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SLIDE 2 – INTRODUCTION

Scott Simms: This is the second Quarterly Business Review of fiscal year 2018. I'm Scott Simms, Director of Communications. We really appreciate you making time for this forum today. Before we get started I want to run through a few reminders for today's meeting. This QBR presentation is being shared via WebEx. The link is available on our event calendar, but if you are having trouble accessing WebEx, the slide deck is also available at bpa.gov/goto/QBR.

Questions can be submitted at any time today, but they will not be answered until the presentation is complete. To submit a question, click the chat button on the upper right hand side of your screen. Enter your question and press send. Your questions will be sent to the BPA host.

SLIDE 3 - AGENDA

We've got a great lineup of topics to share with you today. First, Administrator Elliot Mainzer will start with the state of the business covering grid modernization and updates on our fish and wildlife program. Then senior executives from Finance, Power and Transmission will provide updates on the agencies financial and operational performance. So let's get to it. It's now my pleasure to turn it over to Elliot.

SLIDE 4 – STATE OF THE BUSINESS

Elliot Mainzer: Thanks Scott. Good morning everybody. Hope you're having a great day so far. I appreciate you taking the time to join us for our second revamped Quarterly Business Review. I'm excited to hear the feedback as we continue with this new format and continue to tweak it and make it as effective as possible. So thanks for joining us this morning.

I am going to start with safety. It's at the top of our list of key performance indicators. And as you know it's something that we're embedding into everything we do here at Bonneville.

SLIDE 5 – SAFETY

Our safety KPI looks at incident frequency rate, which is an industry standard measure. And while... we are still below the ceiling of 1.2 injuries and illnesses per 200,000 hours worked, we have seen an uptick in reported injuries recently. This year we've had a

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surprising number of slips, trips and fall not just in the field, but actually in our office environment. And as we've sort of dove into it we're finding that...that a lot of change going on inside the building, a lot of folks...a lot of...a lot happening in the world. We tend to get preoccupied – too many cell phones, too many distractions.

And that's not something that's only in the field, but it's happening actually in our office environment. And so over the last couple of years we've worked hard to insure that people are reporting injuries on the job, which is a boost to the accountability and it's fostered, I think, a much healthier safety culture here at Bonneville. But we definitely have more work to do to address the trend of injuries we're seeing. So, Richard Shaheen, myself, the other executive members, we continue to look for ways to constantly emphasize the importance of diligence.

And, I think the FY18 really...these results have been an important reminder to us that we need to do our best to stay aware of our surroundings and get rid of distractions so we can perform our work safely. So, everything starts with safety here at Bonneville and I wanted to kick off on that upfront.

SLIDE 6 – GRID MODERNIZATION

I'm gonna turn now to give you an update on...on what's happening on the...on our grid modernization effort. As you know, grid modernization is one of the key elements of Bonneville's 2018-2023 Strategic Plan.

You know, at the end of the day modernizing our assets and operations to leverage and enable new technology in emerging markets is designed to make Bonneville more competitive and responsive to customer needs by allowing us to derive additional value from the FCRPS in what's now become a faster more dynamic market environment and to allow us to meet transmission service requests with a broader solution set than we have at present.

These investments will increase power and transmissions revenues and reduce long-term transmission costs by potentially decreasing or delaying the need for system expansion, as we saw with the I-5 decision last year.

Some of the specific benefits of our grid modernization work will improve automation of processes that support system operations; increased accuracy and determining system obligations; and improve visibility into loads resources and power flows, which will help us preserve reliability while operating the transmission system closer to its physical limit...limit and enabling additional transmission capacity.

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By focusing on automation, accuracy and visibility we'll be able to find savings earlier and start accruing financial benefits in the short term. It's something that we're really focusing on, trying to get some real realizable financial benefits out of these efforts as quickly as possible.

There's several grid modernization projects already underway that we expect will be complete by the end of fiscal year 2019. These address...These projects address outage management and energy trading and risk management.

Additionally we have a set of mission critical IT projects underway that are anticipated to be complete by the end of fiscal year 2020. Very, very important work right at the...right at the heart of federal system operation.

We've also identified the next batch of our highest priority modernization projects and are in the process of ramping up these efforts. Significantly more information about these projects will be shared with customers at the June 20th IPR Grid Modernization workshop, in the Rates Hearing Room from 9:00 a.m. to noon. The projected cost of these projects is \$25 million per rate period for an average of 12.5 million a year from FY18 to FY2021. We've got that as dollars embedded in this current rate period and we'll be expending that investment through 2021.

We'll be reviewing our grid modernization costs during the IPR, as I said this June. And we're also planning to hold a public meeting this summer to talk more broadly about our approach. So, I know there's a lot of interest in customer land on these issues and we're going to be quite transparent so you've got an opportunity to really know...understand what we're investing in. And quite frankly, how these investments may impact your system operations and opportunities as well.

