

**RTO West Stage 2 Development Process
Planning and Expansion Content Group**

**RTO West Backstop Authority
RRG Briefing
October 12, 2001**

Policy Questions

- A. What authority should the RTO have to cause (incent) major expansion of the RTO West System?
- B. What facilities should be subject to the RTO's backstop authority?
- C. What can the RTO cause to happen when exercising its backstop authority?
- D. How should RTO West allocate the costs of projects it has caused to be built pursuant to its backstop authority?

Background

A. *What authority should the RTO have to cause (incent) major expansion of the RTO West System?*

1. There is currently consensus on (i) pro-active, public, and extensive RTO West planning process that includes an open-season subscription process and, (ii) in first instance, leaving expansion decision-making authority with market participants (including PTOs).
2. Scope of Backstop Authority
 - a. Transmission Adequacy and Avoided Costs. Stage 1 filing provided RTO with backstop authority to ensure transmission adequacy should market fail to take appropriate action; Stage 2 stakeholders agreed to expand backstop authority to avoid certain costs that would otherwise be uplifted to RTO West schedules (see Backstop Authority – Option 1, *Attachment 1*);

Comment: This proposal was a compromise (albeit one that was not supported by all stakeholders) between a total market-driven mechanism and centralized RTO West decision-making authority. This mechanism placed a high value on the ability of the RTO West System to serve load, but left commercial/economic decisions to market participants (including PTOs).

- b. Other options currently under consideration:
 - i. Chronic, Significant Congestion Relief. Expand the RTO’s backstop authority to authorize the RTO to fix chronic, significant congestion (see Backstop Authority – Option 2, *Attachment 2*)?
 - ii. Unbridled Authority. Expand the RTO’s authority so that it has unbridled discretion to cause (incent) whatever project it determines is appropriate (see Backstop Authority – Option 3, *Attachment 3*)?

Policy Considerations Regarding Expanding Backstop Authority

Pros of Expanding Backstop Authority: Many stakeholders (including some filing utilities) believe that the possibility of market failure in a market-driven expansion mechanism is unacceptable. Possible causes of market failure include the lead time needed to build transmission facilities (market signals could come too late); inability of multiple beneficiaries to get organized and reach agreement on cost allocation of new facilities; “free riders” discouraging market participants from voluntarily sponsoring projects; and lumpiness of transmission investments. These participants point to the current transmission

shortage as a demonstration of how the current (in large part market-driven) system has failed.

While the Stage 1 backstop for transmission adequacy addresses some of their concerns, it does not go far enough. Some participants have also argued that it is impossible or impractical to make a distinction between transmission adequacy and congestion relief.

Some proponents believe that a backstop authority limited to transmission adequacy is inconsistent with FERC's vision for RTOs as reflected in recent RTO orders. They believe that the RTO is in a unique position to grapple with current planning issues (e.g., "look beyond the headlights" of a short planning horizon; cause construction that a party who receives congestion rents does not have sufficient incentive to build.)

Other advocates, while not enamored of expanded backstop authority, believe that Option 2 represents the best chance RTO West has to convince FERC to accept something other than complete authority. Others believe that Option 2 provides sufficient checks and balances to protect the market-driven mechanism.

Bottom line, the proponents of an expanded backstop authority feel that the consequences of market failure are too significant in today's energy market to rely exclusively on a market-driven expansion mechanism.

Pros of Staying with Option 1: [Note: Many of these considerations also apply to the transmission adequacy backstop; while the starting point for the PLCG was that backstop, some parties would be comfortable without a backstop at all.] Option 1 builds on the current system that many believe has worked well (a transmission system need not be overbuilt and completely devoid of congestion – congestion is part of market pressures and how a market works.) Proponents of Option 1 think it is premature to assume that the market-driven mechanism will fail. This is the one area where there will be clear market signals, and the market should be given an opportunity to work. The open season subscription process has worked well in the gas model and should provide sufficient incentives for needed expansion. Further work is underway on developing additional incentives (for example, long-term transmission rights).

