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Power Committee
February 13, 2002
Council Central Offices, Portland, OR
9:30 a.m.

Attendees:
Northwest Power Planning Council Power Committee--Tom Karier, chair; Jim Kempton; Ed Bartlett; Eric Bloch
Staff: Wally Gibson

Panel I; filing utilities: Bud Krogh, RTO West Coordinating Team; Peggy Olds, Bonneville Power Administration; John Carr, PacifiCorp; Frank Afranji, Portland General Electric and TransConnect; Carol Opatrny, RTO West Coordinating Team; Steve Walton, RTO West Coordinating Team

Panel II, non-filing utilities: Aleka Scott, Pacific Northwest Generating Cooperative; Shelly Richardson, Northwest Requirements Utilities; Al Aldrich, Snohomish PUD; Jeff Roarke, Mirant; Steve Weiss, Northwest Energy Coalition

Panel Discussion of the RTO West Proposal

Karier: The Power Committee for the Northwest Power Planning Council welcomes everyone here. We have all but one member here, actually all but two. We have Jim Kempton from Idaho and sitting in for Leo Giacometto from Montana we have Ed Bartlett, and Eric Bloch is on his way up from Oregon. The Council is working on its fifth power plan for the Northwest and in our early discussions about the elements of this power plan, we've put out an issue paper. One of those issues is a question about what the role of transmission will be - how important will it be, what should we focus on, where can the Council provide some value added to the region, recognizing that there's a lot of work going on with RTO West and in other forums. But clearly if the power plan is to provide an efficient, economical and reliable power supply to the Northwest, it has to be connected to an efficient, reliable and economic transmission system. So part of our work of understanding this issue and understanding how it would work with the power plan, we've set up this special meeting of the Power Committee. We have two panels this morning that will be discussing this. And I'll turn this over to Wally Gibson, our staff member, who will introduce the panel members and start off with the first panel.

Gibson: Thank you. The first panel will be made up of the RTO West filing utilities. Bud Krogh from the RTO West Coordinating Team will introduce the material and then Peggy Olds from Bonneville Power Administration, John Carr from PacifiCorp, Frank Afranji from Portland General Electric and TransConnect which is the for-profit transmission owning entity, Carol Opatrny, who has been the coordinator for the RTO West group on cost/benefit study will discuss the preliminary

cost/benefit study results, and Steve Walton from the RTO West Coordinating Team is here as well to talk about some of the issues. So we're going to try to do the two panels this morning. The format we're thinking of is basically presentations, questions from the Council Members and then this afternoon we're going to invite all the panel members together and the Council Members to have kind of a general discussion of any remaining issues. One thing is that Peggy Olds has to leave at 11:30 this morning so if you have questions she won't be here this afternoon, so if you have questions for her this morning. So, Bud, do you want to start?

Krogh: Thank you Wally. Chairman Karier and Council Member Kempton and Council Member Bartlett, thanks very much for the opportunity to come this morning. As Wally said, my name is Bud Krogh and I've been a part of the project management team for the last couple of years on RTO West and helping to run a process to develop filing documents for the Federal Energy Regulatory Commission that describes the proposal that we're putting together here in the region. I'd like to give you a little more background on the panel members this morning. Peggy Olds from Bonneville is also Bonneville's project manager for RTO West and she chairs a group within Bonneville that has been participating in all the different work groups over the last two years. John Carr is the director for transmission planning, is that right, John?

Carr: I'm the managing director for the major issues and one of them is the RTO funding.

Krogh: Right, and we see a lot of John in the RTO forums over the last year and Frank Afranji is director of transmission and reliability at Portland General Electric. What we thought we'd start with is Steve Walton giving some general background on why we are doing an RTO, to give just some historical perspective of what was going on in the 1980s and the 1990s that led to the development of the open access statute and some of the orders in the 1990s so you can sort of see why we're doing this and where we are today. Then after Steve will give that presentation, we thought Peggy and John and Frank could give the perspectives of each company as to why we are doing this. And then following that as Wally said, Carol would speak to the preliminary results of the benefit/cost study that were released I think a week ago on Monday. We just had a chance to go through them the last few days and presented them to the regional representatives group meeting yesterday. The consultant came up and made the presentation, took a lot of questions, and she'll also describe some of the ongoing work for that study because it is not complete yet. There are some additional sensitivities that have yet to be run. And just before getting into it, I would just like to thank the Council for assigning Wally to work with the RTO over the last two years. His support and help has been terrific. Frankly, when I wanted to find out where we were in a lot of these issues I just read Wally's papers that he had provided to you on congestion management pricing and planning, and they give a very accurate picture of where we are in each one of those critical areas. So if that works, Mr. Chairman, we thought we'd start with Steve giving you some background and I think jump in with questions at any time, and I'll bet you have them.

Walton: I'm glad to be here. I wanted to talk a little bit about why we're building RTO West and I think that it helps to understand the historical context. I'm an engineer by training and I guess an historian by avocation, because it helps me to understand how I got to someplace. My favorite expression is a problem well stated is half solved. If you know what it is you are trying to do, it is easier to get it done. To understand the historical context, we have what I call a boom/bust cycle that began in about 1973 with the oil embargo which triggered off a whole series of activities in the 70s and early 80s. The upshot to the utilities was that demand was rising rapidly, that they were building heavily to keep up, the companies that I worked for were building transmission and generation and just trying to stay ahead of the load. They had obligations to serve and they were trying to keep those. The difficulty though, given regulation the way it was, was that the consumers

however were seeing yesterday's prices while the utilities were facing tomorrow's costs, and there was a lag taking place, so the price customers was seeing was lower than the actual cost of supply because they were seeing the delay. So while they were thinking it's a good deal and adding demand, the utilities were desperately trying to keep up with it. So by about 1985 a number of utilities were teetering on the edge of financial exhaustion trying to build all this stuff, and prices are starting to rise now rapidly for electricity, people are starting to demand what's going on, how come these prices are going up, and then to make life even more interesting, oil prices dropped in 1985, just plummeted. So the demand now actually drops because industrials shift to gas and oil away from electricity, and the bottom falls out, and now the utilities have even higher - all these costs they've invested - the load had dropped off, they can't collect, and they get disallowances of utilities, you get utilities that go bankrupt. Utah Power and Light that I worked for was so strapped they were forced into a merger with PacifiCorp to try and get themselves on an even keel. So that was the bust. And we had a big, big surplus of energy in the west. Some people were talking about would it ever go away because the prices were so high. So what was the lesson learned from all of that? The lesson was to use an Olympic analogy if you'll pardon it, traditional-use utility can't ski the bumps. It couldn't respond. It's kind of like me, I go down the easy smooth slopes, I can't ski the bumps with my kids anymore because I just can't move that fast anymore. Traditional regulation couldn't move and it couldn't respond to jars and upsets that take place in our economy and those always happen, but it couldn't respond. And the second thing was that the answer to that was what do we need to change? And so then regulators began, beginning in the 80s and I'm sure the 90s, to talk about what's wrong with the regulatory structure, how can we fix it. We need demand responsiveness, we need open access transmission, but what we're really striving to say is how can we really respond to these bumps if you will. Out of the PURPA reforms that were passed in 1978, there came a new class of generators. There came a class of generators of people who would say, 'Look, I don't have to have the traditional obligation to serve, obligation to take relationship - I'll go out and build a generator and I will enter into a contract with someone and I'll take the risk that the demand will be there when the time comes and I can make money at this. And we called those various names, they started out with the qualifying facility types of facilities, but then we had independent producers, exempt wholesale generators, and we started to change the regulation to allow these guys to build these independent projects. Today most of the generation that is being built right now around the country is being built by independent parties. Some of them are utility companies, but they are building outside their traditional territory and taking the financial risk on those markets. So that's a substantial reform. Rather than the local utility taking the risk and then simply saying, "Okay, now we can tax the folks locally and raise their rates if we have to in order to collect this," the idea is now, well I'll take the risk, I'll sign a contract and if I have a 10-year contract and my plant has a 30-year life, I'll take the out-years' risk as the generator. In order for that to work and that to be the expansion path, you really need open access to the transmission system. The lack of open access and the fact that we didn't have open access goes clear back into the federal power act back in the 20s and the 30s when there was a big fight over whether the system ought to be opened up or not. And when the Federal Power Act was passed, they did not give FERC then the FPC, the authority to regulate access to the transmission system. The Natural Gas Act gave them pipeline authority, but they did not have authority over selected transmission; they couldn't order it. So then as we tried to make the structural reform, FERC can't overtly do this so FERC is saying well how can we encourage people to provide access across their system? Because they are private systems we don't have the authority. So they began to use merger cases like the Utah/Pacific merger to say well if you want to do this merger, the price of admission is open access to your transmission system. When that didn't cause the sky to fall in, Congress reacted in 1992 and passed the Energy Policy Act and finally, after all these years, gave FERC the authority to order people to wheel for each other. Wheeling meaning to transmit for each other. Then out of that came - a series of activities were triggered off to say well how's that going to be implemented, what authority are

they going to use? Is FERC going to do this on a case-by-case basis: You come and ask FERC to order me to transmit for you and then Wally comes and asks FERC to order me and we just one at a time - is that how we're going to do it ? And after a year years FERC said this doesn't make any sense, this isn't the right way to do this. So they issued Order 888 - that is one of the buzz words here - and what Order 888 did is require all the utilities that were jurisdictional to FERC which includes the investor-owned companies mostly to provide open access. They had to put a tariff out to provide open access and they had to allow their system to be used by another party. Now to make that fair they said you'd have to separate functions. You have to take the people who are doing transmission and you have to put them over on this side of a wall, you have to put a wall between them, and these folks on this side who are trying to sell generation and do other things, so that as other parties come in to use the transmission system there is not an undue influence. And they put a Code of Conduct in place to try and regulate the height of this wall and transmission of information back and forth. The difficulty the utilities face is that even if they could perfectly adhere to that they had the problem of trying to provide they are innocent. If their generator does well it must be because they are leaking information to the transmission side. It must be, I mean how else could they do it? They couldn't be that smart. And they have to provide well, I'm innocent of that, but it is really tough to prove that. And then secondly, underneath the wall there is a connection to the bottom line. So there's always a physical connection between the two sides that says, that's true but our bottom line is still the same. We are either behind or ahead based on the fact that we're all together. And after several years of experience with Order 888, the FERC concluded that it wasn't working. Even back when they first issued Order 888, two agencies had come in and said they really ought to do operational unbundling. In other words they ought to separate the function of operating the transmission system and put it somewhere else in a different organization to get around this inherent bias problem. That was the Department of Justice and the Federal Trade Commission. Both of them said the traditional approach to changing structure was divestiture but there was no way to accomplish that in this industry given all the things that happened over the 100 years of its age. But that this other option that would serve. And FERC considered that again and decided to do that and they required the formation or the discussion of regional transmission organizations or independent system operators. And accomplishing the structural change then is that the parties who own the transmission continue to own it, so we don't have to do a divestiture with all of the tax problems and bond problems and all the other list of horribles you would have to do to do that, and instead they simply say to them, "Okay, you turn over operation to an independent party, and the independent party, a not for profit in the case of RTO West, will run the transmission system without bias. It will have a fair tariff; it will treat everybody the same on an ongoing basis and that will be the independent party. So to summarize then, the reason for building RTO West is to provide for the structural change that allows the buyers of energy to have the widest possible access to sellers so they are buying. And does the Northwest buy? Yeah, the Northwest is actually energy short in terms of, especially in the hydro area. The hydro only produces so much energy and that isn't going to increase, so there's a net requirement to buy additional energy. So the Northwest parties need that access to the intermountain states or to the Southwest to be able to buy that energy and take maximum advantage of it. Over the years the Pacific Intertie served to benefit the Northwest by being able to sell its surpluses to the south and to be able to exchange energy back and forth to get the maximum value for the storage. What this does then is it expands the scope and realm of that. It does away with the friction in the system because of the pancaking of rates between parties and the second thing it does is it allows us to execute the fundamental form of the pricing policy. In the past, pricing of transmission was based on the embedded cost, and yet the use of the system was based on what it is worth tomorrow which is just its variable costs which are either the fact that the constraint allowed you to use a different generator than you'd like to use or that you have losses. And so when you have a large scale you are able to implement this larger pricing performance caused congestion management pricing. So those are the two things we're accomplishing. We're de-pancaking the

system and putting in a rational pricing system so that buyers can make the best decisions they can and that sellers can then have the opportunity to provide in this restructured environment where the risk of generation development stays with the developer and it is not simply transferred to the customers through the traditional regulation.

