

Consideration of Comments on Initial Ballot of IRO-010 — Reliability Coordinator Data Specification and Collection

Summary Consideration: The drafting team corrected the typographical error in the red line version of IRO-004 – it showed "R7" instead of "R1".

The SDT also updated the references in the measures for IRO-005 to ensure they reference the correct requirements, using the new requirement numbers.

The drafting team did not make any other modifications based on comments submitted with the initial ballot for this standard.

| Organization: | Duke Energy Carolina |
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| | Douglas E. Hils |
| Comment: | Duke Energy appreciates the opportunity to vote and comment on this proposed Standard. IRO-010-1 Requirement R3 requires that "Each Balancing Authority, Generator Owner, Generator Operator, Interchange Authority, Load-serving Entity, Reliability Coordinator, Transmission Operator and Transmission Owner shall provide data and information, as specified, to the Reliability Coordinator(s) with which it has a reliability relationship". We are unsure what the phrase "with which it has a reliability relationship" means. |
| | IRO-008-1, IRO-009-1 and IRO-010-1 all introduce new terms that are not defined in the NERC Glossary. "Operations Planning", "Same Day Operations" and "Real-time Operations" are used to identify time horizons for requirements. |
| Response: | The phrase "with which it has a reliability relationship" relates to parties directly involved (i.e. has a relationship) in a given RC's plans "to prevent instability, uncontrolled separation, and cascading outages" (i.e. reliability) (see IRO-008 R3). |
| | The definitions used in the "Time Horizons" are not in the NERC Glossary but were posted with the standard when Time Horizons were added to the standard. Here is a link to that comment form: |
| | http://www.nerc.com/docs/standards/sar/IROL_Comment_Form_02Jan07.doc |
| | Note that the definitions for the terms used in defining "Time Horizons" have been posted for stakeholder reference when each drafting team has added "Time Horizons" to requirements. Here are the definitions: |
| | - Long-term Planning: a planning horizon of one year or longer. |
| | Operations Planning: operating and resource plans from day-ahead up to and including seasonal. Same-day Operations: routine actions required within the timeframe of a day, but not real-time. |

| | - Real-time Operations: actions required within one hour or less to preserve the reliability of the bulk electric system. |
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| | - Operations Assessment: follow-up evaluations and reporting of real time operations. |
| Organization: | American Electric Power |
| Member: | Paul B. Johnson |
| | AEP votes No. this proposed Standard calls for the Reliability Coordinator to specify the real-time data and information they require to support real-time monitoring, operational planning analyses, and real-time assessments without restriction. This allows for the Reliability Coordinator to ask for the addition of a significant amount of SCADA installations at the expense of the transmission owners in transmission areas that are not pertinent to the purpose of IRO-010-1 which is preventing the instability, uncontrolled separation, or cascading outages that adversely impact the reliability of the interconnection. The Standard should tie the specification of data and information requirements solely to the needs for monitoring and analyzing the control of IROLs. |
| Response: | IRO-010-1 is limited to requests for data and information needed to support analyses "to prevent instability, uncontrolled separation, and cascading outages." If the data request is not associated with an IROL, then that request is not covered by this standard. Transmission Operators are further protected from unreasonable requests by the fact that they have the option to question the validity of the Reliability Coordinator's request to: its Regional Entity; NERC and FERC. The SDT agrees with AEP that the data requirements relate solely to monitoring and analyzing system to prevent and control IROLs. "To prevent instability, uncontrolled separation, and cascading outages" is the definition of what an IROL is designed to effect. |
| Organization: | Bonneville Power Administration |
| Member: | Donald S. Watkins, Rebecca Berdahl, Brenda S. Anderson |
| Comment: | We do not believe that the IRO-010-1 C.M3 has text that is sufficient to be able to know what is adequate to confirm that we provided data, particularly data such as continually updated ICCP data used for situational awareness and using on-line reliability tools. |
| Response: | IRO-010-1 does not address the data quality / bad data issue except to require an alternative process when an automated system is unavailable (and that alternative may be to do nothing). IRO-010-1 Requirement R1 and its sub-requirements do define the data quantity issue within the constructs of sample times and formats. The Reliability Coordinator's list required in R1.1 is sufficient enough for responsible entities to know explicitly what data must be provided; and the responsible entity is expected to confirm that it has complied with the request, using whatever means it chooses. The measure intentionally allows the responsible entity to provide whatever evidence it has – this allows entities to demonstrate compliance without mandating that every entity provide exactly the same type |

