

Questions and Answers About the Reliability Center Strategic Initiative

Background

The WECC Board of Directors was concerned that WECC's Reliability Centers fulfill all of the RC requirements imposed by NERC, as well the unique reliability needs of our interconnection, and that this be accomplished in a cost-effective and consistent manner for the entire interconnection. They directed that a single strategic plan be developed for all three centers. This directive eventually fell to the Reliability Policy Issues Committee, which created a task force consisting of one director from each class, a Non-Affiliated Director, the chairs of the Operating Committee and Reliability Coordination Subcommittee and a member of the WECC staff. The task force visited each of the Reliability Centers, interviewed the coordinators, reviewed the NERC requirements, and interviewed coordinators in other interconnections. From those efforts, the task force was able to define the functions that the RC's need to perform, the tools required to perform those functions, and the policy issues that need to be addressed to assist the RCs in performing their job efficiently and effectively.

Questions/Answers

What is the purpose of the Reliability Center strategic initiative?

The Western Interconnection is required to have Reliability Coordinators that are capable of performing specific reliability related functions. Because of the hosting relationship that has existed since the RCs were first created, the RC function is currently being performed independently at each of the three existing sites, at different functional levels, using different tools and different databases. The future costs and impacts on reliability associated with developing and maintaining three separate sets of advanced applications was becoming a concern. This initiative was undertaken to improve the reliability of the Interconnection by looking ahead five years and answering the following questions:

- ◆ What functions will the RCs need to perform?
- ◆ What tools will they require to perform them?
- ◆ How should they be configured and staffed to efficiently and effectively perform those functions?
- ◆ What will it cost?

There is so much going on right now. Why are we adding this to our workload?

This timing is being driven by budget concerns, by recent reliability legislation, and by a need to ensure that the Reliability Center function is performed as well as possible to safeguard reliability. The Reliability Centers account for almost half of the WECC budget and that number is growing as the centers acquire the needed tools and personnel to meet their responsibilities. The goal of the strategic initiative task force is to make the best use of WECC members' funds while insuring that our RCs meet all the reliability requirements of the interconnection.

Why hasn't there been broad stakeholder input yet?

The RPIC organized a streamlined and balanced task force to perform the research and make initial recommendations. The work of that task force is now far enough along to place a proposal in front of the membership and implement a wide stakeholder input process.

Why is the timeframe so short?

The suggested timeframe is one aspect of the analysis. It, along with other aspects of the proposal, may be adjusted as stakeholder input is received.

How is this not a west-wide independent system operator?

Under the proposal, the responsibility and authority of the Balancing Authorities and Transmission Operators remains the same as it is today. The Reliability Centers would have better tools, be able to look deeper and further ahead for potential problems, and issue “early warnings” of reliability problems, but unlike an RTO, they would not assume any more responsibility for the control and operation of the grid than they do today. Their use of directives to address real-time, urgent reliability issues would remain as it is today.

Talk of Optimal Power Flows smacks of RTOs.

OPF is a tool that can quickly identify and prioritize options for resolving reliability problems. While economics could be used within OPF as a criterion for prioritizing solutions, the current proposal does not suggest that. By leaving production cost out of the optimization algorithm, the solutions can easily be prioritized based on other criteria such as least amount of load to shed, or the smallest amount of generation to shift. The desire to exclude cost from solution options is valuable stakeholder input. These comments will help shape policy considerations of the proposal.

Would Reliability Coordinators be issuing directives to Independent Power Producers?

This would only happen in the most extreme circumstances where the Balancing Authorities were unable to resolve the reliability problem in a timely fashion. The proposal suggests that the RC enabling agreement be executed with Generator Owners as specified in the NERC Standards so that the authority and obligation to respond are clearly understood in case it ever needs to be used. Coordinators would continue to issue directives to, and interface with, Balancing Authorities and Transmission Operators as they do now.

Compensation for redispatch and changing schedules will be a problem under this proposal.

Yes, it will. It is a problem in the interconnection now, has been for years and will continue to require the best efforts and ideas of all stakeholders to resolve. The proposal does not attempt to solve this problem – it simply points out the need for a policy to address the issue.

How am I supposed to swallow RC veto power over my maintenance schedules?

In the current NERC Standards, the Reliability Coordinator is required to conduct next day reliability analysis and to mitigate any potential reliability problems that are identified through these processes. The proposal is that RCs be provided maintenance schedules and study their impacts on reliability. This raises the policy question of whether or not RC’s need to “approve” maintenance schedules. Feedback to date suggests that this may not be the preference of the members. The right policy may be for RCs to simply advise members of reliability problems resulting from maintenance schedules. Directives having to do with maintenance will be issued as they are today – only if the members are unable to work out a satisfactory reliability solution among themselves. Directives would be a last resort, but keep in mind that a directive may need to be issued prior to a real time emergency if the logistics of the outage preclude restoration

during real time. With improved tools, data, staffing and training, it is intended that the RCs be able to avoid real-time problems arising from scheduled maintenance conflicts.

What's wrong with the status quo?

The Western Interconnection's Reliability Centers are not currently meeting all the requirements set forth in NERC standards. We must either meet the requirements or present compelling justification to NERC for changing the requirements.

You talk about unified tools for all Reliability Centers. Isn't there a danger in tying ourselves to one vendor?

The possibility that a single vendor may not be able to provide all the tools as promised is certainly a risk, but the task force has found that we are already suffering the consequences of that risk – the current host relationships effectively tie each individual RC to a single supplier. Some hosts simply don't own the tools needed by the RCs or have access to the data the RCs need to perform their function. The lack of a common set of tools and a common database means that if any one of the three hosts can't provide what is needed, the other hosts can't fill the gap. Vendor risk will certainly be considered in selecting the vendor for providing the RC toolbox.

Doesn't this duplicate some of the work being done by the CAISO?

There may be some duplication of the tools and database proposed for future implementation by the CAISO, but we don't believe there will be functional duplication with the CAISO. It is likely that other Balancing Authorities may also have the same tools and database as the RCs, especially once the Westwide System Model is made available to all WECC members. This proposal certainly wouldn't preclude Balancing Authorities from implementing parallel modeling efforts, but if implemented, may provide Balancing Authorities more of a choice as to whether or not they really need to do such duplication.

Your cost/benefit analysis is based on avoiding another major disturbance, but this proposal doesn't guarantee that a blackout won't occur.

No, it doesn't. The cost/benefit analysis is intended to give a perspective, not a guarantee.

What are the net benefits to the WECC membership of this proposal?

First and foremost is the reliability benefit that will come with improved tools, common data, and well-defined functions for Reliability Center operations. A second benefit comes from the efficient use of member dollars that a common, long-term Reliability Center strategic plan should produce versus piecemeal, site specific, year-to-year planning.