

**Northern Tier Transmission Group  
Cost Allocation Principles Work Group**

**Straw Proposal**

**Steering Committee Discussion Draft  
April 13, 2007**

## INTRODUCTION

This paper makes a strawman proposal responsive to the Federal Energy Regulatory Commission's Order 890 Principle 9 on transmission cost allocation principles and processes. This work is undertaken by the cost allocation work group of the Northern Tier Transmission Group (NTTG) and builds on previous work undertaken by a workgroup of the Committee on Regional Electric Power Cooperation. We encourage interested parties and stakeholders to review the document and provide comments.

An underlying premise of FERC's Order 890 is that the lack of transmission expansion in the Western Interconnection is partly the result of project developer and investor concern over inadequate cost recovery for long term projects due to state and federal regulatory uncertainty. Order 890 stressed the need for involvement of state regulatory bodies in the process. One of NTTG's strengths is that it draws its membership and governance from the regulatory bodies and transmission owners of its footprint states.

NTTG's cooperative efforts attempt to remove some of that uncertainty, achieving for potential project developers and investors a degree of clarity and consistency regarding the regulatory evaluation of transmission projects -- and hence cost recovery -- especially for lines that cross multiple states. Because state regulators do not set wholesale transmission rates and most bundle transmission costs into retail electric service rates, we understand the FERC's Order 890 directive to be one of exploring the adoption of common state or regional entity cost recovery principles and processes.

Review of the New England ISO, Midwest ISO and Southwest Power Pool ("SPP") cost allocation rules reveals that an ISO or tight power pool institutional structure is required to directly adopt such rules. Because these structures do not currently exist throughout the west and are not expected in the near term, the workgroup agreed to review the substance of the rules but to concentrate on options that can be implemented using existing institutional structures.

On a forward looking basis, we propose the use of a regional process to make the task of developers clearer and simpler and to ensure that information is shared among the stakeholders early in the process. We do not call on the states to revise their regulatory requirements but to help interested persons better understand the various processes and engage them more constructively. States and project developers should work together within the NTTG framework during this process.

Below we propose a group of cost allocation principles (Section 1) and a process for their application in the context of NTTG (Section 2).

## **SECTION 1**

### **NTTG Cost Allocation Principles**

#### **Introduction**

The workgroup identified a number of principles that could be observed for transmission cost allocation. In doing so, we have assumed that the costs of certain projects in the West (e.g., those the SPP would classify as Requested Projects or Generation Interconnection Projects) would be largely assigned directly to the parties involved and would not generally involve allocations to other transmission owners or users. We believe that project developers should be encouraged to use open seasons or other processes to determine cost allocations without resorting to other processes. However, to the extent project developers believe such projects exhibit specific benefits for identified subscribing users and common benefits for others, then such projects, including the portion of the costs attributed by the developer to reliability benefits, would be subject to the principles and procedures identified here. We also recognized that, in some cases, the costs of such projects may be subject to interjurisdictional allocation principles developed outside of the NTTG context and discussed below.

It is important to understand the broader context within which decisions are made for selecting any given project in the West. Unlike in the SPP and MISO areas, there is no RTO or equivalent entity functioning on a West-wide basis. Thus, successful transmission planning must be conducted on a cooperative basis, and transmission investment cost recovery for specific projects will be subject to state and/or federal approval. This process is expected to continue for the foreseeable future.

In addition, utilities in the Western Interconnection are predominantly subject to integrated resource planning (IRP) or least-cost planning requirements. Wyoming, for example, does not have a mandatory IRP process, but subjects transmission investments to examination in the rate making context and is developing an IRP review process. Although purely merchant transmission development has attracted serious interest in the West, it is reasonable to expect that most major transmission investments are going to be undertaken by utilities within an IRP environment. Even utility-built transmission, however, may be built for the purpose of simply accessing wholesale markets, including markets outside of the NTTG footprint.