SLIDE 7 – ENERGY IMBALANCE MARKET

One of the...Turning to the next slide, on Slide 7, one outcome of grid modernization is the potential to join the Western energy imbalance market, or EIM, which I think as everyone knows is operated by the California Independent System Operator. I think from our perspective after having looked very closely at this over...particularly over the last year is that joining the EIM under the right conditions is expected to result in increased ability to optimize federal hydro system operations and to further assist in congestion management of the transmission grid. So we've now begun actively exploring how and under what conditions Bonneville could participate in the EIM.

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As some of you have already seen through various presentations throughout the region, we've begun sharing the results of a cost-benefit analysis that assumed a startup cost of \$35.3 million...three...and...and identified an annual EIM benefit of \$14 million dollars for Power Services.

Transmission Services would also gain access to new tools and better real time data. These capabilities coupled with other grid modernization projects would result in improved operational controls and situational awareness, helping us maximize the capability of the transmission grid per customers. Also with potential revenue enhancement and cost saving opportunities.

BPA planned ahead is that this summer we intend to begin a conversation with the CAISO to conduct additional due diligence on the terms and conditions of a potential implementation agreement.

This work will serve as the basis for a draft record of decision, which would be supplemented by additional financial, legal and regulatory considerations. So it would be released for public review in 2019. Not sure exact time table on that yet. But it will next year at some point. We've already begun engaging our customers and other stakeholders on our cost benefit analysis. And intend to provide multiple opportunities for engagement and input over the coming months as we work toward the decision point next year on whether or not to fully join the market. So, much more work to come on that very important topic. We've already...We've appreciated the engagement so far. We're going to get a lot more involvement of customers really to make sure that we make the best decision for our customers in the region.

SLIDE 8 – OTHER GRID MOD ENGAGEMENTS

Turning to Slide 8, I just wanted to touch on a couple of other grid modernization engagements in a separate but related effort we're also engaged with and support the California ISO's proposal to develop a day-ahead imbalance reserve product. The CAISO's proposed product is an hourly capacity product with 15 minute call rights. This would allow intertie resources such as the FCRPS and other Northwest power providers to be able to participate in this flexible capacity market. It would also enable our customers embedded within our system to participate.

The CAISO expects to issue a final proposal letter later this summer and seek board approval in September. So that's moving and I think this is a really important signal from California that they're looking to create additional opportunities for Northwest providers.

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This product, if it comes to fruition would compensate resources for the flexibility and capacity they're able to provide. And as you know, seeking new market opportunities for clean capacity is one of the key objectives of our strategic plan. I think we clearly recognize that we're going to need to supplement our aggressive cost-management actions with new revenue opportunities. So we're...

I also wanted to point out that we're also engaged with the CAISO and others, including the Los Angeles Department of Water and Power in conversations about further optimizing the AC and DC interties between the Northwest and Southwest. This is some recently emerging work. Also quite encouraging. I think California has heard us. Again, I want you to make sure that Northwest resources are treated fairly from a resource adequacy perspective and that we really understand how to optimize the interties between us.

So as part of the CAISO's 2018 to 2019 transmission planning process, they are assessing ways to increase near-term and long-term dynamic transfer capabilities on the...on the intertie. And they're also looking for alternative ways to potential increase capacity and scheduling frequency.

As part owner and operator of the intertie, Bonneville is on the core study team. We've reached out to the other capacity owners here up in the Northwest to make sure they're engaged. And I know there's also interest on the part of Northern California transmission owners to participate in this. And we're very interested in the potential for increasing sales to the southern end of the intertie, while clearly safeguarding public and regional preference and the interests of the Northwest.

So all of these grid modernization efforts fit together under our objective to preserve and enhance the value of the Northwest hydropower and transmission operations, for our customers in the region and then find new market opportunities to surplus hydro generation. And certainly, I'm going to look forward to hearing a lot more information about these efforts this summer and going forward. This is important market development activity and...and clearly right down the heart of our strategic plan.

SLIDE 9 – SPILL SURCHARGE

Okay, I'm going to turn now to Slide 9 and begin taking on some of the fish and wildlife life issues. If you recall back in January Deputy Administrator Dan James shared a brief update on the spill surcharge which is a rate mechanism that's incorporated into the BPA rate case to recover the costs associated with an increase in fish passage spill as a result of the spring 2017 spill injunction ruling by the U.S. District Court in Oregon.

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At the time of that brief in January an appeal was pending from the District Court's spill ruling to the 9th Circuit, so Bonneville had not yet initiated the spill surcharge process. Of course, back on April 2nd, the 9th Circuit upheld the spill injunction. So Bonneville is now preparing to implement the spill surcharge for...for fiscal year 2018. The spill surcharge will adjust power rates to recover the non-slice portion of the cost associated with increased spill and lost generation relative to the spill assumptions that were actually used when setting rates.

SLIDE 10 – SPILL SURCHARGE

I wanted to just give you a little bit of insight into the process here. We committed to share information on the spill surcharge prior to May 31st. And I'm able to announce our process timeline today. We'll be sharing preliminary data and assumptions used to calculate the spill surcharge next week via the tech forum. Instructions for how to sign up for the tech forum are on the QBR webpage. You just want to make sure you're on that list.