| | of evidence as that would force some entities to modify current practices without necessarily leading to |
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| | an improvement in reliability. |
| Organization: | FirstEnergy Energy Delivery, FirstEnergy Solutions |
| Member: | Robert Martinko, Joanne Kathleen Borrell, Kenneth Dresner, Mark S Travaglianti |
| Comment: | FirstEnergy Corp. appreciates the hard work of the Standard Drafting Team on the challenging task of reorganizing and enhancing the verbiage of the IROL requirements. We vote AFFIRMATIVE to standard IRO-010-1 and ask that the SDT consider our enclosed comments. Comments on EOP-001, IRO-002, IRO-004, IRO-005, TOP-003, TOP-005, and TOP-006: |
| | General – The Violation Risk Factors should be added to the text of all of the standards. IRO-004 - VSL table shows "R7" instead of "R1" |
| | IRO-005 - Several Measures reference the incorrect requirement numbers |
| | TOP-003 - R4 — There is no measure associated with this requirement - Measures do not include evidence of "planning" of scheduled outages per the requirements - VSL for R3 and R4 are incorrect and reference the wrong entity per the requirements |
| Response: | VRFs will be added to all approved standards as part of another administrative activity. |
| | The 'redline' version of IRO-004 did show R7 instead of R1 for the VSL and this has been corrected. |
| | The SDT has updated the references in the measures for IRO-005 to ensure they reference the correct requirements, using the new requirement numbers. |
| | The SDT is limited in what it can modify in TOP-003. The modifications are limited to revisions and retirements associated with the requirements in the new standards. Other modifications, such as adding missing measures or modifying compliance information, will be addressed by other drafting teams. |
| Organization: | Great River Energy |
| Member: | Gordon Pietsch |
| Comment: | IRO-010 does a good job of stating the requirements of the Reliability Coordinator. However, the standard gives the appearance of having taken away the TOP and BA ability to obtain study data from the RC unless they are specifically involved with the mitigation of an IROL. It is GRE's opinion that entities should be able to obtain data from the Reliability Coordinator upon request as they are able to now. GRE understands that the Reliability Coordinator's responsibility to share data was moved in part to IRO-008-1_R3. The new requirement however does not make is sufficiently transparent that the TOP and BA can request the Assessment results if they choose. |
| Response: | These IRO standards do not preclude any other entity from asking for and obtaining data. To the extent the Reliability Coordinator is held accountable for any and all IROLs then the Reliability |

| | Coordinator must get what data it needs. If the Transmission Operator and Balancing Authority need study data, then this should be addressed in a corollary standard. A Balancing Authority has no study functions regarding IROLs, the only involvement of a Balancing Authority with IROLs is to follow the directive of its Transmission Operators and Reliability Coordinator. |
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| Organization: | Hydro One Networks, Inc. |
| Member: | Ajay Garg |
| | Hydro One Networks is casting an affirmative vote on the IRO-010 Standard. However, we believe that Requirement R3. should be modified at the earliest possible time when the standard is revised. Requirement R3. must be clear that when referring to data specifications it is within the parameters specified in Requirement R1. Consequently, R3 should read: R3. Each Balancing Authority, Generator Owner, Generator Operator, Interchange Authority, Load-serving Entity, Reliability Coordinator, Transmission Operator, and Transmission Owner shall provide data and information, as specified in R1, to the Reliability Coordinator(s) with which it has a reliability relationship. |
| | The SDT appreciates the added clarity suggested by the comment. The SDT is going to draft the Reliability Standard Audit Worksheets (RSAWs) for this set of standards and will include this language in the RSAW that is drafted for IRO-010-1. |
| Organization: | National Grid |
| Member: | Michael J Ranalli |
| | National Grid agrees with the comments suggested by NPCC with regard to Requirement R3. We suggest that the wording be revised at a later date to include a reference to Requirement R1. The suggested wording is as follows: "R3. Each Balancing Authority, Generator Owner, Generator Operator, Interchange Authority, Load-serving Entity, Reliability Coordinator, Transmission Operator, and Transmission Owner shall provide data and information, as specified in R1, to the Reliability Coordinator(s) with which it has a reliability relationship. (Violation Risk Factor: Medium) (Time Horizon: Operations Planning; Same-day Operations; Real-time Operations)" |
| | The SDT appreciates the added clarity suggested by the comment. The SDT is going to draft the Reliability Standard Audit Worksheets (RSAWs) for this set of standards and will include this language in the RSAW that is drafted for IRO-010-1. |
| Organization: | Northeast Utilities |
| Member: | David H. Boguslawski |
| Comment: | Insert in R3, "as specified in R1,", after " shall provide data and information,". |
| | The SDT appreciates the added clarity suggested by the comment. The SDT is going to draft the Reliability Standard Audit Worksheets (RSAWs) for this set of standards and will include this language in the RSAW that is drafted for IRO-010-1. |

