



PJM Capacity Market Fuel Assurance Accreditation

RASTF/CIFP Meeting
June 28, 2023

- Using a revised ELCC accreditation paradigm, add accreditation factors to effectively value resources which commit to enhanced fuel security capital investment.
- Recognize and incent the additional level of reliability that can be obtained through investment in fuel security measures
- Initial focus is on natural gas generation during the winter months due to gas pipeline capacity constraints, the inherent just in time delivery characteristics of natural gas, and lack of onsite storage capability, however accreditation model and attestations can also be used for other fuel types with on-site fuel.

- This effort is specifically targeted at the forward capacity market. Through accreditation, PJM seeks to ensure that units with fuel security arrangements in place for the delivery year receive recognition for their investments and arrangements in determining their contribution to resource adequacy.
- PJM recognizes that the real time operations, scheduling issues and coordination with the gas nomination cycle are a related *key component* of fuel security.
- PJM commits to timely address these real time gas-electric operational issues, to include reforms in place in operations that complement the forward accreditation reforms in the capacity market through the EGCSTF meetings.
- These scheduling changes need to be in place well before the CIFP impacted delivery years.

Establish three fuel assurance categories that clearly define the level of fuel delivery security that the generator is bringing into the capacity market

- Dual fuel
- Single Fuel - Firm Transportation
- Single Fuel – Non Firm

Require generation owners to provide signed attestation* that the fuel arrangements of the units that they are bidding into the forward capacity market will fall into one of the above three categories

Provide an opportunity for unit owners to ‘jump the class’ and gain a higher accreditation based on their commitments to install dual fuel or purchase firm transportation.

*Additional detail on subsequent slides

- *Attestation* – PJM obtaining information in order to categorize levels of fuel security:
 - Prior to auction, resource owner officer level commitment that secure fuel arrangements will be in place for the delivery year
 - Resource owners that cannot commit to secure fuel arrangements 3 years out remain in Tier III but are recognized in the next auction when they can exercise their firm transportation contract renewal rights
 - Prior to delivery year, resource owner provides attestation with details (contract terms, dual fuel implementation, etc.)
- *Accreditation* – Use of ELCC applied to each fuel assurance tier to assign capacity value for that level of fuel security



Fuel Assurance Categories – Natural Gas

Tier	Unit Fuel Assurance Category	Description of Fuel Assurance Category	Requirements
Tier I	Dual Fuel	<p>Unit can start up and operate independently on each fuel type up to its maximum capacity level during the period November 1 through March 31 for each year in which it is participating in the capacity market.</p> <p>Additionally, units in this Tier I category must be able to operate on their secondary, onsite fuel, for a minimum of 48 hours when they are dispatched by PJM.</p>	<p>Unit owner must demonstrate through attestation, and through additional supporting documentation and testing to verify and validate the ability to meet this level of service.</p> <ol style="list-style-type: none"> 1. attest that you'll have it in place by the DY 2. attest and demonstrate project plan, documentation, etc. 3. must have it in place and working at the time of the auction
Tier II	Gas-Only Firm Transportation Capacity	<p>Unit has or will have at the beginning of the first capacity delivery year, a Firm pipeline transportation contract from receipt to delivery point and this contract is in effect, at a minimum, during the period November 1 through March 31 for each year in which it is participating in the capacity market.</p>	<p>Unit owner required to provide the proposed attestation and supporting documentation of pipeline transportation contracts which demonstrate the required firm delivery contract for the full capacity commitment supporting this Tier II selection. In lieu of a firm contract directly with a pipeline, a bundled firm delivered gas service through a third party marketer or asset manager, which provides an equal or greater level of firm gas delivery, can support inclusion in Tier II.</p>
Tier III	Gas-Only Interruptible Transportation	<p>Gas delivery to the unit is fully interruptible during the winter “seasonal” period for each year in which it is participating in the capacity market.</p>	N/A

Resource Obligation

- Unit owner selecting Tier I or Tier II, commits that it will have the appropriate fuel security arrangements in place commensurate with their selected fuel assurance category.
- Attestation includes confirmation that the unit's selected fuel security arrangement must be in place for the portion of the year running from November 1 through March 31, at a minimum. Additionally, units in the Tier I category must be able to operate on their secondary, onsite fuel, for a minimum of 48 hours when dispatched by PJM.

Defining Firm Transportation

- PJM is not dictating a specific service to be obtained but seeks a showing of intended arrangements that will provide firmer transportation arrangements (e.g. no notice service, access to storage facilities etc.) and a higher service prioritization level on the respective delivery pipeline(s).
- Broad definition of firm transportation:
 - ***“(T)hose contractual and tariffed arrangements that provide for a level of transportation service that is not subject to interruption for any reason other than a Force Majeure event as detailed in the applicable tariffs of the interstate natural gas pipeline and is entitled to the highest delivery priority consistent with the natural gas pipeline’s tariffs.”***