This update will include any proposed program spending reductions to offset the spill surcharge. Bonneville's been working on reducing its program budgets across the agency as part of a larger exercise delivering on our first strategic goal objective 1a, which is to improve cost management discipline. Mary Hawken is going to be sharing more information on this effort shortly but as I've committed over the last year cost savings found in Bonneville's Fish and Wildlife program as part of this effort will be used to help offset spill surcharge.

On May 16th we'll be hosting a workshop to review materials and how the spill surcharge is calculated and to answer questions. And there then be a comment period on the preliminary surcharge that will close in early June, with a close-out letter expected by the end of the month. So, a lot of information coming at you shortly on the spill surcharge. I recognize a lot of interest in that plan.

SLIDE 11 – ACCORDS

Turning to Slide 11. Another area I'd like to touch on briefly, as it's, you know, a very, very big issue for us is...is the...the Columbia Basin Fish Accords. I think as many of you know, Bonneville entered into the Fish Accords ten years ago in May of 2008. These were ten-year agreements between the federal action agencies and three of the four Northwest states and many of the region's tribes.

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The Fish Accords provided the signatories with nearly a billion dollars in funding for fish and wildlife protection and mitigation throughout the Columbia and Snake river basins over ten years. And there has been some very positive results, and a lot of hard work. A lot of money and a lot hard work by many people throughout the region. I think our partners to date have restored more than 8,000 acres of estuary floodplain and reopened nearly 4,000 miles of spawning grounds. And these have been important on the ground accomplishments.

The cur...The current Fish Accords are set to expire in September. And so, given that expiration date Bonneville is carefully considering the potential benefits, costs, risks, duration, spending allocation process and approach to customer engagement associated with extending the Fish Accords. The accords have certainly done much to strengthen tribal and state partnerships in the fish and wildlife realm. But, we must also work within the financial constraints facing Bonneville and insure we're making investments that support the proposed actions in the next biological opinion.

SLIDE 12 – ACCORDS

Turning to Slide 12, again, as you know, in our...in our strategic plan we committed to keeping fish and wildlife programs costs flat in real terms including expense and capital inclusive of any new obligations that may emerge from litigation or subsequent commitments in current or future biological opinions.

We know that extending the Fish Accords would likely provide some continuity and stability as we complete the Columbia River System Operations review and... and develop the next round of biological opinions. But on the flip side, subsequent agreements could take away flexibility to quickly adjust programs and reduce costs in order to meet changing market, legal and compliance requirements that may recur over the coming years. So this is going to have to be a very thoughtful decision in terms of how we accomplish these competing objectives.

I just wanted to commit to you that Bonneville will continue to engage with our customers, regional stakeholders and the Northwest Power and Conservation Council to consider whether to not to make commitments to extend the Fish Accord. And I just wanted to acknowledge the level of customer interest and the significance of the decision on the future accord. Certainly, we will spend much more time on that. But I wanted to make sure you know what's the very latest in our thinking.

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So, a lot happening. A lot going on. Grid modernization. Fish and Wildlife, of course, we're going to keep an eye on the ball on safety. And we're now going to turn it over...

SLIDE 13 – FINANCE

Elliot Mainzer: Moving to the next portion of the program I'm going to hand it over to Mary Hawken, our chief financial officer, who will take us through a finance update.

Mary Hawken: Okay. Thank you, Elliot. And good morning. So I'll be covering the agency's financial position and our finance KPIs. And just as we did last quarter when I completed the agency overview, then both Joel and Richard will share more detailed breakdowns of Power and Transmission Services expenses and revenues.

SLIDE 14 – AGENCY NET REVENUES

So turning to Slide 14. So first of all, in all the next graphs that you're going to see we're comparing all financial metrics to the BP-18 Rate Case. And on 14 this chart shows the net revenues, KPI, which tracks total revenue less expense. And based on our second quarter forecast we currently expect to end fiscal year 2018 with \$361 million in net revenues, which is \$335 million more than the \$26 million we had reflected in the rate case.

And I need to remind you too that a large portion of the change from the rate case is due to the Regional Cooperation Debt. However, the improved net revenue forecast that you're seeing here is also due to both improving revenues and lower expenses.

SLIDE 15 – AGENCY FINANCIAL HEALTH

So on this slide, on Slide 15, we breakdown further our net revenue KPIs into two more KPI's total revenues and total expenses. So, total expense, which is shown on the left side of this graph, includes things like O&M, fish & wildlife, energy efficiency, depreciation and interest. And as of the second quarter we expect to end the year with \$3 billion, 300 million in total expenses. That's \$327 million under the rate case projection.

So besides our debt management efforts, this reduction is also driven by a budget true up exercise. And I'm going to explain that in a little more detail when we get to the next slide. So staying on this slide we have total revenue on the right side of the chart. And it's defined as the total of Power and Transmission revenues. We anticipate...Based on the second quarter forecast we anticipate ending the year with \$3 billion 661 million in

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total revenue. This is \$8 million more than what was assumed in the BP-18 Rate Case. And this improvement is driven by better revenues for both power and transmission and you'll be hearing more about that from both Joel and Richard.

