Attendance: 43 attendees, 19 webinar/telephone participants

I. Welcome and Introductions by Darrell Gerrard, PacifiCorp

Darrell opened the meeting at 11 am MT. He welcomed the participants to the third stakeholder meeting for the projects being co-developed by the lead entities, Arizona Public Service (APS), National Grid, PacifiCorp and the Wyoming Infrastructure Authority (WIA). Darrell reviewed the Standards of Conduct for the meeting as developed by the Northern Tier Transmission Group.
[Slide 2]

Darrell noted that the agenda was a full one and that David Smith from National Grid would introduce the partners. David, Peter Krzykos, and Craig Quist were on the agenda to explain the projects.
[Slide 3]

Darrell announced that the partners are planning another session in late January for the fourth and final meeting. This meeting will not be a repeat of previous meetings; it will be focused on the engineering study results and other additional information. Darrell also announced that a generation meeting headed up by the WIA is being planned sometime in February and scheduled in Salt Lake.

Participants in the room introduced themselves and a roll call was done on the phone. (See attendance document)
[Slide 4]

II. David Smith, National Grid

David welcomed the group. He stated that there were several different purposes to the stakeholder meeting: the main purpose being to provide information to those participating so they understand what the project plans are and to also receive input from stakeholders in order provide feedback to the partners so they understand what concerns stakeholders might have. David indicated that the partners were also available by email and phone in order to have an ongoing dialogue with stakeholders to discuss any concerns or opportunities the partners may be missing with the project. David noted that the four partners working on the project are committed to an open dialogue with all stakeholders in their work in developing these projects. He thanked the attendees for participating.

David then went through the four groups partnering the project. They are four leading entities in transmission and electric utility operation working on the project. The first is APS, the largest electric utility serving customers in Arizona. They have been working on various transmission projects and have built quite a bit of transmission infrastructure. David stated that Arizona is the fastest growing state – its load growth is four times the average growth in the US. APS is concerned with how it will meet its load growth in the future. David added that PacifiCorp is one of the largest transmission owners in the West. They serve Salt Lake City, which is the focus of the Gateway South project. They also serve Wyoming, Idaho, Oregon and Washington.

David provided information on National Grid, a gas and electric utility, and an international energy delivery company with significant experience building transmission projects in different parts of the world over the last 20 years. He discussed the regions served by the company and he noted that he represented the business development group and they are looking at development opportunities in the west. He recognized the last partner, WIA. David identified Wyoming as a state that has significant natural resources for energy production. Currently, very little of that energy is exported via transmission lines. The WIA was formed by the government to bolster the development of transmission infrastructure in order to develop in state generation for export. The WIA's mission is to diversify and expand the state's economy through generation and transmission development. David indicated that the creation of WIA is in stemmed in part from the work done in the RMATs study and other studies that were done by the various states.
[Slides 5-8]

David discussed the co-development agreement the four parties reached in August 2007, which established a partnership in order to collaborate on the projects. The agreement is based on 6 to 9 months in order to look at the co-development opportunities. David said the purpose of the agreement is to hold projects together and work in the WECC and permitting forums, and meet transmission customer needs. He noted that they have filed separate ROW applications and the WECC rating processes are underway.
[Slide 9]

David indicated that the regional planning began with the work identified by RMATs and studies done to develop resources in the Rocky Mountain area. David noted the partners are looking at both reliability enhancement and capacity increases from Wyoming to the desert Southwest regarding the way the projects complement each other. The partners believe these projects will improve overall electric reliability; the capacity being added is significant. They also see the AC/DC combination improving reliability and capacity in the way they complement each other, much like the Pacific Intertie. David added the projects provide increased access for third party transmission users. David indicated that the scale of the project is large enough to reduce overall per unit costs for transmission services and also provide more optionality for transmission capacity in the west. He noted the projects also improve the regional resource diversity and that will help states meet renewable portfolio standard requirements.
[Slide 10]

David stated that this collaboration will meet regional needs by having a larger project, as is envisioned through the WECC and other FERC processes. The benefits of co-development include meeting regional needs, better use of transmission corridors and the ability co-locate lines closely together to better utilize right-of-ways. David noted that in combination with the opportunity for permitting and economies of scale, the benefits all work together.
[Slides 11]

David completed his presentation and opened the floor to questions.

