Summary Consideration: Based on the comments received with the first re-ballot, the Coordinate Operations drafting team did not make any changes to IRO-014, IRO-015 or IRO-016.

Company	Balloter	Ballot	Comments
Avista Corp. AVA	Scott James Kinney	Affirmative	Approval is based on the assumption that the phrase "Reliability Coordinator's System Operators" can be interpreted to mean "Reliability Coordinator Personnel" in the Western Interconnection.
Response: The NERC-approved definition of System Operator is: An individual at a control center (Balancing Authority, Transmission Operator, Generator Operator, Reliability Coordinator) whose responsibility it is to monitor and control that electric system in real time.			
Bonneville Power Administration Transmission BPAT	Donald Stephen Watkins	Affirmative	The phrase Reliability Coordinator's System Operators can be interpreted to mean Reliability Coordinator Personnel in the Western Interconnection.
Response: The NERC-approved definition of System Operator is: An individual at a control center (Balancing Authority, Transmission Operator, Generator Operator, Reliability Coordinator) whose responsibility it is to monitor and control that electric system in real time.			
Con Edison Company of New York CEPD	vinod kotecha	Affirmative	Adverse Reliability Impact definition needs to address voltage collapse and thermal overloads beyond applicable emergency ratings. Without this, the definition and therefore the actions that may be taken to address such issues lacks the necessary strength.
Response: Most stakeholders agreed with the definition as proposed, and it was not changed.			
Nebraska Public Power District NPPD	Alan Boesch	Affirmative	It would be nice if the ballot identified the appropriate standards. I am assuming that this vote is for standards IRO-014-1, IRO-015-1 and IRO-016-1.
Response: The drafting team will forward this suggestion to NERC staff. You are correct; this vote was for standards IRO-014-1, IRO-015-1, IRO-016-1.			
Salt River Project SRP	Robert Kondziolka	Affirmative	An affirmative vote is submitted for this standard with the understanding that the phrase "Reliability Coordinator's System Operators" is understood to mean Reliability Coordinator Personnel in the Western Interconnection.
Response: The NERC-approved definition of System Operator is: An individual at a control center (Balancing Authority, Transmission Operator, Generator Operator, Reliability Coordinator) whose responsibility it is to monitor and control that electric system in real time.			

Transmission Agency of Northern California - TANC	Peter Mackin	Affirmative	TANC supports approval of these standards, with the understanding that the phrase "Reliability Coordinator's System Operators" can be interpreted to mean Reliability Coordinator Personnel in the Western Interconnection.
Response: The NERC-approved definition of System Operator is: An individual at a control center (Balancing Authority, Transmission Operator, Generator Operator, Reliability Coordinator) whose responsibility it is to monitor and control that electric system in real time.			
Alberta Electric System Operator AESO	Anita Lee	Affirmative	The AESO's approval of these standards is based on our understanding that the phrase "Reliability Coordinator's System Operators" can be interpreted to mean Reliability Coordinator Personnel in the Western Interconnection.
Response: The NERC-approved definition of System Operator is: An individual at a control center (Balancing Authority, Transmission Operator, Generator Operator, Reliability Coordinator) whose responsibility it is to monitor and control that electric system in real time.			
British Columbia Transmission Corporation	Phil Park	Affirmative	The phrase Reliability Coordinator's System Operators can be interpreted to mean Reliability Coordinator Personnel in the Western Interconnection.
Response: The NERC-approved definition of System Operator is: An individual at a control center (Balancing Authority, Transmission Operator, Generator Operator, Reliability Coordinator) whose responsibility it is to monitor and control that electric system in real time.			
Midwest Independent Transmission System Operator, Inc.	Terry Bilke	Affirmative	Please see our comments from the previous ballot.
Here are your comments from the previous ballot and the drafting team's response to those comments: **Comment:** We support the intent of this standard, but are somewhat concerned by the administrative requirements embedded in it. Also, there should never be level 3 and level 4 non-compliance for administrative requirements. Also, how do you measure failure to coordinate for "potential" events? **Response:** The drafting team does not know which administrative requirements nor which levels of non-compliance you'd like changed. In IRO-016, level one is assigned to the administrative aspects of IRO-016; Level four is assigned for failure to coordinate. If an RC identifies a potential event that RC must coordinate – its up to the RC to make the decision that there is a potential event.			
Western Electricity Coordinating Council	Louise McCarren	Affirmative	I support approval of these standards, with the understanding that the phrase "Reliability Coordinator's System Operators" can be interpreted to mean Reliability Coordinator Personnel in the Western Interconnection.

