Hydropower Economics Questions and Answers Transcript

***Q**: The maintenance budgets on all the facilities, how does that play against your overall net worth there? (Shields)*
***C**: Say what the maintenance budgets are for Glen Canyon Dam or (Stevens)*
***A**: Reclamation's budget for power and CRSP in Western's total is probably on average between $65-70 million range per year. I don't have those figures handy. I tried to get them this morning but the rates people weren't responding to my e-mail, but I can follow up and get some actual numbers if you want. (Warren)*
***Q**: Not to put you on the spot Brad at all but I guess people tend to think of this apportionment that was created by the 1956 Colorado River Storage Project Act as a big mystery in a black box and what the Congress attempted to do in setting up apportionment was to do approximately what the Colorado River Compact did for water when the Compact was put into effect. It stopped there being a race for development because of the water being a portion of the Upper Basin and the Lower Basin as you all know from reading the Compact then all of a sudden water was no longer an article of interstate commerce and whether you had an early priority date relative to developing the water was no longer important. And the Congress in creating the 1956 CRSP, which largely was a bill authorizing the comprehensive development of water projects across the upper basin, was trying to do the same thing. And it was trying to assure that there wouldn't be a race for development relative to building these projects, these irrigation projects, and these storage projects. And so apportionment was designed to make sure that if one project got ahead of another in terms of being in line for congressional funding, that there would be funds available in the future for those other projects as they came along and that basically was the point I wanted to make. (Shields)*
***Q**: You talked about the service or marketing areas and the different entities that are being served, about how many tribes do you have in that servicing area you mentioned and how many tribes are within the AMP program you serve? (Heuslein)*
***A**: We market to 53 tribes within the service territory. As far as we know, we've made an offer and I think each of them are receiving CRSP power if I'm not mistaken - receiving an allocation. (Warren)*
***Q**: On the one graph where you show the tracking of the weekly power demand and delivery, there's that gap between what is available and what you've sold so my question is why is the Government entering into contracts to deliver power that they don't actually have, requiring you to obviously purchase it elsewhere? It's probably an economic issue I don't understand but I'm just curious if you could explain that? (Yeatts)*
***A**: Well, the graph I put up there as I said is kind of an example and it showed we have to fill in some purchases. When we have wet years, it doesn't happen. When we have the drought, it does. It's the dynamics of the hydro system and in order to market a product that customers want, they want certainty in their resource and so they have more certainty with fixed delivery contracts as far as an allocation of capacity and energy. They know the limits and what they're going to get. It's the dynamics of the hydro that sometimes you're short and sometimes you're long and that plays into that long-term forecasting when you determine your marketable resource. (Warren)*
***Q**: Thanks for that Brad, it was really helpful and clearly presented. I feel like there's so much that I don't know that I have a mix of dumb questions and then probably confusing questions. It makes me think just as bedrock there and we don't this explicitly in this group but I know that most of you if not all of you will sense the truth of it that there is an apparent divide between hydropower interests and then Grand Canyon resource protection that there's an apparent if not a real conflict and I think that is actually disruptive to the group moving forward and I think the development of the kind of knowledge that you've begun to express today can only serve well this group to give people on my side of the equation better knowledge about the needs and the way that contracts are structured. If we had a little bit more give and take in development of information, I think it would be helpful to all purposes for which we're here and all interests. So I started while you were giving your presentation, I was at the same time learning things, I was writing questions and now I realized that it would be ridiculous for me to ask you these questions. I think you'd have answers to the majority of them but it would take this group's time beyond what's reasonable. So I wonder if the group's interest wouldn't be better served if we form something like an ad hoc group or you know how we did a Loveless paper that we did a long time ago. I wonder if we couldn't develop this more and maybe even an ad hoc where questions are fielded and together we jointly answer them with guidance from Brad and others on the hydropower side of the equation, flesh out some of this stuff so it's clearer the nature of hydropower generation and kind of how that works and what the needs are there. That sounds like that's preliminary to a motion if you're starting to talk about ad hoc, but rather than at this point - I mean seriously I have about 20 questions that I just wrote down. (Lash)*
***Q**: So if I might suggest that the group could establish an ad hoc, that would take a vote of the AMWG to do that. Also, Brad, I know you're open Q&A by phone but there may be, if there is enough interest, we could find out if there is enough interest, you could have a session where people would be invited to come and be a part of that, not maybe as an official ad hoc, although if that's what you want obviously you could put forward that motion either before or after an AMWG meeting or a conference call and maybe we could test the interest and see. Maybe you can think on that and see if there are other questions and then we can come back to settling this. (Orton)*
***Q**: It could even begin maybe I call Brad and then we get a sense of where it might go, send an e-mail to the group and see if other people what to participate in an information-sharing exercise beyond the scope of this presentation. (Lash)*
***Q**: Other questions from AMWG members? (Orton)*

