

Transmission Services Liaison Group

Module 1 Report

Background

The Regional Proposal identified three sequential stages of development for an independent entity (Grid West) to provide improved usage of the transmission system: a Beginning State, an Interim State and an Advanced Target State.¹ Each of these states represents successive implementation phases of the Regional Proposal with various functions and features added over time. The Regional Proposal describes each development state at a broad conceptual level. The Transmission Services Liaison Group (TSLG) was established by the Regional Representatives Group (RRG) to further develop the Beginning State to define the nature of transmission service and develop a “high level” market structure and operational framework.² This work is to support the RRG’s assessment of the Beginning State’s workability as decisions are made regarding whether to adopt bylaws (Decision Point 1) and whether to seat the independent, Developmental Entity board for Grid West (Decision Point 2).

The TSLG divided its work for 2004 into five work modules.³ This report focuses on Module 1 and describes the basic structure of transmission service for the Beginning State. This report describes a basic service and tariff structure which can be used as a starting point for further work on the Beginning State definitions of market design, operational structure, facilities and pricing. As the details of the Beginning State are further developed, the tariff structure suggested here may need to be adjusted.

This report balances two competing objectives: (1) a reasonable starting point for other work and for stakeholders at Decision Point 1 and (2) providing all of the details needed to fully describe a transmission service tariff(s) for the Beginning State. The TSLG has endeavored to provide sufficient information to enable the RRG to have confidence that a workable approach is possible. The remainder of this report is divided into three sections: (1) the transmission service objectives of the Regional Proposal; (2) the transmission service structure for the Beginning State; and (3) the tariff structure to be used to implement that service structure for the Beginning State.

¹See http://www.rtowest.com/Doc/FinalNarrative_RegionalProposal_Dec242003.pdf for the narrative description of the Regional Proposal. The features and functions associated with the three development states can be found at http://www.rtowest.com/Doc/DevelopmentStagingTable%20_RegionalProposal_FinalDec82003.pdf.

² This includes describing the contract and tariff relationships for providing transmission service using an injection-withdrawal model that honors existing service obligations and defining the operational relationship between Grid West and the control areas, both consolidated and non-consolidated.

³ See Appendix 2, “Transmission Service Liaison Group, Scope of Activity (As of March 12, 2004)” for description of Modules 2-5.

Objectives of the Regional Proposal – Beginning State

The Beginning State, as contained in the Regional Proposal, is envisioned to be a clear and substantial improvement over how business is currently done, and yet require only modest changes in customer treatment. Transmission customers who are satisfied with their present transmission service will be able to continue that service essentially unchanged from what they receive today. At the same time, other customers will have the option of acquiring new services that provide enhanced access to expanded markets, improved operational efficiency and potentially reduced cost. While not introducing obstacles to later improvements, the Beginning State must also be workable on its own. While the Beginning State enables some changes in service, these changes will be made in a manner that will maintain reliability at least at current levels and will provide the potential for improved reliability as a result of greater availability of information through a regional view of system operations.

The Regional Proposal contains a number of objectives that support this vision of improved transmission services. These objectives provide guidance for the efforts of the TSLG.

- Eliminate rate pancaking for forward-going service without creating cost significant shifts. Rate pancaking is generally defined as the addition of multiple, sequential charges for embedded costs when a transaction crosses multiple systems within the region.
- Eliminate transactional (or administrative) pancaking, that is, the necessity of contracting and scheduling with multiple transmission owners as energy is moved across the region.
- Eliminate the collection of embedded cost from short-term transactions.
- Provide transparency to market operations, i.e., disclosing sufficient information on rates, settlement, business practices, etc. to enable market participants to make sound business decisions in the wholesale energy market.
- Eliminate system control problems that are associated with contract path rights, e.g., unexpected loop flow effects being managed by often-ineffective real-time schedule curtailments.
- Provide for the full recovery of revenue requirements of the transmission system without significant cost shifts resulting from changes in the collection of fixed costs.
- Facilitate voluntary “transmission right” trading among market participants.
- Maintain existing transmission rights.
- Provide for optional control area consolidation.
- Facilitate markets for ancillary services.
- Make available sufficient information to facilitate a regional view of the system that will enable reliable grid operation.

- Provide non-discriminatory service through an agency that is independent of market interests.
- Provide the coherence and functionality of a single regional OASIS.

Transmission Service Structure

Overview

In the broadest terms, the Regional Proposal has two primary principles for transmission service. First, elements of status quo transmission service are to be preserved, e.g. maintaining existing transmission rights whether arising from contracts or from native load service obligations. Second, region-wide services are to be provided going-forward (for those who want expanded access) that enable better usage of the regional transmission system.⁴ These region-wide services are to accomplish, among other things, the elimination of future pancaked rates, the introduction of region-wide flow-based scheduling and ATC⁵ determinations. The key to the provision of these additional services is a single, region-wide evaluation process that recognizes all injections and withdrawals throughout the region, whether originating under existing transmission usage rights or under new arrangements. The Regional Proposal left the transmission service structure and the tariff structure for further work.

In considering the definition of transmission service in the Beginning State, it is useful to consider the features associated with Open Access Transmission Tariff (OATT) service and how those features might be provided under the broader service concepts of the Regional Proposal. Under today's tariffs, individual service features such as access to the network, a degree of protection from congestion effects and non-firm use of alternate delivery points are generally packaged together as either network service or point-to-point service, both having firm and non-firm variants. Except for ancillary services, the features combined into today's service packages are not priced separately. Instead, the transmission system cost of a given owner is used as the basis for a single rate for the bundle of transmission services. These service bundles have many additional features not discussed here that include curtailment provisions or options for redispatch.⁶

⁴ The service improvements for region-wide service in the Beginning State are focused in day-ahead pre-scheduling processes and not on real-time operations. The procedure for going from these day-ahead process to real-time operation has yet to be developed. Changes in real-time operations will also be a consideration in the discussion of voluntary control area consolidation.