Where a project is essentially intrastate in character and its costs are intended to be recovered from native load customers within one state or utility system, these principles might not apply directly if a single commission or multi-state allocation procedure sufficiently oversees the inclusion of costs fairly in retail rates. However, system benefit issues may arise in which these principles and procedures would be used; and a state or states considering such a project might use the NTTG process and principles for guidance and consistency to aid in their determinations. A project developer will need to apply these principles if it seeks to justify recovery of reliability-related project costs.

## Transmission Configurations and Cost Types

Our Transmission Scenarios Matrix describes a variety of reasonable ownership and topographical configurations in which new transmission might be built. These configurations are useful for relating aspects of project ownership to regulatory processes and jurisdiction. In terms of principles for cost allocation, however, an equally crucial characteristic is the purpose for which the transmission is built, as this provides the underlying rationale for the allocation of its costs. That is, is the transmission line to be built for the provision of retail service to the transmission owner's native load, or for generic wholesale market access?

The following classification scheme is built around the costs related to the end-use characteristics of the transmission line. Because transmission lines might be built and owned by multiple parties, each of whom may have different uses in mind, any given transmission line could, in fact, include multiple types of costs. For purposes of developing the Draft Principles, the types of transmission line costs are:

**Type 1 transmission line costs** are those related to the provision of retail service to the transmission owner's native retail load, including the following sub-types:

- Type 1-A: costs incurred by a single load serving entity for its native load within a single state.
- Type 1-B: costs incurred by a single load serving entity for its native load in more than one state.
- Type 1-C: costs incurred by more than one load serving entity for native load within one state.
- Type 1-D: costs incurred by more than one load serving entity for native load in more than one state.
- Type 1-E: costs incurred to provide service for, to lower the costs of, or to increase the quality of service for a specific retail customer or specifically identifiable group of retail customers. While there may be some "generic" benefit to other retail customers, those benefits would be incidental to the primary purpose of the line.

Type 1 costs might be incurred to:

- a. Provide capacity needed to serve load;
- b. Fulfill reliability or other technical operating requirements, the benefits of which generally inure to the consuming public; or,
- c. Lower costs for the general consuming public (e.g. congestion relief that provides access to cheaper, remote generation).
- d. Fulfill requirements related to state or federal environmental or other policies.

**Type 2 transmission line costs** are those related to the sale or purchase of power at wholesale not directly for the benefit of native load, or on behalf of or at the request of a wholesale generator or a wholesale transmission customer. Type 2 transmission line costs will typically be FERC-jurisdictional and not subject to state review. However, to the extent that the physical transmission line associated with these costs might also have Type 1 characteristics, a state or states may allocate costs to retail rate payers, and project developers should therefore be prepared to bring the project before the NTTG. State regulators have three ways to include transmission costs in retail rates (bundled, functionally unbundled, functionally and service (retail versus wholesale) unbundled). Depending on the method used, either the utility shareholders or the utility customers bear the risk of differences in FERC and state cost recovery decisions. Our NTTG principles are designed to minimize the possibility of incomplete allocation of appropriate project costs while not imposing unwarranted costs on retail ratepayers.

**Type 3 costs** are those incurred specifically as alternatives to (or deferrals of) transmission line costs (typically Type 1 projects), such as the installation of distributed resources (including distributed generation, load management and energy efficiency). Type 3 costs do not include demand-side projects which do not have the effect of deferring or displacing Type 1 costs.

For purposes of these draft principles, it is critical to keep in mind the distinction between transmission *projects* and transmission *cost types*. Any given transmission project may have multiple transmission cost types. For example, a transmission line may be jointly owned by owners who utilize the line for different purposes (one owner may utilize the line for native load, while another utilizes the line for access to wholesale markets); and even for a single owner, the line may serve multiple purposes (part native load and part direct off-system sales or out of region export sales to another transmission user). These principles are built around the characteristics of the associated *costs*.

#### A Note on Project Size

For purposes of this draft, we have chosen not to specify a *de minimis* threshold beneath which, in either cost or size, these principles and processes would not apply. If such a threshold is identified, it should be developed later based on actual NTTG experience.

### NTTG Principles

Below are the NTTG cost allocation principles. A discussion of each individual principle follows.

