Consideration of Issues and Directives

MOD C Project (Standards MOD-016 through MOD-021)

Project YYYY-##.# - Project Name		
Issue or Directive	**Source**	**Consideration of Issue or Directive**
1232. Supported by many commenters, **the Commission directs the ERO to modify MOD-016-1 and expand the applicability section to include the transmission planner, on the basis that under the NERC Functional Model the transmission planner is responsible for collecting system modeling data, including actual and forecast load, to evaluate transmission expansion plans**. We disagree with EEI that this Reliability Standard should not be applied to the transmission planner because load-related data for controllable DSM is not only needed for distribution and transmission operations, but is also necessary for the transmission planner to take controllable DSM into account in planning the transmission system. Requirement R1.1 relates to data submittal, and requires data to be consistent with that supplied for the TPL-005 and TPL-006 standards, which clearly apply to transmission planners. We approve the ERO's definition in the glossary of DSM as "all activities or programs undertaken by a Load-Serving Entity or its	FERC Order 693	MOD-016-1.1 Issues: 1. Assign to a single entity 2. Flexibility to cover different models (PJM forecasts – MISO does not) 3. DSM – different categories Okay to add Trans Planner

Project YYYY-##.# - Project Name		
Issue or Directive	**Source**	**Consideration of Issue or Directive**
customers to influence the amount or timing of electricity they use." Only activities or programs that meet the ERO definition, with the modification directed below, may be treated as DSM for purposes of the Reliability Standards. Recognizing the potential role that industrial customers who do not take service through an LSE and load aggregators, for example, may play in meeting the Reliability Standards, we direct the ERO to modify the definition of DSM. Specifically, we direct the ERO to add to its definition of DSM "any other entities" that undertake activities or programs to influence the amount or timing of electricity they use without violating other Reliability Standard Requirement.		
1232. Supported by many commenters, the Commission directs the ERO to modify MOD-016-1 and expand the applicability section to include the transmission planner, on the basis that under the NERC Functional Model the transmission planner is responsible for collecting system modeling data, including actual and forecast load, to evaluate transmission expansion plans. We disagree with EEI that this Reliability Standard should not be applied to the transmission planner because load-related data for controllable DSM is not only needed for distribution and transmission operations, but is also necessary for the	FERC Order 693	MOD-016-1.1 Issues: 1. Assign to a single entity 2. Flexibility to cover different models (PJM forecasts – MISO does not) 3. DSM – different categories Modify DSM definition

Project YYYY-##.# - Project Name		
Issue or Directive	**Source**	**Consideration of Issue or Directive**
transmission planner to take controllable DSM into account in planning the transmission system. Requirement R1.1 relates to data submittal, and requires data to be consistent with that supplied for the TPL-005 and TPL-006 standards, which clearly apply to transmission planners. We approve the ERO's definition in the glossary of DSM as "all activities or programs undertaken by a Load-Serving Entity or its customers to influence the amount or timing of electricity they use." Only activities or programs that meet the ERO definition, with the modification directed below, may be treated as DSM for purposes of the Reliability Standards. Recognizing the potential role that industrial customers who do not take service through an LSE and load aggregators, for example, may play in meeting the Reliability Standards, **we direct the ERO to modify the definition of DSM. Specifically, we direct the ERO to add to its definition of DSM "any other entities" that undertake activities or programs to influence the amount or timing of electricity they use without violating other Reliability Standard Requirement.**		Susan M to reply on "any other entities"
1249. **The Commission also directs the ERO to modify the Reliability Standard to require reporting of temperature and humidity along with peak load**	FERC Order 693	MOD-017-0.1 Issues:

