



MEMORANDUM

EUGENE WATER & ELECTRIC BOARD

Rely on us.

TO: Commissioners Simpson, Brown, Helgeson, Manning and Mital
FROM: Roger Kline, Generation and Fleet Manager, Mike McCann, Carmen-Smith Project Manager and Patty Boyle, Principal Project Manager
DATE: March 25, 2013
SUBJECT: Carmen-Smith Project Financial Update

Issue

This memorandum provides an update on the economic analysis of the relicensing efforts at EWEB's Carmen-Smith Hydroelectric Project based on the revised construction schedule developed for implementation of the new license and Settlement Agreement.

Background

The Carmen-Smith Project, which is located 71 miles east of Eugene on the upper McKenzie River, represents almost half of EWEB's total owned generation capacity. EWEB received an initial federal license for the Carmen-Smith Project in 1958, and the project went online in 1963. The original 50-year license expired in November 2008, and EWEB has been operating under an annual license from the FERC since that time. The annual license renews automatically until EWEB receives a new license for the Project from the FERC.

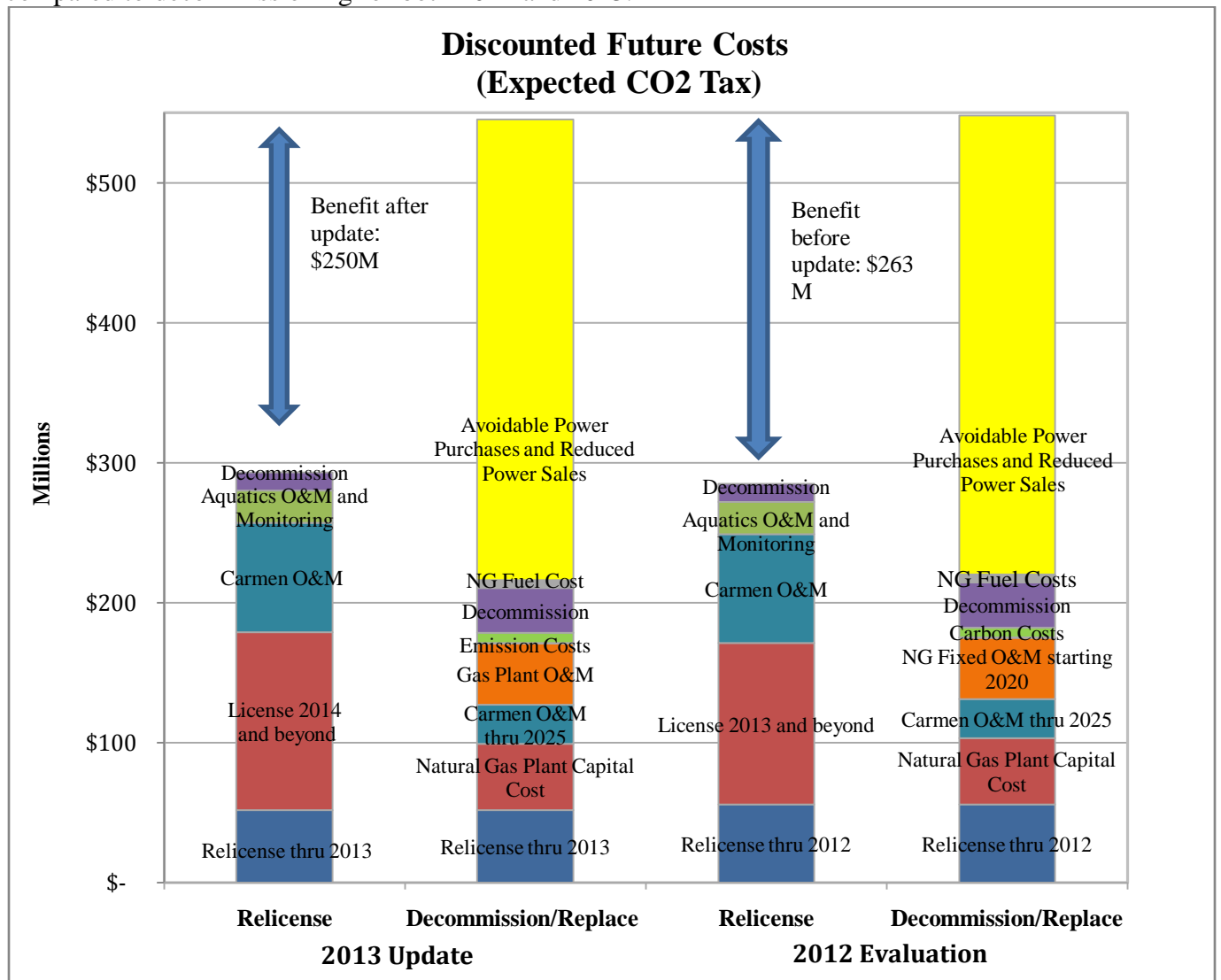
At the May 1, 2012, Board meeting staff presented a project update and economic evaluation. That evaluation forecasted the expected value of relicensing and powerhouse improvements above the alternative of decommissioning the project and replacing the capacity value of the project with a similarly sized natural gas peaking plant. At that time, the expected relicensing value above the decommissioning alternative was \$263 million.

