

# Fixed Resource Requirement Alternative - Overview



CCPPSTF  
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(54817341)

- Fixed Resource Requirement Alternative
  - Purpose of FRR Alternative
  - Participation Requirements
  - Capacity Obligation
  - FRR Capacity Plan
  - Locational Constraints
  - (Performance Assessments not covered)
  - **FRR requirements are defined in Schedule 8.1 of the Reliability Assurance Agreement (RAA).**

- Option to meet a **fixed** capacity resource requirement in contrast to RPM that includes a **variable** resource requirement.
- How it differs from RPM:
  - FRR LSE does not pay RPM Locational Reliability Charge
  - Capacity resources included in an LSE's FRR Capacity Plan do not receive RPM Resource Clearing Prices

To elect the FRR Alternative for an FRR Service Area, an LSE must notify FRR election FOUR months before the Base Residual Auction (BRA) for the first Delivery Year for which the FRR election is effective. The election shall:

- be for a minimum term of 5 consecutive Delivery Years (with some exceptions).
- demonstrate meeting the eligibility requirements.
- indicate intention to offer in any RPM auctions or to sell capacity to a direct or indirect purchaser who may use it in any RPM Auctions or as RPM replacement capacity.

- LSE may terminate its FRR election effective the DY following the minimum term of five consecutive DYs.
  - After termination the LSE will not be eligible to re-elect the FRR Alternative for five years.
- LSE may terminate its FRR election prior to five year commitment without penalty for any DY after the first DY of its five year commitment for which PJM is **required** to establish a separate VRR Curve (VRR Curve required for MAAC, EMAAC, and SWMAAC; LDA with  $CETL < 1.15 * CETO$ ; LDA that had a Locational Price Adder in any one or more of the three immediately preceding Base Residual Auctions).
- LSE may elect or terminate the FRR Alternative effective any Delivery Year in the event of a State Regulatory Structural Change as defined in the RAA.

- Obligation Peak Load of FRR Service Area
- Forecast Pool Requirement (FPR)
- Base Zonal FRR Scaling Factor
- Percentage of Internal Resources Required in an LDA

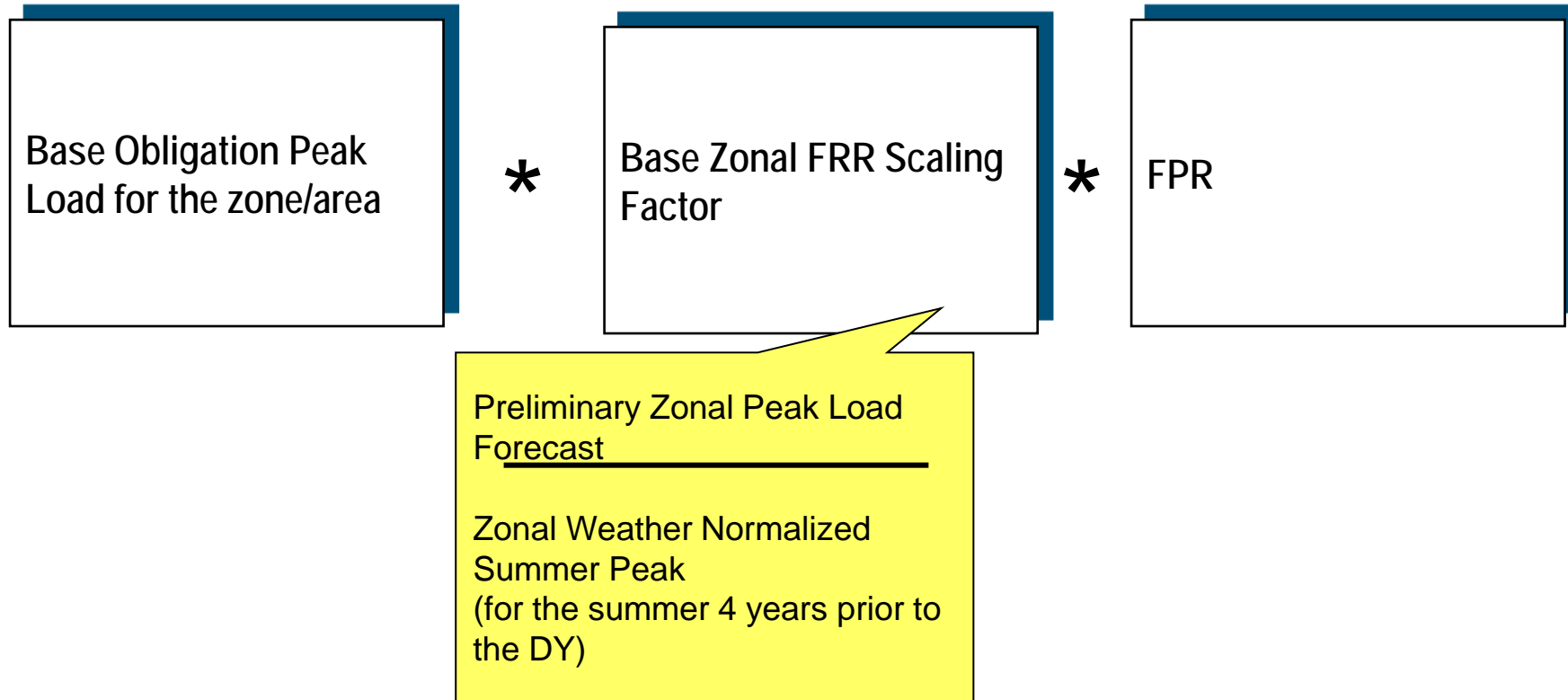
- FRR Service Area is a defined “area” within or external to a zone.
- Only one LSE shall serve the entire load in an FRR Service Area.
  - Part of the FRR Service Area load cannot be served under FRR.
- The EDC estimates the Obligation Peak Load for the FRR Service Area in their zone.