Project YYYY-##.# - Project Name		
Issue or Directive	**Source**	**Consideration of Issue or Directive**
because actual load must be weather normalized for meaningful comparison with forecasted values.[361] In response to MidAmerican's observation that it sees little value in collecting this data, we believe that collecting it will allow all load data to be weather-normalized, which will provide greater confidence when comparing data accuracy, which ultimately will enhance reliability. As a result, we reject Xcel's proposal that the standard be revised to include only the generic term "peak producing weather conditions" because it is too generic for a mandatory Reliability Standard.		1. Regional variance 2. What if entity does not use temperature to forecast 3. How to weather normalize (different methods) 4. Which number should be used (i.e., normalized, reconstituted, etc.)
1250. We also reject Alcoa's proposal that the reporting of temperature and humidity along with peak loads should apply only to load that varies with temperature and humidity because it essentially is a request for an exemption from the requirements of the Reliability Standard and should therefore be directed to the ERO as part of the Reliability Standards development process. We agree, however, with APPA that certain types of load are not sensitive to temperature and humidity. **We therefore find that the ERO should address Alcoa's concerns in its Reliability Standards development process.**	FERC Order 693	MOD-017-0.1 Issues: 1. How to address non-weather sensitive load

Project YYYY-##.# - Project Name		
Issue or Directive	**Source**	**Consideration of Issue or Directive**
1251. **The Commission adopts the NOPR proposal directing the ERO to modify the Reliability Standard to require reporting of the accuracy, error and bias of load forecasts compared to actual loads with due regard to temperature and humidity variations.** This requirement will measure the closeness of the load forecast to the actual value. We understand that load forecasting is a primary factor in achieving Reliable Operation. Underestimating load growth can result in insufficient or inadequate generation and transmission facilities, causing unreliability in real-time operations. Measuring the accuracy, error and bias of load forecasts is important information for system planners to include in their studies, and also improves load forecasts themselves.	FERC Order 693	MOD-017-0.1 Issues: 1. Bias – Is there different ones used Susan M will look at "bias"
1252. The Commission agrees with APPA that accuracy, error and bias of load forecasts alone will not increase the reliability of load forecasts, and, as a result, will not affect system reliability. Understanding of the differences without action based on that understanding would not change anything. Therefore, **we direct the ERO to add a Requirement that addresses correcting forecasts based on prior inaccuracies, errors and bias.**	FERC Order 693	MOD-017-0.1 Issues: 1. Who is responsible for this 2. Is this already being done 3. Inaccuracies – tolerance level for everyone 4. Load forecast uncertainty 5. Optimizing
1255. **We agree with FirstEnergy that transmission**	FERC Order	MOD-017-0.1

Project YYYY-##.# - Project Name		
Issue or Directive	**Source**	**Consideration of Issue or Directive**
planners should be added as reporting entities, and direct the ERO to modify the standard accordingly. We agree that in the NERC Functional Model, the transmission planner is responsible for collecting system modeling data including actual and forecast demands to evaluate transmission expansion plans.	693	Issues: 1. Need to narrow down 2. Who is responsible for preparing
1256. The Commission disagrees in general with MISO's recommendation to allow some exceptions to the requirement to provide hourly demand data. However, the metering for some customer classes may not be designed to provide certain types of data. **The Commission therefore directs the ERO to consider MISO's concerns in the Reliability Standards development process.**	FERC Order 693	MOD-017-0.1 Issues: 1. Must be flexible
1265. Regarding TAPS's concern that small entities should not be required to comply with MOD-018-0 because their forecasts are not significant for system reliability purposes, **the Commission directs the ERO to address this matter in the Reliability Standards development process.**	FERC Order 693	MOD-018-0 Issues: 1. Is this a non-issue now 2.
1276. **The Commission adopts the NOPR proposal directing the ERO to modify this standard to require**	FERC Order 693	MOD-019-0.1