Olds: Chairman Karier and Council Members, thank you for the opportunity. As Bud indicated earlier we appreciate the opportunity to meet with you and to share your views on why we're participating in the creation of an RTO and why does it make sense. This morning I'm going to talk to you about Bonneville's role and pick up a little bit where Steve left off and talk about what's happened over the last couple of years and leading up to today as we prepare for a filing with FERC on RTO West. The question I most frequently get asked when I present to panels like this or when people catch me on coffee break is "Okay, so tell me again why Bonneville needs to do this. We're not FERC jurisdictional and we weren't real sure Indigo was a real good idea, so why now RTO West?" The answer I give them is Bonneville's transmission system is the tie that binds the region. As Steve has pointed out, FERC has had a historical progression over the last ten years toward moving towards opening access across the country to provide a level playing field for generators and loads seeking access to those generators. FERC has identified a couple of problems along the way to making that level playing field. One is existing transmission rate pancaking. And as well worked toward the earlier Indigo proposals and now RTO West, it became obvious here in the Northwest we have some real special benefits, and we have some real special system configurations, both hydropower and transmission. I'm sure you are all aware of the extent to which the Bonneville system interconnects all of the jurisdictional utilities in the Pacific Northwest. When we were first faced with FERC's Order 2000 which called for the voluntary creation of RTOs, many of the investor-owned utilities got together as well and approached Bonneville. Bonneville did the same with them and said, "gee, it is looking like FERC is moving toward - what did we call that - mandatory voluntary compliance." And they came to Bonneville and said, "You know, the way our system has been developed over the last 60 years if we're going to create a system that works for the Northwest and not have FERC dictate to us eventually what may happen, we need Bonneville's participation in that. That was about two years ago today or tomorrow. I think our first meeting we called it "the love fest of 99." On Valentine's Day we launched a fairly significant open public meeting to begin discussion about how does this region protect and secure its benefits for the Northwest which we have historically done, include Bonneville in the mix and create an RTO that works for us in the region. That motivated Bonneville certainly to be a key player in the development. So why have we stayed a key player? Well, one, we believe that there are some significant benefits in a voluntary approach. We can craft an RTO organization that works for us that meets the needs of both our customers and constituents. It keeps us in the driver's seat. And so far I think we have been very successful when we've explained why we need flexibilities to create an RTO that works for the west, the Northwest, and why it wouldn't be good if our jurisdictional partners were forced down some standardized road and yet Bonneville couldn't participate in an RTO like that. Not only does the Bonneville system become the tie that binds the other utilities so it would be needed to create the benefits that we would expect out of an RTO, one of the biggest benefits we see in Bonneville when an RTO comes on line is improving the reliability and maintaining the security of the system we now have in place. We now have a group of separate but interconnected transmission systems with a single entity that controls them, not owns them, just operates them. We can see the entire grid throughout the Northwest. We can see some real efficiencies that we can gain in real time security, real time operations, improve the physical security of our grid and then a stronger planning role to look out over our collective group of systems in a collective way to try to create the efficiencies that our customers are demanding and again, try to keep the benefits in the Northwest.

Karier: What do you mean by the physical security would be improved? Maybe you can elaborate.

Olds: The proposal we're now creating has the RTO as the control area operator over the grid under its control, which now would now oversee the combined system of all the parties here plus those we're representing. So you have one entity able to look at all of the data in a real-time operating environment, a control area function, and should we have a massive, we'd have one entity able through the security coordinator or through its _____- system actually we think be able to address systems emergencies in a more efficient manner. So in effect it would store the capability easier.

Walton: There's a terminology issue here, too. When we use the term security since September 11, people intend to think about terrorists and running around and keeping the towers from being blown up or something. The term security in the transmission system up until then the terminology meant making sure it doesn't fall apart, making sure it stays stable, that it is able to keep everybody on and keep the lights on. That's what we usually mean by the term system security. So you've got a bit of a terminology issue just to make sure you know what we mean. It is a little "s" security, not a capital "S".

Olds: Thanks, Steve, I forget about those. This is why we bring him along, too, great color commentary. So let me move on to at least in my view one of the other major reasons why it's important for Bonneville to be a part of the RTO West development and execution. As my colleagues at the table will know, Bonneville brings we think a strong sense of public purpose to the RTO West development. This has been reflected in our commitment to an open and very public process that involves as Wally will know, a massive amount of stakeholder time from interested parties across the region. While we don't always agree fully or get to consensus on the issues, we wanted to make sure there was a forum where everyone's voice could be heard and the best and the brightest ideas could come forward to help us create an RTO that works for our region. This has been Bonneville's commitment to our regional stakeholders and especially our public power customers to give them a meaningful role through us and with us in the development and creation of the entire RTO construct. I think you will see that reflected in our proposal. We started this process with RTO West development principles - that's the scorecard Bonneville is going to use, and I'm not going to spend a lot of time going through them. I trust Wally has probably briefed you on those in previous meetings. At the end of the day, our administrator, my administrator, is going to take a look at that scorecard and rack up our proposals - have we met these principles. If the answer is yes, we'll feel comfortable going forward. If the answer is now, we've got more work to do. And lastly, another issue that's real important to Bonneville and our customers is to ensure that there are overall benefits from the creation of an RTO. To that end we've participated along with the other filing utilities in what I think is an exhaustive and still ongoing benefit/cost analysis run by an independent firm that many of our stakeholders helped design in both scope, the methods of analysis, they helped select the contractor and now we're beginning to get some preliminary results of that study. So that is why Bonneville is in the game.

Carr: Well good morning, thanks for inviting us. I've spent many hours at this table, but as Steve pointed out to me the last time I was here you still had a view. And it wasn't that view. Glad to be back. Let me take a different approach here maybe to give you additional insight into the RTO and why PacifiCorp supports it. I'm also involved in transmission-related issues for the Western Governors' Association. In fact, I chair a committee that actually has several members in the room. Steve and Wally participate in the committee. The western governors, going back a couple of years ago, started asking the question, "Is there adequate transmission infrastructure being developed?" As you probably know over the last maybe 10 or 15 years there has not been significant expansion of

transmission. The governors asked another group to get together and take a look at what is the potential for transmission infrastructure development over the next 10 years and how does that relate to the diversity of fuel sources and how would it affect production costs. There was a study done and completed by Jack Davis and Marsha Smith that was delivered to the governors last summer that looked at that issue and a couple of things that came out of it was that if significant transmission infrastructure wasn't added over the next few years, that basically the fuel supply that was going to be added in the west was natural gas. It was basically natural gas that would be relatively close. And if, and this is an if, not a policy statement, but if there was a desire to have a much broader set of fuel supplies, coal, wind, and other types of resources, that a significant transmission infrastructure would probably have to be added. So the governors came back and asked the question what would have to happen for significant transmission infrastructure to be added. And basically two issues were identified. One was siting - that there are significant issues associated with siting large transmission lines and I think you are probably aware of some that have occurred in the past or that people are looking at now. Sometimes it isn't even state-related issues - it is just that a lot of it goes over federal land and there are multiple federal jurisdictions; there are tribal jurisdictions and other things that it is very difficult to get it sited. The governors have a small group to work on that issue among the states and the federal agencies and the plan is to have some kind of joint statement from the governors and the federal agencies at their annual meeting this summer. The other issue that was raised had to do with financing, questioning why isn't financing occurring for new transmission. I was asked to chair that group. We're getting ready to submit a report to the governors here in the next few days. Fundamentally after a lot of spirited discussion and continuing spirited discussion among the group a couple of things were I think agreed to by most if not all. One is that the market right now is not well defined. It is still in flux. And transmission investment is a long-term, very capital-intensive investment, 30 or 40 year lives, and somebody is going to put that kind of money in the ground, whether they are an integrated utility where the investment is competing against other investments in the company or by a third party looking into a very unsettled market where market rules are not known or are unstable. From an economist's standpoint, the property rights aren't well defined. That was clearly viewed as a barrier to transmission infrastructure development. The second one is that there is not a well-defined way of collecting money for transmission investment given this new market structure where the beneficiaries may be very wide to _____ transmission infrastructure development. So one of the things that came out of this work was that an RTO fundamentally solves both of those issues, or goes a long way toward solving both of those issues. Once an RTO is in place over a broad geographic territory like RTO West, it basically provides a stable underpinning for the wholesale market. And it also defines essentially what the property rights are for new construction, whether in the RTO West world it is tradeable financial transmission options, access to the grid, or whatever those things are. They are well-defined and they are in place and if somebody wants to put up the money, whether they are a third party or an investor-owned utility, they know what they are going to get in return and it is well-defined and it will be approved by basically a single entity, the Federal Energy Regulatory Commission. And the other one is that it provides a stable funding mechanism, which was the other problem. Whether the investment is being collected from the customers of a particular transmission owner or a set of transmission owners, the RTO West tariff can be used to collect those funds. It is a stable way of collecting the funds and it is well known. So if you look at it from the transmission infrastructure side, it becomes very clear quickly that if you want transmission infrastructure built - and again that's if - you need a stabilizing influence of an RTO in the market. So one of the things we'll be recommending to the governors is to go on record supporting the timely development of the RTOs. In fact, I didn't have the time yesterday to go back and look - I believe they've actually gone on record and done that before, but I wanted to come back to them and re-emphasize the importance of why in this particular area that it is important, and I guess that leads me to my last point. You asked what you can do. I would suggest the same thing. I think in terms of getting not only

transmission infrastructure but just the stability on the market and getting the kind of resource alternatives with a wide variety or them or the market says one of them, whatever, but bring in those options to the table, and allowing them to basically occur in a rational way is a good outcome of the RTO, and my recommendation at the end of the day that the Council support the RTO being developed.

Karier: Thanks. Frank.

Afranji: I would like to also thank you for inviting us and allowing us the chance to address this astute group. Portland General Electric is really the small kid on the block when it comes to transmission. Our transmission assets are small; we are a transmission-dependent entity, but we have a measured piece, a piece of the California/Oregon intertie which is a very important highway for the electrons that flow up and down the I-5 corridor. PGE is committed to joining RTO West in its current format, but we are exploring different business models and as you noticed in the e-mail that Wally had sent out, he said that PGE's RTO/West/Transconnect. Transconnect is really a business model where we believe we will be able to create additional - RTO West is an operation vehicle for independence of the transmission. Transconnect is in addition to operational independence we're creating financial independence. We're moving the transmission assets into an independent entity that will worry about the financial piece of it as well as the operational piece of it, meaning we're completely separating the market participants from between the energy and the transmission market completely. So we believe as the market is evolving we are going to go soon beyond the vertically integrated type of a utility, and we're preparing our entity at this stage along with Avista, Sierra Pacific and Nevada Power to move into that realm. Having said that, it is important to note that we will be an entity under the control of RTO West. RTO West would have the operational parameters - will define for us the operational parameters. We will be an equal member like any other member, like PacifiCorp or others, of this RTO West that pretty much will have the final say-so on the operational parameters of this new entity that we trust will create a lot more efficient system in the west. Why are using a little bit of a different model? FERC had enticed many of the utilities to move into this sort of a set-up business model by offering incentive rates, performance-based rates and what have you. And we felt it is important for us as a company that the reason the market and the market works to move into that direction. We have seen performance-based rates, meaning you set certain benchmarks and you try to beat those benchmarks like in O&M and A&G, and if you beat those benchmarks, then the FERC will allow you to share those benefits between the customers and the owners of the system. We believe this model is a model that will allow us to be very efficient, very lean and to move forward in expanding the transmission system and proposing pretty much a market based type innovation and expansion of the system. When basically your rates, your salaries, the salary of your management and their bonuses and what have you is related to how well they perform on expansion of the system and how well they do on the performance of the operations of the system. We believe that this is one model that will allow us to build and expand the system in a very efficient manner. Otherwise, as I said, we're fully ready to adhere. There isn't much I can add to what my colleagues have said on RTO West because we have been part and parcel of that model for the past few years. Prior to that we engaged Indigo in their work to move forward and quite frankly, we believe we're at a spot right now where this model of RTO West on top as the umbrella RTO with us as the financial vehicle for our assets as well as the assets of Avista, Sierra Pacific and Nevada Power seems to be a good model to move forward. I won't belabor my points. I'm sure there will be a lot of questions as we move forward.

