

City of River Falls – Hydroelectric Operations Options

Executive Summary

The City of River Falls owns and operates two hydroelectric facilities located on the Kinnickinnic (Kinni) River. The two facilities, Junction Falls and Powell Falls, are located in the City, have a total installed capacity of 375 kW, and currently operate under a Minor Water Power Project license issued by the Federal Energy Regulatory Commission (FERC). The two hydroelectric facilities operate to generate electricity that is then sold to the City's electric customers, offsetting the need to purchase replacement power. The Project's FERC license (FERC P-10489) expires on 08/31/2018 and the City is currently in the process of relicensing the Project facilities. The Kinni River is designated as a Class I trout stream upstream and downstream of the Project, and Agencies and other stakeholders expressed interest in evaluating options that may result in the Project facilities being removed.

The City of River Falls contracted with TRC to assist the City by providing an alternatives analysis designed to assist the City in determining a course of action for the future of these facilities. Five options were evaluated: 1) FERC License Extension & Community Planning Process, 2) FERC License Application, 3) FERC License Application with a Settlement Agreement, 4) Surrender the License with Facilities in Place, and 5) Surrender the License with Dam Removal. TRC compiled a list of studies likely to be requested and associated cost estimates for each option.

Detailed information summarized below is outlined in the attached spreadsheets (Attachment A). Each sheet includes a summary of studies likely to be needed (ranked Low, Moderate, or High likelihood) for each option with cost estimates. For the License Extension Option we ranked the studies according to their value for the community-planning process. We included a range of low to high cost estimates, as study scope and costs are often negotiable and vary based on site-specific conditions. Where possible, we assumed City staff would work with the local university, Agencies, and stakeholders to conduct studies. Depending on the scope of study negotiated, this could help the City to gravitate more toward the low end of our estimates.

Summary of Options:

Option 1: FERC License Extension & Community Planning Process

Under Option 1, the City of River Falls would request a license extension from FERC. The City has initiated contact with members of FERC staff, who are evaluating the potential to grant a five to ten year extension. The extension request, if granted, would allow the City time to undergo its community planning process to thoroughly discuss the future of the hydroelectric projects, dams, and potential redevelopment of the river. Studies listed under Option 1 (Attachment A) are not required for a FERC license extension and, at the City's option, can be completed during the community planning process to help the City and its citizens evaluate current site conditions and potential future changes. During this planning process, the City would select the ultimate option (Option 2, 3, 4, or 5) they wish to pursue. Data gathered during the planning period may be utilized in the future, potentially reducing some costs for studies conducted under the future option chosen.

All of these studies are optional, and we believe some of the studies will add little value to the planning process. The low cost estimate excludes the "Low" likelihood studies, while the high cost estimate includes all of the studies listed in Attachment A. The cost estimate for Option 1 ranges from **\$2,000 to**

\$223,000. Note that the cost for this option would be added to whatever additional option the City determines to pursue when the extension expires.

Option 2: FERC License Application

Under Option 2, the City would continue to pursue the Traditional Licensing Process (TLP) as originally planned. This option would allow the City to relicense and operate the hydroelectric facilities and generate power for the duration of the license (30 years), or until it determines it no longer wishes to operate all or a portion of the Project facilities. The objective of the studies listed under Option 2 are to provide sufficient information in the relicensing, per 18 CFR 4.61 (contents of application for a License for a Minor Water Power Project and Major Water Power Projects 5 MW or less), to allow FERC to prepare an Environmental Assessment and issue a new license. This option treats the licensing of the hydroelectric facilities as separate from the Kinni River Corridor planning process.

The low cost estimate excludes the “Low” likelihood studies, while the high cost estimate includes all of the studies listed in Attachment A. The cost estimate for Option 2 ranges from **\$218,000 to \$444,000.** This cost estimate also includes the range of costs to prepare a license application. It does not include any costs of future license requirements.

Option 3: FERC License Application with Settlement Agreement

Under Option 3, the City would proceed with the FERC License Application with the addition of a Settlement Agreement among the City (as the Licensee), Agencies and other stakeholders. The objective of this option is to provide sufficient information in the relicensing process, per 18 CFR 4.61 (contents of application for a License for a Minor Water Power Project and Major Water Power Projects 5 MW or less), to allow FERC to prepare an Environmental Assessment, while also working with Agencies and other stakeholders to support the community-planning process for the Kinni River Corridor. The Settlement Agreement would need to address issues and concerns brought forward by the Agencies and other stakeholders and may allow the City to eliminate or decrease the scope of many of the studies in favor of using currently available data or easily developed data to determine necessary license requirements.