**Principle 1.** As a matter of equity, cost allocations will reflect the classic principles that ‘cost causers should be cost bearers’ and that ‘beneficiaries should pay’ in amounts that are reflective of the benefits received.

**Principle 2.** Projects brought forward for consideration of cost recovery will be shown not to be in conflict with state and federal IRP, Competitive Bidding, RPS (Renewable Portfolio Standard), siting, certification and other policy and planning requirements affecting transmission development, to the extent they are applicable to the project. Selecting an efficient portfolio of remote generation, in-state

generation and demand-side solutions requires that the proposed allocation of transmission project costs be known with clarity. Therefore, the NTTG process will encourage efficient and stable resource planning processes by which the project developer identifies the extent of cost allocation consensus for a proposed transmission project as soon as practical in the project life cycle, allowing the states to evaluate the proposed project for compliance purposes and to understand costs relative to other resource options. Regional and subregional planning resources should be utilized and the results demonstrated.

**Principle 3.** Cost allocations will result in a reasonable opportunity for the transmission owner(s) to achieve full recovery of the costs of the project, but no more.

**Principle 3a.** Transmission project costs should be directly assigned to a single transmission customer or allocated to multiple transmission customers or areas (or the entire region) based upon the distribution of benefits.

**Principle 3b.** Upgrades and other projects proposed on the basis of economic or other benefits for specific transmission customers will be accommodated if [i] the customers and/or transmission owner accept responsibility for the associated costs; [ii] the project does no harm to the network; and [iii] the project otherwise has no adverse impact on regional transmission service.

**Principle 4.** For Type 2 project costs, the rest of the network and its customers will be held harmless and the transmission owner should look to its transmission customers for direct recovery of costs.

## **Principle 1**

Principle Type: Equity

Applies to all Transmission Cost Types

“As a matter of equity, cost allocations will reflect the classic principles that ‘cost causers should be cost bearers’ and that ‘beneficiaries should pay’ in amounts that are reflective of the benefits received.”

### **Discussion:**

This principle is consistent with traditional utility cost recovery principles historically applied by utility commissions. However, the “cost causer” and “beneficiary” concepts are not necessarily identical. That is, there may be situations where the project construction or the problem being solved is “caused” by one party, but where the solution being applied also provides benefits to others or increases costs to others. As such, application of this principle necessarily implies a balancing of these interests. This principle presumes that the term “benefit” includes transmission service allocation (meaning transmission rights, whether physical or financial) and that allocation of service rights is consistent with cost allocation. Further, given the characteristics of the Western Interconnection and the development of electricity markets to

date, the party funding a project should retain its rights as market structure, e.g., formation of an ISO, evolves.

In the SPP, for “Base Funded” projects, this is addressed through the use of an arbitrary allocation of costs. One third of the cost is allocated on a region-wide basis and the balance is allocated to the identified zone or zones that benefit from the project, using an “incremental MW mile” approach.

### **Implementation Requirements:**

This principle states the conceptual basis for cost allocations. No institutional changes are necessary to implement this principle, other than an affirmation by each state in the NTTG footprint that it intends to recognize this principle in the consideration of transmission project costs. In this regard, such recognition might be included in an informal memorandum of understanding among NTTG’s participating states.

### **Principle 2**

Principle Type: Efficiency

Applies to all Transmission Cost Types

“Projects brought forward for consideration of cost recovery will be shown not to be in conflict with state and federal IRP, Competitive Bidding, RPS (Renewable Portfolio Standard), siting, certification and other policy and planning requirements affecting transmission development, to the extent they are applicable to the project. Selecting an efficient portfolio of remote generation, in-state generation and demand-side solutions requires that the proposed allocation of transmission project costs be known with clarity. Therefore, the NTTG process will encourage efficient and stable resource planning processes by which the project developer identifies the extent of cost allocation consensus for a proposed transmission project as soon as practical in the project life cycle, allowing the states to evaluate the proposed project for compliance purposes and to understand costs relative to other resource options. Regional and subregional planning resources should be utilized and the results demonstrated.”

