

Columbia Generating Station IPR 2 Webinar Notes

Slide 4:

- Energy Northwest 2017 fiscal year is July 1, 2016 – June 30, 2017.
- The incremental outage costs for FY 17 are \$27.5 million. Outages occur every other year on odd years.

Slide 6:

- The ten-year long-range plan is currently being reviewed and will be approved by executive board in April. This plan is updated every year.

Slide 10:

- Fukushima capital project, \$11.3 million, is related to regulatory upgrades that are now required following Fukushima incident.
- Energy Northwest manages about 100 O&M and capital projects that are within the budget on any given year.
- Question:
 - Is the Fukushima capital project limited to one type of regulatory work? Is Energy Northwest working on earthquake/seismic studies?
 - The \$11.5 million capital project is to complete work on the vent system. There is seismic analysis review, flooding analysis and other regulatory studies that are completed within regulatory projects.
 - Will the vent work be complete by the end of the FY 17 outage?
 - Yes, the work will be completed by the time the outage is over.
 - For seismic studies, are you planning to continue in the future?
 - Yes. Future spending plans include funds for evaluation and some dollars to account for potential modifications associated with seismic studies. Requirements are not well defined for this which could result in a future change to the estimated budget needs.
 - Was there an additional fuel cost associated with the fuel failure that recently occurred? If so, where in the budget is that expense accounted for?
 - There was no additional cost associated with the fuel defects. It is included in the cost of refueling, which is contracted to Global Nuclear Fuels. The fuel purchase covers possible fuel defect issues, it does not matter at what point the fuel became faulty.
 - What part of the budget covers the repair work that was done when a valve was pried open and a temporary fix was placed? Is this the reason for valve evaluation?
 - Future repair work cost estimate \$500,000 which is below the threshold for the list presented on the slide.
 - The valve evaluation is a standard ongoing cost for routine monitoring and maintenance. Some of the expenses are covered under capital while the rest is captured in O&M under general maintenance.

Slide 14:

- A&G include variable costs with a large portion driven from PERS and Energy Northwest must cover them. In the past, Energy Northwest has found other areas to cut costs in order to stay within the approved budget if A&G costs come in higher than expected.

Slide 16:

- Energy Northwest uses risk reserve part of budget to balance out unforeseen costs but it is a small percent of the total budget so may need to find additional savings in other cost areas depending on the year.
- Who is on the executive board?
 - The board consists of 11 members, few appointees from the Washington state governor, state senator Tim Sheldon and several PUD customers across the state. There are some

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members on the board with a nuclear power background. The board provides final approval for the budget.

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- The value optimization project looks at cost-effective measures and compares to other sites with similar plant size, standards and management structure to determine cost comparison. This placed Columbia within the top quartile. The project has helped to reduce costs and increase reliability with outages. The next step is to focus on being competitive within the region as a cost-effective resource with a goal to be close to BPA's PF Tier 1 rate by 2026. Building the Nuclear Promise refers to an initiative in working with all US nuclear power plants to find ways to save costs and work together. It is an initiative sponsored by NEI (Nuclear Energy Institute), and supported by INPO and NRC.

Slide 24:

- Energy Northwest is looking at changing benefits for new employees. This could include less personal or vacation time included in future benefit packages.
- Energy Northwest reviews costs and targets annually to look at costs and how they move forward.

Slide 25:

- Staffing reductions provide both short-term and long-term savings
- Staffing numbers are just for Columbia. They do not include any other EN organizations.

Slide 26:

- Looking to increase the value of the nuclear industry by improving safety and efficiency through new initiatives.

Slide 27:

- Nuclear Promise –
 - Corrective action program ensures that they are delivering quality products and can focus root-cause analysis efforts on problems to prevent reoccurrence.
 - Preventative maintenance is in the plan.
 - Energy Northwest is working with BPA to learn how they use and manage contract personnel to create new process efficiencies and gain cost savings.
 - There have been some initiatives that have been put in place but are not providing the benefit to the industry for the cost so looking at new ways to address them.

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- Energy Northwest wants to maintain safe, reliable operations while looking at new cost effective initiatives and long range planning focus. They do not want to get rid of projects that may be important to safe reliable operation.

Slide 29:

- Energy Northwest is evaluating additional cuts during the IPR 2 process that go beyond the \$14 million two-year savings identified in the IPR close-out.

Questions:

- You mentioned that you compare to a group of like nuclear plants (single plants with similar governing structure). How many plants are included in that cohort? 5 including Columbia Generating Station Does it include Fort Calhoun?
- There are five total plants that are part of the comparison.
 - The cohort did include Fort Calhoun before it closed. (To be more clear, we have compared our cost of power to Fort Calhoun, but the other four single unit stations that

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we compared ourselves to included VC Summer, Callaway, Fermi 2 and Wolfcreek. We are in the top quartile for COP compared to these 4 single unit stations.)

- What quartile does Columbia fit into for overall INCO rankings? Is it still in the bottom quartile?
 - There has been no change to the current ranking. There will be a new quartile data point released in January.
- Is there sensitivity for rating behind the reason to not include details?
 - Yes, it has to do with propriety information from other firms that can't be released.
- Columbia was designed to last 40 years which means a life running to 2023. Shouldn't Columbia be showing wear and tear on the facility so that costs should be going up rather than down?
 - There will be additional costs and delivering the nuclear promise recognizes that. It comes down to the level of detail and opportunity to manage costs and implement actions as part of cost-effective project. Improving performance and in-time operation help to prove worth of the plant. Improving these areas while moving forward with finding other cost-cutting opportunities.
- The last outage that occurred was longer than planned and when Columbia did return it only came on at 2/3 power. How is it better and how has Energy Northwest been able to stay within budget?
 - Yes, Energy Northwest stayed within the outage budget. There is some contingency built into the budget for reliability issues. There was not a fuel expense associated with this occurrence.
 - Columbia is now producing more power in each month starting in fiscal year 2017. It is performing better than projected and staying within budget.
- NRC has challenged the operation of Columbia four times in last three years on security issues. Why would Energy Northwest look at reducing personnel?
 - Any security reductions proposed would be similar to what others in the industry are doing. For example, if cameras and other features were added that would make some personnel redundant, may consider reducing force. Energy Northwest can't release publically the total number of security personnel due to it being safeguarded information. There are no known issues due to the number of security officers in the area.
- There were two failures on NRC tests about three years ago and an additional finding that employees acted inappropriately but no details were provided.
 - Please provide additional clarification if you need specific information.
- Where is information on the further reductions being proposed?
 - There will be further reductions discussed in future IPR 2 meetings coming in January and February.