Krogh: Should we go right into the benefit/cost presentation? Tom.

Opatrny: Thank you for the opportunity to run you through the benefit/cost study. Wally provided some handouts I think for all of the members and I think there are some in the back for the audience. I'm not going to jump into that yet because I think your driving question is what are the concerns or problems perceived with doing a benefit/cost study. I think it comes down to answering, it's in the eyes of the beholder. Modeling what an RTO is going to do to the region is not an easy task, but we have taken on that responsibility as Peggy indicated. Bonneville has included in its principles for moving forward the need to demonstrate sustainable benefits. The filing utilities all have different commitments to their ratepayers and their stockholders, and state regulators. My client B.C. Hydro also has to look at benefit/cost issues. So we have moved ahead, hired Tabors Charimatis, a cracker-jack consulting firm primarily out of the east coast, headquartered in Boston, to do this task for us. Nonetheless, I think it is very fair to say that it is not a comprehensive analysis, because getting your arms around all the ifs, ands or buts with putting together an RTO is not something that can be done in a one-shot consulting contract. But what I'd like to do is give you an overview of what we're doing, what the indications are for some of the preliminary studies that have been done, and where we are going next. As Peggy indicated, we did start with a group of filing utility representatives and stakeholders in the region to pick the consulting firm to scope the analysis, to review the preliminary results and right now work through the sensitivity tests that we're doing. At this point in time, we are focusing our attention on a modeling effort and that model called the GE Maps model was important in our decision to choose Tabors Charimatis, and the reason for that is this model does a real fine job of looking at the transmission system and efforts to date focused on other aspects of the utility industry, and we really wanted to hone in on a model that could look at what's called a security constrained system. The limitations on the transmission system, what as John indicates the Western Governors' Association includes a new expansion or expected expansion when the entire WSCC works together in an interrelated basis. So that's why we chose that consulting firm. In addition to the GE Maps work that is going on, which is primarily evaluating what will be the impact of an RTO on the production costs, not only in the RTO West footprint but the entire WSCC as a whole. And what I mean by that is to what extent does the elimination of rate pancaking that Steve talked to affect the cost of generating resources. How will removing the pancaking of wheeling change generation dispatch. So that's one element of the study that we're doing. In addition to that we're looking at a number of qualitative, what's been called thumbs-up, thumbs-down aspects of an RTO. I'll take you through those elements. In addition to that, the reliability issue or the security issue that Steve and Peggy spoke to is a third element of this study. Bonneville took on the front-runner responsibility to hire two individuals who are looking at the impact on duration and frequency of outages, if you will, and how can a broader-scoped transmission organization effectively improve the reliability situation. So that has been done outside of this Tabors contract, however Tabors did some evaluation for us that looked at the quantitative impact of an outage, what that costs us. Then finally we are looking at some market concentration evaluations. I wanted to give you a scope of what we're engaged in. Be mindful that this study is looking at one year. We're looking at a test year of 2004 ----- because the expectation was RTO could be up and running by that time and we also then could include all of the Western Governors' Association transmission expansion projects of that time. So we though that was a realistic view. And then what we did was evaluated what the world looks like without an RTO so that today's world, which included the pancaked rates and pancaked losses and all of those losses, and what the world looks like with an RTO. So that's the basic fundamental analysis that we're doing. So I'll just run you through the handout unless you want me to just answer questions. Ready to go through the handout? It starts with Organizational Outline. And I have essentially taken you through - let me make sure you are aware these are excerpts from a very lengthy presentation that Tabors has presented to the regional representatives group, and at Wally's suggestion we pared down fairly considerably, so my page numbers will correspond to the number you see at the bottom right-hand corner. So we're on page 3 now. Caveats are always important in a modeling exercise. These are preliminary results, and

again, I'd say one of the biggest concerns or issues that we have to deal with is how to get your arms around evaluating an RTO. We think we've got a real good, not just starting point because RTOs obviously have been evaluated in Stage 1 of RTO West, but also in Indigo days. So we do see this as being a progressive effort, but for what we're doing right now we're looking at preliminary results with respect to Tabors' work. The Maps analysis, and this is the quantitative work that I referenced, is intended to enhance our understanding of the system. So it's not a definitive here is the answer, but it's supposed to be a good indicator specie if you will of what a transmission organization can do. An then I mentioned that Tabors has done other analyses for us and this is the thumbs-down, thumbs-down qualitative work and again, one person will see a benefit and one person will see a cost. So this is really very much in many cases in the eyes of the beholder. The Maps model itself, and I'm moving quickly to page 15, can model the market operation. As I said, we looked at a with and without world for the 2004. A number of the assumptions in today's world are what we call the without RTO, because we have pancaked wheeling, pancaked losses, we've got limitations right now on the system that are imposed because of scheduling constraints. Different systems set aside a certain amount of capacity for meeting reserves, concerns about inadvertent flow or looped flow, etc., and the expectation is that that limitation is not in place in a with RTO world. We carry reserves differently, we have maintenance schedules that are specific to a control area or a company, and in both cases we did not model in a dynamic fashion hydro generation. And the rationale for that is hydro in the Pacific Northwest U.S. is largely drive by the non-power constraints. We thought it would be inappropriate to run the hydro system based on optimizing the economics. Next page, in the with RTO is essentially the opposite of what we just went through, we eliminated pancaked rates, we don't have the limitation on the contract flow, we had a broader geographic area for carrying reserves. We had a more coordinated fashion for handling unit commitments and scheduling and again, hydro was kept the same in both cases. The results of this model come in the form of consumer and producer surplus. These are theoretical, if you will, quantitative benefits that are intended to reflect in the RTO West geographic area or the WSC as a whole what are the cost savings realized by a more optimized dispatch of generation. And, again, that is primarily driven by eliminating rate pancakes and relieving congestion. On the following page, page 28, this gives you a summary of the benefits. I'm not going to take you through each of these different elements, but I'm going to take you right to the bottom line after I give you a little bit of background. This summary of benefits does assume that there's an export wheeling rate in place, and that's what the $3.80 per megawatt hour represents at the top, so that any power sale that leaves the RTO West footprint and goes into either the west connect area or the California ISO geography would be charged an export charge. Then relying on the with and without assumptions that we just ran through, the bottom line of the preliminary results is that there is a net positive benefit. There is about a $360 million benefit per year in production costs, effectively. The following page gives you a little bit more of a breakdown of this that I think is in more "walk around" language than in the GE Maps language. The elements that are identified to be a contributor to this net benefit go to lower production costs - I've mentioned that already; lower transmission congestion - and what we mean by that is through the congestion management scheme that Steve referenced before, we're seeing greater flexibility in throughput on the system which adds to this benefit or contributes to this benefit. We are seeing higher exports from the Pacific Northwest into the southern and desert Southwest area, so although we are increasing production costs in order to support those exports, we are seeing a benefit as a result of doing that, or a net benefit. And overall we're seeing lower prices to loads. So the previous page we used as kind of a starting point in demonstrating - we see that the loads are paying about $1.l3 billion less; we see that the generators are receiving not all of that but a goodly portion of it, close to $1 billion; the net difference between those two are about $400 million, so that is the total benefit of the system which is slightly offset by the increased cost in more production because of the demand on generation in the Pacific Northwest, e.g. or i.e. the exports outside of the region.

Someone from the audience: This is thermal generation. The hydro is flat in both cases.

Opatrny: That's a really good point. Again, since we fixed the hydro generation, effectively you take your load and you subtract off of that load the hydro generation and so what's left over is the thermal system. So we're seeing these reduced costs in thermal production, thermal resource production.

Bartlett: Mr. Chairman, I know we're saving questions until later, but this one has to be asked now. In real life when the RTO happens, would those benefits, those cost reduction benefits then be applied to all generators, including hydro, or would there be what I would call a fiction then of only applying them to the thermal?

Opatrny: They aren't really applied to a type of generator. These are benefits that are realized by the region because of the assumptions that we've made of putting thermal resources on the margin. In real life, thermal resources are not always on the margin. So we do think this is a conservative assumption and the reason why I say that is whenever you impose a constraint to a model you are not optimizing its result. So we are asking Tabors to look at that some more. We actually wanted to test that particular assumption with a sensitivity test, and as you can well imagine, that's a complicated thing to do - how we are going to restructure the hydroelectric system. But at this point in time our assumption is that is conservative, so we would see greater benefits in a hydro system that was not constrained. I'll turn to real dollars now where I've been talking about fictional dollars essentially to date, because the GE Maps model again looks at consumer and producer surplus. It is a theoretical model and this is I'd say one of the other complications of doing this work. We're not always comparing apples to apples; we're representing BC Hydro and we've got Canadian dollars and U.S. dollars here in this effort. But now we'll turn to some real dollar studies and what we did ask Tabors to do is evaluate what are the set up and operating costs of other transmission organizations that have come to pass? So they've done that for us and I would direct your attention to the essentially middle column on the page that's called "unit revenue" or it is entitled "unit revenue requirement in dollars per megawatt hour." What they did for us is identify with and without California because you can see California is an outlyer in that analytical framework what it looks like the cost would be on a per unit basis for running a transmission organization. In hard dollars we're looking at somewhere between $126/$142 million a year. RTO West to date has been using a $75/100 million assumption which I think will be updated as a result of these results. But this essentially shows us what the carrying cost would be of a transmission organization or gives us a ballpark.

Karier: I think we're probably going to have to wrap up - I think you've hit most of the high points on that - the cost/benefit. Is there anything else?

Opatrny: I just have one last slide for you - so very good timing. This last slide is fleshed out in quite a bit of detail to follow, but I just wanted to point out that here are the qualitative benefits and costs that we're looking at. And again we relied on a literature search by Tabors, and filing utility representatives. But the bottom line for this is that we have looked at the implications of a transmission organization in terms of its greater focus, coordination and informational exchange. We see that as being beneficial. Some consolidation of the _____, we see that as beneficial, some organizational relationships that would be established and of course as Steve mentioned earlier, the independence of a transmission organization -- all leading us to the generalized hypothesis which took us to this benefit/cost study that there are benefits to be had in a transmission organization by ensuring its independence in a one-stop shopping type of set-up.

Karier: Okay, thanks. Maybe we'll just start with questions on the cost/benefit study, because it is the most timely issue right now. And I have a few. The study that has been done here - if you're looking just a couple of years out you really haven't factored in the difference between the two in building new capacity or transmission capacity - you are basically taking the system as we have now and operating it more efficiently under a single RTO kind of operation. Is that where most of the savings is coming from?

Opatrny: We're looking at the system - not as it exists today, but in the very, very near future. We are testing the implication of that through some sensitivity tests. We are doing some low water, high gas tests to see in a stressed situation will we see the same trend? Will we see the benefits get bigger? But you are right, we are just looking at one year right now or today right now.