Dan Brickley (SRP): What is the arrangement going forward with the parties to allow other utilities to join into the participation agreement? What is the relationship with other parties?

David: Last year when APS was working directly leading the process for the TWE project, several different utilities, specifically SRP, TEP, SCE, all expressed interest in joining the TWE project. This smaller team has taken the step to move forward at this point, with the idea to open up the discussions with development agreements for the time period after this interim agreement. We are planning to get back and talk with all those parties and any other utilities in the Southwest who are interested in joining the project.

Mark Etherton (PDS Consulting): What are the possibilities of separate ROW applications being filed, or is there an advantage of joining applications together to file as one application?
David: What we have done is file two separate ROW applications, but you will see we have a common map and common corridor between them that we are looking at. We are also exploring and will most likely move forward with a single Environmental Impact Statement. So really the application is an administrative function that we want to preserve for record of decision and take advantage of the synergies in the development of the environmental reviews.

Ted Mullikan (Terracon Consultants): What are the parameters of joining the project team?
David: The partners are looking for other utilities with an obligation to serve customers in a target area of Southern California, Arizona or the desert Southwest.

David then introduced Peter Krzykos from APS and turned over the presentation to him.

III. Peter Krzykos, APS

Peter addressed the need for the projects and noted that most of the population growth is in Arizona and Utah, and particularly in the southwest. Arizona, Nevada, and Colorado are exploding with load growth. Three and a half percent population and load growth in Arizona is way above the national level of 1%.
[Slides 12]

Peter noted that the energy consumption in Arizona is also increasing about 1 ½% a year. This almost doubles from 2010 to 2020. APS resource capacity requirements are expected to be over 8,000 MW by 2025. APS energy sales are expected to grow by 30% by 2025. Peter added that other utilities in the area like SRP and TEP are experiencing the same kind of growth. In the next 20 years they are expecting to double the peak load to 15,000 MW with 1.8 million customers. Peter indicated that Arizona's RPS requirements demand that 15% of retail energy sales be from renewable energy sources by 2025. Peter noted that APS views the TWE as the alternative to developing local resources.
[Slide 13]

Peter then discussed the feasibility study started in 2005. They have studied five route alternatives: three of which are 500 kV alternatives, one an AC/DC hybrid alternative, and also a DC alternative by itself. They accomplish the same things -they bring about 1,500 MW to the Phoenix area, 500 MW to Salt Lake, and 500 MW to Las Vegas and 500 MW to Palo Verde. The costs for the original feasibility study alternatives ranged from $4.5 to $5.5 billion. The economic analysis concluded that a DC or AC/DC alternative is the most economic from Wyoming to Mona and then to Phoenix and Las Vegas. It also provides flexibility and that made

it possible to reduce the costs to $2.3-$3.2B. The DC alternative is very straightforward from Dave Johnston to the Phoenix area delivering 3,000 MW.
[Slide 14]

Ken Bagley (Genesee Consulting): From slide 14 you show costs of $2.3 B to $3.2 B. What do these estimates entail and what was included in the economic analysis?
Peter: In 2005 the estimated costs were $2.6B – that included the converter and line itself.

Peter then addressed the stakeholder process. He indicated that several regional planning meetings have been held, beginning in November 2005. Meetings were also held in March of 2006 in Phoenix and June of 2006 in Wyoming. The partners have been active in regional updates with the sub-regional planning groups, TSA, WECC, SWAT and SSG-WI. The technical and economic studies for the projects have been shared with the groups and the project was well defined by the end of 2006.
[Slide 15]

Peter asked if there were any questions.

Jerry Smith (WestConnect): Regarding the feasibility and options around the DC transmission line, was the DC option looking at thermal, and are you looking at three terminals or is this a two-terminal option?
Peter: We looked at three terminal options going from Dave Johnston in Wyoming to Nevada and Phoenix. However, operationally, although it sounded like a good idea, I don't believe there are any DC projects that have three-terminal options. We have something that we are comfortable with right now.