Response: The NERC-approved definition of System Operator is: An individual at a control center (Balancing Authority, Transmission Operator, Generator Operator, Reliability Coordinator) whose responsibility it is to monitor and control that electric system in real time.			
Avista Corp. Washington Water Power Division AVWP	Edward F. Groce	Affirmative	Approval is based on the assumption that the phrase "Reliability Coordinator's System Operators" can be interpreted to mean "Reliability Coordinator Personnel" in the Western Interconnection.
Response: The NERC-approved definition of System Operator is: An individual at a control center (Balancing Authority, Transmission Operator, Generator Operator, Reliability Coordinator) whose responsibility it is to monitor and control that electric system in real time.			
Bonneville Power Administration - Power Business BPAP	Francis J Halpin	Affirmative	Because of the established RC relationships in the west, the language should provide clarification that for the Western Interconnection the phrase "Reliability Coordinator's System Operators" can be interpreted to mean "Reliability Coordinator Personnel".
Response: The NERC-approved definition of System Operator is: An individual at a control center (Balancing Authority, Transmission Operator, Generator Operator, Reliability Coordinator) whose responsibility it is to monitor and control that electric system in real time.			
Tucson Electric Power Company TEPC	Michael Raezer	Affirmative	I support approval of these standards, with the understanding that the phrase â€œReliability Coordinatorâ€™s System Operatorsâ€□ can be interpreted to mean Reliability Coordinator Personnel in the Western Interconnection.
Response: The NERC-approved definition of System Operator is: An individual at a control center (Balancing Authority, Transmission Operator, Generator Operator, Reliability Coordinator) whose responsibility it is to monitor and control that electric system in real time.			
Bonneville Power Administration - Power Business BPAP	Brenda S. Anderson	Affirmative	The phrase Reliability Coordinator's System Operators can be interpreted to mean Reliability Coordinator Personnel in the Western Interconnection.
Response: The NERC-approved definition of System Operator is: An individual at a control center (Balancing Authority, Transmission Operator, Generator Operator, Reliability Coordinator) whose responsibility it is to monitor and control that electric system in real time.			
Chelan County PUD CHPM	Hugh Aron Owen	Affirmative	My affirmative vote is based on the understanding that "Reliability Coordinator's System Operators" can be interpreted to mean "Reliability Coordinator Personnel in the Western Interconnection"
Response: The NERC-approved definition of System Operator is: An individual at a control center (Balancing Authority, Transmission Operator, Generator Operator, Reliability Coordinator) whose responsibility it is to monitor and control that electric system in real time.			

Sacramento Municipal Utility District SMUD	E. Nick Henery	Affirmative	See Comments from last vote.
Here is your comment from the previous ballot and the drafting team's response to that comment: **Comment:** I support the standard with the comment that "Reliability Coordinator's System Operators" can be interpreted to mean Reliability Coordinator Personnel in the Western Interconnection **Response:** The NERC-approved definition of System Operator is: An individual at a control center (Balancing Authority, Transmission Operator, Generator Operator, Reliability Coordinator) whose responsibility it is to monitor and control that electric system in real time.			
California Energy Commission	William Mitchell Chamberlain	Affirmative	I support this standard with the understanding that the phrase "Reliability Coordinator's System Operators" can be interpreted to mean Reliability Coordinator Personnel in the Western Interconnection.
Response: The NERC-approved definition of System Operator is: An individual at a control center (Balancing Authority, Transmission Operator, Generator Operator, Reliability Coordinator) whose responsibility it is to monitor and control that electric system in real time.			

Comment from IESO

Introduction

The IESO congratulates the Standards Drafting Team for their work in the development of this standard.

While recognizing the substantial effort made by the drafting team in developing this standard, we must never the less submit a NEGATIVE ballot **"NO with Comments"** in light of the shortcomings noted below.

Comments and Discussion:

The new standard requires coordinated action among Reliability Coordinator's (RC) whenever there is a problem. We agree with this general requirement and recognize that not all problems can be foreseen and articulated in a standard. There is however, one thing that is common to all of the RC's in an Interconnection; frequency. Coordinating an RC response to frequency excursions in the eastern Interconnection is a problem for RC's today and has been for some time. Previous NERC Polices specified a threshold that prompted action by the RC's. Given that frequency is the common currency of reliability and given the problem the industry is having with it, frequency deviation beyond a certain threshold should be explicitly identified as one of the problems that require coordinated RC action.

