

The following items were added to ERPIV issue charge via Energy and Reserve Market Efficiency Issue Charge approved at the May MRC meeting

Key Work Activities

1. Provide education as it relates to the **current rules regarding reserve products, targets and uses.**
2. Provide education as it relates to the **current rules regarding the existing reserve markets.**
3. Provide education as it relates to **actions taken by PJM operators to maintain reliability that are not captured in market clearing prices.**
4. Determine whether enhancements can be made to the current market structure to improve
 - a. **the alignment of operational reserve needs with market clearing prices, and,**
 - b. **the overall efficiency and transparency of the energy and reserve markets.**
5. Determine whether enhancements can be made **to improve the alignment of operational reserve needs with market clearing prices by implementing market(s) for additional product(s).**
6. If enhancements are identified, implement the Consensus Based Issue Resolution process to assess the need for market rule changes.

Out of Scope Items

1. The use of a joint optimization as the method for determining market clearing prices.
2. The use of an operating reserve demand curve as the method for effectuating reserve shortages in market clearing prices.
3. Rules regarding the level of demand response capable of participating in the existing reserve markets.

Expected Deliverables

1. A set of enhancements that improves the overall efficiency of PJM's energy and reserve markets specifically including the alignment of operational reserve needs with market clearing prices.