Review of IRO-009-1—Reliability Coordinator Actions to Operate Within IROLs (Deferred)

http://www.nerc.com/files/IRO-009-1.pdf

VRFs for Requirement R1:

Standard, Requirement	Requirement Language	VRF Assignment	Comments
IRO-009-1, R1	For each IROL (in its Reliability Coordinator Area) that the Reliability Coordinator identifies one or more days prior to the current day, the Reliability Coordinator shall have one or more Operating Processes, Procedures, or Plans that identify actions it shall take or actions it shall direct others to take (up to and including load shedding) that can be implemented in time to prevent exceeding those IROLs.	Medium	FERC cited possible inconsistencies with Guidelines 2, 3, and 4. With respect to Guideline 2, FERC was concerned about inconsistency with the High VRF assignments in IRO-009-1, R3, R4, and R5. With respect to Guideline 3, FERC is concerned that there is an inconsistency with the High VRF assignment for IRO-004-1, R5. NERC staff continues to support the drafting team's VRF assignments. The failure to have an action plan identified in advance, by itself, will not result in instability, separation, or cascading failures. If the Reliability Coordinator does not take any action to prevent or to mitigate exceeding an IROL, then this is a violation of IRO-009 Requirement R3 or R4 and these are assigned High VRFs.
IRO-009-1, R2	For each IROL (in its Reliability Coordinator Area) that the Reliability Coordinator identifies one or more days prior to the current day, the Reliability Coordinator shall have one or more Operating Processes, Procedures, or Plans that identify actions it shall take or actions it shall direct others to take (up to and including load shedding) to mitigate the	Medium	FERC cited possible inconsistencies with Guidelines 2, 3, and 4. With respect to Guideline 2, FERC was concerned about inconsistency with the High VRF assignments in IRO-009-1, R3, R4, and R5. With respect to Guideline 3, FERC is concerned that there is an inconsistency with the High VRF assignment for IRO-004-1, R5. NERC staff continues to support the drafting team's VRF assignments. The failure to have an action plan identified in advance, by itself, will not result in

	magnitude and duration of exceeding that IROL such that the IROL is relieved within the IROL's Tv.		instability, separation, or cascading failures. If the Reliability Coordinator does not take any action to prevent or to mitigate exceeding an IROL, then this is a violation of IRO-009 Requirement R3 or R4 and these are assigned High VRFs.

Original R1 and R2 VRF Guideline Explanations from December 31, 2009 IRO-009-1 Petition:

The following discussion addresses how the drafting team considered FERC's VSL Guidelines 2 through 5. The team did not address Guideline 1 directly because of an apparent conflict between Guidelines 1 and 4. Whereas Guideline 1 identifies a list of topics that encompass nearly all topics within NERC's Reliability Standards and implies that these requirements should be assigned a "High" VRF, Guideline 4 directs assignment of VRFs based on the impact of a specific requirement to the reliability of the system. The team believes that Guideline 4 is reflective of the intent of VRFs in the first instance and therefore concentrated its approach on the reliability impact of the requirements.

- *FERC's Guideline 2:* Consistency within a Reliability Standard. The requirements have no subrequirements; only one VRF was assigned to each requirement so there is no conflict.
- *FERC's Guideline 3:* Consistency among Reliability Standards. IRO-004-1, Requirement R3 includes actions similar to those required in IRO-009-1, Requirements R1 and R2. The VRF for IRO-004-1, Requirement R3 is High. The drafting team recognizes that the VRFs for IRO-009-1 Requirements R1 and R2 are lower than the VRF for the similar requirement IRO-004-1 which is assigned a High VRF, however the IRO drafting team and stakeholders support the Medium VRFs based on NERC's criteria for VSLs. Action plans are based on a set of assumptions, and often these assumptions do not match the real-time conditions — that is, the further ahead the action plans are developed, the less likely the set of assumptions will match the real-time conditions. System operators are required to be trained and competent to develop and modify action plans in real-time to meet actual operating conditions. The assignment of the Medium VRF was made based on the premise that failure to develop an action plan (for an IROL identified at least a day ahead of the operating day), by itself, would not directly cause or contribute to bulk electric system instability, separation, or a cascading sequence of failures. For a requirement to be assigned a "High" VRF, there should be the expectation that failure to meet the required performance "will" result in instability, separation, or cascading failures. This is not the case when a Reliability Coordinator fails to develop an action plan for an IROL that is identified more than a day ahead. While the drafting team agrees that if the Reliability Coordinator fails to develop an action plan, this failure will put its system operators in a position where they are not as prepared as they should be to address instances of preventing or mitigating the exceedance of an IROL. However, even if the Reliability Coordinator has an action plan for an IROL, that

action plan will be based on a set of assumptions that may or may not match the real-time conditions, and the action plan may need to be modified or a new action plan may need to be developed. The expectation is that the Reliability Coordinator's real-time system operators are competent and will be able to make modifications or develop a new action plan based on current conditions. Thus, the failure to have an action plan identified in advance, by itself, will not result in instability, separation, or cascading failures. If the Reliability Coordinator does not take any action to prevent or to mitigate exceeding an IROL, then this is a violation of IRO-009 Requirement R3 or R4 and these are assigned High VRFs.

- *FERC's Guideline 4:* Consistency with NERC's Definition of a VRF. IRO-009-1 Requirements R1 and R2 mandate that the Reliability Coordinator have action plans to prevent exceeding identified IROLs and action plans to mitigate instances of exceeding identified IROLs. If the Reliability Coordinator fails to develop such plans, this could adversely impact the Reliability Coordinator's readiness to address an instance of exceeding an IROL that occurred exactly as studied, but this failure would not, by itself, result in instability, separation, or cascading failures. The Reliability Coordinator's system operators should have the ability to react to real-time conditions, and they can develop action plans as needed to address emerging conditions. As noted earlier, action plans developed in advance of real-time are developed based on a set of assumptions that do not always match the real-time conditions. System operators must be able to modify these plans to bring them into alignment with real-time conditions. The system operator's competence is addressed in the PER-005-1 standard, Requirement R2.
- *FERC's Guideline 5:* Treatment of Requirements that Co-mingle More Than One Objective. IRO-009-1, Requirements R1 and R2 each contain only one objective, therefore only one VRF was assigned to each of these requirements.