SLIDE 16 – Q2 BUDGET TRUE UP

So turning to Slide 16, here's a little more information on the budget true up that I mentioned earlier. The right hand bars on this chart show our budget true up in fiscal year 2018. The strategic plan discussed our cost-management goal to move to a more sustainable budget. So what we've been doing internally is we've been evaluating our historical spending levels. And as you can see in this chart it very clearly tells us that we see and we've had a pattern of under spending.

I do have to say that some of the under spending was by design. Like last year after we issued cost control measures to offset the need for a CRAC. This year we issued guidance in March to the agency to reduce budgets based on each organizations historical underspend. Now the...the budget pool managers had discretion on how to allocate the budget reductions, across different programs, in order to insure that the critical work that had to be done did not go underfunded.

So for the agency we set a target to find \$44 million dollars in savings. And we got nearly all of the savings we asked for. And I do have to say, I really appreciate everyone in the agency just digging into this challenge and helping us achieve this target while still delivering on our mission.

SLIDE 17 – BUDGET ESCALATION

So the reductions for this year are just the start of our efforts to move to a more sustainable budget. Our new guidance will put us on this solid blue line that you see here on this chart, on Slide 17, and it will help us achieve our goal to have program cost at or below the rate of inflation. So this means that we're going to be resetting our spending levels for fiscal year 2019. And we've shared this information with our entire workforce. You're also going to see this guidance reflected in the 2018 IPR initial publication that will be coming out in June and then also the workshops that we're going to be holding in June.

SLIDE 18 – DEPRECIATION STUDY

Turning to Slide 18, the Depreciation Study. Okay, so this is definitely not your most glamorous topic, but it is an important one that I need to cover. BPA updates its

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depreciation study for Transmission and general plant roughly every 5 years or so. This update insures that our depreciation treatment is consistent with the industry standards and that the costs are recovered over the life of the asset.

So, depreciation can be influenced by many things like technology changes, material changes and business practices. What we're seeing is the largest change in depreciation is due to increased costs that are associated with removing the assets from service. So we're going to be applying this new depreciation study starting in March of this year and moving forward. And Richard is going to share some more information with you on how this change has impacted expenses.

For those of you who are really interested in more information and more detail on our depreciation study, we've actually posted the full study on the Financial Reserves and Leverage Policies page under the Financial Public Processes on bpa.gov.

SLIDE 19 – DAYS CASH ON HAND

Going to days cash on hand, so the reminder the days cash on hand KPI indicates the number of days BPA can pay it's operating expenses, with our available financial reserves. And it's a common industry measure of cash liquidity.

Looking at the bottom right side of the chart, we currently anticipate ending fiscal year 2018 better than we expected in the rate case with 76 days cash on hand, as opposed to 64. Higher revenues for both Power and Transmission, our cost-management actions across the agencies and the California settlement for power have all improved our outlook and contributed to this improvement.

So the forecast for Power reserves for risk is 45 million dollars, or 9 days cash on hand. This translates to an 8 percent probability of triggering a CRAC, or a cost recovery adjustment clause. This forecast I have to point out, this forecast is still below the lower threshold of 60 days cash on hand that we established in the Financial Reserves Policy. So BPA will continue to review how it will meet that lower threshold.

Now there are two finance KPIs that I'm not going to be covering today. There's available borrowing authority and debt-to-asset ratio. And, these KPIs really don't change a lot from quarter to quarter so I'll be providing an update on the KPIs annually, or if for some reason there's a major change. And we included this latest information on these KPIs in the January 30 QBR materials and those are posted on the QBR webpage.

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You can also find additional financial details about this second quarter forecast. That information's in our quarterly financial package and we've published it on our financial overview webpage.

SLIDE 20 – POWER SERVICES

Mary Hawken: And that's my finance update. I'm going to hand this over to Joel Cook, the senior vice president of Power Services. And he'll be providing you with more details on the Power Services financials and initiatives.

Joel Cook: Thank you Mary and happy Tuesday morning to everyone on the phone.

SLIDE 21 – POWER SERVICES EXPENSE

I'm going to begin by highlighting Power Services expenses found on Page 21 of the presentation. Total operating expenses through March are \$91 million lower than the rate case expectations of \$1,281,000,000. This is mainly due to lower spending by the Corps, \$4 million dollars, the Bureau of Reclamation, which is approximately \$9 million under spent, and our non-gen operations, otherwise known as our power general and administrative expense, is lowered by \$10 million dollars. The largest savings from the benefit of the Regional Cooperation Debt transactions of approximately \$23 million dollars.

Taking operating expenses so far this year into account, our year end forecast of total expenses are \$141 million lower than the rate case. Most of which is due to the effects of the regional cooperation debt, approximately \$127 million. The remaining savings comes from re...reductions in the fed hydro, the non-gen ops and other miscellaneous reductions.

SLIDE 22 – POWER SERVICES REVENUES

Turning to Slide 22, with operating...total operating revenues for the year through March are \$42 million higher than the rate case expectations of \$1,449,000,000 mainly due to the higher secondary revenue sales which accounts for approximately \$16... \$62 million. That amount is offset by lower preference loads of approximately \$28 million.

As you would expect, secondary sales gain was driven due to the above average water supply, which I will talk about later, and lower preference loads. Lower market prices than the rate case are partially offsetting secondary inventory gains as well.