⁵ ATC (Available Transmission Capability) is used loosely here to describe transfer capability that could be used to enable *additional* use of the transmission system. As used here ATC encompasses both the formal contract path definition used in open access tariffs and the concept of available flow capacity at constraints or sets of constraints (sometimes called flow gates).

⁶ Redispatch options in the OATT tariffs have typically proven difficult to implement on a single utility basis and have not been widely used.

It should also be noted that today's service package offerings are limited in important ways. First, both access and mitigation of congestion effects are limited to the provider's own transmission system and contain no means for price discovery by transmission users of the cost impacts of congestion. Second, to gain access to an adjacent system (e.g., to deliver remote generation to a customer's load) requires a second transmission service contract and access charge, i.e., paying another embedded cost rate.⁷ Moving over additional systems multiplies or pancakes the effect.

For the purpose of considering how region-wide services might be offered, it is useful to identify the primary the features of today's transmission service packages. Setting aside ancillary services, the two primary components of transmission service are: (1) rights to inject and withdraw power without exposure to congestion costs in real time and, (2) system access. Of the two, the "rights" feature is more clearly understood, while system access is a more elusive concept. The right to inject and withdraw energy from the transmission system without exposure to congestion costs is usually described by listing points of receipt and delivery⁸ and associating them with "firm" service.

On the other hand, the concept of "access" under today's transmission tariffs is embodied in the payment of a share of the embedded cost of the provider's transmission system in exchange for permission to use that system to move a defined quantity of power, not necessarily tied to specific delivery and receipt points. When the flexibility granted under OATT⁹ services is considered, it can be seen that the embedded cost payment made under the tariff is not tightly coupled to congestion rights. Recovery of embedded costs does not vary depending upon points of receipt and delivery but is instead based on the total MWs delivered whether defined in terms of monthly peak load (in the case of network service) or a "take-or-pay" capacity reservation (for point-to-point service).

For example, a customer buying 100 MW of point-to-point service pays a 100 MW share of embedded cost and is allowed to move up to 100 MW between specified points of injection (or receipt) and withdrawal (or delivery). At no additional cost, the customer is also allowed to use capacity at alternative points on the system on a non-firm basis. This flexibility of access to the full system is granted only to right holders and is predicated upon the absence of congestion. Network customers have similar flexibility to use alternative network resources to serve designated network loads. In both cases, the customer has access to the full network of the particular transmission provider, subject to availability. The fact that the price for this non-firm service is included in the firm service price is further evidence that the price can be viewed as an access charge for use of an uncongested transmission system.¹⁰

⁷ This layering of each owner's embedded cost rates is called rate pancaking.

⁸ These may also be sets points of receipt, such as the Federal Columbia River Power System, and sets of delivery points, such as the distribution substations of a utility serving native loads or designated network service loads.

⁹ Open Access Transmission Access as provided under tariffs which comply with FERC's Order Nos. 888 and 889.

¹⁰ This view is further bolstered by the fact that the nominal price for separately purchased non-firm service is the same as the price for firm service.

To provide region-wide services without pancaked rates as envisioned in the Regional Proposal, it is necessary to formally separate the access and the Injection-Withdrawal Rights features associated with transmission service. Under a non-pancaked or license-plate approach, now applied in many sections of the North America, loads pay for access at a rate based on the embedded costs of their host system.¹¹ Having met the access fee requirement for the host system, customers are permitted access to a regional system to find sources to serve their loads. However, access to the regional system carries no inherent protection from congestion costs. The responsibility for congestion cost is considered separately from regional access. Once a customer has regional access, it may schedule transmission use within the region. If a customer has Injection-Withdrawal Rights that match its schedule, then use is not subject to payment of congestion cost. If a customer does not have Injection-Withdrawal Rights for the points between which it schedules, the customer must pay the cost of congestion between those points. Often, the customer also has the alternative of asking that a schedule not be accepted if congestion will be encountered (the functional equivalent of today's non-firm usage).

The TSLG recommends the adoption of this two-service approach, which separates system access from Injection-Withdrawal Rights for the Beginning State of the Regional Proposal. This is a logical extension of the Regional Proposal that preserves elements of "status quo" by honoring existing agreements while introducing an optional, supplemental regional service which gives access to the entire regional market.

System Access Requirement

The Regional Proposal recommended adoption of a Company Rate Approach¹² for collection of the fixed costs of the transmission system. This meets the basic requirement for providing an un-pancaked, regional service by recovering the fixed costs primarily through load-based access fees, which minimizes cost shifting among companies and their transmission customers. The access feature of transmission services discussed above is associated with fixed-cost (i.e., embedded-cost) recovery. When load is served either through existing contracts or as native load of the transmission owner, the access fees are collected indirectly through the charges associated with those arrangements. For load not currently covered by existing arrangements, an access fee (the Company Rate) will apply. Loads paying their share of fixed system costs by

¹¹ The host system is defined by the facilities of the transmission service provider where a load is physically interconnected. A party may have load in more than one host system.