The supporters of Option 1 could live with the transmission adequacy backstop in part because they believe it is possible to distinguish between transmission adequacy and congestion relief. They also believe that it complies with Order 2000. While they have placed a high value on ensuring transmission adequacy, they do not believe that the RTO should be making economic decisions on behalf of market participants. They do not believe that

if market sponsors do not come forward that the market has failed; rather they perceive that the market has made a rational decision.

All of the options are based on letting the market, in the first instance, make decisions regarding expansion. Proponents of Option 1 are concerned that expanded RTO authority will undermine the market-driven mechanism because project sponsors will not step forward and pay for a project that the RTO will eventually cause to be built and paid for by a number of entities. (They had this same concern about the transmission adequacy backstop but compromised on that approach.) They are also concerned that the RTO will not do as good of a job as the market (for example, the RTO will make a one size fits all solution that does not take into account individual market participant assumptions, planning horizons, and different investment rates and strategies.) There will also be difficulties with cost allocation. Order 2000 states that those who cause congestion should bear the costs. In a market-driven expansion mechanism, those who benefit from congestion relief and bear cost responsibility are identified through their voluntary actions. Some parties fear that the RTO will not be able to identify beneficiaries (or will identify beneficiaries but will not be able to reach them for payment) and will default to socializing the costs of congestion relief projects.

Other concerns that have been expressed about expanding the authority is that PTOs already have regulators and do not need the RTO to play that role and the tension between federal and state jurisdiction (including the ability of a PTO to recover the costs of a project that it has already decided is not needed).

B. What facilities should be subject to the RTO's backstop authority?

1. Stage 1 – RTO West Controlled Transmission Facilities (those transmission facilities “turned over” to the RTO for operational purposes)?
2. PTO facilities “turned over” to the RTO for any purpose?
3. PTO facilities that are not “turned over” to the RTO but that are used to support wholesale transactions?
4. Application of backstop authority to RTO West Controlled Transmission Facilities; PTO responsible for local planning for distribution facilities with state and customer involvement, ability for PTO or customer to request RTO involvement/alternative dispute resolution if they are not satisfied with results of local planning process (see Proposal for Relationship of Planning to Wholesale Access Contracts, Attachment 4)?

Considerations :

Some participants believe that RTO West should have backstop authority over facilities that are turned over to RTO West and used for wholesale purposes regardless of voltage or whether RTO West has them under operational control. Others believe that this would be inconsistent with state regulatory authority over the quality of service across distribution facilities

C. What can the RTO cause to happen when exercising its backstop authority?

1. RTO mandates PTO funding and construction within the PTO's legal and regulatory constraints? (Analogous to Section 211 authority)
2. RTO causes (incent) facilities to be constructed based on FERC pre-approval of FERC load-based access fees? (PTO facilitates construction, e.g., use of eminent domain powers, and passes through costs, but does not finance project)
3. RTO bully pulpit (cajoles, pleads, threats)?

Considerations : Different participants had different understandings of what the RTO could cause to happen when exercising its transmission adequacy backstop authority. The different understandings have been captured above and need to be discussed.

Further, the backstop options have been developed with the understanding that the RTO cannot own or finance the construction of new facilities. This assumption should be tested. The PLCG is also awaiting legal input regarding ways for the RTO to allocate and collect the costs of facilities that are constructed pursuant to the RTO's backstop authority.

D. How should RTO West allocate the costs of projects it has caused to be built pursuant to its backstop authority (see Allocation Strawdog Proposal, Attachment 5)?

Attachment 1

Backstop Authority – Option 1 Transmission Adequacy and Avoided Costs

Transmission Adequacy

Transmission adequacy is the physical ability of the RTO West System, irrespective of the cost of energy, to serve load. RTO West has backstop authority to ensure transmission adequacy and to avoid certain costs that would otherwise be uplifted to RTO West schedules as follows.

On an on-going basis (but at least annually), the RTO will gather available generator, load (PTO, LSE, UDC forecasts), and system topography information. The RTO will analyze and further develop that information as appropriate (including supplemental load forecasting) to provide a foundation for testing the transmission adequacy of the system as a whole. (There are difficulties in forecasting generation beyond a two-year planning horizon that will need to be taken into account; these difficulties are present with or without the RTO.)