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Looking at the end of the year, taking operating revenues through March into account, our end of year forecast is \$14 million higher than the rate case expectations. Again, due to improved secondary sales of approximately \$60 million projection, considering both year-to-date and expected stream flows offset by lower preference loads.

Power's actual net revenues through the second quarter are above rate case expectations. And the end of year net revenue forecast of \$354 million is higher than the \$325 million net revenue target. Strong set...strong net secondary revenues and the active cost management are the key drivers to this \$27 million forecast gain of net revenues.

SLIDE 23 – PERCENTAGE OF ANNUAL RUNOFF

These next two slides are a couple of my favorites. So this first one here, so Power's financial performance is closely tied to the water supply and market conditions. This helpful graphic shows where the water comes from within the basin and important areas where precipitation will impact the federal generation. As you go downriver the percentages indicated on the map are cumulative from percentages upstream.

So for example, at Grand Coulee, the 59 percent value there is a weighted average of the flows upstream. High and lower percentages further upstream of Grand Coulee therefore have a more significant impact on the federal system.

SLIDE 24 – SNOWPACK CONDITION

This next image shows snowpack conditions across the Columbia Basin as of April 9th. The snowpack situation has increased substantially across Q2. Mostly during wet periods in mid-January through early February and again since mid-March. As a result of this...Since the last published date, this April 9th, we've also seen additional snow...snowpack since early April.

The map shows that the snow/water equivalent percentages for the federal generation are now well above Grand Coulee...the average above Grand Coulee with the largest snow water content observed in this part of the basin since 2012. Snowpack above Grand Coulee is especially important because of the storage from the hydro projects and the snowpack in higher elevations and often helps to sustain us through the summer and early fall. Of course that's depending on how quickly the snow comes out of the mountains.

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Snowpack has also improved significantly in the Snake River Basin where it is also now mostly above average...average. Typically snowpack peaks in the Snake basin around April 15th, as the runoff season begins in that part of the basin.

Finally, given the snowpack increases the January through July water supply forecast at The Dalles increased from 99 million acre feet in early January to 118 million acre feet as of April 9th. That's a 117 percent of average.

SLIDE 25 – HENRY HUB PRICES

Let's now look at the next couple of slides to see what impact the weather may have on prices. Slide 25, looking at natural gas prices, the next two charts indicate how Power's rate case market price forecast have performed against actual market performance and the remaining outlook for the fiscal year.

So in the top chart, with the exception of January, actual gas prices are lower than rate case due to winter weather related demands failing to materialize. Further, LNG, or liquefied natural gas exports, have not ramped up to the expected levels that were assumed or modeled in the rate case.

Looking forward, there's an expectation of continued production growth that will weigh on gas prices throughout 2018. October through January natural gas prices on average were lower than rate case forecast due to the warmer weather specifically in the Northwest. Colder eastern temperatures did impact Henry Hub market prices. but the warmer weather in the Northwest kept a cap on our local prices here in the West.

New gas lines...New gas pipeline completions are roughly on schedule and with this new pipeline capacity gas is being produced at record rates. Additionally increased oil prices are driving up the expected levels of associated gas production. And this has helped to keep the forward curve at lower than expected price levels as well. Overall, natural gas prices show some signs of converging with the rate case forecast. However, despite the strong winter gas storage withdrawal, surging gas productions it's unlikely that prices will recover above rate case levels this summer.

SLIDE 26 – MID-C PRICES

Moving on to Mid-C prices, Page 26, on peak electric prices at the Mid-C on an average...average basis are trending below rate case expectations mainly due to high water supply and lower natural gas prices. The majority of the price variations came between BP-18 and the forward ICE prices are mainly due to difference in water supply

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shape. Hydro generation from January through March, combined with low natural gas prices have kept Mid-C prices below the rate case forecast.

The electricity prices July through September are expected to be higher than rate case levels as natural gas prices start to recover, near rate case levels and heat rates are expected to increase. Again, the shape of the water supply, and we have a lot of it this year, is going to impact forward prices as we move forward.

SLIDE 27 – POWER SERVICES CAPITAL

Page 27, Capital spending. The key performance indicator for capital spending tracks Power's total capital investment for the year, compared to the start of the year. Total Power capital expenditures through March are \$92 million, with an end of the year forecast of \$200 million. Budget execution for fed hydro is currently at 97 percent of the Q2 target, which is \$92 million spent against the Q2 forecast of \$95 million. This represents 42 percent of the total fiscal year budget.

As mentioned in the first quarter review, we continue to work on a new metric, that percent of completion metric that we hope to have available in the next quarterly report. The largest expenditure for fed hydro in 2018 were Ice Harbor turbine runners and turbine windings, which represent about \$23 million, McNary space and service replacement, which was about \$9 million. Grand Coulee firehouse, approximately \$8 million, along with power house and 5 & 6 impellers, stators, cores and rewinds at Grand Coulee that totaled about \$7 million.