¹² Although meeting the same conceptual goal, the Company Rate Approach for the Regional Proposal differs in important ways from that used for RTO West Stage 2. Under the RTO West State 2 Company Rate methodology, participating transmission owners turned over control of their facilities to RTO West and then took all their transmission service under the RTO West tariff. To accomplish this change of transmission service provider, contracts between the participating transmission owners were to be suspended and replaced by transfer payments. Transmission rights were also converted to one of two forms of financial transmission rights; a Company Rate was applied to converted contracts; and payments were to be routed through a Paying Agent to avoid difficulties with bond indentures, revenue taxes, etc. Under the regional proposal, transmission service taken by a transmission owner its own loads from its facilities does not fall under the Grid West tariff, except as the option for a transmission owner. Further, contracts between transmission owners are not suspended, so no transfer payments are created. Finally, transmission rights are not converted to financial forms. The Paying Agent concept may still be required as for the same reasons which applied to the Stage 2 proposal.

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either of these methods or a combination of them meet what is called the System Access Requirement and are thereby eligible for Regional Network Service (RNS) offered by Grid West. RNS is an optional service. Customers, who meet the System Access Requirement may choose to take this broader service, continue with their current transmission service arrangements (limiting their service to the system of the host utility) or utilize a combination of RNS and existing arrangements. The charges and features of Grid West scheduling services and RNS are described below.

Under the RTO West Stage 2 proposal, generators were to be responsible for the interconnection costs but would not pay other access fees directly. The service structure described in this report adopts the same approach. Once interconnected with a host company's system, generators would meet the System Access Requirement and be eligible for RNS. They would then be able to schedule to any load that meets the System Access Requirement with exports being treated as load at the point of export.

Similarly, the Stage 2 proposal assumed that marketers without generation or load, did not pay an access fee for transactions with delivery within the region. The same approach is recommended in this report. Marketers can schedule to any load that meets the System Access Requirement with exports being treated as a load at the point of export. The System Access Requirement rule for marketers' RNS eligibility will need to be consistent with these principles.

All exports are treated the same whether made by a marketer, a generator or a load serving entity selling surplus resources. Exports will pay an export fee at the point of exit unless the exporting party has pre-existing rights at the point of export. Either case will meet the System Access requirement for the export "load." Imports, whether made by marketers or load serving entities within the region, are treated like generation and are therefore not required to pay an access fee when scheduled to a load that meets the System Access Requirement.

The rules for meeting the System Access Requirement for all transmission service customers will be provided under a new transmission service tariff. The TSLG's structural proposal for that tariff is described below.

Regional Network Service

Regional Network Service (RNS) is the optional service that transmission customers may acquire to supplement existing transmission service from their transmission "host". The prerequisite for taking RNS is meeting the System Access Requirement described above. RNS permits the customer access to the regional market without additional access fees but makes the customer subject to payment of congestion costs when such access is exercised. Customers may protect themselves from congestion cost with Injection-Withdrawal Rights, obtained either from pre-existing arrangements or by purchase of Injection-Withdrawal Rights from Grid West.

RNS offers transmission customers access to the entire region without paying pancaked charges for forward-going service, and it would incorporate implementation of planning and system

expansion.¹³ RNS will provide regional administration of congestion rights to improve capacity availability and transmission system throughput, by evaluating available transmission capability on a flow basis rather than on a piece-wise, contract path basis. By evaluating schedules on an injection and withdrawal basis, loop flow problems should be reduced. Grid West optimizes transmission services provided from transmission owners, making capacity available through region-wide analysis that is otherwise inaccessible using fragmented analysis of individual owner's facilities. RNS has two components:

(1) Regional Access – This is the ability to reach resources (or loads) beyond those available within the boundary of the host company area where a load (or generator) is located. A load serving entity will be able to schedule from any resource to their load, whether the resources is imported or is located within the Regional Transmission System. The load serving entity may use transmission rights administration services (described below) to obtain Injection-Withdrawal Rights prior to scheduling to avoid congestion effects or may pay for redispatch energy purchased to enable the transaction.¹⁴ Exports are considered to be loads at the point of export.

(2) Transmission Rights Administration – A suite of three optional services make up this component of service. These services are independently available to customers.

(a) Redispatch Service – the ability to obtain transmission service for day-ahead transactions by paying redispatch costs (congestion costs) if Grid West is able to provide the service by clearing congestion using voluntary inc/dec bids for generators and loads.

(b) Reconfiguration Service¹⁵ – the ability to purchase Injection-Withdrawal Rights that allow the right holder to avoid the payment of redispatch costs for day-ahead scheduled use.

(c) Capacity Expansion Service – the ability to obtain Injection-Withdrawal Rights that are created by expanding the capacity of the transmission system.

As the transmission rights administrator, Grid West will evaluate Injection-Withdrawal Rights on a single system basis and will recognize existing rights in making its evaluations. Additional description of the features and characteristics of RNS is provided below.

¹³ Charges associated with cost of Injection-Withdrawal Rights obtained through the capacity expansion service or reconfiguration costs are not pancaked access fees, but are purchased in advance to reduce exposure to congestion.

¹⁴ Since the Platform is not an “accept all schedules” proposal, a schedule may be denied if sufficient redispatch is not available.

¹⁵ The term Reconfiguration Service has been adopted to describe what the Regional Proposal Narrative called mid-term service. The choice of terms was made to eliminate confusion with the short-term (less than one year) and long-term (more than one year) firm service offered under the Open Access Transmission Tariffs of FERC's Order Nos. 888/889. Reconfiguration Service applies to requests for Injection-Withdrawal Rights made prior to day-ahead scheduling for any term of usage that does not require system expansion.

