

Reliability is a shared obligation between federal, regional and state entities. There are distinct legal and jurisdictional boundaries between these entities that are generically attributed to “wholesale” authority and “retail” authority. While responsibilities in these two areas are legally distinct, they are interrelated as “wholesale” and “retail” need to work in harmony to ensure reliability. This Memorandum of Understanding (MOU) is meant to memorialize the areas of reliability that PJM and the states are responsible for based upon their already-defined jurisdictional boundaries, and to further recommend both PJM and state action to ensure harmony between wholesale and retail actions that will cost-efficiently preserve reliability.

Delineation of Roles To Ensure Resource Adequacy

Establishing Appropriate Price Formation & Provision of Regional Capacity

PJM	States
▶ Commits, to the extent the states continue to desire PJM to do so, to continue to operate open, transparent, competitive wholesale mechanisms with the intent to produce price signals that accurately reflect the marginal cost of maintaining resource adequacy to assist investors with making new supply decisions and to inform bilateral contracting and self-supply decisions; ▶ Commits to conduct competitive mechanisms that allow for the efficient use of regional capacity where transient, modest excesses and deficiencies in capacity across market participants may exist; ▶ Commits to continue to recognize the role of states in resource adequacy under FPA section 201(b), including efforts to maintain frameworks such as the Fixed Resource Requirement for a Load Serving Entities’ self-provision of resource adequacy;	▶ Commit to enable and support long-term commitments (e.g., >5 years) between suppliers within their respective jurisdictions and generation that is either physically deliverable or deliverable through voluntarily funding transmission upgrades orchestrated through PJM – to service load and protect customers from potential wholesale spot market volatility; ▶ Should endeavor as each individual state or a defined collection of states to achieve and maintain load and supply parity on an Unforced Capacity basis by June 1, 2035, using PJM’s latest projections of future Effective Load Carrying Capability ratings posted on the PJM website, through a combination of arrangements such as self-supply, contracting, mandating “bring your own capacity” arrangements and a host of other potential options;

Managing Large Load Growth

PJM	States
▶ Commits to facilitate Large Load growth within the PJM region while preserving system reliability during periods of capacity shortages; ▶ Commits to establish, at the interstate bulk electric system-level, a wholesale product of interim resource adequacy service for the rationed provision of resource adequacy services until such time as sufficient capacity exists to provide firm resource adequacy service; ▶ Commits to establish Reliability Backstop Procurements, or other similar mechanisms codified in Attachment DD of the PJM Open Access Transmission Tariff at the request of states and with the approval of FERC, to allow for the procurement of additional capacity where shortfalls have been identified and risk to system reliability is credible; ▶ Commits to the creation and curation of a regional Large Load registry for the recording of critical site data that can enhance accountability, transparency, and coordination related to areas such as future capacity needs, Large Load customer capacity commitments, Large Load customer curtailment priority, and the application of cost allocation assignments;	▶ Commit to establish programs that require new Large Load interconnecting to its jurisdictional facilities to build new capacity to meet its Unforced Capacity requirements ▶ Commit to establish retail curtailment programs that will facilitate interim resource adequacy service; ▶ Commit to establish, prior to the commencement of any applicable delivery year, retail cost allocation frameworks that allocate retail electric costs to those retail customers causing the need for the execution of a Reliability Backstop Procurement;

Assessing Resource Adequacy Needs

PJM	States
▶ Commits to annually deliver a 20-year load forecast, inclusive of retail Large Load interconnections, which will be used for identifying generation and transmission infrastructure needs; ▶ Commits to conduct resource adequacy analysis for the PJM region, including a reserve requirement study, to identify the future resource adequacy Reliability Requirements for the region; ▶ Commits to conduct resource accreditation for the PJM region – on a resource-specific and class-average basis – to objectively identify the statistical resource adequacy contribution of eligible supply resources; ▶ Commits to conduct studies for the relevant delivery year that determine the import capability of Locational Deliverability Areas within the Control Area, as such Locational Deliverability Areas are defined and may change from time to time; ▶ Commits to ensure, within the relevant delivery year for the entire PJM region that: Capacity Resources meet their Capacity Performance obligations; Capacity Resources meet their testing requirements; Capacity Resource outages are tracked and maintained; and that Capacity Resources arrange qualified replacement capacity, where applicable, or are imposed applicable penalties;	▶ Commit to avail themselves of rights afforded them within PJM Business Process Manual 19 of PJM's load forecasting process where state public utility commissions may engage with their jurisdictional electric utilities who submit retail Large Load interconnections and projections to PJM for development of such load forecasts that may result in the identification of generation and transmission infrastructure needs; ▶ Commit to annually prepare a Resource Adequacy Needs Report in which each state utility commission will indicate to PJM its projected load growth; identifiable new Large Load additions; new generation additions; generation retirements; net position; and any information related to current siting or permitting timelines for these facilities;

Facilitating Entry of New Supply

PJM	States
▶ Commits to conducting the on-time study of interconnection requests for new generation or long-term transmission service to ensure that the delivery of resources occurs in a safe and reliable manner; ▶ Commits to conduct the study of requesting deactivating generation resources to identify needed transmission upgrades to support the reliable transmission of electricity and, to the extent required, will extend Reliability Must-Run agreements to deactivating Generation Owners to extend the operation of the facility where such required transmission upgrades are otherwise unable to be completed before the requested deactivation date;	▶ Shall endeavor to process and complete their determinations of new generation permitting, siting, and Certificate of Public Convenience and Necessity (or equivalent) within a one-year cycle or pursuant to already-prescribed state statutory deadlines; ▶ Commit to <u>not</u> undertake actions that force retirement without PJM studying reliability and financial impacts of such retirement; and will not hinder the continued operation of existing generation without identifying that adequate replacement Unforced Capacity exists;

Transmission Planning

Identifying Regional Transmission Needs

PJM	States
Commits to conduct an annual transmission planning process that ensures such infrastructure is planned based on future expectations of load and generation;	- Shall endeavor to process and complete new greenfield transmission lines' Certificate of Public Convenience and Necessity (or equivalent) within two years of application or pursuant to already-prescribed state statutory deadlines, and within one year for all other transmission Certificate of Public Convenience and Necessity (or equivalent) applications or pursuant to already-prescribed state statutory deadlines; - Commit to respect PJM's need and solution determinations under the federal preemption doctrine, with states holding authority over route examination and the exercise over all siting and permitting authority;