Walton: So in other words of all the benefits you might expect to find, the only thing we've captured, that are captured in these numbers are the hour-to-hour operational kind of savings you get in the system. The fact that the system will expand differently under one scenario or the other is not captured here. If you went and looked at that, the tendency would be to say if you are expanding - individual parties expanding without coordinating in a single coordinated expansion, you would see a different trend. You would probably see better transmission built in the right places and the second factor is that you also now because the pricing is coming from congestion management, tell generators what the real value of energy is at various locations. They have better guidance as to what to build. And then finally you have the potential that under this open environment if someone builds a plant to serve winter peak load in the Northwest, it is much easier for them to sell their surplus if you will in California, thereby lowering the cost of operating that plant overall because they don't have to carry as much capital cost. So the stock in new generation going forward will be different under the RTO assumption because you will be able to recover your costs better. So those are advantages that are in the qualitative list, but they are not in these numbers because we haven't tried to calculate those numbers.

Opatrny: And let me add that this is a phase one effort. Many of the filing utilities and Bonneville in particular are doing follow-on studies to look at load growth and future effort, but the filing utilities contained this particular study that I've just reviewed with you to a regional, let's get our feet wet with the 2004 analysis, but I anticipate quite a bit of follow-on work.

Karier: One thing that would help me, of this $358 million of net benefit per year, what is that in terms of a percent of your total transmission costs?

Opatrny: In terms of overall production cost for the west coast, we're looking at 2 to 3 percent savings.

Walton: That's everything, not just transmission.

Karier: Two to 3 percent. Okay.

Olds: I want to make sure that we answered what I thought the question was so let me just test this. Were you asking did the study incorporate any improvements that are expected to come on line between now and 2004? I know we have built in - the team built in the transmission improvements Bonneville expects to have functional as well as generation - and Carol can probably describe this better, but there are some assumptions that those improvements that are scheduled to be either functional or activated at any time in 2004 are included in this study. So it is not exactly the system we have today.

Opatrny: It includes all the WGA transmission expansion as I mentioned and you are exactly right, and all the capacity in the west coast.

Karier: Some of that isn't under construction yet, right, it's just being planned?

Opatrny: We used the transmission planning in the Western Governors' Association, so if any transmission, capacity, expansion, upgrades, uprates were assumed anytime in 2004, they are in, and then we did a comprehensive look at generation additions in the entire WSCC and that's in, so it is not today, it is what we anticipate in 2004.

Walton: What you're trying to do is what does the RTO actually add in terms of _____.

Karier: In the past it was easy to say that we're moving toward a market-based approach and people would all nod their head and say, "That's right, that's what we need to do." But now we operate under a couple of shadows; the shadow of California and the shadow of Enron. And just simply saying market-based approach isn't enough anymore; there has to be more to it. And I think one of the concerns that I'd like to hear you respond to is my concern about whether or not we're going to get enough capacity built in a timely fashion under this market-based approach. Clearly in California there wasn't enough capacity built in the generation market in time. A lot of it is being built all of a sudden and it is happening in the Northwest as well. And I guess that's my concern is that why would a market-based approach solve that problem? It seems to me that by the time it is apparent that prices are rising in a congested link that you're already too late and the signal is going to be late and also where there should be a signal to build new generation sometime in the future in a constrained area, most of that area is under construction right now. And it's going to be built before and in place before there will be any signals developed from the RTO. So I'm just wondering if you don't have a start-up problem and a problem with this capacity issue.

Walton: Let me just come back to the first question you asked - will new construction take place in this environment? In Texas and Pennsylvania and several other places where entry was encouraged, where the rules for getting into the system were simple and where people were making forward decisions, in other words where they were saying, "Okay, how much energy will I need next year and the year after?" and planning their long-term resources, there has been a lot of construction - a lot of construction in the Midwest, a lot of construction in Texas in particular, and some places, and in Pennsylvania for that matter, and in New England -- all responding to similar kinds of structures that we are talking about here. So there is response to the market. So what happened in California? Well, two things happened in California, I think, and one of them was that the Commission made a mistake and the legislature in the structure they set up. They set up a structure that forced all the utilities to buy all their energy on the short market, on the spot market, and by prohibiting them from allowing them to contract forward, in other words to say I'm going to buy a two year or three year or four year instruments out there, by restricting them from doing that, they took their eye off the ball. They lost sight of the fact that the surplus in the west was shrinking. So then in some ways they made a bet. They said before we're going to be able to clear up all of our stranded costs and that's the reason they did this buy everything in the short market was stranded costs. They lost sight of that because no one was buying forward. Even people who were offering them long-term contracts, they weren't taking them even as the thing was crashing.

Karier: But even there a foresighted independent power producer would have anticipated the shortage of 2001 power.

Walton: The second problem in California is that entry was exceedingly difficult. And it took - it takes two to three times as long to site a plant in California as it does anywhere else in the country. So there was a combination of those things - we'd lost sight of the ball and the market has responded. The fact that prices came down and we also then had the drought hit. So you know there is lots of complication here. But the other question you asked if I can remember correctly had to do with - we are already getting this stuff built, will it make a difference? That's why originally I talked about skiing the bumps is because we just hit this bump but there's going to be another one here and back and forth. The advantage of the independent producers taking the risk is that under the old model, under the old regulated utility model, what was happening is that if the utility makes a forecasting error, it winds up transferring that through a rate increase to its customers. In this environment, there is more of an opportunity for that to be ironed out some, to have a different distribution of the risk that they are taking on new plant development. So for instance if a company decides to build at Hermiston and they build a new plant there, they are taking a substantial portion of the risk - it isn't simply transferred - except for the contract they buy for the term they buy of a lot of the out risks, the years of risk out there in the future aren't going to happen. So this is just a much more flexible model to be able to do that; the sea is wider, people are able to see the market more clearly, and we make transparent what was largely hidden inside the utilities before - what the cost of expansion is, where the value of energy was, that was all hidden inside the utility. When we go to the RTO we pull the curtains back and everyone can see that.

Afranji: Jim, let me just add one more issue. I think the building of the RTO is not just to make the energy market more efficient; it's to make the transmission market more efficient. Right now the transmission market is not efficient; there is a lot of price pancaking, cost pancaking. There is inefficiency in the system when you have 33 different control areas trying to run the system instead of one control area. So maybe the energy market efficiency that we're talking about is a by-product of creating a more efficient transmission market. The RTO's genesis and the need for the RTO is even if the current generation market is operating great, it is still needed because you need to create a more efficient transmission market and that's a point we need to clarify.

Carr: Let me just come back to what I was saying earlier that it isn't a choice between a wholesale market or not. We have a wholesale market. But the problem is there are huge amounts of uncertainty about what the future of that market is going to look like. You don't have that uncertainty in Ercot and in Texas where Steve was talking about because the market rules are set, essentially an RTO is in place and it is supported, people know what the rules of the game are. So if you look at it in the future, maybe it is true, there is lots of combustion turbines being built right now, but you don't see a lot of transmission infrastructure being built, and at least one of the reasons is because the market rules are not known. So one of the things that happens with an RTO, I believe strongly, is that it stabilizes the underpinnings of the market out into the future and allows investment decisions to be made in a rational way.

Olds: I think you're right - we are worried an RTO can't get up and running in time to meet some of the immediate needs that we've talked about this morning, and you are probably aware of the fact that Bonneville is building transmission. In the dialogue we've had in the region in the last couple of years with our other partners, and our concerns about our system's ability to continue to handle the diverse market pressures that are now resulting from deregulation have caused us to come up with our list of transmission projects. The difficulty is getting funding as John mentioned, whether it is in a regulatory process like we go through or the capital market. There is a hole there and folks are trying to set up to the plate. We do think the RTOs will help that as John and Frank and Steve have described.

Kempton: Well, Peggy, just feeding on what you were just talking about, isn't the independent consultant's advice to BPA as a matter of fact is not to concentrate so much right now on expanding hardline but as a matter of fact to concentrate on efficiencies in the system, operational efficiencies in the system as opposed to actually building, especially taking into consideration the difficulty you are having in obtaining funding for doing that?

Olds: We're looking at all sources, especially with the funding situation so critical, to bring out every last efficiency in our system. I wish I could have Vickie Van Zandt, our transmission operations vice president, come here with me today to explain to you how many different ways our operations and planning folks have tweaked the system, stretched the system. The reports I get are that we've done just about all the optimization out of the physical system we can think of. There are a few technological improvements we can try, but we're at the point now where we're seeing a system as she calls it "a little twitchy." We'll have contingencies happen on the border between B.C. Hydro and Alberta for example, and we see those effects down on the _____ to respond to frequency changes on our own system. So we are working mightily to get those efficiencies but that's not the whole answer. Some new infrastructure needs to be built.

Kempton: Well, then a comment because it was a leading question. I think you can build yourself into a pretty sharp corner as you push efficiencies, because once you've taken all the slack out of the system. And then when it crashes, it crashes big-time.

Olds: You'll hear Vickie say that. She'll stand up and say, "We're getting to the point where we've run out of the cord here, push the rpms much higher. Our view is we're risking a lot here.

Walton: We call it the knee of the curve here. You are going down fine and then suddenly there is a cliff there and it falls off. And the system is being stretched to its maximum right now.

Bartlett: Mr. Chairman, thank you. My instincts tell me that an RTO is notwithstanding the preliminary results of the costs benefits which I'm pleased to hear, is one of the right things to do. What I'm concerned about picking up on Steve's comments about the bumps on the ski slope, are that some of us might be trying to ski uphill. It's not the bumps going downhill that concern me, it is the uphill. And almost all of you have indicated one or two things that concern you, but I think you are all unanimous in your statement that an RTO of some structure of some kind is necessary. Am I right in that assessment? Are there folks not on this panel and I don't mean the consumer/public side, but on the industry side who disagree?

Unidentified: You'll hear from them.

Bartlett: Okay, then my question of you is going to be back to Steve and the bumps, one of the questions we asked was what are the two or three main concerns that need to be addressed. I think the question that we asked in the form of the filing. I want to go beyond the filing and ask two questions: One, are those bumps going to get smoothed out and resolved; and what is your opinion on that; and who solves them? I know I'm asking several things here but I am quite concerned with Dr. John's statements and Frank's of who builds, who pays and all of the questions that go with that are just swimming in my mind as to how you get that. So I'm asking you all what are those main concerns and who fixes them?

Carr: Well, let me start. Let me just sharpen my comments from the standpoint of who builds and pays and focus on the transmission side. Several things we've learned in the process, not only the RTO West process, but in the WGA process is that transmission infrastructure is difficult to site and

it is difficult to finance. I don't want to overstate that - there are elements of the financing that are very difficult right now for a lot of different reasons. And what has to happen in the RTO world is to have a very strong planning function, and I think we've built that into the RTO West proposal. We are also very active - the RTO West is - with the other two potential RTOs in the west, the Cal ISO and West Connect. In the sense of forming a steering group, we call it the Seam Steering Group, Western Interconnect Connection, SIGLEAF, one of those great acronyms. And we've been working with the other two potential RTOs very closely and one of the highest-priority issues is to get a planning function up and running now, not wait around until RTOs are functional, but work together and get a strong planning process approach from a least-cost standpoint. I think a lot of us like the way we approached it from the WGA standpoint where we looked across the west, and we need to keep that pressing forward. That's going to be key. To get transmission infrastructure built you've got to have a broad-based public support for it. The environmentalists, tribal, the federal interests - there has to be strong support. And with strong support and the market rules being set, I think, my belief is this transmission infrastructure will move ahead, so it needs a strong planning process and I think that's moving forward. The second thing it needs is a strong working relationship between basically the state public utility commissions and FERC so that there is support being built along the way, and once that support is there from the public process, the least-cost planning process and from joint work between commissions and FERC, we can get the support needed to move forward. So I don't know if that is so much concerns; I think a lot of them are moving forward. So those are the elements we need, and I think there is strong agreement, not only among the RTO West members but as I said a broader group of the Cal ISO, West Connect and I think a lot of the participants think that's the right approach.

Karier: Well, I think looking at the clock I think we're going to have to move on to the next panel.

Watson: Mr. Chairman, can I ask one question before we leave that? Carol gave a truncated version of a much longer report and we further truncated her report which is she got to talk to specifically the potential benefits from a different dispatch of the western system and the physical costs and operational costs of setting up an RTO. Then there are several pages here which are devoted to other potential costs and benefits, and I don't suspect or propose that she go through them all, but are there in particular other potential benefits or costs, either way, that the Council and others need to think very hard about as this whole process goes forward?

