

the Summer Average RPM/FRR Commitment as opposed to the RPM/FRR Commitment on the day of the event and performance will be aggregated to the zone and not the CAA or Performance Assessment Area.

Resource Compliance Position for a registration for a test is determined as the Nominated Load Reduction Value reported in the Load Response system minus the actual load reduction, where the Nominated Load Reduction Value is capped at the Summer Average RPM/FRR Commitment for such registration.

Summer Average RPM/FRR Commitment for a Demand Resource is the daily average of the RPM/FRR resource commitments for such Demand Resource from June 1st through September 30th of the Delivery Year. If multiple registrations are linked to a committed Demand Resource in the eRPM system, the Summer Average RPM/FRR Commitment for such Demand Resource is allocated to the registrations pro-rata based on the nominated load reduction value of the registrations.

For any Load Management test, a provider's net testing shortfall in a zone for a product type is calculated as the provider's Summer Average RPM/FRR Resource Commitments in such zone for a product type minus the actual zonal load reduction value achieved by the provider in such zone for such product type. A resource provider with a positive net testing shortfall in a zone for a product type (i.e., under compliance MWs in zone for a product type) will be assessed a Zonal Load Management Test Failure Charge.

8.9 Replacement Resources

Participants may specify replacement resources in order to avoid or reduce resource performance assessment shortfalls and the associated deficiency/penalty charges. Participants may not specify replacement resources in order to avoid or reduce performance assessment shortfalls and associated deficiency/penalty charges related to price responsive demand.

Replacement capacity for generation resources, Demand Resources, Energy Efficiency Resources, or Qualifying Transmission Upgrades committed to RPM may be specified via the eRPM system by entering a "Replacement Capacity" transaction after the EFORD for the Delivery Year has been locked in the eRPM system (November 30 prior to the Delivery Year), but before the start of the Delivery Day. However, upon a request to PJM made no later than three business days after a Delivery Day containing a Performance Assessment Hour, Replacement Capacity Transactions may be permitted retroactively effective with the Delivery Day provided such transaction meets the following criteria: (1) the replacement resource must have already been in the same sub-account as the resource being replaced on the Delivery Day, (2) the replacement resource must have been included in the same Performance Assessment Hours as the resource being replaced, (3) the replacement resource must have the same or better temporal availability characteristics as the resource being replaced, and (4) the replacement resource must be located in the same LDA (or a more constrained child LDA) as the resource being replaced. Such requests must be submitted to rpm_hotline@pjm.com and include the start date and end date, resource being replaced, replacement resource, and the desired change in Daily RPM Commitments (in UCAP terms) for the resource being replaced and product type (i.e., Base Generation, Base DR/EE, or Capacity Performance) of the commitment being replaced. [During this same](#)

three business day window, unit-specific bilateral transactions for available capacity which are may be permitted retroactively upon a request to PJM made no later than three business days after a Delivery Day containing a Performance Assessment Hour, provided the resource of the requested transaction being transacted was included in the Performance Assessment Hour.

Through the “Replacement Capacity” transaction functionality in eRPM, PJM will provide participants with a list of the available capacity for each generation or demand resource in their portfolio as well as a list of cleared buy bids from any Incremental Auction via the eRPM system and a list of resources with RPM Resource Commitments. Participants will have the ability to match a generation, Demand Resource, Energy Efficiency Resource or Qualifying Transmission Upgrade resource committed to RPM that they would like to replace with available capacity from a generation resource, demand resource, cleared buy bids in an Incremental Auction, or from Locational UCAP transactions. Effective with the 2019/2020 Delivery Year, available capacity from an EE Resource may be utilized to replace the commitment of only another EE Resource because such commitments are accompanied by the adjustment that is required to avoid double-counting of energy efficiency measures as described in section 2.4.5 of this manual.

The following are business rules that apply to Replacement Resources for Resources Committed to RPM:

- The start date and end date of the replacement must be specified.
- A Replacement Resource used to reduce a Demand Resource commitment shall be specified for no less than the balance of the Delivery Year. An available Demand Resource may only be used as a Replacement Resource when the start date of the Replacement Capacity transaction is from June 1 through September 30th unless the Demand Resource can demonstrate through the prior summer’s event or test compliance data that the Demand Resource met both its Summer Average RPM Commitment and the new daily RPM commitment level that would result if the Replacement Capacity transaction was approved.
- The desired change in Daily RPM Resource Commitments (in UCAP terms) for the resource being replaced and the replacement resource must be specified. The change in Daily RPM Resource Commitments cannot result in a negative value for the Daily RPM Resource Commitments for the resource being replaced. Effective for the 2016/2017 Delivery Year, the desired change in Daily RPM Resource Commitments (in UCAP terms) for the resource being replaced must also indicate the product type (i.e., Base Generation, Base DR/EE, or Capacity Performance) of the commitment being replaced.
- The replacement resource must be located in the same sub-account as the resource that is being replaced.
- The replacement resource must be located in the same LDA as the resource that is being replaced or reside in the Sink LDA of the Qualifying Transmission Upgrade being replaced.