Amanda Ormond (TOG): From a wind developer's point of view, the line you are discussing creates a super highway that can't accept additional routes along the way onto the super highway. How do you plan to allow renewables to have access to the highway?
Peter: We realize going from Wyoming to Phoenix you have to have a drop-off point and have other utility benefits. That's why we are in a very open process. As you know, I'm the chair of the Renewable Task Force that SWAT initiated to study renewables in the southwest, particularly Arizona and New Mexico, with the assignment to address these issues. The DC line is for a collection of renewable energy at the hub or start point in Wyoming. This could be viewed as a hub and spoke, with the intent to get renewables to the hub to export to the desert southwest. The superhighway can be supplemented by the joint AC line [Gateway South], which will have collection points along the way.

Amanda Ormond (TOG): Would any part of that model allow for additional substations along the route and what are the economic benefits that will be received by the load centers in Arizona?
Peter: You can't have a drop-off every 100 miles on the DC line- it's not economical. The costs for one terminal are $235 million.

Amanda Ormond (TOG): In WECC and abiding by their standards, how much power could you drop and still be within the standards? What does the DC line do for the reliability and what happens if the DC line is out of service?

Peter: In the WECC area, there are contingencies built in. For the DC line, if it drops one pole the outage would drop 50% of the power. If the system is not very stable, generation would have to be dropped to help stabilize the system.

Amanda Ormond (TOG): What if AC were built instead of DC? What is a scenario you are looking at to handle dropping either the AC or DC line?
Peter: On the AC line, if you drop one line, the power can be moved on the second line because its rating is much, much higher. You could maybe move 750 MWs.

Jeff Schlegel (SWEEP): As Arizona stakeholders there are a variety of reference cases that have been evaluated for supplying power into the metropolitan area. Many of the cases that have been studied have dropping off points in Phoenix, the surrounding metropolitan area, and Las Vegas. What are the different scenarios of the routes to Vegas versus the route to Phoenix? In these cases are you assuming a 2.5% increase in load growth? How long does that program take to achieve energy reduction and what is the efficiency gained?
Peter: Right now we have narrowed down to a DC line on the TWE. At the time of the feasibility study we had several drop-off points to Salt Lake City, Las Vegas, and the Los Angeles area all at 500 MWs, the remaining 1,500 MWs of power was going to Phoenix. The in-service date two years ago was 2012. We did share the load with SRP at that time so 3.5% growth wasn't assumed until 2012. Load growth is still expected to be 3.5%. The project is right now expected to be in service by 2015.

Peter then moved on to discuss the map and the project alternatives in the feasibility study process. The alternatives were narrowed down to a DC line– from Wyoming where the most likely resources are. It is about 40 miles north of Dave Johnston, the AC/DC terminal, then going south to PacifiCorp's ROW. Basically after Mona the line goes south to Sigurd then diagonal to Nevada, stopping at Crystal then south to Marketplace and then to Pinnacle Peak. Peter noted that the project goes a little farther than originally studied. The DC line could be up to 1,250 miles – the original project studied was 850-890 miles. He discussed the routes of the projects and the synergy with Gateway South regarding the ROWs.
[Slide 16]

Amanda Ormond (TOG): Earlier you said three terminals were too risky. Now are you stating that there is a possibility of a three-terminal design?
Peter: The technology is there and also there is synergy with a project also being developed with PacifiCorp. We can see the benefits are there for the AC and DC, which Craig will explain. You can see how the benefits exist with common ROWs. At the end of this presentation, Dave will summarize the benefits and you can see how these projects co-exist and work together.

Amanda Ormond (TOG): More drop-off points allow you the ability to have additional generation and load points of picking up additional power and delivering to the load center. Can you discuss the on and off ramp locations?

Peter: Keep in mind there is a lot of flexibility to gain. This is the proposed route, if you go through Crystal for instance, and the project proves to be feasible, we can stop there and not go any farther. We can do that too – we can back-schedule power to Arizona. There is still flexibility in the project. This is the most extended route and we could end up with a little different arrangement – but this is the ultimate project.

Mark Etherton (PDS Consulting): Regarding the last segment into the Phoenix area, can this last section of 500 kV line in to Phoenix be converted to AC?
Peter: Our DC route is not being converted to AC line. That is where the extra mileage comes from.