Opatrny: I think the planning element that John just went through is of critical importance so to move the planning out of a single company to a region and in the case of RTO West, the British Columbia/Pacific Northwest/U.S. is really important. I think the one-stop shopping that we refer to meaning standardization of market rules within the RTO environment is also extremely important, because right now just because of the nature of our system each utility has different business practices. We have different scheduling regimes and all of that ends up being more bumps on the slope in a different application. I think the broader scope that Peggy spoke to which will in my mind result in higher reliability is also of critical importance. I'm not describing these in any particular order, but I think those three are really important drivers, and I see them as clearly in the thumbs-up category.

Krogh: Mr. Chairman, just in summarizing, too, I think this kind of a discussion is extremely helpful for us, because we've been somewhat cloistered for two years, hammering out filing documents and as one person said, "What is the little secret you all have been working on here? What is it going to look like?" This is going to require a tremendous amount of discussion and debate in the various forums that are dealing with energy issues and I think this is going to be one of the principal ones for us, hopefully to have an ongoing relationship with in addition to the PUCs in

the states, the governors offices, the state legislatures - it is a major shift. We encourage this. I think it's up to us to come out and be able to explain it and be able to respond to the questions that you have and we really appreciate the opportunity.

Afranji: If I may have only 15 seconds because I want to add to what Bud had said on the appreciation of Wally's work. I worked with Wally on national committees like the Market _____ and also when I chaired the Market _____ Committee, we selected Wally to head the _____ discussion group. Wally has been instrumental on national and regional basis as a neutral party that can steer many groups forward in discussing some of the commercial issues, and I just want to thank the Council for allowing Wally to participate because he really has been instrumental.

Karier: Well, we've certainly appreciated the reports we've gotten from Wally - we read those as well and it keeps us informed. So thank you, Bud, for organizing this and to all of you for participating in this and it is very, very useful for all of us. I think we'll just call up the next group.

Gibson: I just wanted to add that I encourage you to look at the rest of the slides that Carol provided if you have questions. Particularly a lot of these issues have to do with technical questions about control area operations and you can just give me a call and I can help to explain some of those things.

The next panel represents the non-filing utilities. We've got Aleka Scott from PNGC, which is an organization of cooperatives; Shelly Richardson, representing Northwest Requirements Utilities which is a group of the small public agencies of 100% requirements customers from Bonneville; Al Aldrich from Snohomish PUD - Snohomish is one of the largest public agency customers at Bonneville, Jeff Roarke from Mirant. Mirant is an independent power developer, and among other things it has developed several projects in the Northwest, owns projects in California. Jeff is going to bring the perspective of the generator/developer. Steve Weiss represents the Northwest Energy Coalition and can talk about the environmental/renewable perspective. I'd also point out that we have a handout that I gave you a copy of from Linc Wolverton. It is a handout that he prepared for the Oregon PUC. Linc has been active in all of the discussions on behalf of ICNU which is the non-DSI industrial customers of the public and private utilities in the Northwest. Linc wasn't able to be here today but he wanted to make sure you got his perspective. I encourage you to read that and if you have any questions, I can forward them to Linc or we ask Linc to come in some other time.

Karier: Wally, do you have a preferred order or should we just go through the order that's here? I think what we'll do again is if there are brief clarifying questions, we'll take those, but for the most part I'd like the panel members to give their presentations and then we'll ask questions at the end.

Scott: Good morning, thank you for having us here today. I am Aleka Scott with Pacific Northwest Generating Power and by way of qualification, I am a bump skier, and love the bumps but I don't like them in my transmission system. I've been in this business about 20 years and have really been focused on transmission for the last eight. The Indigo effort, which you've heard other people refer to as the baby RTO, and I sat on the steering committee for that for a few years as well. PNG Power is the power supplier to 15 rural electric cooperatives. We serve in seven states, the four Northwest states plus Nevada, Utah and Wyoming. We are extremely transmission dependent. Sometimes it takes as many as four transmission systems to reach our members from our supplier. I thought Peggy and Steve Walton did a very good job on giving you the background on why we're even here. I would say that Bonneville has been ahead of the game in this whole access arena - we've had very

good access long before other parts of the country had it, and our system is different from any other parts of the country. This is really a line from Steve Walton I'm stealing. Thanks, Steve. Our transmission system has been shaped by geography as our population center has; we're defined by mountains and rivers, and fuel supply, so we have a lot of long lines bringing in fuel supply from remote areas into densely populated population centers here, more in the west of our system. And vast, vast distances - I think we have to remember that. In the east where FERC is located and them seem a little eastern-centered, the system is very, very different, very dense, very highly interconnected. A long transmission line back there might be 20 miles. A short transmission line here might be 200. So I think we need to keep that in mind. We all know that but I think when we deal with outsiders it is not really well appreciated. Our goal is to have a free-flowing transmission system which really does allow us to optimize power. I would disagree strongly with Frank on that in that the goal of an RTO in our views has always been to optimize the power markets. As was pointed out, transmission is only two to three percent of the cost of delivered power. So we are very leery of disrupting the 97 percent to gain efficiencies in the two percent. And you'll kind of hear that flavored throughout. I find myself here today with kind of a difficult task. I would like to wholeheartedly support RTO West for a few reasons: one, it does depancake rates and if you have to pay four of them you'd like to not have to do that; and also especially now FERC has a docket open talking about national energy market design and there is a push for standardization nationwide. Again, because our system is so different, not only physically but also our hydro system, I think we have a lot to lose here in the Northwest. So the stronger support RTO West has, I think the stronger we are in resisting the national push that may take away some of our benefits. So I would really like to sit here and tell you I am 100 percent in favor of RTO West, and we have been very strong supporters of these efforts, we've put a lot of resources into shaping that, and we will continue to work to make it work for us. And I have to say we've come a long way from where we were a year go, but there are still significant problems and I'll discuss some of those with you now. The first for us is facilities inclusion. We have been wholesale buyers of transmission and power for 40 years, and suddenly we find ourselves in a position where the facilities we need to access the wholesale market are not all going to be included in RTO West. We talked about one-stop shopping in the previous panel. That is our goal. If we have some of the facilities not included, and I'm talking about facilities which function as transmission, but which filing utilities are not necessarily including in RTO West, if those are not included we're going to have two forums to go to for access, planning, for dispute resolution, and pricing potentially. So we are going to be worse off than we are today. There are a lot of reasons why all these facilities aren't included. Some are more nefarious than others. In the wake of retail access, some utilities have left out lines that serve our customers but also serve large loads of their own that they don't want closer to the transmission system. If these lines were included it would just be one step closer and we know where those loads are and we know where our loads are and it is pretty clear that they've been left out because X big utility is right on the same line. There is also a fear among filing utilities about losing control of their distribution, what they call their distribution systems, which also function as transmission systems. And there is also I think pressure from some states to retain jurisdiction over as much of the facilities as they can so that there's increased state jurisdiction. So for a whole variety of reasons not all these facilities are in, it is critical to us that they be in for pricing and for dispute resolution. In other words, we need a place to go when there are disputes about transmission service **(tape change)** by a thread to its livelihood, its existence, and as soon as the RTO was formed, if NERTA doesn't dissolve itself, I think the filing utilities will probably pull out until it will dissolve. If we don't have a place to go, our only place to go is going to be FERC, and that just seems like the wrong outcome, that we would have to go to FERC on a dispute that is much more regional or local in nature. The cost of going to FERC is tremendous. Every time I pick up the phone to even talk to my FERC attorney, it is $5,000. Not to mention actually going back and engaging their proceedings. So it is critical, and as Council Members I think one place you can add value is to push the investor-owned utilities in your states,

your governors and your PUCs to make sure that these facilities are in, because it is all the customers that need to be served, not just IOU customers, for example. Planning has been talked about. I was really pleased to hear the strong support for planning. This has also been an enormous issue for us. We have a little bit different view on the market. I am very skeptical of the market for transmission expansion, and I you referred to that concern. We think it is not viable to put an RTO in place that does not have the ability to fix the system before it breaks. And we have been pleased with how far the RTO West planning has come in terms of putting in a backstop for transmission adequacy and for chronic congestion relief. Again, if our facilities aren't included that's a real gap in the plan, so if the facilities are in a lot of these other problems go away. We do think there are many reasons the market might fail and that because we are trying to protect 97 percent of the cost of delivered power, we have to be sure that doesn't happen. Transmission, as John Carr said, is very capital-intensive, very long-term, heavily regulated, difficult to enter. There is no question we do need to have rules so that investment will be done. Another problem is we're looking at a system where we're looking at price differences to induce transmission investment. A price differential that would pay for a 20-mile line in the east probably does not pay for a 200-mile line. So I think we have to understand that we're going to be looking for huge price differences in order to make payment for a transmission line work, and that's a risk. I don't think that's one that has been really well discussed or looked at, so I am very concerned about that. And therefore, the ability to backstop is essential and I support its inclusion in RTO West. We do have a lot of load pockets and I think we need to recognize that the highest and best use of heavily populated land may not be the site generation. Transmission is just a way to bring a fuel to a population center. You can have coal by wire or you can bring coal in and put a plant closer to load, but no one wants a coal plant close to load. You know it is noisy, it is dirty, there are air quality problems, so they are really alternatives that we need to look at. So it is difficult to look at just transmission. You know the Western Governors' Association is addressing this, but we need to be very cognizant that currently because there are load pockets, there is market power. The market may not work because of market power, and that may require continued cost-based regulation. So we're still supportive of some measure, very supportive of cost-based regulation to curb these market power abuses, and I think we need to address that pretty carefully.

Karier: Aleka, are you close to wrapping up?

Scott: Yes. I just have one more thing and that is putting transmission in the market does expose consumers to large price spikes, and because of the lead time needed to build transmission, I don't think it is politically viable to expose consumers to these kind of long-term very high price spikes, so we need to be very careful about that. So I think the Council really needs to look for all the consumers in the region and ask questions, understand the issues and possibly also help be our advocate in the national arena.

Karier: Thank you Aleka. Shelley, I think you're next.

Richardson: Yes, and I have party favors. I'm sorry I didn't get here earlier but I was with your colleague Mr. Bloch over at the fish mediation meeting.

Karier: We were wondering where he was.

