

Template for Addressing Regional Transmission Problems and Opportunities

Text from Document on Option 3 is shown in italics for each of the Problems and opportunities listed in the row.

This document is based on Draft 5 of the Option 3 document. It is incomplete, and several reference points will probably change as a result of edits of Draft 5.

Group 1: Planning and Expansion Issues

1.a Internal Planning

A.1.1 Failure to use existing capacity which may lead to costly alternatives.

2.a. A.1. 2 Failure to use existing capacity, which may lead to costly alternatives.

3.a.A.1. 2 Failure to use existing capacity which may lead to costly alternatives.

Page 7, last para.: This "big picture" look at capacity will allow the RTO to use all of the available capacity on a combined system basis, even that portion of available capacity that is presently masked by the multi-system, contract path methodology. ...Under the RTO West proposal, schedules are not curtailed because of unavailable capacity and those willing to adjust their schedules can do so and get paid for doing it. Overall, the RTO West system eliminates the biggest impediment to efficiently using the system by allowing the presently unused capacity on the system to be utilized.

A.4.1 Lack of information and incentives (or poor incentives) to guide location of new resources and transmission.

1.c.A.4. 1 Lack of information and incentives (or poor incentives) to guide location of new resources and transmission.

Page 5, 1st full paragraph: It sends accurate price signals to the RTO users, and allows RTO West to determine the cost of any particular constraint enabling the RTO to determine the value of fixing it. It will send the right signals to generators by helping inform their location decision, i.e., the transmission impacts associated with interconnecting new generation.

Page 9, last paragraph: The RTO West planning process would be a planning process open to stakeholders, which seeks to identify and implement least-cost solutions to transmission problems, allows consideration of non-transmission alternatives, and contains a subscription process to encourage market participants to help finance needed projects.

A.4.2 Incentives and cost recovery for system expansion are uncertain.

1.c A.4. 2 Incentives and cost recovery for system expansion and uncertain.

Page 10, Problems and Opportunities 1st paragraph: The RTO West planning process greatly enhances the ability of getting transmission infrastructure constructed, while making sure that only the needed projects are built and that they are the least-cost way of solving problems on the transmission system. RTO West will be able to take a "big picture" view of the transmission system and identify and facilitate constructing projects that benefit the entire system, which otherwise would not be constructed because of the mismatches that exist between "the system with the problem" and "the system with the solution".

Page 9, last paragraph: The RTO West planning process would be a planning process open to stakeholders, which seeks to identify and implement least-cost solutions to transmission problems, allows consideration of non-transmission alternatives, and contains a subscription process to encourage market participants to help finance needed projects.

Page 10, P&O, 2nd paragraph: The RTO West planning process is to be designed as a non-discriminatory, proactive, least-cost, public process. One entity will be ultimately responsible for the planning and expansion of the RTO West Facilities. The output of this process should provide more useful information and transparency to stakeholders than has been available in the past. It will provide more information for decision makers, greater opportunities for innovative solutions, including non-transmission alternatives, and a greater ability for stakeholders, including the states, to shape the outcomes of the process.

A.4.3 Difficulty for recipients in understanding information provided.

Page 5 1st full paragraph: It sends accurate price signals to the RTO users, and allows RTO West to determine the cost of any particular constraint enabling the RTO to determine the value of fixing it. It will send the right signals to generators by helping inform their location decision, i.e., the transmission impacts associated with interconnecting new generation.

Page 9, last paragraph: The RTO West planning process would be a planning process open to stakeholders, which seeks to identify and implement least-cost solutions to transmission problems, allows consideration of non-transmission alternatives, and contains a subscription process to encourage market participants to help finance needed projects.

C.1.1 Meeting adequacy standards must consider all options – generation, transmission, demand-side measures.

Page 9, last paragraph: The RTO West planning process would be a planning process open to stakeholders, which seeks to identify and implement least-cost solutions to transmission problems, allows consideration of non-transmission alternatives, and contains a subscription process to encourage market participants to help finance needed projects.

C.1. 2 Clarification of states' role in transmission and generation adequacy.

Page 3, reloaded: Reloaded Depending upon input from the states, there may need to be some changes in the RTO West bylaws to recognize the states' role in RTO West decision making.

C.1. 3 Need to address transmission capacity reservations for future load growth.

??

C.1. 4 "Tightening" of system due to unintended loss of margin because of economic pressure. Challenge is to secure sufficient investment to meet growing needs while continuing to meet reliability standards.

Page 10, P&O, 1st paragraph: The RTO West planning process greatly enhances the ability of getting transmission infrastructure constructed, while making sure that only the needed projects are built and that they are the least-cost way of solving problems on the transmission system. RTO West will be able to take a "big picture" view of the transmission system and identify and facilitate constructing projects that benefit the entire system, which otherwise would not be constructed because of the mismatches that exist between "the system with the problem" and "the system with the solution".

C.1. 5 There is an opportunity to make investments for reliability on a more coordinated, regional basis.