SLIDE 28 – FEDERAL HYDROPOWER RELIABILITY

Turning on now to our reliability metrics, and the next two pages, this key performance indicator for fed hydro is the forced outage factor which represents the percentage of hours the federal system is not available to run due to unplanned events. The target for FY 2018 is 5.9 percent, and performance through March is below that at 4.6 percent.

However, this shows an increase from the previous quarter that is a result of previous outages at The Dalles and John Day, as well as new forced outages at Ice Harbor, Lower Monumental and The Dalles.

SLIDE 29 – COLUMBIA GENERATING STATION RELIABILITY

Next, page...or Slide 29, the Columbia Generation Station System Reliability. This target rep...Key performance indicator for the CGS station is the availability factor,

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which captures the percentage of times the Columbia Station is available to serve demand. The target for FY18 is 94 percent or better. Performance through March is above the target at 95.6 percent. Columbia had only one unplanned outage that occurred between August 18th and August 29th. And that is because Columbia Generation Station is actually on a different fiscal year. So their performance period includes July 1st of '17 through June 30th of 2018.

And finally I'd also like to take this time to congratulate Brad Sawatzke as the new CEO of Energy Northwest. We look forward to working with Brad and his team to support the good performance of continuing to look for ways to reduce our costs. That concludes my portion of the presentation.

SLIDE 30 – TRANSMISSION SERVICES

Joel Cook: I'll now turn it over to Senior Vice President of Transmission Services Richard Shaheen.

Richard Shaheen: Alright. Thank you Joel. And thank you Elliot. And an equal congratulations to Brad on his new role at Energy Northwest. And good morning to all. I'll start my report with Transmission's expenses and then I'll discuss our reliability performance and then wrap up with a few Transmission engagement updates.

SLIDE 31 – TRANSMISSION SERVICES EXPENSE

Let me start with Transmission Services current year expenses. Turning to Slide 31. The format of these slides follow those that Joel just went over reflecting Power's financial information. These slides, this one showing Transmission Services' total expenses depicts a comparison of our BP-18 Rate Case plan to our actuals on a monthly basis, shown in the bar chart, as well as the year to date and an end of year forecast in the upper right hand table. All of these expenses are shown in millions of dollars.

First, looking at the monthly view in the bar chart, depicting the first 6 months of this year, actuals compared to rate case plan, you can see for the first 5 months of the year our actuals came in lower than our BP-18 Rate Case plan. And in March, the sixth month of the year we came in slightly higher than the rate case plan. That higher than rate case plan was due primarily to a one-time leave and benefit adjustment, as well as the new depreciation rate which began in the month of March that Mary spoke to earlier. I'll get back to that in just a moment.

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So now moving up to the upper right hand table, going to the right side of the table first, which reflects our year-to-date results, you'll see our expenses year to date are at \$485 million compared to a BP-18 year-to-date plan of \$521 million. That's \$36 million dollars less than planned, which is about 93 percent. That under run, I would congratulate the entire workforce at BPA for being part of making smart decisions and thinking differently.

On a yearly basis, that's about 46.5 percent of our BP-18 Rate Case total year plan, which is reflected on the left side of that table at \$1,043,000,000. Our end of the second quarter end of year forecast is at \$1,050,000,000. That's about seven million dollars greater than rate case plan, and that is primarily due to, as Mary again spoke to earlier a new depreciation expense that began in March and as it carries through the remainder of the year the impact will be a total of \$17 million dollars towards our full year expenditures.

SLIDE 32 – TRANSMISSION SERVICES REVENUES

I'll move next to Slide 32, reviewing our Transmission Service's revenues. Again, this...this chart compares BPA rate case plan to actuals on a monthly basis, a year-to-date basis and a end-of-year basis. Also again, total revenues are in millions of dollars throughout the chart.

For the first six months of the year you can see that for the first couple of months actuals came in slightly higher in revenue than planned. And in the next couple of months, in December and January they were just about on or a little below planned. And in the most recent two months, the February and March, our revenues were...were higher than planned.

Moving to the upper right hand table, at the right side of the table that monthly amount adds up to a revenue year-to-date of \$544 million, compared to a BP-18 year-to-date plan of \$526 million. That's \$18 million higher than planned, which puts us about 3.4 percent higher. On an annual basis that's about 51.7 percent of the full year rate case plan. Which moving now to the left side of that table is shown as \$1,052,000,000.

Our end of the second quarter, end-of-year forecast for total revenues is projected to be \$1,066,000,000, which is \$14 million higher than planned, for an increase of about 1.3 percent.

Comparing our expenses to our total revenues, we expect net revenues to be above the BP-18 Rate Case by the end of the year. In the rate case we anticipated net

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revenues of about \$9 million dollars. With the second quarter forecast we are now projecting net revenues at about \$16 million dollars, which is about 78 percent higher than our rate case plan.

SLIDE 33 – TRANSMISSION SERVICES CAPITAL

Advancing now to Slide 33 let me talk about Transmission Service's capital. This chart tracks two areas of our capital, spend and units installed. The actuals and forecast of our expenditures are shown by the line graph, with the solid line showing our actuals year-to-date. And then the dash lines showing our projected or forecast spend through the remainder of this year. We are currently at a spend, or expenditure of \$182 million compared to an end-of-year forecast of \$424 million. That \$424 million is versus a \$511 million rate case projection, or about 83 percent of rate case. So our \$182 million at current year spend is 36 percent of that rate case amount.

