

Project 2008-02: Underfrequency Load Shedding (UFLS)

Industry Webinar September 11, 2014













- Opening comments and NERC Antitrust Guidelines
- UFLS project: background information
- FERC directive
- Proposed revisions to PRC-006-2
- Consideration of Independent Expert Review Project and Paragraph 81 recommendations
- UFLS project timeline
- Question & Answer (Q&A) session



UFLS Project: Background Information

- SAR outlines the <u>very limited</u> project scope...Revise PRC-006-1 to:
 - Address outstanding FERC directive
 - Review the standard to determine if any steady state modifications are appropriate (i.e., Paragraph 81 criteria and recommendations of the Independent Expert Review Project)
- UFLS team: Subset of existing UVLS team
- UFLS project is separate and distinct from UVLS project:
 - Different project timelines and posting schedules
 - Different project scope (UFLS work limited to FERC directive and steady-state modifications)





- FERC raised concern that PRC-006-1 does not specify how soon after an event would an entity need to implement corrections in response to any deficiencies identified in the event assessment under Requirement R11.
- FERC Order No. 763: "Notwithstanding NERC's comments, the Commission is not persuaded that Requirement R9 requires corrective action in accordance with a schedule established by the planning coordinator...Accordingly, we direct NERC to make that requirement explicit in future versions of the Reliability Standard. Within 30 days of the effective date of this Final Rule, NERC is directed to submit a compliance filing indicating how it plans to comply with this directive and a deadline for compliance." (Paragraph 48)



Drafting Team Proposal to Address FERC Directive

- Add one new Requirement (R15)
- Revise two existing Requirements (R9 and R10) to accommodate for new Requirement.



Proposed Revisions to PRC-006-1

R9 Each UFLS entity shall provide automatic tripping of Load in accordance with the UFLS program design and schedule for application-implementation, including any Corrective Action Plan, as determined by its Planning Coordinator(s) in each Planning Coordinator area in which it owns assets. [VRF: High][Time Horizon: Long-term Planning]



Proposed Revisions to PRC-006-1

R10

Each Transmission Owner shall provide automatic switching of its existing capacitor banks, Transmission Lines, and reactors to control over-voltage as a result of underfrequency load shedding if required by the UFLS program and schedule for application implementation, including any Corrective Action Plan, as determined by the Planning Coordinator(s) in each Planning Coordinator area in which the Transmission Owner owns transmission. [VRF: High][Time Horizon: Long-term Planning]



Proposed Revisions to PRC-006-1

R15 (new)

Each Planning Coordinator that conducts a UFLS design assessment under Requirement R4, R5, or R12 and determines that the UFLS program does not meet the performance characteristics in Requirement R3, shall develop a Corrective Action Plan and a schedule for implementation by the UFLS entities within its area. [VRF: High][Time Horizon: Long-term Planning]

- 15.1 For UFLS design assessments performed under Requirement R4 or R5, the Corrective Action Plan shall be developed within the five-year time frame identified in Requirement R4.
- 15.2 For UFLS design assessments performed under Requirement R12, the Corrective Action Plan shall be developed within the two-year time frame identified in Requirement R12.



Paragraph 81 and IERP Recommendations

- UFLS team reviewed five requirements recommended for retirement as a result of the Independent Expert Review Project (IERP) or Paragraph 81:
 - Requirement R6
 - Requirement R7
 - Requirement R8
 - Requirement R10
 - Requirement R14
- UFLS team determined that these requirements are necessary and/or support reliability objectives, and should not be retired.
- Link to UFLS team <u>Response to Paragraph 81 and IERP</u> Recommendations



UFLS Project: 2014 Timeline and Key Dates

- May 23, 2014: Revised SAR posted for informal comment
- July 9, 2014: Standard Drafting Team meeting (Atlanta, GA)
- August 21 October 8, 2014: Formal comment and ballot period
 - August 21 October 8, 2014: Formal comment period
 - August 21 September 19, 2014: Form ballot pool
 - September 29 October 8, 2014: 10-day ballot and non-binding poll
- October 20 October 30, 2014: 10-day final ballot
- November 13, 2014: NERC Board of Trustees for Approval



Question & Answer Session

Please submit your questions by using the chat feature



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