Page 10, P&O, 2nd paragraph: The RTO West planning process is to be designed as a non-discriminatory, proactive, least-cost, public process. One entity will be ultimately responsible for the planning and expansion of the RTO West Facilities. The output of this process should provide more useful information and transparency to stakeholders than has been available in the past. It will provide more information for decision makers, greater opportunities for innovative solutions, including non-transmission alternatives, and a greater ability for stakeholders, including the states, to shape the outcomes of the process.

1.b West-wide Planning

C. 6 Interregional (seams) planning issues

??

1.c System Expansion

A.4. 1 Lack of information and incentives (or poor incentives) to guide location of new resources and transmission.

1.a.A.4. 1 Lack of information and incentives (or poor incentives) to guide location of new resources and transmission.

Page 5, 1st full paragraph: It sends accurate price signals to the RTO users, and allows RTO West to determine the cost of any particular constraint enabling the RTO to determine the value of fixing it. It will send the right signals to generators by helping inform their location decision, i.e., the transmission impacts associated with interconnecting new generation.

Page 9, last paragraph: The RTO West planning process would be a planning process open to stakeholders, which seeks to identify and implement least-cost solutions to transmission problems, allows consideration of non-transmission alternatives, and contains a subscription process to encourage market participants to help finance needed projects.

A.4. 2 Incentives and cost recovery for system expansion and uncertain.

1.a.A.4. 2 Incentives and cost recovery for system expansion are uncertain.

Page 9, last paragraph: The RTO West planning process would be a planning process open to stakeholders, which seeks to identify and implement least-cost solutions to transmission problems, allows consideration of non-transmission alternatives, and contains a subscription process to encourage market participants to help finance needed projects.

A.4. 3 Pancaking effects on wholesale energy markets include – limits diversity of options available to buyers, limits ability to complete otherwise economic transactions, sub-optimal resource development and difficulty in long-term power contracting.

2.a.A.4 3 Pancaking effects on wholesale energy markets include – limits diversity of options available to buyers, limits ability to complete otherwise economic transactions, sub-optimal resource development and difficulty in long-term power contracting.

3.a.A.4. 2 Pancaking effects on wholesale energy markets include – limits diversity of options available to buyers, limits ability to complete otherwise economic transactions, sub-optimal resources development and difficulty in long-term power contracting.

5.b. 2 Pancaking effects on wholesale energy markets include – limits diversity of options available to buyers, limits ability to complete otherwise economic transactions, sub-optimal resource development and difficulty in long-term power contracting.

Page 4, Single Point of Access: RTO West will create a single point of access for all transmission users. It will standardize rules for those wishing to use the Northwest transmission grid and eliminate the multiple rules that apply to multiple systems that presently plague current users of the system.

Page 9, P&O: RTO West's pricing proposal eliminates rate pancakes for crossing multiple transmission systems, but does so in a way that avoids any significant cost shifting. The proposal eliminates the inefficiencies and inequities that can result from pancaked rates. It better aligns the costs to users of the system with the actual costs they impose for using it. It also encourages economic transactions throughout the RTO West market by eliminating the fixed costs charges that bear no relationship to costs the transaction imposes on the system. This change would allow the region to best achieve generation for the lowest overall system cost.

C.1. 1 Incentives have changed form past when expansion conferred strategic advantage, resulting in reduced incentive to use scarce capital for expansion with generalized benefits like more economic energy trade.

Page 9, last paragraph: The RTO West planning process would be a planning process open to stakeholders, which seeks to identify and implement least-cost solutions to transmission problems, allows consideration of non-transmission alternatives, and contains a subscription process to encourage market participants to help finance needed projects.

Page 9, last paragraph (cont.): The RTO West planning process also has a backstop mechanism to get certain projects constructed under certain conditions and to align the costs and benefits should the RTO determine there are market failures and certain projects should be constructed given certain criteria.

C.2. 1 Need sufficient, timely investment to adequately serve load, provide capacity to new users and alleviate congestion.

Page 9, last paragraph: The RTO West planning process would be a planning process open to stakeholders, which seeks to identify and implement least-cost solutions to transmission problems, allows consideration of non-transmission alternatives, and contains a subscription process to encourage market participants to help finance needed projects.

Page 9, last paragraph (cont.): The RTO West planning process also has a backstop mechanism to get certain projects constructed under certain conditions and to align the costs and benefits should the RTO determine there are market failures and certain projects should be constructed given certain criteria.

C.2. 2 Currently have multiple planning process and limited construction.

Page 9, last paragraph: The RTO West planning process would be a planning process open to stakeholders, which seeks to identify and implement least-cost solutions to transmission problems, allows consideration of non-transmission alternatives, and contains a subscription process to encourage market participants to help finance needed projects.

Page 9, last paragraph (cont.): The RTO West planning process also has a backstop mechanism to get certain projects constructed under certain conditions and to align the costs and benefits should the RTO determine there are market failures and certain projects should be constructed given certain criteria.

C.2. 3 Lack of access to capital leads to over-use of short-term measures which contributes to uncertain cost recovery.

??

??

C.3. 1 Uncertainty over (a) regulatory support for recovery and (b) method of recovery which is increased by multi-jurisdictional environment.