Now moving to the bars at the right side of the table, these are showing units of work completed year-to-date versus our entire plan. At the end of the second quarter we have 208 units of our capital plan spent, with about 329 units remaining for the rest of the year, for a total plan of 537 units for the year. So where we stand now we're at about 39 percent of the full year plan.

In other words, in summary, we've completed 39 percent of our projects for about 36 percent of our budget. We've forecast to spend about \$424 million by the end of FY 18, which is 83 percent of our rate case budget. We've forecast total assets will be in the range of about 516 to 521 units out of the total of 537 total units planned at the start of the year due to some project deferrals and some resource challenges. But we manage this as the year moves on.

SLIDE 34 – TRANSMISSION RELIABILITY – SAIFI

Now, moving to Transmission reliability performance, Slide 34, we will start first with SAIFI, which is our System Average Interruption Frequency Index. This tracks the frequency of unplanned outages. And we track SAIFI in two forms. In lower voltage, which is less than 200 KV lines, and then higher voltage, which is 200 KV or above.

We also have included on this chart our warning levels for both the low voltage and the high voltage, which is based on historical performance. These limits are not to be exceeded as our goal throughout the year. Those dash lines reflecting both the low and the high voltage warning them.

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Down is good on this chart. For our lower voltage you can see we have improved down to a .56 SAIFI. And on our higher voltage down to a .22 SAIFI. Those are both compared to the limits of .68 and .6...Excuse me .66 and .68 respectively performing better than planned.

Bottom line is our reliability is improving. The trend indicates better performance. However, part of this improvement may be due to better weather but also our asset plan's going forward. Bottom line, BPA is showing improved reliability since the beginning of the year. And our continuous improvement projects and investigating outages in order to find their root causes and prevent recurrences is paying off.

SLIDE 35 – TRANSMISSION RELIABILITY - SAIDI

Next let me touch on transmission reliability SAIDI. That's our System Average Interruption Duration Index. This tracks the duration of our unplanned outages. And again, we do it as the two buckets, our low voltage and our high voltage. And again, I'll just chart as with the SAIFI chart we have warnings limits depicted based on historical performance.

In both cases our low and high voltage were doing better than our warning limits. For our low voltage we're at a SAIDI of 99 compared to a warning limit of 430. And on our higher voltage a SAIDI of 76 compared to a warning limit of 260. Both performing well. Performance is below limits and trending better. You might say Mother Nature is being kind to us but we also are making strides and improvements in our asset planning.

SLIDE 36 – ENGAGE WITH TRANSMISSION

Next on Slide 36, let me touch on a few topical areas within the ...the transmission first. Reliability coordination. We continue to be an active participant in the reliability coordinator discussions, which are separate from the EIM discussions that Elliot just talked about earlier. We're participating in CAISO's stakeholder process to design technical documentation and rates. And in our also...and are also involved in repeat discussions on their proposal for a transitional RC that they believe will be substantially lower than their existing cost. We'll be evaluating these options as they become clearer over the course of the summer and this fall.

We're also aware that Excel Energy recently announced that they are no longer participating in the Mountain West Transmission Group. That was...that...that was exploring services from the SPP, or Southwest Power Pool. And continuing discussions

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with Mountain West entities, along with other balancing authorities and transmission operators in the West.

Second, in regards to our BPA strategic goal of asset management, Transmission continues to mature its risk management methodology with a focus on defining critical parts of the transmission system to meet reliability and other standards at lower total economic cost. Investments in sustained programs remain focused. Additional focus is on making improvements to the maintain area of the asset management life cycle, as well as through the use of probabilistic risk assessment. More to come as we mature our methodologies in this area.

We also continue to adopt a scalable flexible approach to expansion investments, which we'll first speak to use efficiencies and non-wires alternatives to relieve congestion or increase capacity on constrained transmission paths where new line construction is unfeasible or cost prohibitive.

Next, transmission tariff engagement, and pro forma gap assessment efforts have now transitioned to TC-20, a former proceeding under Section 212 of the Federal Power Act. TC standing for terms and conditions. In other words, we've concluded the pro forma gap analysis effort and are now executing upon the findings.

The TC-20 proceeding includes a series of customer workshops that will set terms and conditions. And a new tariff that will be more closely aligned with the pro forma tariff allowing BPA to execute on a key element of both transmission business model and the BPA agency strategy.

We held the kickoff for the TC-20 pre workshops Monday of last week on April 23rd, which included guiding principles for any non-pro forma consideration. And a draft tariff including proposed language to replace Section 9, which is the FERC approval and proposed language for ancillary services. Customers have been given until May 30th to comment on this content.

The last topic I want to cover is about an evolving transmission market. We're seeing a flurry of requests associated with cryptocurrency production, particularly in Central Washington. While a single request ranges from 5 to about 30 megawatts, the aggregate amount is, in some areas over a 100 megawatts. Coupled with the ongoing data center requests for hundreds of megawatts, our region is seeing unpredicted and significant growth. While the requests are not all directly connecting to the BPA network, BPA is receiving official service requests and funding to perform system impact studies and we are closely monitoring these requests. Given the lack of maturity

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of the cryptocurrency market, we're not able to forecast whether or not this is a long-term trend.

