



December 18, 2017

## AWEA CALIFORNIA CAUCUS (ACC) COMMENTS ON THE CAISO'S REPORT ON PROPOSED ENERGY IMBALANCE MARKET (EIM) GREENHOUSE GAS (GHG) ENHANCEMENTS

The AWEA California Caucus (ACC) appreciates the opportunity to offer comments on the California Independent System Operator's (CAISO or ISO) recent report on proposed EIM GHG enhancements. ACC is supportive of a well-functioning EIM which appropriately attributes GHG emissions associated with EIM dispatches to serve California load. A well-functioning EIM is a critical piece of achieving California's GHG reduction goals as the EIM facilitates mutually beneficial trades of renewable energy across a broad footprint. A methodology which appropriately attributes GHG emissions associated with generation used to serve California load is a cornerstone of an efficient EIM. An accurate GHG attribution methodology for the EIM is even more important now because the ISO is considering ways to expand the EIM, including into the day-ahead timeframe.

For both the EIM and a day-ahead timeframe, ACC has been supportive of the two-pass solution proposed by the ISO. The proposed two-pass solution is an improvement over current practices in accurately quantifying the atmospheric impact of EIM dispatches to serve California's electrical demand. The CAISO's November 17, 2017 presentation illustrates the impact of using the two-pass solution on total GHG emissions and the attribution of GHG emissions to California. While the total impact of using the two-pass solution represents a "minor" reduction in total GHG emissions across the EIM footprint (0.07%), the GHG reduction impact would likely be much larger if the two-pass solution were performed on a day-ahead basis. Day-ahead optimization would cover far more energy transactions than the EIM and, thus, the GHG impact could be expected to be much larger.

It is important to ensuring achievement of California's GHG goals that the EIM appropriately account for GHG emissions to serve California load and it is critical to all EIM participants that the EIM provide the correct economic incentives to market resources. The two-pass solution is the best option proposed to achieve those goals. Therefore, ACC continues to support use of the two-pass optimization.

The issues that have been raised concerning inappropriate bidding incentives should be addressed, but should not deter the ISO from moving forward with implementation of a two-pass solution. The ISO should propose the market rules necessary to mitigate the problematic incentive for clean resources to influence the first pass solution. Use of self-schedules or base schedules for determining the reference level is a subpar option to address this concern because it does not allow for economic optimization of resources within the EIM areas first. Therefore, ACC tends to prefer use of Default Energy Bids (DEBs) in the first pass as the option to continue forward using a two-pass solution while mitigating the inappropriate bidding incentives.

ACC looks forward to continuing to work with the CAISO to implement EIM GHG enhancements and encourages the ISO to continue to pursue the two-pass optimization, while implementing the necessary market rules to address the issues that have been raised regarding inappropriate incentives for clean energy resource bidding. The two-pass solution is important for the EIM and will only grow in importance as the CAISO explores ways to provide additional EIM services, including in the day-ahead market.