

California ISO's CIM Based Network Model Management

California ISO's reliability and market network model is close to representing the entire Western Interconnection model with detailed network modeling. This has allowed California ISO's reliability applications higher solution quality and accuracy of results in the CAISO Balancing Area and in its neighboring areas. California ISO has also introduced and implemented the Western Energy Imbalance Market (EIM) with several participating EIM entities. The reliability and Western EIM initiatives have required California ISO to quickly expand its network model used by its network and market applications. The California ISO leverages CIM models to quickly integrate the network and SCADA model for the neighboring areas and the participating EIM entities. California ISO relies on the concept of the Model Owner or Modeling Entity and treats the Network Model CIM export from the Modeling Entity as the valid representation of the model for that portion of the network. The California ISO's modelers evaluate the CIM model export from different Modeling Entities and ensure that all models remain consistent in terms of the network tie-lines that connect the neighboring models. The presentation summarizes the California ISO's model processes that leverage CIM for an expedited model integration into its EMS and Market applications to meet the organization's overall reliability and business objectives. The presentation will also cover challenges overcome, lessons learned and efficiencies gained in the California ISO's implementation of CIM in its business processes.