As transmission requests are received, the RTO will determine which PTO's(s') system(s) are likely to be used to serve these requests and other projected load requirements, and forward such information to the affected PTO(s).

PTO (on individual or collective basis) tests the transmission adequacy of its facilities. If a PTO's system is not transmission adequate, the PTO has the option of developing and proposing a fix to the RTO or requesting that the RTO develop a fix through its planning process.

All PTOs submit the results of their transmission adequacy tests to the RTO, who will double-check the results (using the generator, load, and system topology information discussed above) on a simultaneous system-wide basis by assuming that all generation is on, and running a model of the physical RTO West System to see if all load is served.

If not all load is served, the RTO will determine whether this is attributable to transmission insufficiencies and where such insufficiencies exist. The RTO will then engage in dialogue with the PTO to fix the transmission adequacy issue, as set out in the attached flow chart.

If the PTO does not voluntarily fix the issue, the RTO can mandate the PTO to fund and construct the project within legal and regulatory constraints. The costs of the project will be recovered through the PTO's Company Rates.

Avoided Costs

The RTO has authority to expand (in a cost-effective manner) to avoid residual congestion costs that would otherwise be uplifted to RTO schedules.

The RTO also has the authority to expand (in a cost-effective manner) to avoid long-term system-wide operational costs that would otherwise be uplifted to RTO schedules.

Attachment 2

Backstop Authority – Option 2

Chronic, Significant Congestion (Plus Transmission Adequacy and Avoided Costs Backstop (Option 1))

Expanded Scope of Backstop

Chronic, significant congestion is a transmission system limitation that leads to constrained generation dispatch, as manifested by large balancing energy price differentials between two RTO West zones, high prices for Firm Transmission Rights in secondary markets, or other appropriate indicators and is expected to persist for many years under a range of weather, water, supply, demand, and fuel price scenarios.

RTO West has backstop authority to relieve chronic, significant congestion when such congestion is projected and:

- a) RTO West has identified in its least-cost planning process an investment to relieve the constraint that would be cost-effective (including consideration of benefits to RTO West load and avoided costs) under a wide range of scenarios, after considering investment risk associated with the proposal, including risks related to forecasting of consumer demand, advancement of conservation and distributed generation technology, generation siting and potential changes in economic or environmental regulatory policies; and
- b) No satisfactory fixes have been undertaken by market participants due to factors that are generally recognized as constituting “market failure” and the RTO has determined that expansion is the appropriate way to address the market failure (as opposed to, for example, fixing the market through a design change.) Such factors could include difficulty organizing multiple beneficiaries into an efficient economic unit for investment, lack of participation by significant beneficiaries that are hoping to reap the project’s benefits without incurring its costs, market power exercised by an individual market participant to block investment by others, the RTO has not defined long-term transmission rights in a manner that stimulates transmission investment, or siting or regulatory requirement to build a larger fix than sponsors will support. Market failure does not include legitimate differences in outlook related to price and supply forecasts or alternative strategies for delivering resources to the constrained location; and
- c) RTO West has published a report that analyzes the market failure, identifies the beneficiaries of the “fix” and provides other pertinent information.

Implementation Specifics

The RTO will need its Board's approval to exercise its backstop authority. One option (that might make this option more acceptable to some parties) is to require that a super-majority of the Board support an exercise of backstop authority and that FERC pre-approve the project before it can go forward.

When the RTO exercises its backstop authority to relieve chronic congestion, it can cause or incent the construction of the needed project and recover the cost from beneficiaries through the mechanisms provided in the RTO's allocation procedures [*Note: The Allocation Strawdog Proposal leaves the issue of how to allocate the costs of congestion relief benefits to the RTO with the guidance that the RTO should determine specific beneficiaries and directly assign as many costs as possible*]. A PTO will be required to facilitate the construction of the project (for example, use its eminent domain powers), but the RTO cannot compel a PTO to finance the project.

The RTO's decision with respect to its backstop authority will be subject to the RTO ADR process, as well as appeal to FERC.

Alternatives

Not include Option 2 in the Stage 2 filing, but have it ready should FERC require more RTO authority.