Redispatch Service

- Grid West processes all schedules for the Regional Transmission System, including native load service. Initially Grid West will receive schedules indirectly for service under pre-existing arrangements that will come to Grid West through transmission owners or directly for RNS.¹⁶
- Base schedules must be covered by rights held prior to submittal.
 - Schedules will be checked against rights, initially by each TO then by Grid West.¹⁷
- Base schedules must be balanced and all load accounted for.
- All schedules will be reduced to injection and withdrawal quantities by Grid West.
- Base schedules are put into a power flow simulation::
 - To obtain a comprehensive view of system for better reliability coordination; and,
 - To determine capacity available for additional schedules, while maintaining allowances for the potential exercise of transmission rights¹⁸ under pre-existing arrangements.
- Supplemental schedules may be nominated without rights.
- Voluntary bids into the Inc/Dec redispatch market are accepted.
- Using a combination of Inc/Dec bids and available capacity, Grid West will accept the supplemental schedules that it can enable through redispatch.

Reconfiguration Service

- Reconfiguration service operates prior to day-ahead schedule and provides the ability to obtain Injection-Withdrawal Rights that allow the right holder to have day-ahead schedules accepted and not be exposed to the effects of congestion.
- Reconfiguration service is used to acquire, sell¹⁹ or restructure portfolios of Injection-Withdrawal Rights from existing system capacity.

¹⁶ Over a two year period, the scheduling process for pre-existing agreements is to move to direct scheduling with Grid West. See pp. 6-7 of “Narrative Description of Regional Proposal” for further discussion of this transition.

¹⁷ The Regional Proposal describes a four-step process to transition from transmission owner review of rights to Grid West review of rights. This transition includes an inventory of rights by the Grid West and transmission owners. It is expected to be completed no later than 2 years after start of operation. An inventory of rights for some customers may be required before the start of operations.

¹⁸ The allowance for the ability of right holders to submit schedule changes after the conclusion of the day-ahead up through real-time has been called “headroom”. These types of rights vary among pre-existing contracts.

¹⁹ Parties must have the right to trade or reassign rights before they can be offered into the reconfiguration market. The resolution of reassignment rights between transmitters and their transmission customers will affect the amount of capacity available through reconfiguration.

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- Rights sold or resold through the reconfiguration service will have standardized forms. Additional work under Module 2 will be required to determine which rights held under existing contracts can be offered to support the reconfiguration service as well as the details of the auction, the pricing and settlement procedures, etc.

Capacity Expansion Service

- The capacity expansion service provides a means for acquiring Injection-Withdrawal Rights that are not available using existing system capacity and for which construction or expansion is necessary. These are Injection-Withdrawal Rights, and once obtained they may be traded through the Reconfiguration Service.

Scheduling, Operations and Planning Services

Under the Regional Proposal, Grid West will provide scheduling, operations and planning services for the Regional Transmission System. Grid West will process all schedules, whether received directly or indirectly. Access to all schedules and their resolution into injection and withdrawal quantities will provide the basis for improving use of system capacity. Grid West will also be responsible for transmission planning for the Regional System under provisions that generally follow those developed for the RTO West Stage 2 proposal.

Scheduling Services

The scope of the Operations segment of the Grid West RNS will include the following:

- Single OASIS.
- Single entity processing all schedules for the Regional System.
- Single ATC determination on a regional flow basis.
- Full system view for reliability – the Pacific Northwest Security Coordinator (PNSC) continues to handle reliability coordination with revisions to address scope and effectiveness.

Operational Services

Grid West will provide control area operation services to control area operators who choose to voluntarily consolidate.²⁰

- The cost of control area consolidation will be paid by those who choose to participate.

²⁰ This moves away from the RTO West Stage 2 model which required all PTOs to consolidate control areas to a mixed model with some areas consolidating and others not. The mixed approach has implications for many subjects (control area operations, transmission services, A/S, fixed cost recovery, etc.) that are to be addressed in Module 4.

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- To the extent that Grid West uses market mechanisms as part of consolidated control area operations and others are allowed to participate in providing ancillary services through that mechanism, those who participate will be expected to share the cost of operating these market mechanisms and their associated obligations.

Planning Services

- In the Beginning State, Grid West will produce an annual plan, expanding upon existing regional cooperative planning efforts.
- Grid West will have backstop authority to compel construction when necessary for reliability or TTC maintenance.

Grid West Service Charges

The charges for Grid West services are outlined below. Charges for scheduling will apply to all parties who submit schedules to Grid West. Other charges apply to those who take RNS or who chose to consolidate control areas. The charges for RNS will cover the costs incurred to make region-wide service available. These costs include both Grid West's own cost to provide service (equipment, rent, labor, etc.) and the shortfalls in transmission owner revenue requirements that occur as a result of moving from the current system-by-system service model to the Regional Network Service model. The actual rate design for the Grid West tariff (i.e., the billing determinants and formulas used to set rates) will be developed by the Pricing Group. However, the types of charges envisioned for a Grid West tariff are expected to be:

(1) Grid Management Charge (GMC) – The GMC will cover RTO West's costs of providing the services that apply to all users, i.e., the cost of start-up, scheduling, system reliability evaluation, forecasting, planning, etc. The GMC would apply to all parties submitting schedules to Grid West.

