

**COMMENTS ON THE UTILITY REFORM NETWORK REGARDING  
“REPORT ON PROPOSED EIM GREENHOUSE GAS ENHANCEMENTS”**

**December 18, 2017**

The Utility Reform Network (“TURN”) offers the following comments on the slide presentation titled “Report on Proposed EIM Greenhouse Gas Enhancements”, which the California Independent System Operator (“CAISO”) reviewed at a December 4, 2017 stakeholder meeting.

TURN understands that tracking the Greenhouse Gas (“GHG”) emission impacts of the Energy Imbalance Market (“EIM”) is challenging given the complexity of power system operations, the actions of EIM market participants (and non-participants), the limits of California’s jurisdiction over such activities, and California’s current laws and regulations regarding GHG emissions. The CAISO seems to have offered three practical (if imperfect) proposals to attempt such tracking and TURN does not at this time have a preference among the three options.

TURN recognizes that the CAISO’s analysis of the differences between the current one-pass solution and a proposed two-pass solution suggests that the two-pass approach would have yielded lower GHG emissions than the one-pass solution.<sup>1</sup> However, the CAISO’s analysis was based on simulation of about 1,500 five-minute increments – that is, only about 125 hours – so TURN does not believe that the two-pass solution can be assumed to yield this better result in all, or even most, intervals, or in the aggregate. To help parties assess these options fully, TURN suggests the CAISO provide such analyses for each of its three proposed alternatives for an entire calendar year. If three such 8,760-hour simulations require too much effort, the CAISO could instead provide analyses for a smaller number of intervals, provided that the chosen intervals cover the broad range of load and resource conditions the CAISO system experiences in a year, that is, analyze each option by season and time-of-day in general and by specific weather or other system conditions that further affected load and renewable generation.

TURN also believes that whatever GHG tracking method is applied to the EIM, the public be provided complete information about the power sector’s GHG emissions generally and the

---

<sup>1</sup> See slides 7 to 13 of the Report.

impact of the EIM specifically. To this end, TURN offers the following comments and recommendations:

- Public Access to Results of “Counterfactual” Simulations: TURN understands that the CAISO is now using a “counterfactual” one-pass EIM simulation to attribute GHG impacts to the EIM for CARB’s purposes. TURN recommends that the results of such computations be made public in as much detail as possible, limited only by market participants’ legitimate confidentiality concerns.
  
- Out-of-State Hydro: Slides from the December 4 meeting suggest that the EIM includes out-of-state (“OOS”) hydroelectric resources in its optimization.<sup>2</sup> TURN is of course not opposed to Load-Serving Entities (“LSEs”) purchasing OOS hydro in their efforts to minimize their customers’ costs. However, TURN does not believe OOS hydro purchases can be assumed to reduce GHGs in the aggregate. Such purchases may reduce GHGs attributed to CAISO load, but they should not be presumed to reduce GHGs across the entire footprint of the Western Electricity Coordinating Council (“WECC”). In fact, the best default assumption is that the “transfer” of hydroelectric energy from outside the CAISO into the CAISO has no net impact on WECC-wide GHGs, as the use of a MWh of hydroelectric energy by the CAISO will cause one less MWh of hydro to be available elsewhere in the WECC, presumably resulting in the dispatch of a thermal resource to offset the loss. TURN understands that the CAISO is focused on developing a GHG attribution method to facilitate the GHG tracking and enforcement activities of the California Air Resources Board (“CARB”) and that neither the CAISO nor CARB are focused on estimating WECC-wide GHG emissions. However, the CAISO should be clear in any of its reports on the GHG benefits of the EIM the portion of such benefits that are attributed to OOS hydro.

---

<sup>2</sup> *Id.*, slides 8 and 9.

TURN appreciates this opportunity to provide comments.

Submitted by:

Matthew Freedman  
Staff Attorney  
The Utility Reform Network  
785 Market Street, Suite 1400  
San Francisco, CA 94103  
(916) 929-8876  
[matthew@turn.org](mailto:matthew@turn.org)

Kevin Woodruff  
Principal  
Woodruff Expert Services  
1127 – 11<sup>th</sup> Street, Suite 514  
Sacramento, CA 95814  
(916) 442-4877  
[kdw@woodruff-expert-services.com](mailto:kdw@woodruff-expert-services.com)