Black Oak 500/138 kV #3 transformer [SPS]

- **Condition:**
  - Outage of the Hatfield-Black Oak (542) 500 kV line

- **Previous Result:**
  - Potential overload on the Black Oak 500/138 kV #3 transformer

- **Current Result:**
  - No overload on the Black Oak 500/138 kV #3 transformer

- **Existing Procedure:**
  - Upon the loss of the Hatfield-Black Oak (542) 500 kV line the SPS will operate as outlined in PJM Manual 03: Transmission Operations as Black Oak 500/138 kV #3 Transformer [SPS].

- **Proposed Procedure:**
  - Retire [SPS] and remove from PJM Manual 03: Transmission Operations
Black Oak Special Protection System

Area Major Transmission Facilities

Hatfield to Black Oak 500 kV
PJM Operating Procedure Description

Excerpt from the PJM Manual 3 : Transmission Operations
Black Oak 500/138kV #3 Transformer

Prevents overloads on the Black Oak #3 500/138 kV transformer by opening the #3 138 kV Low Side CB, BO-3, via relay upon the contingency as defined in Section 5.
Black Oak SPS, Black Oak Substation: Has been required due to overload conditions under contingency conditions.
Proposed SPS Retirement

- Based on present system conditions the retirement of the Black Oak #3 500/138 kV transformer SPS is being recommended.

- Primary drivers of proposal to retire SPS
  - The Black Oak 500/138 kV #3 transformer was rerated in 2012
  - 502 Junction-Loudoun 500 kV line, a.k.a. Trans-Allegheny Interstate Line (TrAIL), was placed in-service in May 2011
  - Generation retirements in PJM
Questions?