Peter than addressed the parties who have expressed interest in the TWE. Salt River Project, Tucson Electric Power and SCE have all expressed interest in participation. National Grid is the development manager, with WIA joining the project team. PacifiCorp expressed interest in co-developing the project with Gateway South. At this point all parties remain interested and work is being done under the development agreement.
[Slide 17]

Peter opened the floor to questions.

Amanda Ormond (TOG): Is it being contemplated to build a very long line to get to generation at a great distance? Is there any other analysis taking place to look at serving load locally? Is there a parallel process looking to meet local load with resources in the same time frame to address using resources outside of Wyoming and other mechanisms to serve load with local resources?
Peter: In our ten-year plan we are looking at a lot of alternatives concerning Phoenix, however there is nothing comparable to what we are doing right now. These are our proposed alternatives bringing in energy from Wyoming to Arizona. In the past two years we have studied three alternatives, hybrids, etc, and this is ultimately the one that we prefer because of the economics and the synergies with PacifiCorp. So to answer your questions, the answer is yes, but this is our proposal right now.

Amanda Ormond (TOG): But when you say yes, what does that mean?
Peter: Yes means that in the original study plan we looked at all kind of alternatives of how to bring energy to Arizona - state-wide and southwest-wide going to California and Nevada. There are all kinds of projects going on. On a regional planning process, SWAT or WestConnect can put those all together so you understand what's going on in the Southwest.

Amanda Ormond (TOG): It's difficult to look at $3.5 billion to build a transmission line and that's a lot of money to look at bringing in energy to Arizona. Are there other projects being reviewed to serve Arizona load?
Peter: SWAT or WestConnect would probably have a good summary of all the projects going on in the Southwest so you could have an understanding of transmission development going on.

Jerry Smith made a clarification, stating that as of 12/4/07, a draft report to look at the ten-year regional plan for WestConnect was posted on the web site.

Peter then handed the meeting over to Craig Quist, From PacifiCorp.

IV. Craig Quist, PacifiCorp

Craig described the Gateway South Project being developed by PacifiCorp. PacifiCorp has some major energy needs. Craig indicated that the Salt Lake Valley is growing very rapidly north of Mona. Southern Utah in the Red Butte area is a major retirement area. Idaho Power also has some load growth. The two companies have developed a variety of scenarios for moving power across Wyoming into Idaho. The Gateway West project starts near Dave Johnston in eastern Wyoming. There are already coal plants located there. PacifiCorp has identified future thermal resources for that area. They anticipate networks being built around the hubs to pick up wind resources. The Gateway line involves Aeolus, which is about 15 miles north of Miners, which will head west to the Jim Bridger substation in Wyoming then on to Populus, and then continue on over to Midpoint in Eastern Idaho. He noted that PacifiCorp is investigating a possible terminal to the Pacific NW to Captain Jack or Mid C. Craig added that a 3,000 MW rated line will be heading west out of Wyoming and south to Aeolus. He noted that in the base case PacifiCorp is looking to add a 345 kV line out of Sigurd for additional transfers. PacifiCorp is also looking at 500 kV options form Mona south down into southern Nevada.

Craig noted there have been several significant queue requests on several paths. PacifiCorp has identified significant load growth by 2022 on the Wasatch Front – at least 2,500 MW. Southern Utah will grow at least 500 MW. Regarding PacifiCorp's IRP, Craig indicated PacifiCorp is projecting 8.5% of renewable energy on its system over its six-state territory. Craig added that there have been 5,000 MW of point-to-point requests off the system.
[Slide 18]

Craig noted that there have been eight public workshops starting in 2005 to seek input on the Gateway South and West projects. Meetings have been held in Portland, Salt Lake and Cheyenne. The transmission needs have been examined in both PacifiCorp's Integrated Resource Plan and the partners are using the NTTG process as the method of communicating technical information. Craig added that three meetings have been held with NTTG since May 2007.
[Slide 19]

Craig went through the reference case and rating process. He indicated the project would carry 3,000 MW from Aeolus to Mona with two 500 MW lines that will be in service by 2013. PacifiCorp is also looking at possibly a 345 kV line from Sigurd down to Crystal. The Utah to Nevada lines will carry from 800 to 1,500 MW that will be either 345 kV or 500 kV AC – the in-service date is 2012.
[Slide 20]

Craig opened the floor for questions.