(2) Regional Network Service Charges:

(a) Regional Revenue Requirement Adjustment (R3A) – The R3A provides a financial backstop to recover the revenue shortfall resulting from the shift from the OATT model to the RNS model, i.e., the elimination of non-firm and short-term firm revenues, etc. This is the cost of making a region-wide service available and eliminating rate pancakes going forward without generating a cost shift among the transmission owners and their customers. The revenue shortfall will be offset by any surplus revenues generated from Reconfiguration or Redispatch Services and will be used to reduce the R3A. The R3A would apply to all parties who opt to take RNS, be known in advance and be adjusted periodically.

(b) Option Service Use Charges – The specific cost of the services provided will be charged to those requesting Redispatch, Reconfiguration and Capacity Expansion Services, e.g., those buying Injection-Withdrawal Rights pay for what they purchase.

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(c) Overhead Charges for Optional Services – These charges would apply to those taking RNS Service to cover the overhead costs for the Redispatch, Reconfiguration and Capacity Expansion Services.

(3) Consolidated Control Area Charges – These charges would apply to those participating in or using the services of the consolidated control area.

(4) Losses – The mechanism for recovery of losses under RNS has yet to be addressed. See row 7.2 of the Development Staging Table²¹ for concepts discussed as part of the Regional Proposal..

Tariff Structure

Today each transmission owner has in place an Open Access Transmission Tariff which arises from FERC Order Nos. 888/889. In addition, some transmission owners have contracts that pre-date Order No. 888.²² The Regional Proposal envisions that the rights granted to transmission customers under both types of tariffs are to be preserved. Having determined the nature of services for the Beginning State of the Regional Proposal, the TSLG addressed the question of what tariff structure should be used for implementing those services. Joint meetings with representatives of the Facilities Group provided a forum for broader discussion of the tariff structure. These joint discussions produced three tariff structure options, with one of the options selected as a candidate for further development.

Assumptions

Before proceeding with the discussion of the tariff structure, it is important to describe some underlying assumptions. First the TSLG's tariff structure recommendation is provisional. While it appears to be workable and addresses a major concern of parties with differing needs, its final merit will have to be judged after more details are developed. Second, to implement RNS, there can only be one party determining ATC and approving new capacity commitments. Under the proposed tariff structure, Grid West is the only "gate keeper" for the issuance of additional Injection-Withdrawal Rights for the Regional Transmission System. Third, as used below, the term TO Tariff does not mean a full OATT tariff like those in place today, but rather a tariff covering specific items that remain the responsibility of transmission owners, with linkage to the Grid West tariff for scheduling, defining regional service, etc.

²¹ http://www.rto west.com/Doc/DevelopmentStagingTable%20_RegionalProposal_FinalDec82003.pdf

²² These older contracts vary considerably, ranging from more standardized contracts, such as Bonneville's FPT (Formula Power Transmission) and IR (Integrated Resources), to specialized contracts negotiated to meet specific needs over the past 30-40 years.

Tariff Options

The basic tariff structure question addressed by the joint group was to determine which service features would be found in a Grid West tariff and which would be found in a transmission owner tariff (TO Tariff). The three options developed are shown schematically in Appendix 1. For all three options the grid management charge, scheduling provisions, RNS provisions and associated charges would be found in the Grid West tariff, and for all three options the interconnection provisions would be found in a TO Tariff. Transmission owners would also continue to be responsible for their pre-Grid West contracts, so they are shown in the diagram as falling below the dividing line between the Grid West Tariff and the TO Tariff. The difference between these options is in the responsibility for rate setting and for determining if the System Access Requirement has been met for RNS eligibility.

In Option 1, rate setting is done by the transmission owner, and the System Access Requirement provisions are in a TO Tariff. The advocates of this approach felt that the rate setting responsibility and the determination of access should remain with transmission owners. The TO Tariff would specify the Company Rate for new access and contain the provisions for physical interconnection and integration of load and generation.

In Option 3, rate setting is done by Grid West²³ and System Access Requirement provisions are in the Grid West Tariff. The advocates of this approach felt that RNS should be an inclusive service. The advocates of Option 1 find Option 3 to be unacceptable because it would transfer their rate setting authority to Grid West and FERC. The advocates of Option 3 find Option 1 objectionable because it increases exposure in multiple jurisdictions or because they find it commercially unacceptable. They are also concerned about Option 1 meeting the comparable service standard.

After discussion of the pros and cons of these two positions, Option 2 was developed which provides a middle ground. In Option 2, a transmission owner may elect to set its Company Rate and issue a transmission tariff (TO Tariff) which covers System Access Requirement or it may elect to have the System Access Requirements for loads interconnected with its facilities covered by the Grid West Tariff and have Grid West establish its Company Rate.

- If the transmission owner elects to issue a TO Tariff, it would have a Company Rate for load not covered by pre-existing contracts or bundled retail service with the transmission owner, and it would contain rules for using either pre-existing contracts or the payment of the Company Rate in order to meet the System Access Requirement for RNS eligibility.
- For transmission owners who elect the Grid West Tariff route, their Company Rates would be calculated by Grid West and listed by owner in the Grid West Tariff. The

²³ For jurisdictional transmission owners, the revenue requirement for their transmission facilities would be established through a filing of the transmission owner with the FERC. Grid West would calculate the Company Rate for a given transmission owner by applying the FERC approved revenue requirement to a Company Rate formula.

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transmission owner, could also opt to take service for its “own use” to retail load, etc. under the Grid West Tariff.

- It is likely that the Grid West Tariff would include the System Access Requirement for marketers without loads and for loads interconnected with companies who elect not to issue a TO Tariff.
- It is also likely that the export fee provisions would fall under the Grid West Tariff.