The low cost estimate excludes the “Low” likelihood studies, while the high cost estimate includes all of the studies listed in Attachment A. The cost estimate for Option 3 ranges from **\$191,000 to \$397,000.** In addition to studies, the cost estimate for this option includes an estimate for negotiating a Settlement Agreement and preparing the license application. It does not include any costs of future license requirements that result from the settlement.

Option 4: Surrender with Facilities in Place

The City may choose to surrender its FERC license and maintain the two hydroelectric project dams without operating the generating facilities. The objective of this option is to provide sufficient information in a surrender application to allow FERC to prepare an Environmental Assessment, issue an order, and transfer dam safety requirements to the state of Wisconsin (18 CFR Part 6 Surrender or

Termination of License; state of Wisconsin Chapter 31 regarding dam safety). For the purpose of this analysis, it was assumed the City of River Falls would retain ownership of the hydroelectric facilities.¹

Power generation would cease and the City would need to commit to specific plans maintaining the dams in a safe and stable manner. Continued dam safety oversight would be through the WDNR. The City would need to coordinate with the WDNR to determine requirements for maintaining the dams.

TRC does not believe any significant studies should be required for this option. Other than historic structures, and possibly Projects Costs and Socioeconomics, TRC has placed a “Low” likelihood of these studies being required. That being said, we cannot be certain how FERC will rule on the need for all of these studies. There are additional risks regarding the unknown requirements FERC may place on the Project prior to issuing a surrender order, such as removal of one or both dams.

A surrender application for a minor project would be in the form of a letter outlining the proposed disposition of the project. Supporting documentation from Agencies and other stakeholders would be helpful to the process.

The low cost estimate excludes the “Low” likelihood studies, while the high cost estimate includes all of the studies listed in Attachment A. The cost estimate for Option 4 ranges from **\$24,000 to \$236,000**. It does not include any costs of future maintenance requirements under WDNR oversight, other possible FERC requirements under the surrender order, or future costs associated with dam removal or other Kinni River projects.

Option 5: Surrender with Dam Removal

The City may choose to surrender its FERC license and propose removal of one or both dams.² The reasons for removal rather than simply surrender with facilities in place would be based on a community desire to remove the facilities or the City’s choice to eliminate all future dam safety obligations. The objective of this option is to provide sufficient information in the surrender-removal application to allow FERC to prepare an Environmental Assessment and issue an order (18 CFR Part 6, Surrender or Termination of License).

This option includes a variety of studies and activities that would likely be needed to ensure safe dam removal, stabilization of the river corridor, and minimization of environmental impacts. It includes cost estimates for removal, excavation and disposal of sediments, and surrender application preparation.

The low cost estimate excludes the “Low” likelihood studies, while the high cost estimate includes all of the studies listed in Attachment A. The cost estimate for Option 5 ranges from **\$660,600 to \$4,450,000**. The large range in the cost estimates is due to currently unknown site-specific characteristics, specifically any sediment removal from the impoundment. Studies outlined herein would provide detail needed to more accurately determine final costs. It should also be noted that costs for implementation of the Lake George Stormwater Plan are not included in this cost estimate.

¹ When a licensee surrenders a Project license, FERC first looks for another owner to take over the license and operate the hydroelectric facilities. To avoid the possibility of an alternate operator taking over the license, the City would need to clearly communicate its desire to shut down the generation and would require support of the Agencies and stakeholders. Due to the size of these projects, although possible, we believe it is unlikely that anyone else will step forward with the intent to buy and operate the project.

² If one of the two dams is removed under this option, the remaining dam would fall under Wisconsin Department of Natural Resources Chapter 31 jurisdiction, as in Option 4.

Summary of Cost Estimates

Cost estimates for each option are summarized below.

Table 1. Low and High Cost Estimates for Hydroelectric Options

Option	Low Cost	High Cost
Option 1: FERC License Extension & Community Planning Process (Ultimate disposition – the cost of the appropriate option is added to Option 1)	\$2,000	\$223,000
Option 2: FERC License Application (Relicensing)	\$218,000	\$444,000
Option 3: FERC License Application with Settlement Agreement	\$191,000	\$397,000
Option 4: Surrender with Facilities in Place (Does not consider future costs of dam removal and other River projects)	\$24,000	\$236,000
Option 5: Surrender with Dam Removal	\$660,600	\$4,450,000