- The service territory of an IOU as recognized by state law, rule or order;
- The service area of a Public Power Entity or Electric Cooperative as recognized by franchise or other state law, rule, or order; or
- A separately identifiable geographic area that is:
  - bounded by wholesale metering, or similar appropriate multi-site aggregate metering, that is visible to, and regularly reported to, the Office of the Interconnection, or that is visible to, and regularly reported to an Electric Distributor and such Electric Distributor agrees to aggregate the load data from such meters for such FRR Service Area and regularly report such aggregated information, by FRR Service Area, to the Office of the Interconnection; and
  - for which the FRR Entity has or assumes the obligation to provide capacity for all load (including load growth) within such area. In the event that the service obligations of an Electric Cooperative or Public Power Entity are not defined by geographic boundaries but by physical connections to a defined set of customers, the FRR Service Area in such circumstances shall be defined as all customers physically connected to transmission or distribution facilities of such Electric Cooperative or Public Power Entity within an area bounded by appropriate wholesale aggregate metering as described above.



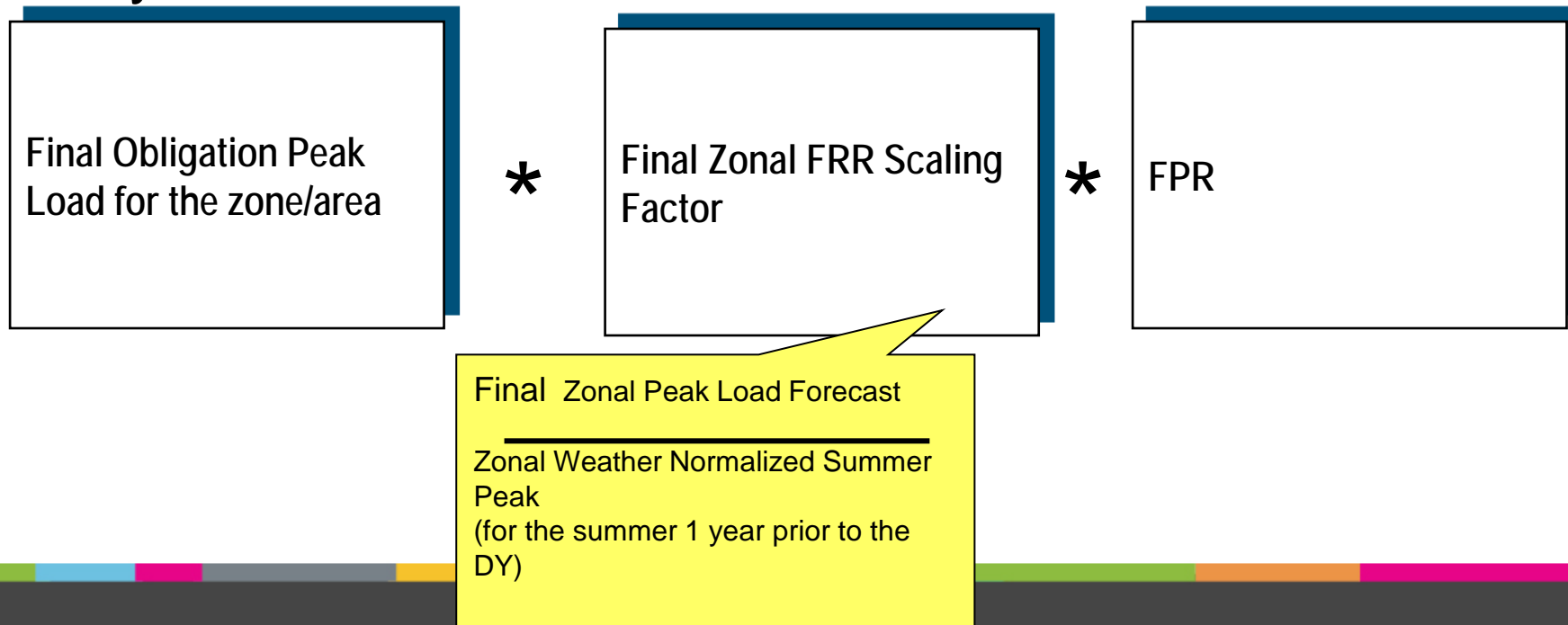
The load obligation is constant throughout the Delivery Year.