Amanda Ormond (TOG): With projects going into Oregon and Washington and all the talk of co-development with the parties – I'm trying to get an idea of the co-development agreement.

Craig: The co-development agreement focuses on Gateway South, which starts at Aeolus and comes south. PacifiCorp also has an agreement with Idaho Power to work with them on the Gateway West project.

Amanda Ormond (TOG): Is National Grid a partner in Gateway West?
Craig: No, they're not.

Ned Farquhar (NRDC): From slide #18, could you describe the transmission leg in to New Mexico and the Four Corners area?
Craig: We start out with the base case on initial Transwest presentations and on the following pages we look at what other potential upgrades could be made if more requests came along. One of the other upgrades that could be made, if we get enough requests, would be from Sigurd down to the Four Corners area. It really comes down to how many requests we get and who comes forward for transmissions service.

Amanda Ormond (TOG): At Four Corners, is the power flowing north to south, south to north, or is it bidirectional?
Craig: Each of the paths from southern Utah down into Arizona and Las Vegas both paths are rated bi-directional. It just depends on what season of the year, what is going on and what the schedules are. We can control the schedules on them.

Jeff Schlegel (SWEEP): I want to ask the same question I asked earlier, do the power flow scenarios modeled look at load reduction?
Craig: All of our forecasts already take that into account.

Jeff Schlegel (SWEEP): Do these projects take into account the IRP forecast?
Craig: We have an ongoing program for saving energy that is rolled into this.

Jeff Schlegel (SWEEP): How long does that program take to achieve energy reduction and what is the efficiency gained?
Craig: We are working on including that. We'd have to go back and ask the IRP folks what their targets are to answer that question.

Craig turned the meeting back over to David Smith.

V. David Smith, National Grid

David discussed the potential design solutions for the two projects and the options being looked at. David added that the development is being coordinated through NTTG so that both projects are moving forward in a regional planning forum. This is the same format WestConnect uses so it happens in a collaborative way. David noted there is a fair amount of energy policy and resource planning happening in concert with these projects, there is also ongoing work in the resources being looking at both in Wyoming and other alternatives. This is one alternative the partners are looking at. The partners are focusing in on what solutions they see here for Wyoming and the Southwest. Currently system studies are being conducted and stakeholder input sought. David noted that these projects are a portion of the answer to the needs. There is a lot more comprehensive regional planning required for all the needs to be satisfied.

The study group is studying two 3,000 MW projects. Configurations under the study include from 4,500 MW to 7,500 MW export out of Wyoming. These represent plus and minus 1500 MW solutions from the 3,000 MW Gateway South and 3,000 MW Transwest Express reference cases. They are co-locating the super highway in the desert Southwest area. They are also looking at the optionality of a third DC terminal in the Las Vegas area for 3,000 MWs. However, David indicated that the likelihood that it will be economic to provide a third terminal solution is remote.
[Slide 21]

David discussed the needs assumptions for both projects: sinks and sources. The sinks are located in Utah, Phoenix and Las Vegas and ten –year expected growth demands have been included. These are a myriad of configurations that will best serve the growing needs.
[Slide 22]

David then discussed the design solutions that have been designated for the projects. The partners are looking at a reference case of bi-pole 500 kV circuitry – co-located with two double circuit 500 kV lines. The result is then four circuits of 1,500 MW, which provide better reliability. David added that this is where the benefit of the additional circuits providing extra reliability is seen.
[Slide 23]

David reviewed the complementary projects in the WECC rating process. The footprint of the regional plan includes a series of projects in the eastern Wyoming area to serve the growing load in Denver. PacifiCorp is also working on circuits to expand the Salt Lake service area. There is a lot of opportunity to optimize the transmission development in Wyoming and the viable resource market there. There are also circuits being expanded between California and the Southwest and the partners are watching how these projects fit into that.
[Slide 24]

