

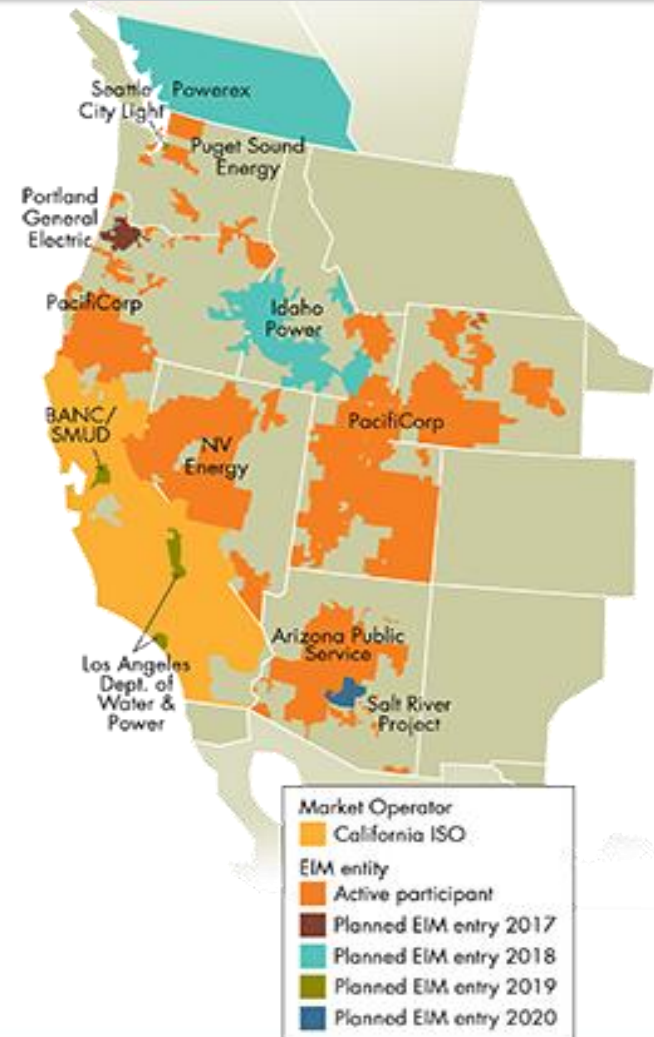
Renewable Energy Certificates Associated with Energy Imported into California via the Energy Imbalance Market

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Energy Imbalance Market—Simplified

- Participating resources bid energy and optional GHG adder into the EIM for the real-time operating hour
- California Independent System Operator (CAISO) dispatches the entire EIM footprint on a simultaneous basis every five minutes
- Dispatches result in transfers within each balancing authority area and between balancing authority areas
- Renewable Energy Certificates (RECs) are not incorporated into EIM energy bids



California Cap-and-Trade Program Obligation in the EIM

- Under California Mandatory Reporting Program, all energy imported into California, including zero-emitting energy, must be reported to the California Air Resources Board (ARB)
 - Reporting null power is not allowed
- Under the Cap-and-Trade Program, emissions associated with imported energy are subject to a compliance obligation (compliance obligation is assigned to importer referred to as “first jurisdictional deliverer”)
- Outside of the EIM, first jurisdictional deliverers are identified as the purchase-selling entity, identified on the e-Tag, on transmission paths crossing into the CAISO balancing authority area
 - This approach does not work for EIM since there is one e-Tag for total EIM transfer into California
- CAISO developed methodology to identify specific resources deemed imported into the CAISO balancing authority area via the EIM
 - ARB modified regulations to assign reporting and compliance obligations based on CAISO’s methodology

CAISO EIM Import Methodology & RECs

- The CAISO methodology for determining resources that are imported to California solves for least-cost based on GHG bid adders
 - Lower cost (zero-emitting) resources are selected first
 - CAISO methodology currently undergoing revision
- Compliance costs associated with energy imported to the CAISO balancing authority area via the EIM are recovered from California load through market prices
 - Benefits associated with lower compliance obligations accrue to California entities
- Under Cap-and-Trade Program, retirement of RECs associated with imported energy is not required
- Under California Renewable Portfolio Standard, RECs associated with imported energy may be used for RPS compliance
 - California REC definition includes avoided emissions however the California Public Utilities Commission concluded that no avoided emission value in a capped jurisdiction

Issues

- If RECs associated with energy bid into EIM are “used” when reported to ARB as zero-emitting, PacifiCorp has few options to allow RPS-eligible resources to fully participate in the EIM
 - RECs generated from PacifiCorp resources are allocated to each of PacifiCorp six states—PacifiCorp cannot unilaterally render RECs unusable without compensation to customers
 - Because PacifiCorp does not know beforehand which resources or the amounts that will be deemed delivered to California, the Company cannot compare financial benefit of allowing resources to be deemed delivered to California versus keeping the RECs
- In general, market restrictions limit flexibility and reduce market benefits
- At this time, because of how the CAISO import deeming methodology works, it does not appear that preventing RPS resources from participating in the EIM is impacting EIM power cost benefits or increasing renewable curtailments
 - However, CAISO is proposing to change its methodology and market optimization so this may need to be revisited