Include Option 2 in the Stage 2 filing, but provide that it should only be put into place by the RTO if in the future the market does not step forward to construct to relieve chronic, significant congestion.

Have the RTO collect a fee from each schedule on a congested path, which may only be a few hours a year, and use the collected funds as a construction incentive for any project that the RTO agrees will fix the congested path. The RTO will collect these funds for a maximum of five or ten years. Funds that are not claimed by construction projects would be used to lower RTO operating costs. The RTO would have the ability to change fee amounts or duration of collection to encourage more construction to relieve congestion. This also would smooth out congestion spikes due to large market price swings. In general, this will not encourage construction, but for a path that has constant congestion, the funds might change a non-economic solution to something workable.

Attachment 3

**Backstop Authority – Option 3
Complete Authority**

RTO West has the authority, after an unsuccessful open season subscription process, to cause or incent the implementation of whatever project it determines is appropriate, provided such project was developed in the RTO West planning process and is consistent with the RTO's planning principles and guidelines and Prudent Utility Practice.

Before such authority can be exercised, the RTO Board must approve a specific proposal by a super-majority vote and FERC must pre-approve such proposal.

RTO decisions will be subject to RTO ADR, and appealable to FERC (although might be encompassed within the FERC pre-approval process).

Attachment 4

Proposal for Relationship of Planning To Wholesale Access Contracts

Linc Wolverton - October 11, 2001

Background

This proposal relies on the assumption that each PTO will file a Distribution Wholesale Access Tariff to fill the gap between the RTO operated and tariffed facilities and the Eligible Customer points of delivery. This tariff will be a FERC approved tariff, but because it involves wheeling across distribution level facilities within a PTO's or LSE's service territory, the issue of jurisdiction comes to the fore. For example, a Fred Meyer store embedded in PGE's distribution system can request transmission service from the RTO because of its Eligible Customer status under direct access.

One objective of the proposal is to avoid FERC having to regulate planning for all facilities down to the Eligible Customer level. Those customers, whether generators or loads, may be connected at very low voltages and may be dispersed within the distribution system. If FERC were to assert jurisdiction on all those facilities, it would effectively be regulating the majority of the distribution system.

Distribution Wholesale Access Tariff Implementation

The notion is that the Distribution Wholesale Access Tariff would be proposed to FERC by the distribution utility based upon parameters largely established at the state level—for rate base, rate of return, service requests, etc. FERC would then approve or reject the tariff, based upon the evidence in its docket.

What this procedure implies is that states will necessarily cede some of their authority to FERC regarding local implications of a FERC tariff. From the utility perspective, however, there is less likelihood of being caught between two regulatory bodies.

Planning Aspects of Distribution Wholesale Access Tariff

1. Eligible Customer applies for RTO West service.
2. PTO or local serving entity would plan subtransmission/distribution facilities under state or local jurisdictional procedures.
3. Eligible Customers would have opportunity to be informed of and opportunity to comment on plans that affect service to them.
4. Planning procedures would be comparable as between Eligible Customers and retail customers.

5. Disputes over planning would be dealt with first according to local procedures. Appeals would use local guidelines and the comparability provisions in No. 3 above.
6. After local dispute resolution avenues had been exhausted, the Eligible Customer or the distribution utility could appeal the decision to the RTO. The RTO would perform the necessary studies, based upon its broader perspective of the issues and could take into account the relationship between the distribution and transmission systems, and it would make a decision.
7. The Eligible Customer or the distribution utility could then take a dispute through the RTO's ADR process.
8. Finally, the Eligible Customer or the distribution utility could appeal an adverse ADR decision to FERC.

The planning and appeal procedures would be spelled out in the Distribution Wholesale Access Tariff.

Attachment 5

Allocation Strawdog Proposal

When a new transmission facility is being constructed, the RTO will honor the project sponsors' agreements regarding cost responsibility among themselves (*i.e.*, the RTO will honor the results of a successful open season subscription process). Failing agreement, the RTO may allocate costs as set out below.

