recommendations with respect to transmission service charges when the CAISO provides more information concerning how the proposed Alternatives could be implemented in the EIM.

Based on its current understanding, EDF Renewable Energy recommends that the CAISO focus on Alternative 2 and develop an EIM-wide Transmission Access Charge (“TAC”) that is neutral with respect to resource location. In the alternative, if the CAISO determines to proceed with its current transmission charge structure outlined in Alternative 1, the CAISO should commit to a path to implementing Alternative 2 if and when one or more of the EIM entities (*e.g.*, PacifiCorp) joins the CAISO as a Participating Transmission Owner (“PTO”). Such an event would necessitate the CAISO’s re-examination of EIM transmission charges because it would expand the transmission rates discussion into Day Ahead and Hour Ahead scheduling and thus involve much more significant costs and volumes.

**A. Implementing an EIM TAC that Is Resource Location Neutral Will Encourage the Most Efficient Real-Time Transmission Use.**

Under Alternative 2 of the Proposal, the CAISO would extend the principles of its current transmission rate design to development of an EIM TAC. The Proposal explains that the EIM TAC could be determined “based on the ratio of transmission revenue requirement that is associated with incremental real-time demand versus the total amount of demand.”<sup>3</sup> The Proposal further notes that an EIM TAC could be set as a “blended access charge for all real-time incremental [CA]ISO and EIM demand” or, alternatively, a “regional access charge that would apply only to EIM demand within EIM entities while the [CA]ISO demand would remain responsible for paying the [CA]ISO transmission and wheeling access charges.”<sup>4</sup>

EDF Renewable Energy supports CAISO’s development of the type of EIM TAC outlined in Alternative 2, with uniform rates throughout the EIM area. As the Proposal explains, the use of a uniform EIM TAC would be consistent with the Federal Energy Regulatory Commission’s goal to

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<sup>3</sup> Proposal, at 8.

<sup>4</sup> Proposal, at 8.

eliminate rate pancaking and implement single system access charges. An EIM TAC would provide full transmission revenue requirement rate recovery for all transmission owners participating in the EIM, while also ensuring the same transmission charges for resources and load regardless of whether they are directly participating in the EIM or being served by an EIM entity. Moreover, an EIM TAC would allow generation resource owners to provide supply bids without specifying their sink location.

By implementing a uniform EIM TAC, the CAISO will help avoid assigning different transmission costs to generators depending on where their generation resources are located (i.e. the EIM TAC would be “resource location neutral”). The CAISO’s current market structure seeks to maximize the efficiency of economic dispatch by allowing generation resources to only bid their variable generation costs (as opposed to fixed costs such as transmission) regardless of where they are located.

In the case of EIM, energy customers in all areas participating in EIM will be disadvantaged if variable transmission charges are added to generators outside of the CAISO. For instance, if a generation resource in the PacifiCorp BAA incurred a variable PacifiCorp transmission charge (*e.g.*, for hourly service), this added cost would economically disadvantage the generator compared to generators within the CAISO footprint and also raise the cost of energy for all EIM load. Such incremental transmission charges would act as a “hurdle” rate and could prevent EIM dispatch of non-CAISO resources even when those resources have the lowest variable costs. Thus, it is critical that the CAISO implement transmission services charges (through an EIM TAC or otherwise) which “level the playing field” for all generation resources by ensuring that they are not penalized by virtue of their geographic location. Doing so will encourage more generators to participate in the EIM, potentially encourage the geographic growth of the EIM, and improve the efficiency of the EIM dispatch.

**B. If the CAISO Implements Alternative 1, It Should Commit to a Path to Implementing Alternative 2 If and When the CAISO Expands.**

Under Alternative 1 of the Proposal, transmission use would continue to be available through the EIM with no incremental charge for real-time transfers between the CAISO and EIM entities.<sup>5</sup> This transmission is made available to EIM by rights-holders in EIM entities with existing transmission rates which were set without an existing EIM. Under this Alternative 1, if an EIM-participating resource wished to bid into EIM beyond its existing transmission rights, the transmission service providers could assess incremental charges on that generator pursuant to the applicable Open Access Transmission Tariff (*e.g.*, non-firm transmission services charges, unreserved use charges).<sup>6</sup>

EDF Renewable Energy does not recommend that the CAISO continue the Alternative 1 approach of assessing no charge for as-available transmission. During the initial implementation of the EIM, it made sense for the CAISO and EIM entities to agree on a rate design based on reciprocity in the use of as-available transmission to better understand whether the EIM could produce the intended costs savings and other benefits using current transmission rates and rights (particularly because the applicable transmission rates had been set prior to the creation of the EIM). However, as the EIM further develops and potentially expands, the CAISO must develop transmission service charges that apply equally to all generators participating in the EIM, both within the CAISO and other EIM entity BAAs.

As explained above, the CAISO's implementation of a uniform EIM TAC (*i.e.* Alternative 2) would better ensure transmission charge consistency between CAISO and non-CAISO area

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<sup>5</sup> See Proposal at 7-8.

<sup>6</sup> See Proposal, at 7-8.

generators. Consequently, the EIM TAC will encourage more generators to participate in the EIM, thereby strengthening the market and improving its efficiency for the benefit of EIM customers.

If the CAISO determines to continue with Alternative 1, it should commit to a path to implementing Alternative 2 if and when other EIM entities (*e.g.*, PacifiCorp or NV Energy) seek to become part of the CAISO as PTOs. The expansion of the CAISO will require significant technical, commercial, and regulatory analysis, and as part of that process it is important that the CAISO re-examine any EIM transmission services charges it adopts during Phase 2 of this proceeding.

**C. Alternatives 3 and 4 Are Not Sufficiently Developed and Could Lead to High and Unpredictable Transmission Costs.**

The Proposal outlines, at a high level, two other potential alternatives for setting EIM transmission charges. Alternative 3 would be a transmission charge based on the amount of transfer from one BAA to the other and any resulting congestion (*i.e.* a minimum shadow price). Alternative 4 would assess a transmission charge applicable to load and wheeling in some undetermined fashion, and it would potentially eliminate CAISO TAC charges on exports.<sup>7</sup> At this time, particularly given the lack of detail in the Proposal, EDF Renewable Energy does not support either Alternative 3 or 4. It appears that either or both of these alternatives could result in potentially high and unpredictable transmission charges for EIM transactions (particularly outside of CAISO), which could discourage further adoption of the EIM and lead to the inefficient use of resources.

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<sup>7</sup> See Proposal, at 9-10.