David provided an overview of the resource potential in Wyoming. Wyoming is one of the lead export states for energy in the country. Most of that is done through rail and through pipes, very little of it is done over wires. WIA is looking to expand exporting energy. WIA and National Grid have been working together for several years and have done studies to determine Wyoming's potential. Six to ten GW of coal-fired generation could be developed. One of the major constraints in pulverized coal plant development is limited air shed. David indicated that Wyoming is the 7th largest wind potential state in the country. He reviewed the map that illustrates the wind potential in Wyoming compared to other surrounding states. Wyoming has several Class 5 areas, which lowers the price of the wind resources and provides more availability and capacity.
[Slides 25-26]

David moved on to discuss the numbers around the generation development happening in Wyoming. The WIA and National Grid are closely monitoring the development. Nearly 17,000 GW of undedicated wind developments have been identified.
[Slide 27]

David then reviewed the timeline for the projects. The next step is the WECC rating process to secure a rating for the transmission lines. A fair amount of extensive study needs to be conducted. The partners are looking to move in to that process in January for a peer review amongst the engineering community within WECC, which will be reviewing how the circuits would interact with other circuits and impact other ratings that parties have secured. The study is looking at the fuel sources available in Wyoming – the study group has mainly focused on wind and coal, but there is almost a vast amount of gas potential in Wyoming as well. Transmission siting resources will be developed over the next several years and the partners are looking for developers to work on the transmission line and also develop resources in Wyoming to go onto the line. Coal, wind and natural gas are included in the table for both projects. The percentage of wind energy included within the plan is above the composite RPS requirements of the states and utilities involved.
[Slides 28 and 29]

Amanda Ormond (TOG): Are the numbers related to resources shown on slide #29 for study purposes?
David: These are the studies we are going to take into the transmission rating process.

Amanda Ormond (TOG): Does slide 29 necessarily represent the resource mix that what will be purchased as a generation mix?
David: We want to make it robust enough that whenever the ultimate mix is determined we won't have to go through the rating process again, so we are trying to create somewhat of a stable renewable mix here to take a look at our options.

David then addressed the bubble diagram that represents the terminals and resources in the transmission study. It shows the different locations and depiction of what has been shown in the maps.
[Slide 30]

David moved on to the status of the co-development deliverables. The partners are looking at the conceptual technical analysis to determine what the best options are regarding cost and benefits. The resource plan development and delivered energy economic analysis will be presented at the Las Vegas meeting in January. The performance criteria and corridor analysis are being looked at to determine how energy can be exported, and the regulatory plan is being developed by the partners.
[Slide 31]

David reviewed the WECC timeline and the review planning process through 2009. There are many variables that have to be addressed in the Phase II process. He announced the next stakeholder meeting would be held on January 23 in Las Vegas. At the end of November the parties filed a ROW permitting application to the national projects office at the Cheyenne BLM office. At the same time the parties filed an update to the filing PacifiCorp made in May for the Gateway South Project. BLM will be the lead agency and the parties have met with the officials a number of times. BLM and the partners are looking forward to moving ahead with the projects and coming up with a common Environmental Impact Statement. The project sponsors are working to secure a third-party consultant and also considering setting forth a regional siting protocol.

[Slides 32 and 33]

David finished the presentation by addressing the routing from the ROW applications just filed with the proposed corridors.
[Slides 34 -36]

The group broke for lunch and questions were asked in a stakeholder forum following lunch.

Questions and Answers/Stakeholder Forum

This discussion was started after lunch as part of the stakeholder process with David Smith opening the floor for discussion.

Jerry Smith (WestConnect): What analysis is being done for assumptions of TWE and Gateway South? Are they each being studied separately in accordance with WECC criteria and/or are they being studied in conjunction to see the impacts of one another?
David: We are studying each project individually. At this point we haven't done all the analytical work; we do have some qualitative analysis that was done on the AC/DC lines– we are looking at upwards of 300 MW or a 5% rating increase and we need to do more study work to confirm that. The first stage of the WECC process is to find out what the effects are of the projects individually and we are focusing on that part. Phase II, which will be starting in the summertime, is to look at the simultaneous effects and the benefits.