When

The RTO can allocate costs of new facilities in the following two instances:

1. When it has exercised its backstop authority and caused a facility to be built;
2. When a project sponsor requests an allocation and can demonstrate that its proposed project has been developed in a sufficient least cost planning process and:
 - i. Confers a system-wide benefit;
 - ii. Confers a local or sub-regional benefit; or
 - iii. Confers a transmission adequacy benefit by deferring the need for another facility to be built for another PTO to achieve transmission adequacy within the RTO planning horizon.

General Principle

To the extent possible, the RTO should identify specific beneficiaries and directly assign cost responsibility.

Who

The RTO will calculate and allocate costs to the following beneficiaries (in an amount commensurate with the benefits conferred):

1. Transmission Adequacy Benefit
 - a. Facilities Constructed Through Backstop Authority – The RTO will assign the costs of a facility needed to assure transmission adequacy to the PTO(s) who is found to be inadequate. The PTO(s) will recover the costs of such facility through its Company Rates.

- b. When there are competing PTO projects to achieve transmission adequacy and the PTOs cannot agree which project to implement or how to share its costs, the RTO will decide which is the better solution, cause that solution to be implemented, and allocate the costs.
 - c. Facilities Sponsored by the Market – If a facility provides a transmission adequacy benefit that avoids or delays the construction of another transmission adequacy project, the RTO will assign a portion of the costs of such facility to the PTO(s) who would otherwise have been required to build. The costs that are assigned to a PTO cannot exceed its avoided costs of the transmission adequacy project. The PTO(s) will recover the costs of such facilities through their Company Rates
2. System-Wide Benefit (facilities that confer a benefit to the entire RTO system)

The RTO will allocate costs corresponding with system-wide benefits to all RTO West users.

NOTE: Some participants do not believe that there are facilities that will benefit the entire system, although others point to programs that could provide such a benefit, e.g., under frequency shedding, WSCC phase shifters. It has been suggested that the RTO be required to make a showing that everyone in the RTO West system has benefited in roughly the same magnitude before the RTO can allocate costs on this basis. Many are concerned that system-wide benefits will become an RTO dumping ground for difficult cost allocation determinations, and caution that the default for difficult allocations should not be to declare system-wide benefits and spread the cost accordingly. Some parties would like the RTO to explore ways of collecting these costs from beneficiaries that do not pay a Company Rate as well as load who pay Company Rates.

- a. Avoided Costs

The RTO has backstop authority to invest in cost-effective long-term system-wide operational fixes that avoids costs that would otherwise be uplifted to RTO West schedules. When the RTO exercises this authority, the costs will be uplifted to all RTO West schedules.

3. Local or Sub-Regional Benefits

The RTO will determine when a local or sub-regional areas benefits and allocate costs commensurate with benefits received to the load within the benefiting areas.

- a. Congestion Relief – Allocating the costs of congestion relief benefits is a particularly challenging issue. Beneficiaries cannot be identified on a static basis, and some load may be negatively impacted by the new facility (it could result in higher energy costs for some load). The RTO will ultimately decide how to determine the beneficiaries of congestion relief and allocate costs accordingly, but it should be guided by the general principle that it should directly assign costs to the extent possible.

FTRs will be created as a result of a project with congestion relief benefits. To the extent that the RTO directly assigns the portion of the costs of such project attributable to congestion relief to specific entities, those entities will also receive the corresponding FTRs. If, however, the RTO elects to spread the costs of such facilities, the FTRs will be auctioned by the RTO and the proceeds will offset the costs that are to be spread.

How

As part of the RTO West planning process, project studies will be performed that will provide information regarding the nature of a proposed project's benefits. The RTO will use this and other information resulting from its planning process to identify benefits, determine beneficiaries, and allocate costs.

Upon the request of a project sponsor, the RTO will determine a preliminary cost allocation prior to an open season or the sponsor committing to go forward with the project. *[This may have an impact on the open season.]* The RTO's preliminary allocation will be provided to the market as part of the open season. If the open season is not successful, the project sponsor will have the opportunity to sponsor the project as originally proposed with the RTO's preliminary cost allocation.

RTO's cost allocation decisions will be appealable to FERC.