- Preliminary Daily Unforced Capacity Obligation



The load obligation is constant throughout the Delivery Year.

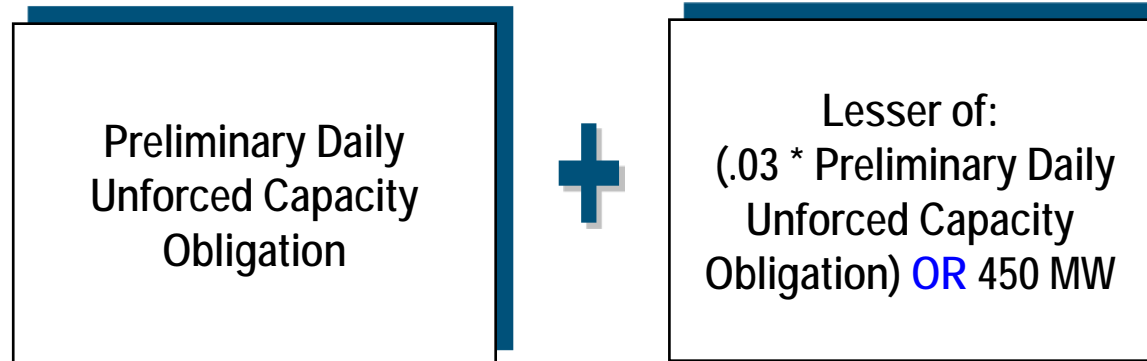
- Final Daily Unforced Capacity Obligation
  - The EDC estimates the Final Obligation Peak Load for the FRR Service Area in their zone by December 31 prior to the start of the Delivery Year.



- A minimum Percentage of Internal Resources Required in the FRR Capacity Plan is defined for a constrained LDA.
  - Internal capacity resources must be located in the LDA in which the FRR Service Area is located.
- An approved Qualified Transmission Upgrade may be used to reduce the Amount of Internal Capacity Required.
- Capacity Transfer Rights are implicitly allocated to the FRR LSE in the determination of the Percentage of Internal Resources Required in an LDA. An FRR LSE will not be eligible for any explicit CTRs.

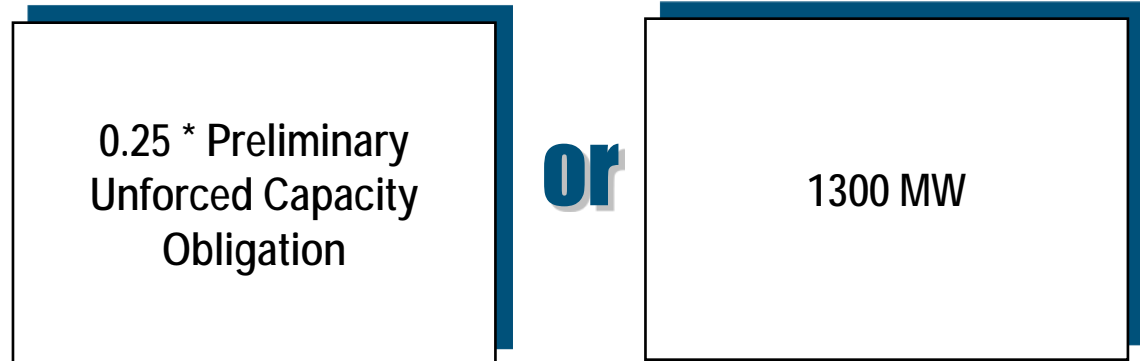
- Commitment of capacity to satisfy the daily zonal unforced capacity obligations including any applicable Percentage of Internal Resources Required in the LDA.
- If the LSE intends to sell capacity resources to a direct or indirect purchaser for use in RPM, the LSE must also maintain a Threshold Quantity in its Capacity Plan.

Threshold Quantity =



- If Threshold Quantity is not satisfied, FRR LSE cannot sell capacity in excess of the amount needed for its Capacity Plan to satisfy RPM obligations; however, they can sell such excess to outside PJM or to an FRR Entity.
- If Threshold Quantity is satisfied, FRR LSE may sell capacity in excess of its Threshold Quantity to satisfy RPM resources up to a Sales Cap Amount.

Sales Cap Amount = lesser of:



- Capacity rate information applicable to load serving entities in FRR service areas are posted on PJM's website at the request of the FRR LSE:  
<http://pjm.com/markets-and-operations/billing-settlements-and-credit/frr-lse-capacity-rates.aspx>
- APCO includes its formula rate as part of RAA Schedule 8.1, Appendix 2A