

Notes for RRG Hybrid Presentation

As stated by Kurt Conger at RRG meeting 11/19/03

1. Observations from the drafting room...

A. Regional Ownership of Problems and Opportunities

- Even if it's not my problem it can still be a regional problem.
- Are the opportunities worth the cost?

B. Is the “Beginning State” a hill too steep to climb?

Group was pressed to make modest, workable changes in the beginning. Don't make the bar so high that some cannot make it over.

C. “End State” is too big a commitment for some, but...

- Just as long-term system planning horizons contemplate future loads based on the best information available today, the “Advanced Target State” provides a long-term objective that is subject to revision over time and regional approval to proceed.
- Evolutionary changes should always be based on improvements gained by the region.
- Again, the region should not focus on a solution, especially if today's solution becomes inappropriate as time progresses. The proposal explicitly provides for regional resolution of problems and seizing regional opportunities that make sense in the future.

2. Brief Explanation of Certain Functions

A. Reliability Coordination (1.1)

The current institutions for reliability coordination can be strengthened in the Beginning State by:

- improving the operational data available to the PNSC,
- enabling the Reliability Coordinator to perform the “next-day reliability analyses” as required by NERC Policy 9,
- limiting the frequency and severity of curtailments that may result from contract path methods used by multiple, adjacent control area operators.

The Advanced Target state integrates the reliability coordination functions with the market and transmission operations functions assumed by the IE, and is thus contingent upon the IE developing these capabilities in the Interim State.

B. Tariff Administration (1.4)

Current differences in business practices and application of tariff provisions between transmission providers create transactional risks—or weak links—that frustrate potentially beneficial transactions for some regional stakeholders. The Beginning State will preserve individual tariffs of the regional transmission providers but simplify the reservation and tagging process. Over time, the Independent Entity will develop and offer a single regional tariff. Bear in mind that conversion of existing contracts to the regional tariff will remain voluntary.

C. Nature of Transmission Rights and Management of TTC/ATC (1.5)

For the most part, contract paths are used for transmission reservations and scheduling under the current Open Access Transmission Tariffs. Because of the mismatch between the contract path commitments charged against TTC and the

actual flows that result from the injections and withdrawals of transmission customers, transmission providers are turning to flow-based approaches for transmission rights management and ATC calculation. Nevertheless, these adaptations to the contract path method tend to highlight rather than resolve the reliability problems and underutilization of transmission capacity that results from this mismatch.

The Beginning State will establish an inventory of injection and withdrawal rights for customers that will be evaluated from the perspective of a single, regional transmission system. This is in contrast to the current approach of evaluating transmission use against path transfer capabilities allocated to multiple adjacent control area operators. To the extent that a customer's transaction affects multiple flowpaths, the IE will consider the diversified impacts of all uses and allocate revenues to the transmission owners in proportion to their allocation of path transfer capability.

During the Interim State, the IE will develop capabilities to perform regional system security analyses using injection/withdrawal values and a regional network model of the physical transmission system.

The transition to financial rights is contingent upon a determination by the governing board and affirmative vote of the stakeholders Trustee Selection Committee. Financial rights are generally developed using security constrained dispatch methods in conjunction with an economic objective function to determine the marginal cost of delivering power to all locations on the transmission system. Customers are exposed to significant locational price differences today when there is congestion. Financial rights provide a way for transmission providers to offer customers a hedge against significant locational price differences.

D. Scheduling, Congestion Management and Redispatch

(1.6)

Contract path transmission congestion and the absence of system-wide visibility of combined transaction schedules results in poorly managed regional transmission capacity. Congestion is managed by schedule limits and curtailments without settlement of redispatch costs.

In the Beginning State the IE will develop, in four steps, a scheduling process that takes into account contractual rights of customers, new transmission service requests, and market bids that can be used to clear physical congestion. To the extent that the market bids can successfully match buyers and sellers, the IE will accommodate as many additional schedules as possible. An inventory of transmission rights will be compiled so that the IE can eventually assume complete responsibility for scheduling and managing congestion through redispatch.

In the Advance Target State, bilateral energy scheduling will continue to be the predominant means for delivering energy to loads, but congestion management will rely less on willing buyers and sellers bilaterally agreeing to redispatch to clear congestion. Instead, the IE will provide balancing energy and congestion management using methods consistent with the financial transmission rights structure discussed earlier. One method is security constrained economic dispatch, a method that determines which generators are able to provide additional power for load service and ranks the generators according to an economic objective function that can be minimized. Settlements are based on locational costs and the financial rights held by the customer.