C.3. 2 Need to align payment of cost with beneficiaries of system improvements.

Page 9, last paragraph (cont.): The RTO West planning process also has a backstop mechanism to get certain projects constructed under certain conditions and to align the costs and benefits should the RTO determine there are market failures and certain projects should be constructed given certain criteria.

??

Group 2: Use of Existing System Issues

2.a Short-term Access

A.1. 1 Not everyone is able to obtain desired service.

3.a.A.1. 1 Not everyone is able to obtain desired service.

2.d.A.1. 1 Not everyone is able to obtain desired service.

Page 3, Operational fundamentals last full paragraph: RTO West proposes a system that accepts all schedules that are submitted as opposed to a system where only schedules with contract rights are accepted. In its place, RTO West proposes a voluntary market that all users are free to bid into, however, the RTO does not force any existing contract holder into this market. This allows RTO West to honor all transactions and facilitates the bilateral markets that presently exist in the Northwest. RTO West's market mechanism will accommodate all those wishing to use its system, rather than a few, and will assure the RTO operates the system in the least-cost manner.

Page 4, System Use: Use of the RTO West system is proposed to change from current scheduling practices, which is based on contract paths and ownership of contract path rights on individual system paths, to a system in which all users can schedule to all points on the RTO West system, regardless of rights. In order to schedule, users must submit schedules that balance loads with generation and be willing to pay for any congestion they cause on the system.

Page 6, 2nd paragraph from bottom: Customers who do not have FTOs or CTRs will nevertheless be able to submit schedule requests, however, they will have to pay whatever congestion charges apply.

A.1. 2 Failure to use existing capacity, which may lead to costly alternatives.

1.a.A.1. 1 Failure to use existing capacity which may lead to costly alternatives.

3.a.A.1. 2 Failure to use existing capacity which may lead to costly alternatives.

Page 7, last para.: This "big picture" look at capacity will allow the RTO to use all of the available capacity on a combined system basis, even that portion of available capacity that is presently masked by the multi-system, contract path methodology. ... Under the RTO West proposal, schedules are not curtailed because of unavailable capacity and those willing to adjust their schedules can do so and get paid for doing it. Overall, the RTO West system eliminates the biggest impediment to efficiently using the system by allowing the presently unused capacity on the system to be utilized.

A.1. 3 Current rules contribute to problem.

2.b.A.1. 1 Current rules contribute to problem.

Page 2, Structure/Governance paragraph at bottom of Page 2 and reloaded: RTO West will be governed by a nine-member board of trustees that will operate the RTO in accordance with its bylaws. Each trustee must be independent from any financial interests of any power market participant. This independence assures that the transmission system will operate to the overall good of the region, rather than to the economic interest of any particular power market participant. The Trustees will be selected by representatives from five member classes: major transmission owners, transmission-dependent utilities, non-utility transmission users, retail customers, and state and provincial regulatory authorities, tribes and unaligned entities, such as public interest organizations. The Board, and the RTO, will be fully accountable to all users of the transmission system.

Page 4, 1st paragraph: RTO West will have exclusive authority to administer a single tariff that will control access to and use of the system. The tariff will contain the terms and conditions that apply to all users of the RTO West system, including pricing, how congestion is managed, and how both loads and generators are to be interconnected to it. It is the "rules of the road" for all users of the system and provides users with protections that terms and conditions don't unfairly advantage any one user over any other.

Reloaded Depending upon input from the states, there may need to be some changes in the RTO West bylaws to recognize the states' role in RTO West decision making.

A.1. 4 Opportunity to make more capacity available.

Page 4, System use Use of the RTO West system is proposed to change from current scheduling practices, which is based on contract paths and ownership of contract path rights on individual system paths, to a system in which all users can schedule to all points on the RTO West system, regardless of rights. In order to schedule, users must submit schedules that balance loads with generation and be willing to pay for any congestion they cause on the system.

Page 7, last paragraph: This "big picture" look at capacity will allow the RTO to use all of the available capacity on a combined system basis, even that portion of available capacity that is presently masked by the multi-system, contract path methodology. The RTO West model eliminates the mismatch that the current system of contract rights causes because the contracts are totally divorced from actual flows on the system.

A.3. 1 Lack mechanism for service and study coordination between regional providers.

3.a.A.3. 5 Lack mechanism for service and study coordination between regional providers (now we evaluate on a system-by-system basis, rather than a “big picture” view).

Page 10, P&O, 1st paragraph: The RTO West planning process greatly enhances the ability of getting transmission infrastructure constructed, while making sure that only the needed projects are built and that they are the least-cost way of solving problems on the transmission system. RTO West will be able to take a “big picture” view of the transmission system and identify and facilitate constructing projects that benefit the entire system, which otherwise would not be constructed because of the mismatches that exist between “the system with the problem” and “the system with the solution”.

A.4. 1 No correlation between short-term charges (to recover embedded costs) and marginal cost of system use.

5.a.A.4. 1 No correlation between short-term charges to recover embedded costs and marginal cost of system use that may be higher or lower than the usage charge.