That concludes today's update from the business lines. and I'm now going to turn it over to Scott. Thank you and stay safe. Scott.

SLIDE 37 – PUBLIC PROCESS

Scott Simms: Alright. Thank you very much, Richard. Before we take questions I have a few reminders to share about upcoming opportunities to engage with BPA. A complete list of our upcoming events and processes are listed at bpa.gov.

SLIDE 38 – PUBLIC PROCESS

And as you've heard, BPA is executing a number of processes to ensure we have opportunities to hear from you before we make decisions for the region. Timing and details of these meetings are posted on BPA's event calendar. It's pretty clear that May will be a busy, busy month. And that will bleed into June as well. So let's look over the list here.

BPA Staff will discuss a preliminary inputs to the FY2020-2021 Rate Period High Water Mark calculations May 9th. On May 10th, staff will present draft results of BPA's resource program. May 15th and 16th BPA is cosponsoring energy effi...Exchange 2018 in Tacoma with the Northwest Energy Efficiency Alliance and the Northwest Power and Conservation Council.

The spill surcharge workshop that Elliot mentioned in his opening comments will be on May 16th. On May 22nd BPA is hosting a strengthening financial health workshop focusing on capital financing, and our ten year capital financing plan.

On May 30th, BPA and the CRSO team invite you to a webinar to hear about next steps in analyzing alternatives for environmental impacts. And as Richard just mentioned, BPA is hosting monthly TC-20 tariff customer workshops through August. And the next one is scheduled for May 31.

A draft schedule of June IPR workshops is being held between June 18th and June 22nd is now available. But the week prior we'll have a workshop on June 13th updating interested parties about the second year of our South of Allston Bilateral Redispatch Pilot. If I had to say that twice in a row.

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SLIDE 39 – COMMENT PERIODS

Alright. Now, turning now to comment periods. BPA is accepting comments on the Financial Reserve Policy and the Leverage Policy through May 11th. And on the requested extension of this agreement with the Bonneville Environmental Foundation through May 24th. And if you didn't catch all that, for more information about these comment periods you can find those at www.bpa.gov/comment.

9:52 a.m. Advance to SLIDE 40 – QUESTION AND ANSWER

Scott Simms: Okay, that concludes the presentation portion of today's QBR. And what we're going to now do is turn to answering your questions from those folks who submitted during today's presentation. We'll be reading these as they appear on the screen within our QBR format. As a reminder you can still submit questions by clicking the chat button on the upper right hand part of your screen, enter your question and press send.

So the first question we have from today is from Randy Gregg saying, on Slide 20 of the detail package there's an indication of an 8 percent probability of a Power CRAC. What is the dollar amount associated with the 8 percent probability? And I believe that Joel Cook, senior vice president of Power Services is going to answer this question.

Joel Cook: Thanks Scott. Based on the latest information I have, I believe the 8% CRAC probability represents an amount of \$5 million to \$50 million in reserves. So it's a range of \$5 to \$50 million in reserves.

Scott Simms: Great. Thank you, Joel. Our next question comes from Marie Morrison. Where and how do we follow developments on the Fish Accords? And I believe that Elliot Mainzer, BPA Administrator, is going to answer that question.

Elliot Mainzer: Well, it's...it's a great questions and I...I think you just saw we've got processes and engagements on multiple topics, but I'm gonna have to circle back with our fish and wildlife and legal team to find out exactly what the...what the proposed steps are for engagement. It's...it's definitely part of the master plan, but I think we'll take that as a homework assignment and get information back out through this mechanism, so...

Scott Simms: Great.

Elliot Mainzer: ...thanks for asking questions and we owe you an answer.

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Scott Simms: Okay, great. We're not...we're not seeing any further questions on the screen. We'll give it just a moment for folks to type in and see prior to our planned wrap-up here at 10:00 a.m. Pacific.

Elliot Mainzer: Mary, while they're looking at the questions could you just remind folks, for folks that were wanting to look at the...the more detailed financial package where they could find that?

Mary Hawken: I can certainly do that, yes. So our quarterly financial package we have published on the Financial Overview webpage.

SLIDE 41 – THANK YOU

Scott Simms: Great. Alright, not seeing any other questions coming in we want to give you some opportunities for submitting questions after this forum closes. So what we're gonna do is we'll wrap up the question and answer session right now. If we were unable to get to your question today or we're not able to submit it somehow, you can send that to Communications@bpa.gov. Again, that's Communications@bpa.gov.

Questions that have already been submitted via today's WebEx do not need to be resubmitted. So we'll follow up on that Accord questions. We'll be posting follow-up answers to all of these question on the QBR webpage in the coming weeks, along with a recording of today's meeting.

So thank you all for listening today. And we look forward to joining...you joining us on July 31 for our next QBR, a date which will be upon us before we know it. On behalf of all of us here at BPA, thank you for your time.

SLIDE 42 – FINANCIAL DISCLOSURE