Project YYYY-##.# - Project Name		
Issue or Directive	**Source**	**Consideration of Issue or Directive**
reporting of the accuracy, error and bias of controllable load forecasts. This requirement will enable planners to get a more reliable picture of the amount of controllable load that is actually available, therefore allowing planners to conduct more accurate system reliability assessments. The Commission finds that controllable load can be as reliable as other resources, and therefore should also be subject to the same reporting requirements. Although we recognize that verifying load control devices and interruptible loads may be complex, we do not believe that it is overly so. **Further, we believe that the ERO, through its Reliability Standards development process can develop innovative solutions to the Commission's concern.** We also note that EEI is concerned about such testing at times of peak load. We clarify that we are not requiring the testing to be conducted at peak load conditions. Consequently, we reject the proposals of EEI, FirstEnergy and International Transmission to discard the requirement for reporting of the accuracy, error and bias of controllable load forecasts.		Issue: 1. Is this already being done (i.e., DADS)
1277. **We direct the ERO to include APPA's proposal in the Reliability Standards development process to add a new requirement to MOD-019-0 that would oblige resource planners to analyze differences between actual**	FERC Order 693	MOD-019-0.1 Issue: 1. An entity needs to have a process to do

Project YYYY-##.# - Project Name		
Issue or Directive	**Source**	**Consideration of Issue or Directive**
and forecasted demands for the five years of actual controllable load and identify what corrective actions should be taken to improve controllable load forecasting for the 10-year planning horizon.		2. All entities do not need to be the same
1287**. We adopt the proposal to direct the addition of a requirement for reporting of the accuracy, error and bias of controllable load forecasts because we believe that reporting of this information will provide applicable entities with advanced knowledge about the exact amount of available controllable load, which will improve the accuracy of system reliability assessments.** The Commission finds that controllable load in some cases may be as reliable as other resources and therefore must also be subject to the same reporting requirements. We recognize that determining the precise availability and capability of direct load control is a difficult management and customer relations exercise, but we do not believe that it will be overly so. **Further, we believe that the ERO, through its Reliability Standards development process can develop innovative solutions to the Commission's concern.** Regarding LPPC's suggestion that this requirement should be region-specific and should only apply to entities that separately forecast interruptible loads, we note that if a region does	FERC Order 693	MOD-020-0 Issue: 1. Is this already being done (i.e., DADS)

Project YYYY-##.# - Project Name		
Issue or Directive	**Source**	**Consideration of Issue or Directive**
not forecast interruptible loads, this Reliability Standard does not apply.		
1298. We agree with FirstEnergy and SMA that standardization of principles on reporting and validating DSM program information will provide consistent and uniform evaluation of demand response to facilitate system operator confidence in relying on such resources, which will further increase accuracy of transmission system reliability assessment and consequently enhance overall reliability. We direct the ERO to modify this Reliability Standard to allow resource planners to analyze the causes of differences between actual and forecasted demands, and to identify any corrective actions that should be taken to improve forecasted demand responses for future forecasts. **Therefore, we adopt the NOPR proposal and direct the ERO to modify MOD-021-0 by adding a requirement for standardization of principles on reporting and validating DSM program information.**	FERC Order 693	MOD-021-1 Issue: 1. Does DADS cover this
MOD-016-1.1 Standard		Issue: 1. References other standards 2. Need to remove RRO and Requirement R2 3. Change Planning Authority to Planning Coordinator

Project YYYY-##.# - Project Name		
Issue or Directive	**Source**	**Consideration of Issue or Directive**
MOD-017-0.1 Standard		Issue: 1. Who is responsible for this 2. What does the term “prior year” mean 3. Report to who 4. Modify Requirement R1.3 (add “as required”)
MOD-018-0 Standard		Issue: 1. Can this be combined into MOD-016-1.1 2. Is this really two separate entity’s
MOD-019-0.1 Standard		Issue: 1. Who is responsible for this
MOD-020-0 Standard		Issue: 1. Reporting to operations
MOD-021-1 Standard		Issue: 1. Combine this into MOD-016-1.1
Combine MOD-016 through MOD-021 into two standards		Actual reporting standard • MOD-016 • MOD-017 R1.1 & R1.2 • MOD-018 Forecast reporting standard • MOD-016 • MOD-017 R1.3 & R1.4 • MOD-018

Project YYYY-##.# - Project Name		
Issue or Directive	**Source**	**Consideration of Issue or Directive**
		• MOD-019 • MOD-020 • MOD-021