### **Discussion:**

Transmission projects should support applicable state and federal resource choice policies and regulatory requirements and should result in efficient transmission development. Project developers should demonstrate how the project achieves these requirements and what the costs are, in real terms and relative to other resource choices. In reviewing project costs, the developer will show that non-transmission alternatives (e.g., demand side management, distributed resources and energy efficiency programs) have been fairly considered. Project developers should demonstrate how their proposals have been identified and assessed by WECC and by any other entities (e.g., groups planning interregional transmission projects such as the Trans West Express or the Frontier Line) which may be involved.

### **Implementation Requirements:**

Transmission projects are currently identified or proposed through a variety of channels and by a variety of entities. To understand the consensus (or other) cost allocation scheme for a project, NTTG must be able to examine the extent to which projects have completed the various planning and other activities that must be addressed before construction can begin. Once projects are proposed, they must obtain all required federal, state and local approvals, including those concerning IRP, competitive bidding, RPS, certification, siting, etc. This policy ensures that certifications and permitting, to the extent possible, have been obtained, and that alternatives at the regional or sub-regional level been identified and considered.

Currently IRP and least cost analyses are typically done on a state-by-state or single utility system basis. NTTG will encourage utilities and other transmission developers to conduct such reviews and planning on a cooperative regional and sub-regional basis. In this regard, NTTG can assist in the development of a framework for such a more broadly integrated planning process. An informal memorandum of understanding among state commissions may be helpful in this regard.

An IRP review in one state or a single utility system would not typically consider the cost savings associated with demand-side alternatives in another state or utility system. Fulfillment of Principle 2 will enhance the implementation of a broader regional or sub-regional IRP review of all proposed transmission projects and alternatives. Principle 2 encourages cooperative engagement early in a specific project's life cycle.

### **Principle 3**

Principle Type: Fair and Full Cost Allocation

Applies to all Transmission Cost Types

“Cost allocations will result in a reasonable opportunity for the transmission owner(s) to achieve full recovery of the costs of the project, but no more.”

### **Discussion:**

Order 890 recognizes this critical principle. Needed transmission projects will not be undertaken if there is no reasonable assurance that the project developers can obtain an appropriate recovery of costs.. Type 1 or Type 3 project costs should all be fully recoverable from the appropriate ratepayers; and all of the costs of multi-state projects of Types 1-B and 1-D should be allocated to one or more utility systems for recovery. For a Type 2 project related solely to wholesale generation or transmission, this may not require action by NTTG because (except for any system reliability case that might be made) there should be no expectation of recovery from ratepayers. In any situation, there should be no over- or under-allocation of these costs.



Historically, utilities have largely recovered multi-jurisdictional costs through allocation mechanisms that were, for the most part, sufficiently consistent to allow recovery of all costs. This has become less consistent as state policies and requirements bearing on electric utility infrastructure construction have diverged over time. While there are legal standards that support full cost recovery at the federal and individual state levels, there have never been formalized rules to assure this result. State and federal standards that provide for a reasonable opportunity to earn a return on the investment, and prohibit confiscatory rates to the utility or excessive rates to customers, demonstrate the careful balance that must be achieved in setting rates.

**Implementation:**

Because this principle is a key element of the NTTG’s cost allocation principles and is important to the encouragement of needed transmission projects, states should endeavor to implement this principle going forward. While full allocation of costs to ratepayers is not prudent in certain circumstances (e.g., a purely merchant export line without identifiable system reliability benefits), the cost responsibility for each project going through the NTTG process must be fairly assessed. An informal memorandum of understanding among state commissions may be helpful in this regard.

**Principle 3a**

Principle Type: Cost Assignment Should Follow Benefits

Applies to all Transmission Cost Types

“Transmission project costs should be directly assigned to a single transmission customer or allocated to multiple transmission customers or areas (or the entire region) based upon the distribution of benefits.”

**Discussion:**

To the greatest extent possible, transmission costs should be allocated to the customers or regions that receive the benefits of the project. This elaborates the “beneficiaries should pay” aspect of Principle 1.

