

Reactive Power Requirements for Asynchronous Resources

Comments of Iberdrola Renewables

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Iberdrola Renewables appreciates the opportunity to comment on the California ISO's Reactive Power Requirements for Asynchronous Resources Issue Paper. We understand the CAISO's need to ensure sufficient reactive power support with the increase in asynchronous generation and we support a uniform requirement for asynchronous resources to provide reactive power capability and voltage control. Iberdrola Renewables appreciates and supports the CAISO's decision to adopt these requirements on a going forward basis and to exempt existing facilities and generators already in the CAISO interconnection process. We are concerned, however, with the CAISO's proposed requirement for asynchronous generators to provide full reactive support at any voltage from 0.9 – 1.1 per unit. Iberdrola Renewables operates in other organized markets in the United States and reactive support for a 0.95 – 1.05 per unit voltage range is standard. From our experience in these other markets, we believe the .95 – 1.05 is sufficient to ensure reliability operation under a wide variety of grid conditions. It is important to note that while the design requirement in these other markets is 0.95 – 1.05, the facilities are still able to provide some reactive support at voltages outside of this range. Adopting a *design* requirement at this wider voltage range will require substantial additional investment in supplemental equipment with little, if any, incremental reliability benefit. If the CAISO moves forward with the wider voltage range proposal, Iberdrola Renewables recommends the capability beyond the 0.95 – 1.05 per unit voltage range be voluntary and be eligible for compensation in the market.