Richardson: That's where he is and that's where I'll be going back to. I apologize for not getting these to you earlier. Briefly, I don't have the privilege of making appearances before you all that often, so given that let me tell you a little bit about who I'm here on behalf of and try and address some of the general and more specific issues that Wally raised in his agenda. I'm an attorney representing the Northwest Requirements Utilities and it is actually through the RTO West

development process a slightly broader group than just John Saven's Northwest Requirements group. Namely, we're charged in our representation through the regional representatives group with representing the transmission dependent requirements customers of Bonneville. So these are folks by and large full, but not all of them are full power purchase requirements customers of Bonneville. Directly representing about somewhere between 50 and 60 utilities, Oregon, Washington, Idaho, Montana, as well as in portions of Nevada, California, Wyoming and Utah. Now the track we take coming at the RTO West development may be a little different than that which you hear from other components within the public power community, and it is a little different because I think our group has recognized a really strong national direction that survived through two different administrations, pushing toward the development of RTOs. It is not a question of embracing them because we like them, it's a question of that's the dance we got brought to and now we're trying to figure out whether it's a tango or a polka and figure out which one we want to do. So it is more proactive than throwing up an impediments approach. What I've handed you - there are two components - and I wanted to give that to you but I won't read it to you. The two pieces there on the front side in bold type it identifies a series of seven issues, and these are issues which are fundamental to the interests that I'm representing in the RTO West discussion. I'll hit on a couple of them because I think they are relevant to the issues Wally wanted us to address, both generally and more specifically. The backside I won't get into at all because I'm not the expert on the cost/benefit assessment. You've heard from folks here I think, about the framework of the assessment. Our point of view is that it's an ongoing study and we'll know more at the end of the month, but the bottom line it is key to our assessment of whether RTO West on a going-forward basis makes sense. If I am asked by East Cupcake Utility in northern Idaho what the impact on them of RTO West is going to be, I darned well better be able to answer it or I haven't done my job, and I'm an attorney, I'm not an economist. I will use and my clients will use the output from the cost/benefit study to try and answer the questions that we get that are very specific on a utility-by-utility basis. So let me hit on a couple of the key things for us. They are touched on on the front page of the paper, but the overarching concern that we have had in transforming the transmission market Aleka alluded to and that's when you have as we do in the Northwest load pockets that are isolated from the generation necessary to serve them and, again, in my heart of hearts my guys are folks who do not have generation and it is remote from almost all of them. The issue for us then becomes what rights do we have to move that power to meet our loads, because load service is the bottom line. And I heard one of the speakers at a recent FERC conference admonish the commission to first do no harm, and I think that's a darned good watchword for us here. If I can't tell the folks I'm representing loads will be served, I haven't done my job. So preexisting rights are paramount to us, rights that have traditionally within the RTO West footprint been covered by long-term transmission contracts. Now in the Pacific Northwest you've got and Aleka referenced this a bit and I want to expand on it, you've got in excess of 120 consumer-owned electric utilities, just in the Northwest. But the whole of RTO West's geographic footprint is on the order of about 160 consumer-owned utilities. Of that group of utilities, the range in transmission contract duration, both with the Bonneville Power Administration as well as with WAPA in some cases is anywhere from 10 to 50 years. And those are the long-term rides that I'm concerned about for purposes of RTO West how they're going to get treated. There are some who would advocate that those rights be abandoned and replaced by service with the as yet to be formed RTO West under terms and conditions contained in a tariff that hasn't been produced yet. I represent a lot of conservative folks who are more comfortable with the deals they've negotiated, which are long-term transmission contracts to serve their load. So that's the key, up-front issue. Now I do want to say that with respect to the general transfer agreement service that Aleka was describing, when she says facilities inclusion that is code for a set of facilities which aren't owned by Bonneville, which are owned by others among the filing utilities in RTO West, typically lower voltage but not always. They are part of agreements between Bonneville and the other owner for service to our loads in these remote circumstances. So the issue of what happens to

those facilities that aren't Bonneville's that are other filing utilities that may not be in the RTO is critical. The face to put on that when you think about in the Northwest how many utilities are in that position it may not seem like a bit deal on the surface, there are in excess of 70 utilities whose wholesale power requirements need travel over utilities served under general transfer agreements, namely these third party facilities that Bonneville doesn't own and that the other utilities have the discretion to include or not include. So it is not just chump change. Now we've talked about pre-existing rights, we've talked about whether those rights ought to be required to be converted or not.

Karier: I'm a little confused, why would those facilities not be part of the RTO? Do IOUs have the discretion of withholding?

Richardson: In the design of RTO West it is discretionary as the operating agreement is designed. I have anecdotal information about the individual reasons why certain utilities would or wouldn't want to include, because some quite frankly have included all of their facilities. Bonneville has included all of its facilities.

Karier: Well doesn't that interfere with the idea of one large coordinating body?

Richardson: It certainly does from my perspective. Absolutely. And when Aleka mentioned if I could - no I won't draw it, that's an economist thing to do - when Aleka mentioned large cherry loads. If I'm a retail load and I'm considering perhaps an open access state whether or not to access the market or even a non open access state, one of my options is get on the grid and find somebody else to supply me. The closer the grid is to me in that instance potentially the greater liability from an incumbent provider's point of view that my cherry load is going leave. That's the anecdotal evidence, but again it's discretionary. From a legal point of view I would argue that there's FERC precedent to the contrary and the good lawyers on the other side of the issue will argue to the contrary. So we do this dance regularly. But it is discretionary. The last point I want to leave you with because I know you've had a long morning and have more ahead is the RTO as designed now - I concur with Aleka. I would love to sit here and say go for it and recommend it to my clients, but absent resolution of some of the key issues that are out there that are flagged in the paper and that I've raised, we're not there yet, but we're making progress. Governance is one issue where the door has already been pretty much I think closed by FERC, the proposed governance structure has already been filed with FERC and largely approved. The good news is that it's structured as a non-profit and that's key to us. Having an independent and non-profit governing structure over this critter whatever it turns out to be has been a fundamental starting point for our clients. That's sort of the summary version and any questions you have when we get there I'd be delighted to take them.

Karier: And Al, I think you're up next.

Aldrich: Thank you and good morning Chairman Karier and members of the committee. I appreciate the invitation today. I'm Al Aldrich with Snohomish PUD. As Wally noted we are a large transmission-dependent utility, our average load is about 800 megawatts, and we bring about 85 or 90 percent of that power to our county from somewhere else. Currently Bonneville is the major provider of power to us. Let me first note that the benefit/cost study we certainly consider preliminary. I think the folks who have done it would say that also. It has only been available to us since Wednesday and so our comments are similarly preliminary. We have a consulting firm that's helping us analyze this stuff and we won't get our first sort of official product back until Friday, but we obviously have some ideas and notions about RTO West and even parts of the study that we have seen. We're concerned. We believe that costs for Northwest utilities, particularly public utilities, are going to go up, and they are going to exceed benefits under the RTO West proposal. I would

also just say this and it might help to say that I spent yesterday afternoon in my Board of Commissioners meeting and the first hour and a half was spent listening to angry consumers complain about their power bills which are up 53 percent from 14 months ago, and many of them are wondering how the hell their bills got to $500 for two months for their home and what can be done about it.

Bartlett: It was all due to the formation of RTO West?

Aldrich: No, I don't think so, but with all due respect to professional economists, and complex computer models the recent record of transferring their skills and knowledge to the real world isn't very good lately. For instance, some of the shadows that Chairman Karier spoke is another thing, so that's the real world. You don't get a lot of off the street consumers in here saying, "gee, how do I get my bill down? How do I pay my $500 bill for the last two months?" We do, we're where the rubber meets the road as are some of the folks here. A couple of things: our starting perspective is we don't really have a lot of problems with transmission in the Northwest. Bonneville has done a pretty good job of providing low-cost transmission, one of the most reliable systems in the world, and we largely agree with what Aleka characterized as we're getting jammed by FERC into a sort of one model that is probably very useful for solving problems in the Midwest or PJM area or some other things, and you know we need to be careful about that. I don't think we can just disregard FERC and blow them off, that isn't going to work. But on the other hand it is kind of crazy to throw out a system that works pretty good today and buy into this system that as I'll mention in a minute, we don't even have a good handle on some of the cost features that were left out of the study. We do think what we can do is work on the system that we have; there are some areas where improvements can be made, and maybe we need to do a cosmetic wrapper to make it to FERC like they got most of what they wanted out of it and they can claim victory. We can claim victory and get improvements over today's system at lower costs. We would argue that that's probably a way that ought to be explored a lot more before we just plow ahead with the current model. A number of the problems that RTOs generally are intended to solve from the FERC proposed model aren't big problems in this part of the country, volcanized ownership, serious pancaking - there is some obviously - and lack of centralized planning. Bonneville does a lot of that for us at a pretty good outcome we think. Beyond that let me mention a couple of things that we think are concerns about the study. Number one, there is a few costs that we think aren't in there. I'm going to suggest to you coming from the state of Washington, and I'm going to spend the rest of my week in Olympia where I spend most of my time these days at the State Capitol, that the Department of Revenue in Washington and its counterpart in Oregon are looking for roughly a billion dollars each to fill holes in their revenue stream, are going to look very carefully at whether they can tax the current tax-exempt assets of Bonneville in particular that happen to fall within their state. And I'm going to suggest to you that given their current financial situation, they are going to press that to the wall. And I realize that as Carol mentioned that is outside the scope of their study and that's understandable, but it is a real world cost that I think is going to show up where it's going to take us a while to figure out if it isn't going to show up. I think it is not appropriate to assume it isn't going to show up for one thing. I would just say also it doesn't make sense to us that a model - it doesn't make sense to me anyway - that a model that shows optimizing generation on marginal power plants is going to result in lower costs. I haven't seen that happen in the last couple of years in the region. It just kind of doesn't work and again, I understand the difference between computerized models, I've got an MBA - I understand the difference between computerized models and sort of the real world and sometimes they break down. We're just real concerned. Our consumers don't have the stomach for more untested models frankly. We're also concerned that there are some critical and potentially and very costly issues that are left to jump balls for the RTO West Board to decide after start-up, things like losses methodology, planning, transmission expansion. What we do think

should be done is to make sure that Bonneville can get its borrowing authority and go to work on some of the congestion issues and then go to work on some of those other issues. In the security coordinator I think there's room for improvement there and a few other areas like that where instead we should focus on as much as possible. We'd also suggest that the March 1 deadline should be pushed back. We need to get as I think Shelly suggested more time to try to work through these issues and see if we can get more consensus in the region on a model that is going to work, whether it is the RTO West model today or whether it's something more like we suggested, something in between, but jamming us toward an artificial deadline of March 1 when FERC hasn't figured out their national standards that they are sort of threatening to shove on people, doesn't make a lot of sense to us. But ultimately that's up to the filing utilities and I do understand that. At any rate, I'll stop at that point and be happy to participate in the discussion later on.

Karier: Thanks, Al. We have Jeff Roarke from Mirant.

Roarke: Let me first say where Mirant came from so you'll understand my background. Mirant was spun off from Southern Company. Southern Company of course is one of the largest utilities in the country; it covers parts of four southeastern states. So as a company, Mirant, though we are an IPP and though we are independent from any utility companies, that is our background, and we try to remain true to our utility background. Where this affects me is my background personally as a system planner. I've been in the business for nearly 30 years. A lot of that time was as a system planner for the utility, both in transmission and generation, and then with what used to be southern Electric International I was a market analyst. I've used a lot of the models; I understand a lot about how the systems work. That puts me in a little bit of an unusual position in a company like Mirant. Let me say that Mirant as Southern Electric we've been active in this region for quite sometime. The first wholesale transaction by SEI which was the forerunner of Mirant was actually done in 1995 with Chelan County PUD. So we started here, really, as a business. As a business we are interested in RTOs because to us it opens the door to a future and we very much want to be part of the energy supply future wherever that's a vital business and where it can be done. So in that sense we strongly support RTO West. We would have some quibbles over various items of design. We'd be active in helping to affect how those designs might come out. Our feeling is that in RTO design, RTOs will be in the long-run of positive benefit for consumers. They need to be. Because they will generate more efficient power markets, not just transmission, more efficient power markets in the long-term, however we really do as an industry have to be careful in how we put these things together. Obviously. Anybody who's been watching knows it's easy to screw this process up. All the problems have not been solved and I think several people here have mentioned some of the problems that are out there. My main concern as a system planner and as an industry watcher is that pricing on the transmission system does reflect the physics and the economics as closely as possible as it can. This is important because if there are going to be companies like Mirant out here building power plants in the system, we really need to know where those things need to go. And if the physics and the proper economics are reflected in the pricing, then those things will be evident to us. It will be evident to consumers where they need to try to buy power. So we're very interested in making sure that the pricing is actually rational in terms of economics. I would caution that any looks at what we're doing with the transmission system today, how we're using it, where the congestion lies today, these things reflect the current pricing of the system. And we're not pricing the system consistent with the physics and economics of power flow. So we don't really know how the system would be operated, where the congestion would be or whether there would even be congestion if we were really pricing the transmission product correctly. Al mentioned losses. Losses is an extremely important characteristic of transmission pricing that really has been left out of the discussion. It's often assumed to be small, but in terms of the effect it can have on transactions in the market, it can be fairly large. If you ignore it as we have pretty much tended to do in the

industry and I'm not condemning you guys, really all around the industry we've done this. We've tended to ignore the fact that losses are non-lineary;we've had many more transactions taking place out in the market that probably shouldn't have been, and what these transactions do is waste consumer money. Somebody out there is making some of this money, but basically consumers are paying for more activity out there than probably they really need to. So that's just one of the facets that we need to think about. The next thing that would happen if we continue to ignore those, we have too many transactions, we have too much congestion, the next thing - what are we going to do next - we're going to look and we're going to say well there's congestion here, somebody should go out and build a transmission line and relieve it. Okay, now we were wasting money to begin with and now we're building transmission so we can continue to waste money for consumers and we're going to charge the consumers to build the line. So again, I think we have to be very careful how we design RTOs and the pricing of power on these networks does adequately reflect the physics and the economics so that as the system develops, again this is my planning background, as a system planner I used to be able to optimize the whole thing because I was in control of all the assumptions - where we put plants, where we put transmission lines, but in a competitive market there's nobody who's really in control. It needs to be price that tells everybody out there what they need to do. And it needs to tell them to do it in the right way that creates greater efficiencies and make things happen to benefit consumers in the long run. And I'll be glad to answer any questions.