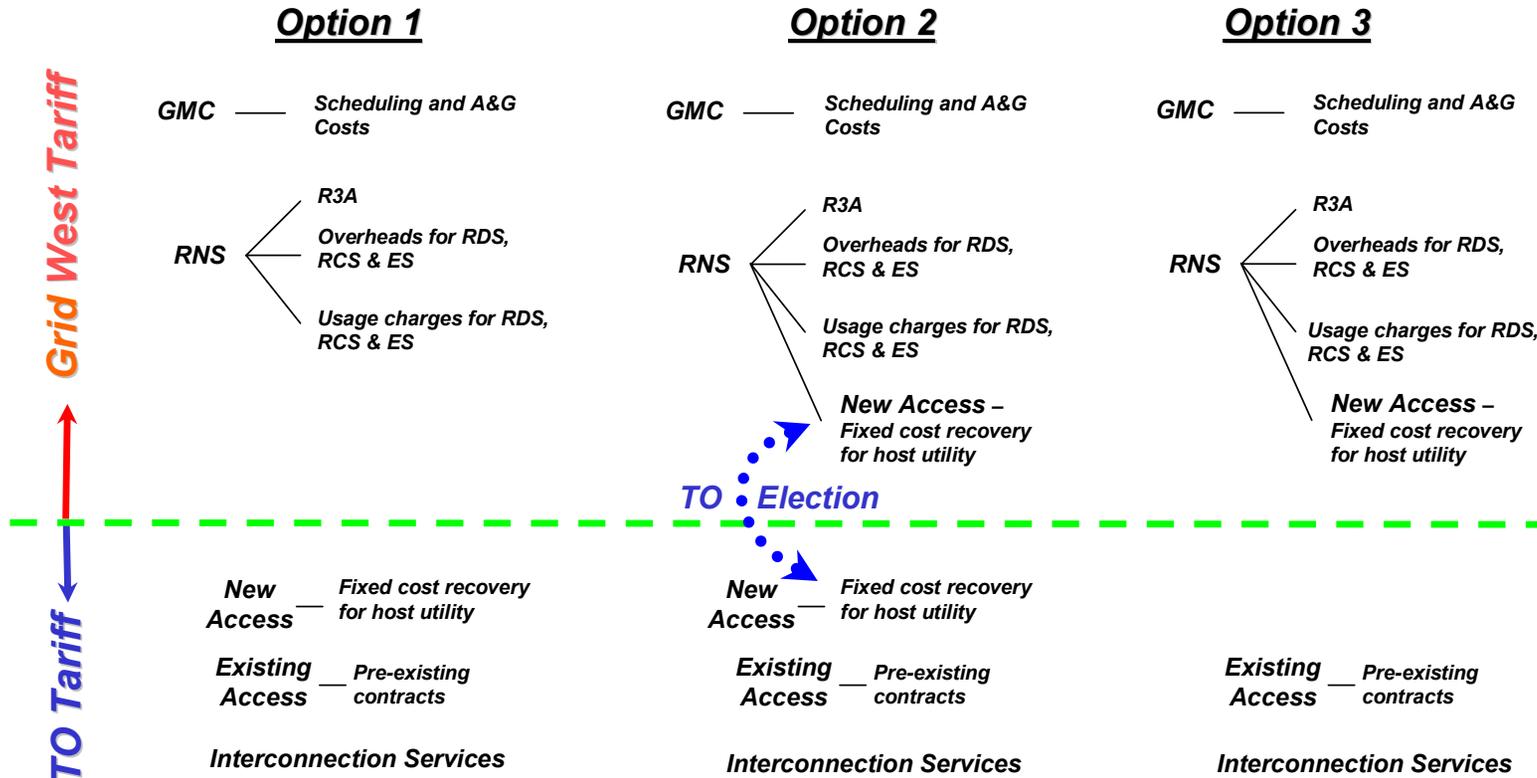
In all three options, Grid West is the “gate-keeper” for rights that provide protection from system congestion, i.e., the issuance of new Injection-Withdrawal Rights. It is not possible to have two separate agencies managing the same transfer capability. Even when parties ask for extensions of service that are to be honored under pre-existing contracts, Grid West will have to make a determination of availability for the transmission owner. At the same time, the transmission owner will have the option of using the RNS suite of services to meet its pre-existing obligations.

Further work is needed to prove the workability of Option 2 including meeting the comparable service standard and establishing the division of duties between the transmission owners and Grid West.²⁴ This work will need to address the continuing concern about how “rates, terms and conditions of service” to be divided between two tariffs.

²⁴ For instance define who takes the lead and makes decisions on an issue and the degree of review each has of the other party’s decisions.

Appendix 1

Tariff Structure Options



Legend:	TO = Transmission Owner	RDS = Redispatch Service (day-ahead)
	GMC = Grid Management Charge	RCS = Reconfiguration Service
	RNS = Regional Network Service	ES = Expansion Service
	R3A = Regional Revenue Requirement Adjustment	
	(to cover loss of non-firm, short-term or other revenues due to adoption of new service structure)	

Appendix 2

Transmission Service Liaison Group Scope of Activity (As of March 12, 2004)

Principles and Objectives

Objectives

The Transmission Service Liaison Group (TSLG) is responsible for developing an operational framework for the Beginning State of the Regional Proposal that can serve as the basis for decision making processes and for preparation of tariffs, transmission operating agreements (TOA) and other needed documents. This objective has two parts.

