

GADS Guidelines for Energy Storage Resources (ESR)

Introduction

With the implementation of Effective Load Carrying Capability (ELCC) in the 2023/2024 Delivery Year Limited Durations Resources including Energy Storage Resources (ESR) and an ESR component of a Hybrid Resource must have an EFORD calculated which will be used as their Performance Adjustment in the Accredited UCAP calculation. Therefore Energy Storage Resources participating in the capacity market must submit monthly GADS data to PJM. In order to help facilitate this data submittal, the following guidelines have been created.

GADs Data

The PJM eGADs tool has been updated to allow event data to be submitted for Energy Storage Resources which includes adding a new single cause code (9996 – Battery Outage). This cause code is intended to be used anytime the unit is on an outage or derate until cause codes specific to ESRs are published by NERC. This will allow PJM to accept outage data and therefore calculate an EFORD for ESRs.

Outages (card 97)

Outages for energy storage resources should follow the same logic as outlined in the NERC Data Reporting Instructions (DRI)¹ for conventional units and therefore an outage occurs anytime an active unit is not synchronized to the grid system and not in a reserve shutdown state.

A derate exists whenever a unit is limited to a power level that is less than the unit’s net maximum capacity in which for batteries the NMC should equal the Effective Nameplate Capacity used in ELCC.

All event types (Planned/Maintenance/Forced) must be submitted to PJM via the eGADS tool by the 20th of the following month and should closely follow outages submitted in eDART².

Charging of an ESR is not considered an outage/derate and the unit should be reported as available.

Performance (card 95)

Performance data is required to allow the system to identify hours as available/unavailable or reserve shutdown hours which all impact the EFORD calculation.

Hours in which the unit is charging should be included in the pump hour field and therefore considered as available hours.

The Net Maximum Capacity (NMC) should be equal the Effective Nameplate Capacity as identified in the ELCC calculation.

The Net Dependable Capacity (NDC) should equal the NMC adjusted for ambient conditions in the month.

¹ [NERC DRI](#) outlines NERC data reporting instructions

² [PJM Manual 10](#) provides information on eDART reporting requirements.

Testing

Energy Storage Resources will be required to submit their capacity verification test into the eGADS tool which will be utilized for CIR retention.

Any capacity verification testing shortfalls on an ESR will require a derate to be entered into eGADS for the entire testing period, unless an out of period test or ENC reduction is entered prior to the end of the period. Cause code 9999 should be used in this circumstance.