| Organization: | Consolidated Edison Co. of New York |
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| _ | Peter T Yost |
| Comment: | R3 may be revised at a later date to include a reference to R1 as follows: "R3. Each Balancing Authority, Generator Owner, Generator Operator, Interchange Authority, Load-serving Entity, Reliability Coordinator, Transmission Operator, and Transmission Owner shall provide data and information, as specified in R1, to the Reliability Coordinator(s) with which it has a reliability relationship. (Violation Risk Factor: Medium) (Time Horizon: Operations Planning; Same-day Operations; Real-time Operations)" |
| Response: | The SDT appreciates the added clarity suggested by the comment. The SDT is going to draft the Reliability Standard Audit Worksheets (RSAWs) for this set of standards and will include this language in the RSAW that is drafted for IRO-010-1. |
| Organization: | Hydro One Networks, Inc. |
| Member: | Michael D. Penstone |
| Comment: | Hydro One Networks is casting an affirmative vote on the IRO-010 Standard. However, we believe that Requirement R3. should be modified at the earliest possible time when the standard is revised. Requirement R3. must be clear that when referring to data specifications it is within the parameters specified in Requirement R1. Consequently, R3 should read: R3. Each Balancing Authority, Generator Owner, Generator Operator, Interchange Authority, Load-serving Entity, Reliability Coordinator, Transmission Operator, and Transmission Owner shall provide data and information, as specified in R1, to the Reliability Coordinator(s) with which it has a reliability relationship. |
| Response: | The SDT appreciates the added clarity suggested by the comment. The SDT is going to draft the Reliability Standard Audit Worksheets (RSAWs) for this set of standards and will include this language in the RSAW that is drafted for IRO-010-1. |
| Organization: | MidAmerican Energy Co. |
| Member: | Thomas C. Mielnik |
| Comment: | Interchange transaction data should be added to the standard. Reliability Coordinator should still be required to share reliability data with TOs and BAs. |
| Response: | IRO-010-1 Requirement R1 provides the Reliability Coordinator the flexibility to request whatever data it needs which is why there is not a list of ad hoc items and no inclusion of Interchange Transactions. Interchange Transactions will be included in the Reliability Coordinator's specifications if needed, and omitted if they are not needed. These IRO standards do not preclude any other entity from asking for and obtaining data. |
| | To the extent the Reliability Coordinator is held accountable for any and all IROLs then the Reliability Coordinator must get what data it needs. If the Transmission Operator and Balancing Authority need |

| | study data, then this should be addressed in a corollary standard. A Balancing Authority has no study functions regarding IROLs, the only involvement of a Balancing Authority with IROLs is to follow the directive of its Transmission Operators and Reliability Coordinator. |
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| Organization: | Alliant Energy Corp. Services, Inc. |
| Member: | Kenneth Goldsmith |
| Comment: | Entities should be able to obtain study data upon request to the RC, rather than when expected to take action for an IROL. |
| Response: | These IRO standards do not preclude any other entity from asking for and obtaining data. To the extent the Reliability Coordinator is held accountable for any and all IROLs then the Reliability Coordinator must get what data it needs. If the Transmission Operator and Balancing Authority need study data, then this should be addressed in a corollary standard. A Balancing Authority has no study functions regarding IROLs, the only involvement of a Balancing Authority with IROLs is to follow the directive of its Transmission Operators and Reliability Coordinator. |
| Organization: | AEP Service Corp. |
| Member: | Brock Ondayko |
| Comment: | AEP suggests that this standard tie the specification of data and information requirements solely to the needs for monitoring and analyzing the control of IROLs. |
| Response: | IRO-010-1 is limited to requests for data and information needed to support analyses "to prevent instability, uncontrolled separation, and cascading outages." If the data request is not associated with an IROL, then that request is not covered by this standard. The SDT agrees with AEP that the data requirements relate solely to monitoring and analyzing system to prevent and control IROLs. "To prevent instability, uncontrolled separation, and cascading outages" is the definition of what an IROL is designed to effect. |
| Organization: | AEP Marketing |
| Member: | Edward P. Cox |
| Comment: | AEP suggests that IRO-010-1 tie the specification of data and information requirements solely to the needs for monitoring and analyzing the control of IROLs. |
| Response: | IRO-010-1 is limited to requests for data and information needed to support analyses "to prevent instability, uncontrolled separation, and cascading outages." If the data request is not associated with an IROL, then that request is not covered by this standard. The SDT agrees with AEP that the data requirements relate solely to monitoring and analyzing system to prevent and control IROLs. "To prevent instability, uncontrolled separation, and cascading outages" is the definition of what an IROL is designed to effect. |