Included in the materials for the March 5, 2013 Board Meeting was a memo describing the current status of the relicensing effort and the revised construction schedule. Recall that while the environmental issues regarding the Wild and Scenic Boundary and spotted owl habitat are not likely to impact EWEB's ability to eventually obtain an operating license, it is unlikely that the FERC will be able to resolve these issues and issue an operating license before 2014. Also, the revised implementation schedule is consistent with EWEB's strategy to maintain stable reserves, improve debt service coverage and minimize rate increases. The complete March 5, 2013 memo is attached for reference. The current Management recommendation scenario presented at the March 19, 2013 Board meeting assumes a revised project schedule and this updated analysis is consistent with those assumptions.

Discussion
Economic Analysis

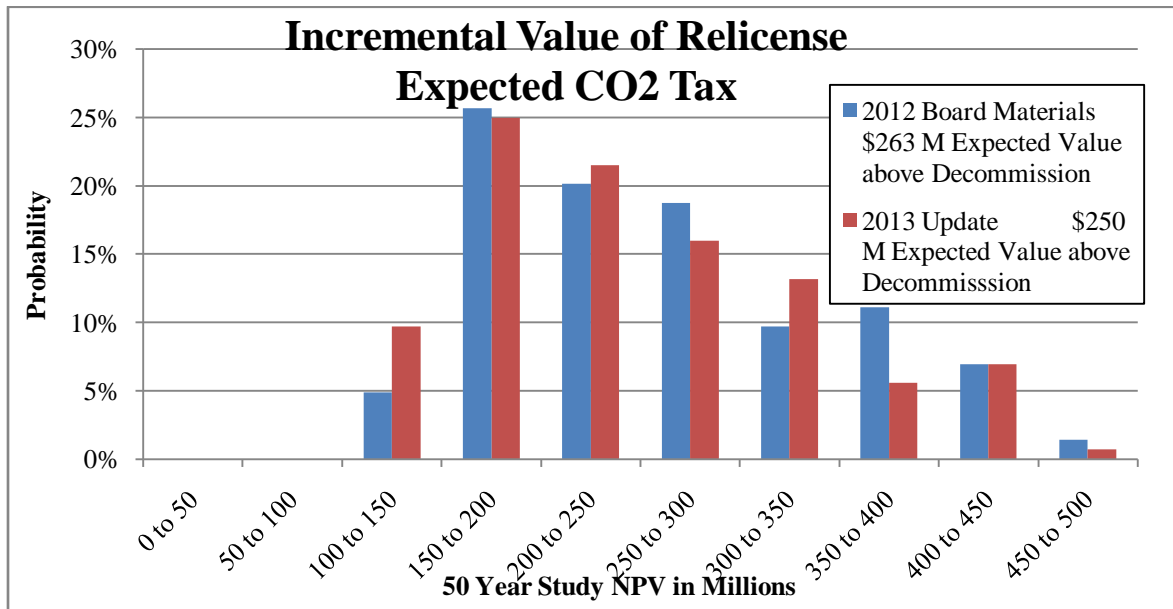
For this update, the Aurora model was adjusted to reflect the revised construction schedule maintaining alignment with the recently updated Long Term Financial Plan. Recall that the Aurora Model is a monte-carlo style analysis that simulates the Pacific Northwest power grid and is used to develop and maintain the Integrated Electric Resource Plan. Based on the updated analysis, the expected value of the Carmen-Smith Project, as envisioned in the settlement agreement and anticipated license, is \$250 million above the expected value of the alternative case. The alternative case assumes we will decommission the Carmen Project and replace it with a natural gas peaking plant. This decrease in value is driven by a longer outage assumption in a higher value period and an increase in forecasted cost of the fish ladder and fish screen. This analysis also assumes a carbon tax is implemented in 2018 and reflects the full cost of the project from license development through the completion of capital construction.

The chart below shows a comparison between the expenses and benefits of relicensing the project compared to decommissioning for both 2012 and 2013.