2.c.A.4. 1 No correlation between short-term charges to recover embedded costs and marginal cost of system use that may be higher or lower than the usage charge.

Page 6, 1st and 2nd paragraphs: This congestion management system would take the incremental costs of changing generation or load to relieve constraints and use those costs to calculate prices at various locations on the RTO West transmission system. These locational prices become the basis of congestion charges that customers would pay for short-term use of the system. And, Such a system allows users to see the cost consequences of their choices and allows the RTO to make decisions to clear the congestion on the system at the lowest cost. It is superior to an administrative mechanism where schedules are curtailed based on set of pre-determined rules.

Page 8, top paragraph: The RTO West congestion model has the further advantage of identifying the costs that congestion causes on the system, allows users to see these costs, informs decisions and, then allocates them to those that cause them.

Page 9, P&O: . It better aligns the costs to users of the system with the actual costs they impose for using it. It also encourages economic transactions throughout the RTO West market by eliminating the fixed costs charges that bear no relationship to costs the transaction imposes on the system. This change would allow the region to best achieve generation for the lowest overall system cost.

A.4. 2 Transactions must be arranged with multiple providers.

3.a.A.4. 1 Transactions must be arranged with multiple providers.

Page 2, 2nd paragraph: By operating as one system, RTO West will eliminate the inefficiencies in the current system of having to schedule across multiple utility systems with multiple rules. RTO West will standardize transmission use on the system and create one-stop shopping for all users of the grid. RTO West will also allow the region to capture the benefits of operating the transmission grid as an independent single entity.

Page 4, Single Point of Access: RTO West will create a single point of access for all transmission users. It will standardize rules for those wishing to use the Northwest transmission grid and eliminate the multiple rules that apply to multiple systems that presently plague current users of the system.

A.4. 3 Pancaking effects on wholesale energy markets include – limits diversity of options available to buyers, limits ability to complete otherwise economic transactions, sub-optimal resource development and difficulty in long-term power contracting.

1.c.A.4. 3 Pancaking effects on wholesale energy markets include – limits diversity of options available to buyers, limits ability to complete otherwise economic transactions, sub-optimal resource development and difficulty in long-term power contracting.

3.a.A.4. 2 Pancaking effects on wholesale energy markets include – limits diversity of options available to buyers, limits ability to complete otherwise economic transactions, sub-optimal resources development and difficulty in long-term power contracting.

5.b. 2 Pancaking effects on wholesale energy markets include – limits diversity of options available to buyers, limits ability to complete otherwise economic transactions, sub-optimal resource development and difficulty in long-term power contracting.

Page 4, Single Point of Access: RTO West will create a single point of access for all transmission users. It will standardize rules for those wishing to use the Northwest transmission grid and eliminate the multiple rules that apply to multiple systems that presently plague current users of the system.

Page 9, P&O: RTO West’s pricing proposal eliminates rate pancakes for crossing multiple transmission systems, but does so in a way that avoids any significant cost shifting. The proposal eliminates the inefficiencies and inequities that can result from pancaked rates. It better aligns the costs to users of the system with the actual costs they impose for using it. It also encourages economic transactions throughout the RTO West market by eliminating the fixed costs charges that bear no relationship to costs the transaction imposes on the system. This change would allow the region to best achieve generation for the lowest overall system cost.

2.b ATC Calculation

A.1. 1 Current rules contribute to problem.

2.a.A.1. 3 Current rules contribute to problem.

Page 2, Structure/Governance paragraph at bottom of Page 2 and reloaded:RTO West will be governed by a nine-member board of trustees that will operate the RTO in accordance with its bylaws. Each trustee must be independent from any financial interests of any power market participant. This independence assures that the transmission system will operate to the overall good of the region, rather than to the economic interest of any particular power market participant. The Trustees will be selected by representatives from five member classes: major transmission owners, transmission-dependent utilities, non-utility transmission users, retail customers, and state and provincial regulatory authorities, tribes and unaligned entities, such as public interest organizations. The Board, and the RTO, will be fully accountable to all users of the transmission system.

Page 4, 1st paragraph: RTO West will have exclusive authority to administer a single tariff that will control access to and use of the system. The tariff will contain the terms and conditions that apply to all users of the RTO West system, including pricing, how congestion is managed, and how both loads and generators are to be interconnected to it. It is the "rules of the road" for all users of the system and provides users with protections that terms and conditions don't unfairly advantage any one user over any other.

Reloaded Depending upon input from the states, there may need to be some changes in the RTO West bylaws to recognize the states' role in RTO West decision making.

2.c Scheduling

A.2. 1 Seams exist today between NW and CAISO.

6.a.A.2. 1 Seams exist today between NW and CAISO.

Page 12, Integration: The RTO West proposal greatly reduces existing seams problems. Both the California MD02 proposal and the RTO West Stage 2 proposal are based on locational prices and financial transmission rights. It should be much easier to manage the seams between two models based on similar principals than trying to bridge the gap between physical and financial rights.

A.4. 1 No correlation between short-term charges to recover embedded costs and marginal cost of system use that may be higher or lower than the usage charge.