Discussion:

While the IESO supports the approach taken by the drafting team regarding generalizing the requirements, enabling the Reliability Coordinators (RCs) to define problems and to establish mutually agreed to processes and procedures to take associated actions. We nevertheless believe there is a need to be prescriptive for issues and problems deemed significant that also enables unambiguous compliance monitoring. As an example, the standard specifies that action is required for problems but does not specify the criteria or even the process, by which a threshold for what constitutes a problem, will be established.

This standard envisages an after the fact process which either leaves RC's vulnerable to be found non-compliant to a problem they never thought was a problem or it leaves them with the ultimate defence since there was no definition of what is a problem in the first place. This would make it ineffective for compliance and ineffectual in terms of driving reliable coordinated action consistently. Further, the main requirement (R1) places an obligation on a single RC (the one that identifies a problem) to decide upon a solution to the problem (it is intended to mean that the involved RC's collectively decide on a solution but it is not written that way). Having decided on a solution there seems to be no requirement to implement the solution.

The IESO continues to support the view that specific threshold limits on Interconnection frequency deviation combined with time duration, is an essential element for consistency of applications among RCs and for compliance assessment purposes. It establishes a specific triggering point for associated actions to be taken by Reliability Coordinators.

The IESO also recognizes that it is ultimately more appropriate to include such threshold limits within the BAL-008-1 (Frequency and Area control Error) standard. However, that standard has yet to be approved and it remains uncertain if such threshold limits will be in the final approved standard. In the absence of such approved threshold limits, as existed in NERC Policy 9. F, R4, the need exists to include specific Interconnection frequency deviation related requirements in the Coordinate Operations standard until such time BAL-008 is approved with such limits.

The existing requirement R11 of IRO-005-0, which is being replaced with IRO-016-1: R1, provides the general statement *"If a Frequency Error, time error, or inadvertent problem occurs outside of the Reliability Coordinator (RC) Area, the Reliability Coordinator shall initiate a NERC hotline call to discuss the Frequency error, Time error or Inadvertent Interchange with other Reliability Coordinators……..".* While, the new requirement R1 of IRO-016-1 states "*RC that*

identifies a potential expected or actual problem that requires the actions of one or more other RCs shall contact the other RCs to confirm a problem and discuss options……..".
The IESO is of the opinion both statements are too generic and the use of the term "problem" too open ended. The standard specifies what action is required but fails to specify the criteria or even the process, by which a threshold for what constitutes a problem will be established.

Suggestions/Recommendations:
Based on the growing concern of the impacts of Interconnection frequency deviations and associated needs of actions and coordination among RCs, we suggest that a prescriptive clause/specific limit on Interconnection frequency deviation along with a duration of time (either similar to that outlined in previous Policy 9 requirement 4 or similar to NERC Resource Subcommittee Proposed Frequency Monitoring and Response Guidelines) be included in the Coordinate Operation standard IRO-016-1:R1 as follows:

R1. The Reliability Coordinator that identifies a potential, expected, or actual problem that requires the actions of one or more other Reliability Coordinators shall contact the other Reliability Coordinator(s) to confirm that there is a problem and then discuss options and decide upon a solution to prevent or resolve the identified problem.

"For instance if a Reliability Coordinator detects an Interconnection frequency error in excess of +/-0.03 Hz (eastern) and +/-0.05 Hz (western) from scheduled frequency for more than 20 minutes, the Reliability Coordinator is required to initiate a NERC Hotline conference call, or a notification via the RCIS, to determine the Reliability Coordinator Area with the energy emergency or control problem."

Alternatively:

We recommend that Triggers and Benchmarks and **associated actions** similar to those outlined in the NERC Resource Subcommittee Proposed Frequency Monitoring and Response Process/Guidelines (that are part of the field trial test for Balance Resources and Demand) should be included in the requirement R1 of IRO-016-1:R1.

Conclusion
Once again, we thank the standards drafting team for their efforts and commend the team for the many improvements this standard incorporates.

The IESO appreciates the opportunity to table these comments and looks forward to participating further in the standards development process.

Response: The Balance Resources and Demand standards currently undergoing field testing set acceptable operating boundaries and those boundaries are frequency dependent. Although the Balance Resources and Demand standards are not approved, they have been undergoing field test since July 6, 2005 without any operating problems and there is an expectation that the standards will be approved and adopted in 2006.