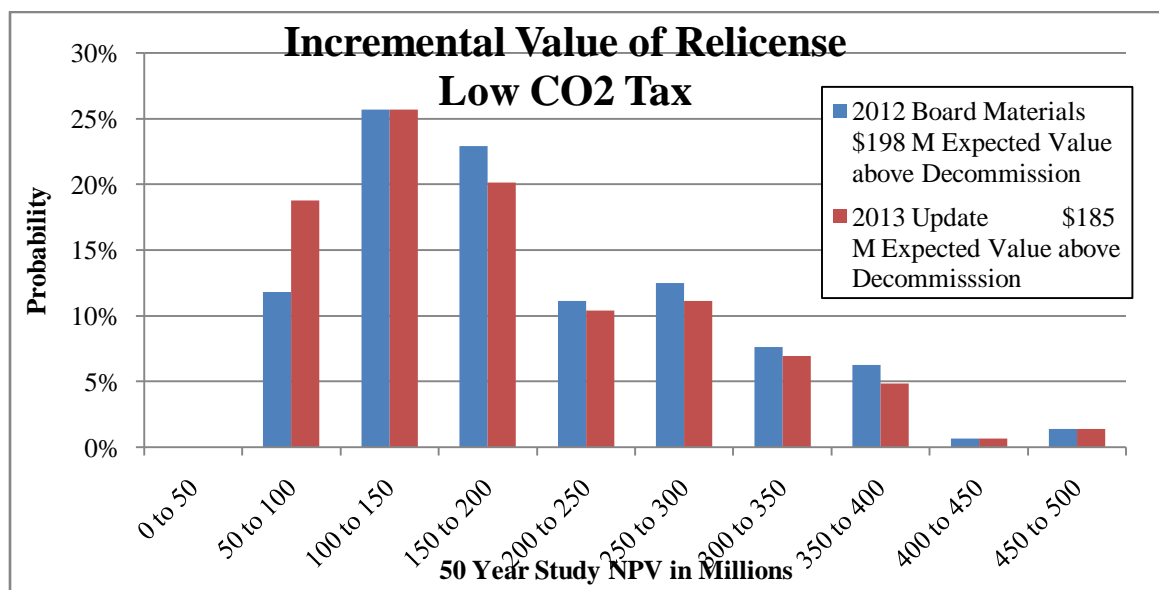


While the expected value is an important aspect of the analysis, it's also important to understand the range of possible outcomes associated with the cases. As we have discussed and learned well, the future is almost always likely to be different than a single point forecast; therefore, evaluating ranges will help us understand how "robust" our proposed project is or is not.

Below is a graph that shows both the expected incremental value of the project and the range of possibilities over the 50 year license. Included is the range of values from the May 2012 analysis as well as the updated values. As currently modeled, there continue to be no years where the expected value falls below the expected value of decommissioning although the profile has shifted as a result of higher projected costs.



Similarly, if we assume a low case scenario of a carbon tax, the expected value remains above the decommission scenario, but the individual cases have shifted into lower value ranges.



Long Term Financial Plan

As noted in the March 2013 project update, the licensing and scheduling impacts from the environmental issues and the financial condition of the organization allow EWEB to create a manageable financial and construction sequencing plan. Under the revised schedule, we expect to be able to complete the design of the fish passage and power house refurbishment elements and begin construction of some supporting infrastructure using the proceeds from the borrowing completed in 2012 and a draw from reserves. As currently scheduled the project would require a draw of approximately \$7.6 million in 2015 that would be repaid by bonds issued in 2016. This schedule delays a rate increase of approximately of 1%-1.25% from 2014-2015 until 2016. It's important to note that while this schedule has the benefit of deferring a rate increase there is risk associated with inflation and moving the outage period to a period where power has a higher value. When the license is issued we will better be able to mitigate those risks.

Recommendation and Requested Board Action

This memorandum is being provided for the Board's information only and no action is requested. Please feel free to contact Mike McCann at Mike.McCann@eweb.org or Patty Boyle at Patty.Boyle@eweb.org with questions ahead of the meeting.



MEMORANDUM

EUGENE WATER & ELECTRIC BOARD

Rely on us.

TO: Commissioners Simpson, Brown, Helgeson, Manning and Mital
FROM: Roger Kline, Generation Manager, and Mike McCann, Carmen-Smith Project Manager
DATE: February 20, 2013
SUBJECT: Carmen-Smith Project Update

Issue

This memorandum provides an update on the relicensing efforts at EWEB's Carmen-Smith Hydroelectric Project and describes the revised construction schedule developed for implementation of the new license and Settlement Agreement.

Background

The Carmen-Smith Project, which is located 71 miles east of Eugene on the upper McKenzie River, represents almost half of EWEB's total owned generation capacity. EWEB received an initial federal license for the Carmen-Smith Project in 1958, and the project went online in 1963. The original 50-year license expired in November 2008, and EWEB has been operating under an annual license from the FERC since that time. The annual license renews automatically until EWEB receives a new license for the Project from the FERC.