2.a.A.4. 1 No correlation between short-term charges (to recover embedded costs) and marginal cost of system use.

5.a.A.4. 1 No correlation between short-term charges to recover embedded costs and marginal cost of system use that may be higher or lower than the usage charge.

Page 6, 1st and 2nd paragraphs: This congestion management system would take the incremental costs of changing generation or load to relieve constraints and use those costs to calculate prices at various locations on the RTO West transmission system. These locational prices become the basis of congestion charges that customers would pay for short-term use of the system. And, Such a system allows users to see the cost consequences of their choices and allows the RTO to make decisions to clear the congestion on the system at the lowest cost. It is superior to an administrative mechanism where schedules are curtailed based on set of pre-determined rules.

Page 8, top paragraph: The RTO West congestion model has the further advantage of identifying the costs that congestion causes on the system, allows users to see these costs, informs decisions and, then allocates them to those that cause them.

Page 9, P&O: . It better aligns the costs to users of the system with the actual costs they impose for using it. It also encourages economic transactions throughout the RTO West market by eliminating the fixed costs charges that bear no relationship to costs the transaction imposes on the system. This change would allow the region to best achieve generation for the lowest overall system cost.

A.4. 2 When system overloaded, current tools (cutting schedules) cannot be relied upon to manage congestion.

4.a.A.4. 1 When system overloaded, current tools (cutting schedule) cannot be relied upon to manage congestion.

??

A.4. 3 Contract path schedules do not correspond to actual energy flows.

4.a.A.4. 2 Contract path schedules to not correspond to actual energy flows.

Page 5, 2nd full paragraph: This significant change from status quo was largely driven by the fundamental fact that today's contract path methodology is incompatible with physical flows on the transmission system. The contract path methodology has resulted in schedules being denied even though there has been available capacity on the system. The contract path methodology suffers from other serious problems, including its lack of effectiveness, which creates a reliability threat when schedules are cut due to overload and no flows get changed. Today's contract path methodology also is an "all or nothing" system in which requests for rights are often rejected when a particular path is only fully committed a few hours of the year. Nobody on the system knows what this committed capacity is worth because the contract path system does not allow parties to either buy it or sell it for the few hours it is constrained.

Page 6, last half of 2nd full paragraph: . The RTO West congestion management and scheduling process will be based on actual flows on the system and financial rights, rather than the present "contract paths" and physical rights that are becoming increasingly disconnected from actual use and power flows on the system.

A.4. 4 Users have no indication whether they are using a congestion portion of the transmission system.

TO BE FILLED IN

A.4. 5 Inefficient dispatch may result from inability of users to know the congestion value of their transmission rights.

TO BE FILLED IN

A.4. 6 Current ancillary service market arrangements don't deal with transmission capacity implications.

4.b.A.5. 5 Current ancillary service market arrangements don't deal with transmission capacity implications.

TO BE FILLED IN

B.1. 1 Lack a good mechanism to determine when problems exist and make decisions.

4.a.B.1. 1 Lack a good mechanism to determine when problems exist and make decisions.

TO BE FILLED IN

B.2. 1 Poor tools for managing system overloads and conflicts between different operators' curtailment procedures.

4.a.B.2. 1 Poor tools for managing system overloads and conflicts between different operators' curtailment procedures.

TO BE FILLED IN

B.2. 2 Lack of process for financial settlement of redispatch use to address reliability.

4.a.B.2. 5 Lack of process for financial settlement of redispatch use to address reliability.

TO BE FILLED IN

2.d Congestion Management & System Control

2.a.A.1. 1 Not everyone is able to obtain desired service.

3.a.A.1. 1 Not everyone is able to obtain desired service.

2.a.A.1. 1 Not everyone is able to obtain desired service.

Page 3, Operational fundamentals last full paragraph: RTO West proposes a system that accepts all schedules that are submitted as opposed to a system where only schedules with contract rights are accepted. In its place, RTO West proposes a voluntary market that all users are free to bid into, however, the RTO does not force any existing contract holder into this market. This allows RTO West to honor all transactions and facilitates the bilateral markets that presently exist in the Northwest. RTO West's market mechanism will accommodate all those wishing to use its system, rather than a few, and will assure the RTO operates the system in the least-cost manner.

Page 4, System Use: Use of the RTO West system is proposed to change from current scheduling practices, which is based on contract paths and ownership of contract path rights on individual system paths, to a system in which all users can schedule to all points on the RTO West system, regardless of rights. In order to schedule, users must submit schedules that balance loads with generation and be willing to pay for any congestion they cause on the system.

Page 6, 2nd paragraph from bottom: Customers who do not have FTOs or CTRs will nevertheless be able to submit schedule requests, however, they will have to pay whatever congestion charges apply.

2.e Transmission Rights

Page, 2nd full paragraph: The RTO West congestion management and scheduling process will be based on actual flows on the system and financial rights, rather than the present "contract paths" and physical rights that are becoming increasingly disconnected from actual use and power flows on the system

Group 3: Long-term Access 3.a. Physical Interconnection

A.1. 1 Not everyone is able to obtain desired service.