Karier: Thanks, Jeff. We'll have questions after this. Steve Weiss from the Northwest Energy Coalition.

Weiss: Thank you. I appreciate this opportunity to come before you. For people who aren't familiar with me, I represent Northwest Energy Coalition. It is a coalition of about 100 organizations, a number of utilities, Snohomish is one, some IOUS as well, PGE, EWEB, City of Seattle and fish and wildlife advocates, environmentalists and low-income consumer groups as well. It has been very expensive to follow this process, even for some of the organizations here it is a stretch, and for our organization it's quite a stretch, and they've pretty much put me on this as probably the only environmental interest there just because the whole public interest community can't really afford to do much more than that. We had hoped that the states would be taking more interest. We are pleased that the Council has at least lent Wally and is going to take more interest in this, but even the state commissions have not really been present very much, one or two people show up occasionally. There is definitely a utility industry bias to the whole process and that's something to watch out for. I have a hand out; I think some of you may have it. There were some out in front. But it is just one page. I know Wally gave it to the Council. Some of the potential - we're weighing whether we should support the RTO filing as well. And we're sort of on the edge right now. We think that there are some potential advantages and I put the potential in italics because it depends on how you implement the RTO whether we will realize those. But some of the benefits that we think are available over the current system are good price signals. This is as the previous speaker talked about, time of use and locational price signals to utilities, also to generators and new generators who are going to locate, and to direct access end-users who will receive - some states have allowed direct access, some of the big industrial customers have gotten direct access to various deals and so on, even in non-direct access states. They will face much more immediate price signals and that will lead to more efficient use of power. Secondly, regionwide least-cost planning. I think this will be very productive to look at the entire system. Right now each utility looks at its system. It is hard to kind of look at the whole thing as a group. The Power Planning Council sort of does that at a very, very high level. This will be a more detailed look at where upgrades, where new transmission, new generation and so on might be located, and so on, to create a least-cost system. Hopefully that will result in least-cost solutions, and I'll talk about some of the problems later about why I put a question mark there. More efficient dispatch of generation. This is one of the things the study is

looking at. We have pretty efficient dispatch of generation right now, but still with various controlling _____ and so on, if you operate it as one complete whole you will get more efficient dispatch of thermal generation. And hydro generation because the price can decide when you should - within whatever limits there are left after the non-power constraints - when to generate and when not to. We already have fairly efficient dispatch - I'm not sure how much extra that is going to give us, but it is an advantage. We'll capture some of the value that has not been captured of conservation, load controls and distributed generation. The RTO model allows loads which big industrial loads to be available to shut down or shut back during peak periods. To do so and capture that value. In the future as we get into more electronic controls even on residential homes - most people don't realize for instance their freezer automatic defrost is just sort of a random time thing - it cycles on every so many cycles of the refrigerator unit. That could be put on a timer and it would defrost your freezer in the middle of the night and you could squeeze a lot of efficiencies out of the system once we have a way of capturing the value. Under this system loads could bid in to provide interruptibility and so on to the system just like the generator could bid in to provide more generation. Five is fair treatment of renewables. Renewables right now can have a hard time getting on the system, because renewables, wind especially, is intermittent. The RTO will provide a real-time balancing market so that it can minute-by-minute buy and sell the extra or the plus or minus that it needs to serve a load without paying penalties. Unbiased interconnection policies for distributed generation so you can do one-stop shopping. A new generator, small or large, can just go to the RTO, make sure it is treated fairly and not being given the run-around by its incumbent utility and so on. Access to transmission on short notice: right now we do have - it's hard to get access for one hour here or one hour there, and often renewables needs to get that. That will be provided in a market quite easily. And people willing to give that access to the market by shutting back can get the value because it will be a market bid. So all that said, there is a lot of potential value. The problem is now will this RTO provide this value? I think that the pricing, there are a few problems in it. There is some bias in decisions of where a generator will locate; there's a bias toward - if I'm a new generator and I want to serve PGE's load that I had better hook up to PGE's system rather than somebody else's system because the ___ will have to pay a double pancake if you don't, and so things should be fixed in the proposal, but generally it is a pretty decent pricing proposal. It keeps the status quo with not too many cost shifts and collects from the short-term transactions we've had in the past. The big problem is planning and expansion. We've talked about it over and over here, but it really is the problem. Now to get to this problem I think I have to go back to some of the things that Steve Walton said earlier. He talked about first you have to ask the right questions and I don't think - the fundamental question has to be asked of who do we want to keep the lights on and who do we want to do that at the best price possible? The old system has integrated utilities, and the reason this question is extremely important is because we're attempting to split transmission from generation, but transmission and generation cannot be split. Transmission and generation are substitutes for each other. If you think you need a transmission line, you don't because you could put generation on the side that you need the power. You could substitute generation for transmission for very often. If you think you need more generation, maybe not. You could build a line and get existing generation somewhere else. Transmission and generation are often substitutes for each other. So requiring a transmission operator to split - Bonneville for instance - into two companies, transmission and generation, makes no sense until you decide who is responsible for actually keeping the lights on and making decisions. And this is the problem that we've had with the planning function in the RTO for the three years I've been working on this thing - it feels like eight but it's only three. We've gone back and forth over who is responsible. There are two basic sideboards on this thing and the RTO plan has gone both ways by the way. One is it is the transmission has to keep the lights on. They have to make sure that the system is adequate. You'll hear about that - make sure that we have reliability. Well, to make sure your system is adequate and that you are reliable, you have to make sure generation is around. Because you can't assure

adequacy without generation, so if you are going to say the transmission business is going to keep the lights on, then you need one big utility that makes transmission decisions and generation decisions, so what you need is what's called a backstop where ultimately the transmission system will decide what to build for everybody to keep the lights on. It is their ultimate responsibility. The other model is loads are responsible for keeping the lights on. If you belong to a utility, your utility is responsible for making sure you have enough power. That's the old model we have right now - that's the model I tend to like. And if you are going to do that you don't ask the transmission system to do it for you, ultimately you say well it's the load's responsibility and if the loads don't do it, then maybe I'll do it for you but at a huge price and you're going to pay the price. I don't think anybody wants the lights to actually go off, but basically it is the load's responsibility. These two models are incompatible with each other; you can't have one and the other; you've got to pick. Are loads responsible or is the transmission company responsible? Well, we've gone back and forth on this and right now the proposal is a mish-mash of the two. They don't work together because if loads are responsible but they know the transmission operator also thinks it's responsible, they are going to wait until transmission gets built, and they are not going to act, and of course the transmission builder is going to be waiting for the loads to build and it's not going to act. So everybody is waiting for each other and that's what we have is the uncertainty that John Carr was talking about. Nobody knows who's responsible. Right now the problem then is that we haven't decided who's going to make the decisions and we have both. Now as representative of the governors, I'll tell you that if you have the transmission business making those decisions and Tom, for instance, you said well, shouldn't maybe we have to build transmission, if you're going to have the transmission business, you have just taken away the authority of the states. It is going to be a regional authority. What you've done is you've created a central regional giant utility that is going to be making decisions and with its hands in our pockets, and you've given away the authority of the state to regulate its own future. That model of giving the transmission business the ability to spend our money is - you can call it the big centralized communist model or something - it is somebody else you are giving up your authority. I don't think the states should be there at all. The states should say we want to have the loads, the local utilities have the authority and responsibility to keep the lights on, and they make the decisions and do not give the transmission RTO this ability to spend our money. You don't want a backstop, it will ruin everything.

Karier: In your version each individual utility would make a decision about whether to build and that's really very much different from the alternatives within the RTO.

Weiss: No, that is the front stop. That is supposedly what the RTO is going to try to do first, but waiting in the background is the backstop.

Karier: They would do it based on market incentives and prices.

Weiss: Well, you give people prices and you do what is called small p planning. They've done this in the gas pipeline business. You do the plans, you say wouldn't it be great, look at the savings if you built this line over here. Who wants to sign on? And then you go around to the loads and you say if you sign on you could reduce your congestion costs. This is a really good project, you should sign on to it. And each local utility, either the public utility's board or the utility commission approves the IOU, says yeah, I'll sign on for 45 megawatts on that line, and I'll sign on for 75 megawatts. That is the proposal in the RTO as the front-stop or the beginning, but we also have in the RTO the backstop and as long as the backstop is there and as long as everybody's waiting for it to go into action, nobody is going to volunteer. Why should I volunteer when I can wait until they do it and peanut butter the costs all over the place and I wont' have to do it. So right now we have two models that don't mix and if we go toward the RTO big honking utility model, you as states

have given away your authority to the RTO and the only place you can challenge it is at FERC. And I don't think the Northwest wants that. I don't want to have to go to FERC to stop a stupid project. I'd rather go to my local commission. The big problem in addition that is not only does it take away your authority but it is restricted to only doing wire solutions. That is even though they will identify, the little p planners will say you know the best solution over here is if we could get some generator to build over here and let's give them some money to build over here. They are not allowed to do that. They have to actually build the line; they are not allowed to do non-wire solutions. So not only do they have authority to spend your money, but they don't have the authority to spend your money on the least-cost project.

Bartlett: Mr. Chairman, Steve, I have lot of questions, but one comes from your last statement. You're probably not going to find any of us disagreeing with you that states should be responsible for what states can be responsible for, but my concern is this: it was my understanding that at the transmission line level states don't have that authority now; that at least in the state that I'm from transmission is governed by FERC, not by the state Public Service Commission and that's today's model. Now, again, I for one am not going to speak for my colleagues, I for one would always like to see things decided at the state level, that makes sense to me. But I don't think that's what today's model is on transmission.

Weiss: We haven't gotten very much transmission built and one of the reasons is because almost in every case, in very, very many cases, the local utility is looking at this problem when they do this least-cost planning and they say you know I can't get power from over there and I don't know if the transmission is every going to get built. Why don't' I get some generation built and Tom for instance you were saying who's building generation, I don't want to be subject to price spikes and I'm worried about what happened in California. We're not outlawing utilities. Any utility that wants to build a generation to ensure or sign a long-time contract with somebody can do it right now and ensure their future. Lots of utilities went short, and they just thought the market was going to always behave the way it did last week. And things change. And I think a lot of utilities have learned don't let your reserves go down, sign a mixture of contracts, have a mixture of resources and so on. I think it is the responsibility of the local utilities to take care of their loads, and when we give up that authority to someone else it's a bad move to make.

Richardson: Mr. Bartlett, if I may, I think your assessment of the legal and regulatory line for jurisdictional purposes is correct. The FERC does have jurisdiction over facilities that are used for wholesale power transfer transactions. Those sorts of transactions are necessary in this region in order for local utilities to serve their loads. So we can't be so parochial as to only look at those assets that are within our own ownership and control, much less the state's ownership and control (tape side change) and given the nature of the region with loads remote from generation, interstate commerce is impacts, the FERC jurisdictional assets are impacted, and so we do end up with an array of different regulators if you will, and different influences on who controls what system.

Bartlett: And if I may editorialize on that Shelley, I not only agree with you, that's why I am an advocate for changing today's model because I think that whatever the change is, we need to change it in order to make it work. Otherwise we're going to have a mess. Sorry for the editorial comment.