- Resources located in a constrained LDA can serve as replacement capacity for a generation resource located in a less constrained parent LDA.
- The replacement resource must have the same or better temporal availability characteristics as the resource that is being replaced.
- Annual Resource commitments can only be replaced by available capacity from an Annual Resource, or by cleared Buy Bids for Annual Capacity, or by Locational UCAP originating from an Annual Resource
- Extended Summer DR commitments can only be replaced by available capacity from an Annual Resource or Extended Summer DR, or by cleared Buy Bids for Annual or Extended Summer Capacity, or by Locational UCAP originating from an Annual Resource or Extended Summer DR
- Limited DR commitments can only be replaced by available capacity from an Annual Resource, Extended Summer DR or Limited DR, or by cleared Buy Bids for Annual, Extended Summer or Limited Capacity, or by Locational UCAP originating from an Annual Resource, Extended Summer DR or Limited DR..
- Capacity Performance Resource commitments can only be replaced by available capacity from a capacity resource that is eligible to be committed as CP, or by cleared Buy Bids or Locational UCAP of the Capacity Performance product type..
- Base Capacity commitments on a Generation Resource can only be replaced by available capacity from a generation resource that is eligible to be committed as Base, available capacity from a capacity resource that is eligible to be committed as CP, or by cleared Buy Bids or Locational UCAP for Base Generation product type or Capacity Performance product type
- Base Capacity commitments on Demand Resource or Energy Efficiency Resources can be replaced by available capacity from a capacity resource that is eligible to be committed as Base or CP, or by cleared Buy Bids or Locational UCAP for Base Generation product type, Base DR/EE product type or Capacity Performance product type.
- If a generation, demand, or EE resource is used as replacement capacity, a decrease in the Daily RPM Resource Commitments for the resource that is being replaced will result and a corresponding increase in the Daily RPM Resource Commitments for the replacement generation, demand, or EE resource will result during the time period specified for replacement. A change in the Daily RPM Resource Commitments for a generation resource will result in a change in the Total Unit ICAP Commitment Amount for the generation resource.
- If cleared buy bids from an Incremental Auction or Locational UCAP transactions are used as replacement capacity, a decrease in the Daily RPM Commitments for the resource that is being replaced will result during the time period specified for replacement. A change in the Daily RPM Commitments for a generation resource will

result in a change in the Total Unit ICAP Commitment Amount for the generation resource.

Replacement capacity for Generation Capacity Resources, Demand Resources, Energy Efficiency Resources, or Qualifying Transmission Upgrades committed to RPM may be specified via the eRPM system by entering a “Replacement Capacity” transaction prior to the EFORd for the Delivery Year being locked in the eRPM system (earlier than November 30 prior to the Delivery Year), when the owner of the replaced resource provides transparent and verifiable evidence to support the expected final physical position of the resource at the time of request.

The following additional business rules apply to Replacement Resources for Resources Committed to RPM entered prior to the EFORd for the Delivery Year being locked in the eRPM system (earlier than November 30 prior to the Delivery Year):

- Requests shall be submitted in writing simultaneously to PJM rpm_hotline@pjm.com and the Independent Market Monitor rpmacr@monitoringanalytics.com documenting the reason for the early replacement.
- Acceptable reasons for early replacement include:
 - Generator Deactivation (properly noticed to PJM and posted to the website)
 - Withdrawal of queue position / cancellation of project (accompanied by written notification to PJM Interconnection Projects manager)
 - Delayed in-service date (accompanied by written notification to PJM Interconnection Projects manager)
 - Permanent departure of load used as a basis for an existing DR or EE resource at the time of commitment
- Generation replaced early may not be recommitted for the Delivery Year.
- DR/EE sites replaced early may not be registered or committed for the Delivery Year.
- If the replacement resource’s capacity is not affected by its outage rate, such as a cleared Incremental Auction Buy Bids, the Replacement Transaction can be completed at any time.

Replacement resources for Generation Capacity Resources, QTU, Energy Efficiency Resources, or Demand Resources committed to FRR Capacity Plan are specified by an FRR Entity through the update of the FRR Entity’s FRR Capacity Plan prior to the start of the Delivery Day. FRR Entities may update their FRR Capacity Plan to reduce the FRR Capacity Plan Commitment on the resource being replaced and increase the FRR Capacity Plan Commitment on a replacement resource. The change in the Daily FRR Capacity Plan Commitments for a generation resource will result in a change in the Total Unit ICAP Commitment Amount for the generation resource.