To provide reasonable assurance of cost recovery to project owners and to avoid post-construction cost allocation controversy, the project owner must identify its expectations for the allocation of costs early on in the NTTG review process and always prior to construction. While it is unlikely that any state would endorse “pre-approval” of cost recovery, especially in the regional or sub-regional context, it is important for the project owner to engage the states and NTTG early in the process so the expectations of the project owners and others will be clearly identified and understood during preconstruction review.

**Implementation:**

No formal action is required with respect to this principle. However, an informal memorandum of understanding among state commissions participating in NTTG, recognizing this principle, may be helpful.

### **Principle 3b**

Principle Type: Customer Specific Allocation

Applies to all Transmission Cost Types (most specifically Type 1-E)

“Upgrades and other projects proposed on the basis of economic or other benefits for specific transmission customers will be accommodated if [i] the customers and/or transmission owner accept responsibility for the associated costs; [ii] the project does no harm to the network; and [iii] the project otherwise has no adverse impact on regional transmission service.”

#### **Discussion:**

Where transmission customers require specific projects that are not otherwise identified as having Type 1-E cost aspects, cost recovery should be limited to the affected customer or customers. Incidental benefits to other customers could be considered.

#### **Implementation:**

No formal action is required for implementation of this principle, but an informal memorandum of understanding among state commissions recognizing this principle may be helpful.

### **Principle 4**

Principle Type: Allocation for wholesale and merchant project costs

Applies to Transmission Cost Type: Type 2

“For Type 2 project costs, the rest of the network and its customers will be held harmless and the transmission owner should look to its transmission customers for direct recovery of costs.”

#### **Discussion:**

These projects fall mostly outside the scope of regional or sub-regional cost allocation mechanisms, and the merchant transmission owner should look to its customers for recovery of costs. As a general rule, it is expected that Type 2 costs will be subject to FERC jurisdiction. NTTG may apply its knowledge of sub-regional facts and circumstances to assist state and federal regulatory bodies in resolving conflicts in defining and adjudicating “harm” and ancillary benefits. Project developers may bring forward assertions of reliability benefits.

**Implementation:**

Merchant transmission projects will connect to the grid and should therefore be reviewed for their impact on the stability, reliability and capability of the Western Interconnection, including any costs they might impose or advantages they might create for other users of the system. NTTG will work closely with WECC and the project developers to assess the project's impact early in the development of the project.

## **SECTION 2**

### **Proposed NTTG Cost Allocation Process**

**Introduction**

FERC's Order 890 stresses the need for constructive participation in transmission decisions by state regulators. If this involvement can be accomplished through the vehicle of regional organizations, the overall process can be made more efficient, certain and useful to the states and to project developers. Such a regional process would draw on the combined strengths and resources of states in their knowledge of local and regional considerations and give stakeholders -- customers, environmental interests, utilities, the financial community, and others -- a way to become engaged in a more local and less expensive process designed to decide transmission cost recovery issues.

The process must be open and transparent. It must apply principles and processes agreed to in advance of the discussion of a particular case because it is not the intent of the NTTG to create a standardless review process. NTTG's involvement should begin early in the life of a project to allow for timely decisions by developers and others. This requires regulatory involvement in the planning stage -- well before the project is fully built and functioning; and it does not replace the jurisdiction of individual state regulatory commissions. A properly open and agreed upon NTTG process is intended to deflect any allegations of prejudgment or impermissible *ex parte* communication.

**Note regarding Steering Committee involvement**

As the organization of NTTG evolves, the Steering Committee may wish to designate another committee to perform the allocation review. Therefore, references to the Steering Committee should be read as including any designated successor committee. The work group's intent is that this process will, in any case, be consistent with the recommendations of Order 890 and involve the regulatory commission members of NTTG.