Richardson: It's a business opportunity for some of us.

Weiss: And I think that model makes sense and if the RTO would stop with that model, but it also has a second model as its backstop. I would suggest that instead of this whole backstop thing, we say that if the RTO can demonstrate, if it goes back to FERC and says all these price signals aren't

working, there is huge price differentials, but still nobody is coming forward, we need to do the big utility model or we're going to take action - ask for authority. But when you have that authority waiting in people's back pockets, we're going to build stuff because of political pressures not because of pricing. Aleka brought up an example: a 200 mile transmission that only has a small differential in price, well if it only a small differential in price why should be upgrading that line? No one wants to. So why second-guess the market. The load seems to be willing to pay that differential. Once that price gets big enough the load will say I'm sick of this, I'll build a new line or I will generation, I'll do DSM, I'll do something to solve it, but we don't want to build things that the market says shouldn't get built.

Karier: Well, I think there are issues of security as well as the price differential that you have there. Governor Locke in our state has said more than once I think and something that is very reasonable, which is let's take a look at what the cost of these mistakes could be and we're designing a pretty elaborate, complex system here, and there's going to be some mistakes, and there's going to be some cost to those mistakes. The question is whether or not those are going to be small, manageable mistakes that we can cover or whether we are going to have some large mistakes like the California system. And to weigh those against the benefits of success. And a cost-benefit analysis from what I've seen of it so far doesn't really get into that - the costs of mistakes. It is sort of optimizing from a centrally programmed position and not making any mistakes, and it is worth looking at and it is worth judging from it, but I think at least from my perspective of trying to represent our state in this, I need to look at what the cost of those mistakes are. And I think I've heard all of you mention some of those. I think Steve probably hit it more directly - potential mistakes on planning and expansion - that if we go into a very elaborate process and we're ambiguous about one of the most important elements of this process, that doesn't provide the kind of reassurance that I'm looking for. You have all mentioned potential mistakes or problems there - are you optimistic that those will be resolved by March 1, that we can get this right?

Scott: No. I'm not optimistic that we'll know by March 1 and maybe not even March 1 of next year, because I think we won't find out what they are until we're actually implementing. So that to me would argue for giving the RTO authority because we are going to make mistakes, and I'm especially concerned because of the price differentials. I don't see the public and we're right at the consumer level, too. We don't see the public having a big appetite for price spikes. That was demonstrated in California, even FERC came in and price-capped our market. If the whole system depends on prices being high enough long enough to send a signal to construct a long-term capital asset, and we have politically people coming in and preventing those signals from either reaching the consumer or actually capping them, we need to have a transmission system that an go ahead and address the problem. When you look at the cost of building a line that perhaps was on the margin, it is a small percentage of a small percentage of the total. Compared to what the excess power cost could be, I think I would rather err on the side of too much transmission than too little, because as everyone has told you the system is stretched right now. We have constraints right this minute, and maybe some of them are excessive because we aren't doing losses right, but nevertheless the system is stretched, so I really worry about the cost of not enough transmission than too much.

Richardson: Chairman Karier, I'll take your question in two pieces and the reason why I do that is March 1 or March 15, whatever the next filing date for RTO West is, isn't - it's not a magic date by which everything is finished, and so the two pieces that I take your question in is what does it take for me to identify a filing at FERC asking for FERC's actions consistent with Order 2000 that would make me comfortable - that's step 1. Step 2 is implementation and any compliance filings at FERC once you get past step 1. As to the first step, I don't think March 1 is a drop dead date, but there are specific issues that we've identified with the filing utilities which if they are remedied in the way

that we suggested, would make it a much better looking filing than anything we've seen before. Now with the number of utilities I represent, I don't know whether it is something they would support or not, but we've identified the issues to be remedied and my recommendation would be that they support it. Their action is their action. But those big issues, and we've whacked them here and elsewhere, treatment of your pre-existing rights, making sure the facilities you need to serve your loads are in, and although I certainly appreciate Steve's point of view with respect to what's described as the planning backstop, adequate and reliable transmission service is absolutely key to the folks I work for. And if they can't keep the lights on and they don't have their own generation, you can't build it in a day. So the planning backstop is key to us. If we can pick up those and then look at a robust cost/benefit study I think we're there. Now the second piece is implementation, and saying that we think the filing looks good on March 1 - that's step 1, but that doesn't mean we're done.

Karier: Jim.

Kempton: Mr. Chairman, first of all, before I have to say Mirant three times - my wife's from Texas so I can live with this deviation in the normal English language pretty well. And by the way you haven't completely lost your accent. To Aleka and Shelley I have a question and that is in this issue of rights and prior rights and GTAs, could you elaborate a little bit on the other options being considered, perhaps define it a little bit for me on the third party procedure for hard-wire. I assume that's what direction is.

Richardson: The GTAs arose historically and Aleka can speak more eloquently to this than I, in lieu of building hard assets, namely, when it looked like the systems were going to be built duplicative of one another, Bonneville entered into contractual arrangements with a third-party owner to move power to serve our loads. So historically there haven't been wires. The solutions that are being offered up now in the alternative to including those assets in the RTO are not to hang more wires. To the contrary - I think you're looking at a future not with one-stop shopping but with several-stops shopping where a local utility, say Salmon River, has to go to Idaho Power, use an open access tariff from Idaho Power to cover that increment of transmission service before it even gets to the RTO West facility. So it is not a question of putting more wires up; it is a question of shopping from spot to spot to get enough access, if you will. Aleka, did you want to do the color commentary?

Kempton: When you see the language third party, third party relates to alternative sources for securing power on other transmission systems?

Scott: If we're talking about third party transmission, we're talking about, let's take Salmon River. They are a Bonneville transmission customer but in order to actually get to Salmon River and it's Pacific in that part of the world, you have to actually go over PacifiCorp's facilities. So you have Bonneville facilities and then PacifiCorp facilities.

Kempton: I'm going to have to research this some more and then I'll give one or both of you a call, because it actually has to do with an alternative, recognizing that you can have several transmission systems involved in getting power from point a to point b. For example, just talking about only the 500 kv line, Idaho Power line, into southern Idaho, it is a GTA contract for some of those rural electrics down there. If the GTA contract isn't going to be honored as a part of the transmission system as a defined right, then I think there is some concern on the people down there to actually move toward a third-party procurement of hardwire systems. I don't know if that's the case or not.

Scott: I looked at that about ten years ago, but they could actually do that. Part of the problem is for the size of load down there it would be - when I looked at it ten years ago - prohibitively expensive.

Richardson: I'm sorry that I didn't understand where you were going with that - there are individuals and organizations having those discussions in that area now. Those discussions are occurring parallel to the RTO development and as best I've been able to tell because a number of our utilities are cross-pollinating in these different groups, they are at the fairly infant stage of development, largely because of the very issue Aleka just identified - the cost at least at the first cut.

Scott: And it is not an efficient use of money to build another line when one that is adequate exists. So we're just trying to get all those facilities into the RTO so that this kind of really uneconomic development doesn't happen.

Bartlett: Your point 5 Shelley on your document, from your view what are those? I assume it's geographic area but what are the three RTOs that you would be proposing?

Richardson: Assuming there were RTOs, what we would look at as the appropriate distribution is Pacific Northwest with some slop for some of our more southerly and easterly neighbors. So RTO West largely; for the desert Southwest separate RTO for that area, and there's one currently proposed West Connect that is a for-profit RTO comprising a lot of the former Desert Star RTO assets, and then California is the third largely because they are there, they have been there and nobody wants them. I don't mean to be trite - some of us don't want them and others of us have looked at the potential speaking shifting of costs that would accrue in the event that that entity were to walk up here and don't like what we see.

Karier: One question I had was it has been mentioned a few times that the Northwest is different, that we are not the same as the east coast or the south. I was wondering - in this filing that's going through and in FERC's orders has there been enough deference to those differences in the Northwest? I mean how does what is being produced here look different from the rest of the country because of the Northwest, because of the hydro system, because of the large percentage of public utilities, or whatever the long distances of transmission lines? Have all those differences been taken into account adequately?

Weiss: Because we have lots of hydro and hydro has no or very, very little cost in any hour, what hydro has is opportunity costs. Should I run a dam this hour or should I wait until next hour or maybe next month or next year, whatever, should I store it or not. So one of the big differences that the RTO is doing in the Northwest is that every scheduler has to submit a balanced schedule so you don't depend on - whereas in some of the other regions you can just say I want to buy or I want to sell and you can depend on getting it in the market because the market is always set by the fossil fuel. The prices are always there depending on the price of fuel. So by always submitting balanced schedules in the Northwest, we have pretty well said that we are not relying on the spot market to fill our schedules, and I think that is probably one of the main differences.

Richardson: Chairman Karier, the filing utilities have done an awful lot of what my neighborhood would call missionary work with respect to illustrating the differences between this region and others. I don't do political stuff for a reason - I'm not read good at it, but they could use some help making sure that message gets across from my point of view. The filing itself from the areas that I am familiar with, the more legal areas, that case has been made up to a point both in this docket and in other FERC dockets, but it is such an uphill battle with respect to the commission's staff, who quite frankly hear every time somebody from a different state shows up, they say we're unique,

they've got to be thinking okay, so what? The point is it is not for lack of trying that the distinction between this region and others may not have gotten through. Folks here have tried. These folks have done a darned good job on it, but they could use some help.

Scott: Everytime I go back to D.C., and I do a small amount of political work, I take my big transmission map and everyone is very interested in it because we have big blank areas on our transmission map where - you go look at any transmission map where there are no people and at least not very many, and if there are they are served by Shelley's customers or mine. And just to illustrate what a huge uphill battle this is, when we applied for a FERC power marketing license, we were turned down the first time because they thought we might have transmission market power. So we had to go back to D.C. with our transmission and road maps and show them that at the end of this big 115 line there were tumbleweeds, and they just didn't get it. You look at a roadmap of rural Virginia or West Virginia, there are a lot of people there, there are lots of roads, it is all inter-connected, and they really don't get it at FERC. So we go back pretty regularly to work them, to work the delegation, but really any political help I think would be hugely appreciated. We all kind of carry a common message in that regard, that the transmission system is different and the hydro system is different, and they are a thermal system back east, they always think on the margin with thermal. So that totally - they just totally don't get that back here hydro is on top.

Aldrich: as you may know Mr. Chair, the four sitting members and the member-designate, the furthest west of any of those is Texas, which of course isn't even affected by FERC policies because Ercot is its own little republic and most of the staff is D.C. based.

Bartlett: Mr. Chairman, there was twice Aleka you used the 3 percent delivered cost of electricity is transmission - that is a number that bothers me somewhat because I think it is substantially higher than that, so I'm asking from all of you, Wally and Dick and others, that first I don't agree with you, I want you to know that, because I think it's substantially higher. But I want to know if the rest of you are in agreement with that and if you are, where do you get that information, because that's not the number I have in my mind.

Scott: Because you're from Montana and seriously Montana has the highest transmission rate probably of anywhere. And the reason you have that is because you have a huge state with not very many people in it. So you have very high transmission costs because you have very low density systems, but overall, our cost of Bonneville transmission which includes to your co-ops which are Bonnevill customers, not the Montana Power ones, is about 3 mills, and the cost of our power right now is say 125 mills, so that would be a little higher. But it is still a small number and when power was at 200 mills, you know it doesn't take long at 200 mills before the difference between 3 and 4 mills is kind of noise. But overall that's a WSCC number, that 2 percent, because the cost of power is more expensive in California, so on average that is probably correct. It may be different in different jurisdictions depending on their cost of power and their transmission.

Karier: My plan is to take a lunch break and reconvene at 1:30. And at 1:30 what we're going to do is we're going to change the format; it is going to be more of a discussion with the Council Members and whoever else can be here to talk about what all this means for the Council's role in terms of anything from participating in RTO West discussions to filing a letter on positions of the states in this to the role in the power plan. I encourage all of you to come back at 1:30 and help us sort out some of these issues. Again, thank you very much to the panels. This has been very, very informative for all of us. Thanks.

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