***Q**: That's a very interesting discussion there because in science we go to textbooks to look at river ecosystem issues and in the world you're talking about here, Brad, which I have very little familiarity with, you've presented on the hydropower side of it but there is a whole agricultural side of it, irrigation water supply is also a big economic area, can you recommend some readings on these topics? Is there such a thing as a synthesis of the water-related economics of the West or does anyone know of a good readable reference on that or something they could recommend? (Stevens)*
***A**: I'm not sure that I could answer. (Warren)*
***Q**: Does anyone know of such a paper or such a reference? (Orton)*
***A**: There are many and I'd be glad to visit with you Larry on this. (Garrett)*
***Q**: I had several questions and I'm not sure I can get to all of them. A couple of detail questions: 1) this monthly distribution for WY09 that we've proposed for this year shows higher monthly volumes in the summer than in the winter. It shows the same pattern you showed on the board there but what you showed your demand, I believe by month, (Potochnik)*
***A**: No I showed allocation commitment by month and you've got to remember that's more than just Glen Canyon, that's the whole resource. (Warren)*
***Q**: What I saw in that figure was that most of your demand is in the winter time then, is that correct? (Potochnik)*
***A**: The allocation commitment is higher in the winter. (Warren)*
***Q**: Then why aren't the flows from Glen Canyon Dam, that being the primary producer of power, higher in the winter? (Potochnik)*
***A**: These allocations have been in place for quite a number of years on that and I'm not sure of the history and how they ended up actually being patterned the way they are. It probably had to do with the load profile applicant data that was submitted when people's loads are determined and part of the patterning has to do with Reclamation's needs to move water through the system and prepare for possible equalization and move a bunch of water early in the year and then end up with a dry winter so there's some of that factor that goes into that patterning at Glen. Would you agree, Tom? (Warren)*
***A**: Yes. (Ryan)*
***Q**: You said your composite rate when you sell it, the power is about 2.7 cents per Kilowatt hour on average? (Potochnik)*
***A**: Yes. (Warren)*
***Q**: And that I as a rate payer, I pay 7¢or 8¢ per kilowatt hour so why is the spread there? Why is there such a big spread? (Potochink)*
***A**: Some possible reason is that we sell on a wholesale basis to your utility. Well, I don't know where you get your power from and this utility has distribution costs. They have to build lines to your home, they have the administration and billing of operating their utility. All we're doing is selling them that power resource and as I said earlier, it's probably not a 100% of their resource so they've got to go. Either they own their own or they get it from someone else. It's likely - it's almost always a more expensive resource like ___ , natural gas and they blend that altogether and so their blended resource cost would be more than the 2.7¢ per kilowatt-hour but again that's the resource itself and then you have to get it to the home so that's where that additional - the difference between a retail hourly rate and just the wholesale of this energy. (Warren)*
***C**: We need to move on but if you want to follow up on that. (Orton)*
***Q**: How do the rates you sell power for compare to rates that other producers sell their power for? (Potochnik)*
***A**: I can give just some insight on when you have to go to market and we're short, then we have to buy it from the market. There are times when this spring, there were companies giving away off peak energy saying that if we wanted it, we could take it. But that was because the demand was low and for whatever reason, that was the market. Now you go to peak hours and you $100-150 for a megawatt hour which is 15 to 20¢ per kilowatt-hour to buy from the market and again that's the energy price and the utility still has to get it to you. And the market prices can vary quite a bit by demands, seasons. If Palo Verde goes down because it has a problem, everybody is going to get more money because they're offline and that's the market demands. (Warren)*
***C**: So what I'd like to do is have Steve's question and then get a sense from the room of how many folks might be interested in a follow up either in a conference call with Brad or a face-to-face associated with another meeting or some thing that. We should've scheduled more time for this but we need to move on. (Orton)*
***Q**: A great presentation and we'd be interested in participating in a follow-up. In a year like this where the projections were for 8.23 and we ran 9+3 through the dam, how much additional revenue did you see because of that 10% bump in hydropower going through and did those profits go directly off the top into the basin fund. So basically, what's the net gain from a good year like year and next year being 800-900,000 acre-feet? Can you give us an approximate value of what you saw in addition to what your 8.23 projections were? (Martin)*
***A**: Our contracts are structured so that when we have what we call available hydro which is hydro energy above the minimum commitment is that our customers get first chance at it. (Warren)*
***Q**: And what's the value of that in a year like this? (Martin)*
***A**: Well, it's sold to the customers at that energy rate. (Warren)*
***Q**: Can you give us a dollar estimate of what the difference would be? (Martin)*
***A**: I don't have that in my head but I can get it. (Warren)*

***Q**: So you can send me a note or e-mail on that? (Martin)*
***A**: The water year isn't done and we're still in the month of September but we have numbers that will tell us how much we sold to customers above the minimums and we can put a dollar revenue to that. (Warren)*
***C**: Thanks, and again a really good presentation. (Martin)*
***C**: So let me get a sense from AMWG members and non-AMWG members, how many of you might be interested in a follow-up on this conversation, either a conference call or a face-to-face associated with another meeting? Okay, so quite a few. Let me suggest that Reclamation work with Brad and the other members that are interested and see what is the best forum to put together, whether it's a meeting, a conference call, another session on a future agenda, whatever. It sounds like we've obviously got a great deal of interest and a lot of questions that still need to be addressed and so we'll take the assignment in Reclamation to work with Western and the other parties to see what we can schedule. What's the most effective way to do that? Maybe several things but we'll work with everybody to see what we can set up. Is that acceptable to everyone? And I know there are a lot of other questions that people probably have. We've run past on time and I see a couple of hands here. (Walkoviak)*
***C**: If I could just make a suggestion. I agree with the process you've said is a good one. If I might make a suggestion, I would expect that a lot of these questions would need to be researched that couldn't be answered spontaneously so one of the suggestions might be to have the questions in writing, provided, looked at, researched, and then perhaps respond to that because a lot of the questions are going to be "I need to talk with my staff." You might consider that in terms of how to process it, that first exchange of questions and answers as a first step." (Caan)*
***C**: And I apologize to several of you that hands in the air but I'd like to suggest that we will take that assignment, work with everybody, and find the best vehicle to further this discussion. (Walkoviak)*