

## HYBRID RESOURCES MARKET MODEL SELECTION

### PROBLEM / OPPORTUNITY STATEMENT

A Mixed Technology Facility (MTF)<sup>1</sup> is able to operate in PJM Markets as either one Hybrid Resource or as multiple co-located resources. A Hybrid Resource is where different technologies at one Point of Interconnection (POI) operate as one market unit. A common example of this is a solar + battery hybrid. A co-located resource is simply an independent market unit that shares a POI with another independent market unit.

Typically, the Market Seller of a MTF may elect either the Hybrid Resource or co-located resource classification following the rules and requirements of the RAA Schedule 9.2 for capacity resources and Manual 11 for resources participating in the Energy and Ancillary Services Markets. Once elected, the classification must be the same across all PJM Markets.

The existing requirement that a facility that participates in the capacity market as a Hybrid Resource must *also* operate as a Hybrid Resource in the Energy and Ancillary Services Markets is presenting challenges. Operating a Hybrid Resource is very complex and may not be viable in certain situations. PJM has heard from stakeholders that coordinating two technologies to operate as a single market unit is technically difficult. Moreover, where different components of a MTF have different offtakers, the hybrid model is not practical. This is because separating out and assigning the appropriate credits and charges for what is essentially one market unit and has one market settlement is very difficult.

The requirement to maintain the same classification is typically not a problem because a MTF that cannot or does not desire to combine two technologies into one market unit may simply choose to operate in PJM Markets as separate co-located resources. However, this is *not* the case for project going through Surplus Interconnection Service (SIS). Because the surplus resource cannot obtain its own CIRs through SIS, becoming a Hybrid Resource with the existing project at the POI is the *only* path for the surplus project to obtain capacity value today. For example, a battery that is being added to a POI with solar must be accredited as a Hybrid Resource in order to leverage the solar resource's CIRs and increase the UCAP of the POI.

PJM's requirement that these projects operate as a Hybrid Resource, particularly in the Energy and Ancillary Services Markets, is presenting a potentially insurmountable challenge for SIS projects and limiting SIS as a pathway for PJM to obtain much-needed capacity that can come online more rapidly. Moreover, the rule is inconsistent with how non-MTF are treated. Generally, PJM permits one capacity market unit to be represented by multiple units in the Energy and Ancillary Service Markets.

Given the abundant interest in leveraging SIS to provide additional UCAP to PJM by, for example, adding batteries to solar facilities, and consistent with PJM's stated objective in its December 2024 filing amending its SIS rules to "secure another tool to expand generation on the system in order to address the reliability challenges"<sup>2</sup>, PJM should review its market rule requiring MTF that choose to participate in the capacity market as a Hybrid Resource to also operate as hybrids in the Energy and Ancillary Services Markets.

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<sup>1</sup> A MTF is a facility with multiple technologies behind one Point of Interconnection.

<sup>2</sup> PJM Transmittal Letter in ER25-778: [https://elibrary.ferc.gov/eLibrary/filelist?accession\\_number=20241220-5253&optimized=false](https://elibrary.ferc.gov/eLibrary/filelist?accession_number=20241220-5253&optimized=false)