EWEB has been engaged in a process to relicense the Carmen-Smith Project since 2002. This relicensing process resulted in the development of draft and final license applications that were submitted to the FERC in 2006. Beginning in early 2007, EWEB entered into settlement negotiations with a stakeholder group that included federal and state agencies, three Native American tribes, and a number of non-governmental organizations. The negotiations concluded in October 2008 with an agreement signed by EWEB and 16 other groups (EWEB Board Resolution #0833, October 21, 2008). The Settlement Agreement was filed with the FERC on October 23, 2008 in support of and as a supplement to EWEB's 2006 license application. In late 2010 and early 2011, the FERC received a Clean Water Act Section 401 Certification from the Oregon Department of Environmental Quality (ODEQ) and biological opinions (BiOps) from the National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (USFWS) in support of the license application and settlement agreement. In May 2011, EWEB confirmed with the FERC that the FERC had in its possession all of the requisite pieces to process the new license for the Carmen-Smith Project.

Discussion

A combination of environmental and financial issues has lead staff to re-set the Project implementation schedule. EWEB has yet to receive the new FERC license for Carmen-Smith due to

issues having to do with the McKenzie Wild & Scenic River and habitat designated for the northern spotted owl. While neither environmental issue is likely to impact EWEB's ability to obtain an operating license for the Carmen-Smith Project, it is unlikely that the FERC will be able to resolve these issues and issue an operating license before early 2014. We also believe a revised implementation schedule is consistent with EWEB's strategy to maintain stable reserves, improve debt service coverage and minimize rate increases. Smoothing and extending the Project implementation schedule will allow for smaller debt issuances over a longer construction period.

The Wild & Scenic River issue has to do with boundary errors and jurisdictional matters involving FERC and Forest Service authority under the Federal Power Act and Wild & Scenic Rivers Act. In 2012, the FERC identified survey errors that dated back to the original McKenzie W&S designation by the Forest Service. The Forest Service corrected those survey errors in November 2012. The Forest Service subsequently needs to revise their analysis of potential project effects (termed a "Section 7 Determination" after Section 7 of the Wild & Scenic Rivers Act). The revised Section 7 Determination is expected to be filed with the FERC by the Forest Service in March 2013. In the following month, EWEB staff will file with the FERC a letter on behalf of all settlement parties acknowledging resolution of the W&S River issue and asking the FERC to proceed with licensing the Carmen-Smith project consistent with the Settlement Agreement.

In November 2012, the U.S. Fish & Wildlife Service (USFWS) finalized a designation of critical habitat for the northern spotted owl, and parts of the Carmen-Smith Project are included in the critical habitat designation (roughly Smith and Trail Bridge Reservoirs and the forests and stream reaches nearby). EWEB, acting as the FERC's designated representative, has initiated work on a revised Biological Assessment (BA) to address the critical habitat designation. Staff hope to be able to file a final revised BA with the FERC by the end of April 2013. The FERC will then initiate formal consultation with the USFWS. This process is expected to take between 90 and 135 days to complete, based upon past experience.

Because of the licensing, and scheduling, impacts from these environmental issues and the overall financial condition of the organization, EWEB staff have begun the process of re-setting the Project implementation schedule. When issued, the new license will contain the negotiated timelines for implementation of the required actions. By using the time allowed under the Settlement Agreement to create a manageable financial and construction sequencing plan, EWEB staff hope to spread and smooth the construction work for the overall benefit of EWEB. This will result in a more manageable annual workload for EWEB and our contractors, and a more balanced expenditure projection over the life of the construction project:

- 2014 – Begin powerhouse, transmission and substation work.
- 2015 – Complete transmission and substation construction.
- 2016 – Carmen powerhouse re-commission; begin fish passage construction.
- 2017 – Begin turbine and generator work; continue fish passage and habitat work.
- 2018 – Complete turbine and generator work; continue fish passage and habitat work.
- 2019 – Complete fish passage and habitat work.
- 2020 – Complete campgrounds and other ancillary project work.

It is also worth noting that in re-evaluating the Project implementation schedule and looking at critical work elements, it has become apparent that due to the aging infrastructure, EWEB needs to focus on the power generation components of the Project in the short term, and then use the time allowed under the Settlement Agreement to complete the majority of the fish passage elements.

Taking this path will enable us to manage several important aspects of the Project appropriately: (1) we preserve the ability to generate power at Carmen-Smith by addressing that risk first, (2) we schedule the majority of the project spending into 2016 and beyond, which benefits the organization's financial picture, and (3) we maintain a spread in project construction work so that no particular year is too heavy in either construction or expenditures. An updated economic analysis based upon this schedule, including impacts to the long term financial plan, has been scheduled for Board discussion on April 2, 2013.

Recommendation

This memorandum is being provided for the Board's information only.

Requested Board Action

None.