Jerry Smith (WestConnect): In regard to the High Plains Express and Sun Zia projects that run along east of the Rockies and possibly into the Desert Southwest. What of these projects are being studied in the same time frame as the TWE and Gateway South projects?
David: We have talked with the High Plains folks on our respective project plans. These multi-state transmission line projects would complement each other and combine benefits, particularly along the eastern part of the Western Interconnect. More transmission will improve the WECC footprint. The detailed study work hasn't been done yet and will be done in the next 2-3 years. TransWest Express and Gateway South will most likely go through the WECC rating process before these projects.

Amanda Ormond (TOG): Can you give the big project time line of the development of these projects?
David: The timelines for the Gateway South projects is a 2012 in-service date, 2012 for the southern portion and 2013 for the northern portion. The drivers for that are reliability and service into the Wasatch Front. The in-service date for the TWE project is 2015 and that has remained the same for the past year. We are looking at a 2-3 year permitting time-frame for the project. We see permitting as the critical path for the permitting process. We are looking at coordinating the generation projects around the same time as the transmission. We are spending tens of millions of dollars in these first couple of years, and then billions of dollars later on.

Rob Boner (Converse Area New Development Organization): Can you give a clarification of the resources based on possible state laws or carbon restrictions?
David: We believe coal may need to be a part of an economic solution for this project as we view it today. We are uncertain on how renewable resources will be valued in the future. We also need to look at gas and see how that would levelize the costs. One of the concerns that we have is connecting 9,000 MW of non-synchronous generation in Wyoming. That's quite a bit. We will be testing out the types of resources.

Rob Boner: Clarification on the PacifiCorp Gateway South project, could you expand on the timeline of the two project segments, along with expectations of the anticipated resource mix?
Darrell: That is an important tie between PacifiCorp and Gateway South. We have a December 2013 timeframe to tie Wyoming into Mona. The 2012 earlier date is driven by two requests for service by 2012. The Gateway West project is double circuit over to Idaho and then north in 2013. What we are shooting for is 3,000 MW to Salt Lake for the regional planning path rating – the circuits have to work together. PacifiCorp's resource planning is over ten years, but we extend it. In the event those resources don't get built, we still have one half with 1,500 MW on the table. We've got a three-year window and those projects really have to come along. We may have 6,000 MW by 2012. We are building for native load. We will also have 3rd party users. Circuits can't work in isolation – they need to be fully loaded and fully constrained. What happens if coal isn't developed? We will still have 1,200 MW of wind in Wyoming either under construction or being developed. Another thing is that if the resources don't happen we have several options. We have an obligation to serve and we are bound by that. There are quite a few moving parts that have to come together. TWE fits into those moving parts.

David: To amplify on what Darrell said, it's the same for Arizona. There are different options for meeting Arizonas needs and TransWest Express is one of these viable options.

Jerry Smith (WestConnect): Looking at slide #18, what is the dependency on leg "G" and trying to deliver 1,500 MW from Sigurd to Mona over a single path?
Craig: The area south of Mona and Sigurd has a capacity of 800 MW, so there is not a need for additional lines there. There is quite a bit of capacity - more than enough capacity that we will have a lot of options south of Sigurd.

Amanda Ormond (TOG): In the Frontier Line project some of the wind advocates asked that wind be modeled alone because it was more cost effective. Has that been considered here? With concerns of coal, does it make sense to do that?
David: Yes, I'm familiar with the Frontier Project work. I believe they did a analysis of replacing California wind with and Wyoming wind. We will take a look at any options in getting projects developed, wind only and other resources. That's more on the backs of the folks who develop resources. I am aware that NREL and the Lawrence Berkley National Lab have been looking at all wind. I know there is study work going on in that regard. We are taking a more "what might happen" approach. As transmission developers it's hard for us to predict what resources get built.

Amanda Ormond (TOG): Referenced the WIEB study that looked at solar and wind and if there was any coordination with them.

David: We will reach out to other groups that are doing study work and evaluations to take a look at their results. We are looking for support of transmission lines. The study work is outside the transmission development itself.

Ned Farquhar (NRDC): You are permitting just for the transmission lines, not resources.
David: That's correct.

David closed the meeting and thanked the participants for attending. He announced that the next meeting would be held in January in Las Vegas and information would be forthcoming.