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| Organization: | Midwest Reliability Organization |
| Member: | Larry Brusseau |
| Comment: | For the MRO comments: IRO-010-1 R1, R2, & R3 and IRO-008-1, the SDT have taken away the ability of entities to obtain study data from the RC unless entities area specifically expected to take actions for an IROL. The current standard says that we may obtain this data upon request at any time. Entities should be allowed to obtain data from the RC upon request as they have now. The MRO believes TOP-003-0 should remain as it stands. Having the requirement to report outage data to the RC in two places is better than not having it in TOP-003-0. Having it listed as a data requirement only and not in the standard does not make it clearer. The MRO believes that the Interchange transaction data should be added to the new IRO-010-1 R1. The MRO believes that the data requirements will be more detailed in this new standard; however, RC should still be required to share this data with the TO's and BA's. This information should not be lost from this requirement by removing the RC from TOP-005-1 attachment 1. The MRO does not agree with removing Reliability Coordinator from the requirement Including the Reliability Coordinator in the statement that the RC, TO & BA's shall have information including weather forecasts and past load patterns available to predict near-term |
| Response: | In these IRO standards do not preclude any other entity from asking for and obtaining data. To the extent the Reliability Coordinator is held accountable for any and all IROLs then the Reliability Coordinator must get what data it needs. If the Transmission Operator and Balancing Authority need study data, then this should be addressed in a corollary standard. A Balancing Authority has no study functions regarding IROLs, the only involvement of a Balancing Authority with IROLs is to follow the directive of its Transmission Operators and Reliability Coordinator. Both NERC and FERC have requested that the standards be cleaned up and that includes removing redundancies. Outage reporting need only be covered once – the SDT simplified the data provision requirements by ensuring that there would be a single requirement for a specification that identified all data and information that needed to be provided to the Reliability Coordinator. |
| Organization: | Lincoln Electric System |
| Member: | Bruce Merrill, Eric Ruskamp |
| Comment: | Comments: IRO-010-1 R1, R2, & R3 and IRO-008-1. The Standard Drafting Team has taken away the ability of entities to obtain study data from the RC unless entities area specifically expected to take actions for an IROL. The current standard says that we may obtain this data upon request at any time. Entities should be allowed to obtain data from the RC upon request as they have now. |

| | LES believes TOP-003-0 should remain as it stands. Having the requirement to report outage data to the RC in two places is better than not having it in TOP-003-0. Having it listed as a data requirement only and not in the standard does not make it clearer. LES believes that the Interchange transaction data should be added to the new IRO-010-1 R1. LES believes that the data requirements will be more detailed in new standard. However, RC should still be required to share this data with the TO's and BA's. This information should not be lost from this requirement by removing the RC from TOP-005-1 attachment 1. LES does agree with removing Reliability Coordinator from the requirement Including the Reliability Coordinator in the statement that the RC, TO & BA's shall have information including weather forecasts and past load patterns available to predict near-term load patterns provides clarity. |
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| Response: | These IRO standards do not preclude any other entity from asking for and obtaining data. To the extent the Reliability Coordinator is held accountable for any and all IROLs then the Reliability Coordinator must get what data it needs. If the Transmission Operator and Balancing Authority need study data, then this should be addressed in a corollary standard. A Balancing Authority has no study functions regarding IROLs, the only involvement of a Balancing Authority with IROLs is to follow the directive of its Transmission Operators and Reliability Coordinator. |
| Organization: | Entergy Services, Inc. |
| Member: | William Franklin |
| Comment: | Agree with the content changes, however the format of the Requirements deleted in other standards has resulted in a reassignment of Requirement numbering and thus created an undesireable administrative/logistical situation of entities having to revise associations with Requirement numbers to Requirement verbiage. This also applies to NERC processes as well since, for example, a reference "R2" in an RSAW or a matrix may now be skewed and really be "R1 or R3" if a Requirement was deleted or added. |
| Response: | This is an administrative issue, outside the drafting team's scope. The team will forward your comment to the Director of Standards for his consideration. |
| Organization: | Minnesota Power, Inc. |
| Member: | Carol Gerou |
| Comment: | 1. On page 10 of 23 of the redlined "Implementation Plan for Operate Within Interconnection Reliability Operating Limits Standards", the already approved standard requirements are IRO-004-1 R4 & R5 and IRO-005-2 R2 while the proposed replacement requirements are IRO-010-1 R1, R2, & R3 and IRO-008-1 R3. Minnesota Power's comment to IRO-010-1 R1, R2, & R3 and IRO-008-1 R3 is, "The SDT has taken away the ability of entities to obtain study data from the RC unless entities area specifically expected to take actions for an IROL. The current standard says that we may obtain this data upon request at any time. Entities should be allowed to obtain data from the RC upon request as they have now." |