- o First, reports must be provided to the Regional Representatives Group (RRG) that fill out elements of the Regional Proposal in sufficient detail to enable the RRG to make informed decisions at the first two “Decision Points” identified in the RRG Process Diagram.
- o Second, additional information is desired to complete as much of the framework detail as possible to be used as a viable starting point for the Developmental Entity in completing a final design for the Beginning State of the Regional Proposal.

Deliverables

In the conceptual description of the Regional Proposal prepared by the Platform Group, a number of questions and significant elements of transmission service in the Beginning State were deferred for later work.²⁵ The TSLG plans to produce at least three reports to provide these missing elements of the Beginning State in progressive stages of detail.

- o Deliverable 1 – An initial report to address the basic structure of transmission service (see Module 1 below) that will advance the conceptual description of the Regional Proposal sufficiently to enable decisions to be made at Decision Point 1 (estimated completion, May 2004).
- o Deliverable 2 – The second report will be a complete conceptual level description of transmission service for the Beginning State (see Modules 2, 3 and 4 below) that answers major questions and supplies significant missing elements. At a minimum, this report will provide a market and operational framework at a conceptual or “policy” level, with sufficient information for RRG assessment at Decision Point 2 (estimated completion, November 2004).

²⁵ For instance, how to schedule and honor existing contracts in conjunction with an injection/withdrawal-based operational model.

- Deliverable 3 – As much additional work as can reasonably be done on the framework for market structure, operational structure, the TOA and the tariff between Decision Point 2 and the hand-off to the Board of the Developmental Entity. This work will aid the Board’s final design to implement the Beginning State of the Regional Proposal.

Principles

Work products of the TSLG are to be prepared in accord with the following principles that express regional concerns regarding development of a workable operational framework for the Beginning State:

- Provide a transmission service through an organization that is independent of market interests but is still accountable and responsive to regional input.
- Existing transmission contracts and obligations are to be honored.
- Within the limits of reliable operation, enable additional services obtaining as much use of existing system capacity as possible.
- Proceed methodically with Regional Platform development to minimize chances for market design errors, i.e., a working Beginning State with required milestones before proceeding to the Advanced Target State.
- Allow voluntary consolidation of control areas.
- Utilize a redispatch market (for generation and load) to obtain additional reliable transmission system throughput.
- Improve the tradability of existing transmission rights.
- Prepare for early implementation of voluntary Ancillary Service markets.
- Make information transparent to market participants, e.g. the cost of congestion.
- Market design and pricing models must be compatible to ensure cost recovery.
- Existing concepts that are working in other power markets should be considered and adapted as necessary to meet our regional needs.
- Proposals developed by TSLG are to be guided by and consistent with the Regional Proposal.

Module 1 – Transmission Service

This work module addresses the policy issues related to defining the nature of the transmission service being offered in the beginning state. It relates the service to both the Independent Entity and Transmission Owner tariffs, addresses some underlying principles of pricing and facilities inclusion, and addresses rights (i.e. what you get for your money).

This module may need to be completed first, as part of Deliverable 1. It embodies the policy decisions that underlie much of the remaining work.

Transmission Use Service (for existing and new transactions)

- o Define a tariff structure for providing comparable transmission service (wheeling) to all users. Clarify the roles of existing utility tariffs, revised utility tariffs, and an Independent Entity tariff, including features related to the market functions of a consolidated control area.
- o Specify the nature of the going-forward service (i.e. new service) and how it relates to new rights that are defined by injection/withdrawal pairs. This should not necessarily be limited by current OATT terms.
- o Ensure compatibility between existing contracts and going-forward service where rights are defined by injection/withdrawal pairs:
 - Contractual compatibility.
 - Physical compatibility.
 - Feasibility (security-constrained, simultaneous test).
- o Transmission service queue – how is a single queue managed?

Eligibility

- o To get access.
- o To get rights.
- o To bid into the congestion redispatch and ancillary services markets.

Physical Interconnection

- o This service is separate and distinct from wheeling service. Provision of interconnections through transmission service tariffs should accommodate and facilitate interconnection procedures under potentially varied functional and jurisdictional structures.

Some Service Considerations

- o Possible definitions:
 - “Access” = permission to use the network

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- “*Rights*” = ability to schedule injection and withdrawal of energy from the network without additional service fees (i.e. congestion cost).
- “*Interconnection*” = connection of loads and generation to a provider’s principal network sufficient to serve load from or deliver output.
- Today’s approach:
 - *Access* and *Rights* are packaged together, with no separation of components or fees.
 - Congestion cost to provide *Rights* is internalized by the provider.
 - Most of capacity of existing system grantable as *Rights* has been sold and committed.
 - Residual capacity that is still available is “claimed” under tariff by payment of prices derived from embedded cost and receipt of *Rights*.
- Regional Proposal approach:
 - Honor pre-existing obligations. Parties holding *Access/Right* packages retain their access status and rights. This requires additional work on BPA issues related to public customers.
 - Additional *Rights* (not held under pre-existing arrangements) are obtained from centralized rights auctions (either from right holder offerings or unclaimed capacity) or granted for funding system expansion projects, or perhaps from bilateral trade.
 - *Rights* are protection against any redispatch (or congestion) cost, so price for *Rights* is based on current and estimated future value to the buyer and not linked to embedded cost calculations.
 - The Regional Proposal envisions a maximum two year period for transition to full Independent Entity administration of *Rights*.

Module 2 – Rights Administration

This work module is to develop the processes to acquire, trade, and reconfigure transmission congestion rights. It also assesses the workability of rights administration. There will be significant overlap with service definitions developed in Module 1.