2.a.A.1. 1 Not everyone is able to obtain desired service.

2.d.A.1. 1 Not everyone is able to obtain desired service.

Page 3, Operational fundamentals last full paragraph: RTO West proposes a system that accepts all schedules that are submitted as opposed to a system where only schedules with contract rights are accepted. In its place, RTO West proposes a voluntary market that all users are free to bid into, however, the RTO does not force any existing contract holder into this market. This allows RTO West to honor all transactions and facilitates the bilateral markets that presently exist in the Northwest. RTO West's market mechanism will accommodate all those wishing to use its system, rather than a few, and will assure the RTO operates the system in the least-cost manner.

Page 4, System Use: Use of the RTO West system is proposed to change from current scheduling practices, which is based on contract paths and ownership of contract path rights on individual system paths, to a system in which all users can schedule to all points on the RTO West system, regardless of rights. In order to schedule, users must submit schedules that balance loads with generation and be willing to pay for any congestion they cause on the system.

Page 6, 2nd paragraph from bottom: Customers who do not have FTOs or CTRs will nevertheless be able to submit schedule requests, however, they will have to pay whatever congestion charges apply.

A.1. 2 Failure to use existing capacity which may lead to costly alternatives.

1.a.A.1. 1 Failure to use existing capacity which may lead to costly alternatives.

2.a.A.1. 2 Failure to use existing capacity, which may lead to costly alternatives.

Page 7, last para.: This "big picture" look at capacity will allow the RTO to use all of the available capacity on a combined system basis, even that portion of available capacity that is presently masked by the multi-system, contract path methodology. ... Under the RTO West proposal, schedules are not curtailed because of unavailable capacity and those willing to adjust their schedules can do so and get paid for doing it. Overall, the RTO West system eliminates the biggest impediment to efficiently using the system by allowing the presently unused capacity on the system to be utilized.

A.1. 3 Capacity not available in all hours leads to request denial although capacity available in most hours. TO BE FILLED IN

A.3. 1 "Getting on the highway." TO BE FILLED IN

A.3. 2 Interconnection process cumbersome. TO BE FILLED IN

A.3. 3 Generator queuing can be “nightmare”. TO BE FILLED IN

A.3. 4 Renewables need/want easier interconnect and use process. TO BE FILLED IN

A.3. 5 Lack mechanism for service and study coordination between regional providers (now we evaluate on a system-by-system basis, rather than a “big picture” view). 2.a.A.3. 1 Lack mechanism for service and study coordination between regional providers. TO BE FILLED IN

A.4. 1 Transactions must be arranged with multiple providers. A.4. 2 2.a.Transactions must be arranged with multiple providers.

Page 2, 2nd paragraph: By operating as one system, RTO West will eliminate the inefficiencies in the current system of having to schedule across multiple utility systems with multiple rules. RTO West will standardize transmission use on the system and create one-stop shopping for all users of the grid. RTO West will also allow the region to capture the benefits of operating the transmission grid as an independent single entity.

Page 4, Single Point of Access: RTO West will create a single point of access for all transmission users. It will standardize rules for those wishing to use the Northwest transmission grid and eliminate the multiple rules that apply to multiple systems that presently plague current users of the system.

A.4. 2 Pancaking effects on wholesale energy markets include – limits diversity of options available to buyers, limits ability to complete otherwise economic transactions, sub-optimal resources development and difficulty in long-term power contracting.

5.b. 2 Pancaking effects on wholesale energy markets include – limits diversity of options available to buyers, limits ability to complete otherwise economic transactions, sub-optimal resource development and difficulty in long-term power contracting.

1.c.A.4. 2 Pancaking effects on wholesale energy markets include – limits diversity of options available to buyers, limits ability to complete otherwise economic transactions, sub-optimal resources development and difficulty in long-term power contracting.

2.a.A.4 3 Pancaking effects on wholesale energy markets include – limits diversity of options available to buyers, limits ability to complete otherwise economic transactions, sub-optimal resource development and difficulty in long-term power contracting.

Page 4, Single Point of Access: RTO West will create a single point of access for all transmission users. It will standardize rules for those wishing to use the Northwest transmission grid and eliminate the multiple rules that apply to multiple systems that presently plague current users of the system.

Page 9, P&O:RTO West's pricing proposal eliminates rate pancakes for crossing multiple transmission systems, but does so in a way that avoids any significant cost shifting. The proposal eliminates the inefficiencies and inequities that can result from pancaked rates. It better aligns the costs to users of the system with the actual costs they impose for using it. It also encourages economic transactions throughout the RTO West market by eliminating the fixed costs charges that bear no relationship to costs the transaction imposes on the system. This change would allow the region to best achieve generation for the lowest overall system cost.

