



Federal Energy Regulatory Commission

February 15, 2018

Open Commission Meeting

Staff Presentation

Item E-2

"Good morning Mr. Chairman and Commissioners,

"Item E-2 is a draft Final Rule on Essential Reliability Services and the Evolving Bulk-Power System, focusing on Primary Frequency Response. The draft final rule reforms the Commission's rules and regulations and adopts requirements to ensure that interconnecting generating facilities are capable of providing primary frequency response. Primary frequency response actions are needed to arrest abnormal frequency deviations and ensure that system frequency remains within acceptable bounds.

"In advance of this draft Final Rule, the Commission and Commission Staff worked extensively to gather information regarding the status of frequency response and the bulk electric system. In February 2016, the Commission issued a Notice of Inquiry on the need for reforms to the Commission's regulations related to primary frequency response. In November 2016, the Commission issued a Notice of Proposed Rulemaking that proposed revisions to the pro forma large and small generator interconnection agreements. These revisions were designed to address the potential reliability impact of the evolving generation resource mix, and to ensure that the relevant provisions of the pro forma interconnection agreements are just, reasonable, and not unduly discriminatory.

"In the Notice of Inquiry, the Commission explained that in recent years, the nation's electric supply portfolio has transformed to a point where fewer resources may now be providing primary frequency response than when the Commission considered this issue in other relevant proceedings. In addition to the concerns associated with the nature and operational characteristics of the evolving resource mix is the uncertainty of whether a resource configured to provide primary frequency response is willing and able to offer such a service when called upon to do so. While almost all existing synchronous resources and some non-synchronous resources have governors or equivalent control equipment capable of providing primary frequency response, generator owners and operators can independently decide whether generating units provide primary frequency response.

"Considering the significance of primary frequency response to the reliable operation of the Bulk-Power System, the draft Final Rule adopts the core proposals of the Notice of Proposed Rulemaking by amending the pro forma large and small generator interconnection agreements to require newly interconnecting generating facilities, both synchronous and non-synchronous, to install, maintain, and operate equipment capable of providing primary frequency response as a condition of interconnection. Also, the draft Final Rule establishes certain minimum, uniform operating requirements in the pro forma large and small generator interconnection agreements, including maximum droop and deadband parameters and provisions for timely and sustained primary frequency response.

"The reforms in the draft Final Rule address the Commission's concerns regarding the decline of Interconnection frequency response as well as concerns that the frequency response provisions in the existing pro forma large generator interconnection agreement are too limited because they apply only to synchronous generating facilities. The reforms also account for recent technological advancements enabling new non-synchronous generating facilities to have primary frequency response capabilities. Further, the reforms adopted here address potentially unduly discriminatory and preferential impacts by revising both the pro forma large and small generator interconnection agreements to impose comparable requirements on both new large and small generating facilities.

"The requirements will apply to newly interconnecting generating facilities that execute, or request the unexecuted filing of a large or small generator interconnection agreement on or after the effective date of the draft Final Rule. While generally excluded from the requirements of the draft Final Rule, existing generating facilities will become subject to the new requirements by taking any action that

requires the submission of a new interconnection request that results in the filing of an executed or unexecuted interconnection agreement on or after the effective date.

“The draft Final Rule does not apply to a subset of combined heat and power facilities, and also exempts generating facilities regulated by the U.S. Nuclear Regulatory Commission. Also, the draft Final Rule addresses the unique physical and operational characteristics of electric storage resources by requiring transmission providers to include in their pro forma large and small generator interconnection agreements specific accommodations and limitations on when electric storage resources will be required to provide primary frequency response. In particular, newly interconnecting electric storage resources will be required to specify an operating range representing the minimum and maximum state of charge over which the resource will provide primary frequency response. Finally, the Commission is not imposing a headroom requirement, nor is it mandating compensation for compliance with the requirements of the draft Final Rule.

“Thank you, this concludes our presentation.”