## **A Proposed Cost Allocation Process**

1. The project developers prepare an application package and transmits it to the NTTG Steering Committee or its designated successor for its review.<sup>1</sup> Upon the developer's request, the NTTG Planning Work Group may provide its assistance. The project developers shall provide the following information with the application:

- a. Project description
- b. Physical location
- c. Cost/benefit analysis
- d. Investors
- e. Operator
- f. Subscribers/Contracts
- g. Pertinent transmission study results
- h. A copy of the WECC Phase 2 reliability determinations relative to the project
- i. Proposed siting process
- j. Proposed cost allocation
- k. Proposed cost recovery
- l. A risk and benefit analysis of impacts to native utility loads affected by the proposed cost allocation
- m. Proposal on dealing with cost overruns
- n. Degree of consensus among stakeholders on all of the above
- o. How each NTTG cost allocation principle was applied in the analysis
- p. A description of any regulatory rulings needed prior to examination of the project
- q. Any NTTG Planning Work Group analysis pertinent to the project and a description of how it fits into the NTTG Biennial Plan
- r. Description of any proprietary or commercially sensitive information applicants believe should remain confidential during the review process

### **Note on claims of reliability benefits**

NTTG encourages project developers to provide for the allocation of the costs of their projects through an open season or other similar process. However, any project developer asserting the existence of benefits by which they seek to justify allocation of costs to parties other than direct participants must make a convincing demonstration that the amount and likelihood of such benefits merit the implicit risk sought to be placed on such parties. For example, benefit estimates derived from modeling the electrical system depend on assumptions about system conditions, loads, load shapes, and the future development and use of the transmission system. Any presentation must therefore carefully explain such estimates and provide reasonable sensitivities to aid in the demonstration.

2. The developer submits the application to the Steering Committee, which takes the following actions within 45 days of receipt:

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<sup>1</sup> All references to the NTTG Steering Committee refer to the Steering Committee or its designated successor.

- a. A general determination of the completeness of the application and its readiness for consideration. (If it is incomplete, the Steering Committee will inform the developer about the necessary additional information.)
  - b. Deciding what, if any, information is to be kept confidential during the review process (with an emphasis on the greatest possible degree of openness and transparency).
  - c. A determination whether the application has fairly observed the NTTG's cost allocation principles.
  - d. Setting the time and date for public examination by the Steering Committee.
  - e. Composing public notice of the Steering Committee meeting at which the application will be examined.
3. The Steering Committee subjects the application to a public examination. It will take information and views orally or in writing from any person involved in the project or the preparation of the application as well as from interested regulators, consumers and other interested persons. The examination may continue as needed at a later date if needed, but shall be completed within [xxx days] of the time it receives a complete application.
4. If it is satisfied, the Steering Committee will issue a determination letter on the project to each affected authority having jurisdiction over siting and cost recovery of the project describing the extent to which the project complies with NTTG principles. The Steering Committee may, in the alternative, decline to issue a determination and send the project back to the applicant for modification or clarification. The determination letter will discuss the extent to which the project developers have provided adequately for project cost recovery, including any evidence produced to support allocation of any portion of the costs on the basis of reliability enhancement. In its review, the Steering Committee will ensure that all of the NTTG cost allocation principles have been observed and fairly applied. Further procedural rules for the conduct of the review will be added later as experience dictates.
5. The project developers will provide updates on any or all of the application items listed above as the project progresses through study and construction. The Steering Committee will determine whether any changes are significant enough to trigger additional review of the project. (Significant changes might include, for example, a 15% increase in project costs, a 10% increase in the length of the line, and major unforeseen changes in the routing of the line or its capacity; but it is the workgroup's intent not to specify any bright line tests, relying instead on NTTG's experience as to whether any such thresholds are useful.)
6. The Steering Committee will, if possible, resolve disputes using the NTTG dispute resolution process. If the dispute persists, the matter will be referred to the WECC for resolution under its established processes.

NOTE:

NTTG-state regulatory agencies must avoid *ex parte* problems and the appearance of prejudgment. Among the tools available are:

- Making the entire process open and noticed to the level required by each participating state.
- Ensuring the Steering Committee's determination letter is not framed as a decision binding on the individual states and states clearly that each retains its decision making prerogatives.