Response: These IRO standards do not preclude any other entity from asking for and obtaining data. To the extent the Reliability Coordinator is held accountable for any and all IROLs then the Reliability Coordinator must get what data it needs. If the Transmission Operator and Balancing Authority need study data, then this should be addressed in a corollary standard. A Balancing Authority has no study functions regarding IROLs, the only involvement of a Balancing Authority with IROLs is to follow the directive of its Transmission Operators and Reliability Coordinator.

2. On page 18 of 23 of the redlined "Implementation Plan for Operate Within Interconnection Reliability Operating Limits Standards", the already approved standard requirement is TOP-003-0 R1 while the proposed replacement requirements are IRO-010-1 R1, R2, & R3. Minnesota Power's comment is, "Minnesota Power believes TOP-003-0 should remain as it stands. Having the requirement to report outage data to the RC in two places is better than not having it in TOP-003-0. Having it listed as a data requirement only and not in the standard does not make it clearer."

Response: Both NERC and FERC have requested that the standards be cleaned up and that includes removing redundancies. Outage reporting need only be covered once – the SDT simplified the data provision requirements by ensuring that there would be a single requirement for a specification that identified all data and information that needed to be provided to the Reliability Coordinator.

3. On page 19 of 23 of the redlined "Implementation Plan for Operate Within Interconnection Reliability Operating Limits Standards", the already approved standard requirement is TOP-005-0 R1 while the proposed replacement requirement is IRO-010-1 R1. Minnesota Power's comment is, "Interchange transaction data should be added to the new IRO-010-1 R1."

Response: IRO-010-1 Requirement R1 provides the Reliability Coordinator the flexibility to request whatever data it needs which is why there is not a list of ad hoc items and no inclusion of Interchange Transactions. Interchange Transactions will be included if needed, and omitted if they are not needed.

4. On page 20 of 23 of the redlined "Implementation Plan for Operate Within Interconnection Reliability Operating Limits Standards", the already approved standard requirement is TOP-005-1 Attachment 1-TOP-005-0 Electric System Data Reliability Data while the proposed replacement requirement is IRO-010-1 R3. Minnesota Power's comment is, "Agree – Data requirements will be more detailed in new standard. However, RC should still be required to share this data with the TO's and BA's. This information should not be lost from this requirement by removing the RC from TOP-005-1 attachment 1."

Response: The requirements remaining in TOP-005 require Balancing Authorities and Transmission Operators to share data with other Balancing Authorities and Transmission Operators. IRO-008-1 Requirement R3 requires the Reliability Coordinator to share the data under specified conditions. The new standard does not preclude any other entity from asking for and obtaining data.

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5. On page 22 of 23 of the redlined "Implementation Plan for Operate Within Interconnection Reliability Operating Limits Standards", the already approved standard requirement is TOP-006-1 R4 while the proposed replacement requirement is IRO-010-1 R1 R2, & R3. Minnesota Power's comment to TOP-006-1 R4 is, "Minnesota Power don't agree with removing reliability coordinator from the requirement. — Including the Reliability Coordinator in the statement that the RC, TO & BA's shall have information including weather forecasts and past load patterns available to predict near-term load patterns provides clarity."

Response: The adopted paradigm is to provide flexibility and define the objective not the procedure. Listing data items can lead to including data that is not needed and omitting data that is needed. If a Reliability Coordinator needs data including such items as weather forecasts and load patterns, then the Reliability Coordinator will include that item in its list to the entity involved; and if the Reliability Coordinator doesn't need the item then the Reliability Coordinator will not ask for it. The concept is that the Reliability Coordinator is obligated to comply with IROLs and that the Reliability Coordinator will not be excused if it did not ask for data that it needed to ensure IROL compliance.