3.b Business Relationship

A.3. 1 “Rules of the road” TO BE FILLED IN

A.3. 2 Generation integration TO BE FILLED IN

- Not all generators have same terms and conditions of service. TO BE FILLED IN

- Different application of penalties. TO BE FILLED IN

- Inequitable treatment concerning RAS. 3.b.A.3.3.- Inequitable treatment concerning RAS. TO BE FILLED IN

- QF/Cogen problems not the same as IPPs. TO BE FILLED IN

A.3. 3 Load integration TO BE FILLED IN

Asymmetric load obligations by type of supplier. TO BE FILLED IN

Different sources of obligations to load. TO BE FILLED IN

Inequitable treatment concerning RAS. 3.b.A.3.2 - Inequitable treatment concerning RAS. TO BE FILLED IN

Inequitable service between unbundled retail and bundled retail customers. TO BE FILLED IN

Different penalties for similar actions. TO BE FILLED IN

Access to wholesale utility loads (access to one-stop shopping.) TO BE FILLED IN

Concern about integrity of distribution system and its ability to serve local loads. TO BE FILLED IN

Group 4: Control Area Function Issues

4.a Short-term Reliability

A.4. 1 When system overloaded, current tools (cutting schedule) cannot be relied upon to manage congestion. 2.c.A.4. 2 When system overloaded, current tools (cutting schedules) cannot be relied upon to manage congestion. TO BE FILLED IN

A.4. 2 Contract path schedules do not correspond to actual energy flows. 2.c.A.4. 3 Contract path schedules do not correspond to actual energy flows.

Page 5, 2nd full paragraph: This significant change from status quo was largely driven by the fundamental fact that today's contract path methodology is incompatible with physical flows on the transmission system. The contract path methodology has resulted in schedules being denied even though there has been available capacity on the system. The contract path methodology suffers from other serious problems, including its lack of effectiveness, which creates a reliability threat when schedules are cut due to overload and no flows get changed. Today's contract path methodology also is an "all or nothing" system in which requests for rights are often rejected when a particular path is only fully committed a few hours of the year. Nobody on the system knows what this committed capacity is worth because the contract path system does not allow parties to either buy it or sell it for the few hours it is constrained.

Page 6, last half of 2nd full paragraph: . The RTO West congestion management and scheduling process will be based on actual flows on the system and financial rights, rather than the present "contract paths" and physical rights that are becoming increasingly disconnected from actual use and power flows on the system.

B.1. 1 Lack a good mechanism to determine when problems exist and make decisions. 2.c.B.1. 1 Lack a good mechanism to determine when problems exist and make decisions. TO BE FILLED IN

B.1. 2 As operating margins decline, need more effective, quick-response operating tools. TO BE FILLED IN

B.1. 3 Outage risk must be balanced against economic cost of avoiding those risks. TO BE FILLED IN

B.1. 4 Must measure the degree of system use permitted without unreasonable exposure to system failure. TO BE FILLED IN

B.2. 1 Poor tools for managing system overloads and conflicts between different operators' curtailment procedures.	2.c.B.2. 1 Poor tools for managing system overloads and conflicts between different operators' curtailment procedures.	TO BE FILLED IN
B.2. 2 Need more efficient method for managing loop flow.	TO BE FILLED IN	
B.2. 3 Fragmented operations (i.e., multiple control areas) produce a lack of system-wide visibility.	TO BE FILLED IN	
B.2. 4 Security Coordinator can't see all data to monitor due to limitations of contractual relationships.	TO BE FILLED IN	
B.2. 5 Lack of process for financial settlement of redispatch use to address reliability.	2.c.B.2. 2 Lack of process for financial settlement of redispatch use to address reliability.	TO BE FILLED IN
B.2. 6 Generation response to curtailments is unpredictable due to weak linkage between schedule changes and actual generation changes.	TO BE FILLED IN	
B.3. 1 Determination of load-serving entity's responsibility for load "behind the meter".	TO BE FILLED IN	
B.4. 1 Consider benefit gained, unintended consequences, user preference and who should bear implementation burden.	TO BE FILLED IN	

4.b Ancillary Services

A.2. 1 Market power an issue for developing competitive ancillary service market.	6.a.A.2. 5 Market power an issue for developing competitive ancillary service market.	TO BE FILLED IN
A.5. 1 Workable markets for imbalance energy and ancillary markets (frequency regulation, load following, operating reserve) need by both buyers and sellers of energy.	TO BE FILLED IN	
A.5. 2 Not all parties have adequate access to such ancillary service market(s).	TO BE FILLED IN	
A.5. 3 Some suppliers with technical ability to provide ancillary services are not permitted to do so under current tariff and market structure.	TO BE FILLED IN	

A.5. 4 Ancillary service market needed at or near load centers (i.e., local availability). TO BE FILLED IN

A.5. 5 Current ancillary service market arrangements don't deal with transmission capacity implications. 2.c.A.4. 6 Current ancillary service market arrangements don't deal with transmission capacity implications. TO BE FILLED IN

A.5. 6 There is an opportunity to use the resource more efficiently that is currently set aside by control areas to follow load. TO BE FILLED IN

A.5. 7 Opportunities to use contingency reserve resources more efficiently (or cost effectively). TO BE FILLED IN

4. c Losses

A.6. 1 Current loss methods for assigning and collecting system losses to transactions are not aligned with the actual loss effects created by those transactions. This mismatch between assigned losses and loss effects involves both the quantity assigned and the value of the loss energy supplied. TO BE FILLED IN

Group 5: Cost Recovery Issues (Including Rate Pancaking)

5.a Embedded Cost of Existing System TO BE FILLED IN

A.4. 1 No correlation between short-term charges to recover embedded costs and marginal cost of system use that may be higher or lower than the usage charge. 2.aA.4. 1 No correlation between short-term charges (to recover embedded costs) and marginal cost of system use.