Existing rights

- Define, in general, the rights associated with existing contracts²⁶ and contrast such with new rights acquired from the Independent Entity.
- Provide overall description of administering existing rights, clarifying the roles of the Independent Entity, the original provider and the customer.
- Develop a process for determining the overall feasibility of the set of outstanding rights associated with existing contractual obligations.

²⁶ This task does not include attempting to inventory specific outstanding rights. The inventory activity is expected to be completed within the first two years of Beginning State operation.

New Rights

- o Nature of long-term rights; medium-term rights:
 - Term of going-forward requests –
 - Long-term.
 - Day-ahead.
 - Hour-ahead.
- o Rights Registry.

“Reconfiguration” Auction

- o Define auction parameters:
 - Eligibility to participate.
 - Terms.
- o Develop reconfiguration auctions procedures
 - Bids to buy and sell
 - Evaluation of bid award feasibility
 - Pricing mechanism

Transition Plan

- o How will we provide for moving from today’s practices to the Beginning State?
- o What steps will be required to move from the start of the Beginning State to the all features of the Beginning State described in the Regional Proposal?

Module 3 – Scheduling, Operations and Settlement

This work module is to develop the scheduling protocols used from day-ahead prescheduling to real time and to describe real-time operations and settlement of the congestion redispatch markets.

Functional Model

- o Specify who performs the various elements of the NERC Functional Model:
 - Interchange Authority.
 - Reliability Authority.
 - Balancing Authority.
 - Planning Authority.

OASIS

- o How will regional OASIS services to be provided?

Scheduling Process

The current scheduling and determination of feasibility will be overlaid with flow-based, injection/withdrawal schedules. Voluntary inc/dec offers may be made with schedules to facilitate greater use of the transmission system.

- o Develop Scheduling Processes:
 - Application of rights.
 - Integration of reconfiguration auctions with scheduling.
 - Redispatch.
 - Curtailment.
 - Method for schedule changes prior to real-time.

- o Specify redispatch function:
 - Describe participants/eligibility.
 - Describe general structure of auction.
 - Bidding rules.
 - Clearing.

- o Scheduling protocol:
 - Timing of scheduling activities.
 - Day-ahead.
 - Adjustments.
 - Real-time execution.
 - E-tagging.

- o Control area seams.

Real-Time Operation

- o Application of rights.
- o Flexibility.
- o Redispatch.
- o Interruption of transfers.

Settlement

- o Develop settlement processes for reconfiguration auctions, redispatch markets and ancillary service markets.

Reliability

- o System monitoring.
- o Authority and scope of operational changes.
- o Physical capacity or TTC of the transmission system.
- o System voltage and VAr control.

- o Relationship with reliability coordinator (i.e., PNSC).

Transition Plan

- o How will we provide for moving from today's practices to the Beginning State?
- o What steps will be required to move from the start of the Beginning State to the all features of the Beginning State described in the Regional Proposal?

Module 4 – Ancillary Services

This work module is to describe ancillary services and ancillary service markets needed for control area consolidation. It deals primarily with generator-provided services such as regulation, redispatch, and reserves.

Define Services

- o Balancing/regulation:
 - Regulation.
 - Frequency response.
 - Load following (up and down).
 - Balancing energy.
 - Replacement.
- o Contingency Reserves:
 - Spinning.
 - Non-spinning.
- o Redispatch.

Market Configurations

- o Describe the general configurations of the ancillary services markets in the parts of the region where the Independent Entity serves as a single control area and the parts where utilities operate multiple control areas.
- o Eligibility to participate in ancillary services markets

Control Area Consolidation

- o Define “Consolidated Control Area”
- o Specify requirements of consolidated control area ancillary service markets.
- o How will the consolidated control area work with control areas that are not consolidated?

Transition Plan

- o How will we provide for moving from today's practices to the Beginning State?

- o What steps will be required to move from the start of the Beginning State to the all features of the Beginning State described in the Regional Proposal?

Module 5 – Specifications for Beginning State Implementation

This work module is to develop elementary specifications for the Independent Entity control facility and staffing necessary to implement the Beginning State including the implementation of voluntary control area consolidation. The deliverable product will be a cost estimate for initial operation of the Independent Entity. To the extent that the Beginning State is phased in through a transitional period, estimates for initial phases may be required.

- o Analytic systems.
- o Scheduling and settlement systems.
- o Hardware requirements:
 - Is there a “control center”?
 - Metered boundary, EMS facilities, etc. for a consolidated control area.
- o Communications.
- o Staffing.
- o Estimate the overall costs of new configuration and separately identify:
 - The general costs of establishing and running the Independent Entity to provide the services available to all eligible customers.
 - The additional cost of establishing and operating a consolidated control area applicable to the customers purchasing control area operator service from the Independent Entity.
 - The potential cost offsets.

Other

There are other “buckets” of issues that will eventually need to be considered while the market design is being developed. These are generally not work modules in themselves. Some, like planning and market monitoring, already have substantial work done. Others may be smaller items or may be incorporated in the above work modules.

Inter-Control Area Interfaces in Region

- o Operational Interfaces:
 - Independent Entity to regional control areas.
 - Independent Entity to the consolidated control area.
 - Independent Entity to PNSC.
 - Independent Entity to other control areas (“seams”)

System Expansion

- o Planning
- o Interconnection
- o Expansion and construction
- o Financing
- o Planning and expansion for the Beginning State will be drawn largely from the RTO West Stage 2 proposal; however, these will need to be integrated with the transmission service request process.

Market Monitoring

- o Data Repository

Line Operation

- o Switching
- o Maintenance
- o Local voltage management

Losses