2.cA.4. 1 No correlation between short-term charges to recover embedded costs and marginal cost of system use that may be higher or lower than the usage charge.

Page 6, 1st and 2nd paragraphs: This congestion management system would take the incremental costs of changing generation or load to relieve constraints and use those costs to calculate prices at various locations on the RTO West transmission system. These locational prices become the basis of congestion charges that customers would pay for short-term use of the system. And, Such a system allows users to see the cost consequences of their choices and allows the RTO to make decisions to clear the congestion on the system at the lowest cost. It is superior to an administrative mechanism where schedules are curtailed based on set of pre-determined rules.

Page 8, top paragraph: The RTO West congestion model has the further advantage of identifying the costs that congestion causes on the system, allows users to see these costs, informs decisions and, then allocates them to those that cause them.

Page 9, P&O: . It better aligns the costs to users of the system with the actual costs they impose for using it. It also encourages economic transactions throughout the RTO West market by eliminating the fixed costs charges that bear no relationship to costs the transaction imposes on the system. This change would allow the region to best achieve generation for the lowest overall system cost.

5.b Rate Pancaking

5.b. 1 When multiple transmission providers must be used, fixed-cost charges are pancaked without regard to costs imposed on system. TO BE FILLED IN

5.b. 2 Pancaking effects on wholesale energy markets include – limits diversity of options available to buyers, limits ability to complete otherwise economic transactions, sub-optimal resource development and difficulty in long-term power contracting.

3.a.A.4. 2 Pancaking effects on wholesale energy markets include – limits diversity of options available to buyers, limits ability to complete otherwise economic transactions, sub-optimal resources development and difficulty in long-term power contracting.

1.c.A.4. 2 Pancaking effects on wholesale energy markets include – limits diversity of options available to buyers, limits ability to complete otherwise economic transactions, sub-optimal resources development and difficulty in long-term power contracting.

2.a.A.4 3 Pancaking effects on wholesale energy markets include – limits diversity of options available to buyers, limits ability to complete otherwise economic transactions, sub-optimal resource development and difficulty in long-term power contracting.

Page 4, Single Point of Access: RTO West will create a single point of access for all transmission users. It will standardize rules for those wishing to use the Northwest transmission grid and eliminate the multiple rules that apply to multiple systems that presently plague current users of the system.

Page 9, P&O: RTO West's pricing proposal eliminates rate pancakes for crossing multiple transmission systems, but does so in a way that avoids any significant cost shifting. The proposal eliminates the inefficiencies and inequities that can result from pancaked rates. It better aligns the costs to users of the system with the actual costs they impose for using it. It also encourages economic transactions throughout the RTO West market by eliminating the fixed costs charges that bear no relationship to costs the transaction imposes on the system. This change would allow the region to best achieve generation for the lowest overall system cost.

Group 6: Market Power Issues

6.a Market Monitoring

A.2. 1 Seams exist today between NW and CAISO.

2.c.A.2. 1 Seams exist today between NW and CAISO.

Page 12, Integration: The RTO West proposal greatly reduces existing seams problems. Both the California MD02 proposal and the RTO West Stage 2 proposal are based on locational prices and financial transmission rights. It should be much easier to manage the seams between two models based on similar principals than trying to bridge the gap between physical and financial rights.

A.2. 2 Opportunities exist for exercise of market power within Western Interconnection.

TO BE FILLED IN

A.2. 3 Lack of consistent rules and price transparency.

TO BE FILLED IN

A.2. 4 While more apparent in stressed conditions, exercise of market power may be occurring now.

TO BE FILLED IN

A.2. 5 Market power an issue for developing competitive ancillary service market.

4.b.A.2. 1 Market power an issue for developing competitive ancillary service market.

A.2. 6 No mechanism to fix design and market structure issues.

TO BE FILLED IN

6.b Market Power Mitigation

A.2. 1 Need ability to detect and correct abuses.

TO BE FILLED IN

A.2. 2 Need comprehensive view of all related products.

TO BE FILLED IN

A.2. 3 Need proactive not after-the-fact approach.

TO BE FILLED IN

A.2. 4 Need equitable in-region mitigation measures.

TO BE FILLED IN

A.2. 5 Must address jurisdictional differences. TO BE FILLED IN

A.2. 6 Independent party needed. TO BE FILLED IN

Group 7: "Ballpark" Costs, Benefits and Timing Issues

7. a Expected Costs TO BE FILLED IN

7. b Benefits (Return on Investment) TO BE FILLED IN

7. c Order of Steps TO BE FILLED IN

7. d Time to Implement TO BE FILLED IN