



# Hydroelectric Licensing Workshop

January 13, 2015

# Introductions

Mayor, City Council, and Utility Advisory Board

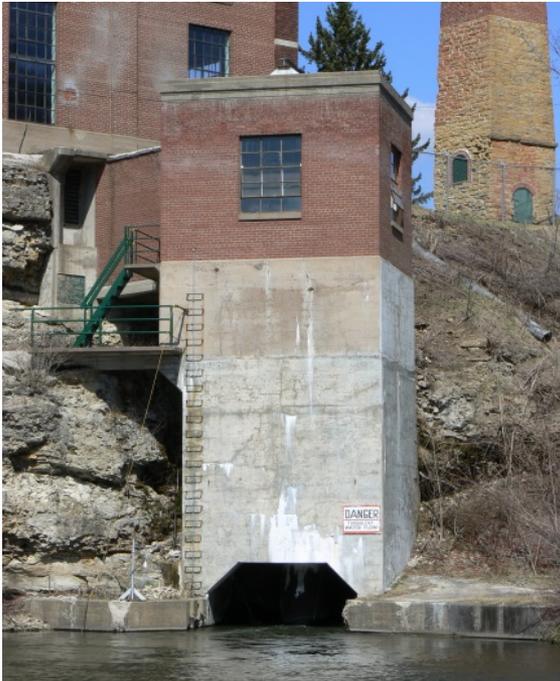


# River Falls Hydroelectric Project

- Federal Energy Regulatory Commission (FERC)
- Project Number P-10489
- 30-year license expires August 31, 2018

# River Falls Hydroelectric Project

Federal Energy Regulatory Commission (FERC) Project No. 10489



## Junction Falls, Upper Hydro

Lake George is its reservoir

## Powell Falls, Lower Hydro

Lake Louise is its reservoir



# Where are we?

- 30-year license expires August 31, 2018
- Current process:
  - November 2013 – Submitted Pre-Application Document
  - January 2014 – Granted request for Traditional Licensing Process
  - March 24, 2014 – Stakeholder meeting
  - May 23, 2014 – Comments and study requests received
  - June-September – Reviewed comments, continued stakeholder meetings, and began financial analysis
  - October 20, 2014 – Completed preliminary financial analysis
  - November – Hired TRC for licensing analysis
  - December 9, 2014 – Hydro Workshop #1
  - December 9, 2014 – Council adopted 2015 Strategic Plan with initiative of enhancing Kinnickinnic River Corridor
  - January 13, 2015 – Hydro Workshop #2

# December Workshop Takeaways

1. Consensus on the need for a community planning strategy
2. Interest in further discussion of financials
3. Consensus not to pursue expansion or transfer
4. No urgency to pursue either a full relicense or immediate surrender
5. Consensus for an additional workshop

# City Council Priorities

1. Providing opportunities for wide and thorough community input
2. Retaining flexibility for future decision making
3. Spending limited resources wisely

# Option 1: Extension

- Objective: To extend the current license providing time for the City to initiate and complete its public review and input process about the future of the hydroelectric projects, dams, and potential redevelopment of the river.
- If granted, no studies would be necessary during the community planning process. However, many studies could assist in planning and reduce future costs.
- Stakeholder and resource agency support would improve the chances of approval.

# Option 1: Extension impacts

- Financial Considerations:
  - Low Cost = \$2,000                      High Cost = \$223,000
  - Extension would lead to the City pursuing Option 2 – 5 at the end of the license period. Costs associated with this option are added to the selected option.
  - Studies completed as part of the planning process could reduce the future study obligations of the selection option.
- Flexibility Considerations:
  - Retains all options for continued operation of the hydros at one or both facilities, surrender, and dam removal and one or both facilities.

# Option 2: Relicense

- Objective: To provide sufficient information in the relicensing to allow FERC to prepare an Environmental Assessment and issue a new license.
- This is the City's current path in the Traditional Licensing Process with the objective of another 30 year license.
- Studies would need to be completed in 2015 to maintain current timeline.

# Option 2: Relicensing impacts

- Financial Considerations
  - Study scope and costs are often negotiable.
  - City staff could work with UWRF, agencies, and stakeholders to conduct some studies.
  - Low Cost = \$218,000      High Cost = \$444,000
- Flexibility Considerations:
  - Operates independently from Kinni Corridor Planning
  - Leaves all future options on the table, but commits the City to generate power until some future date

# Option 3: Relicense w/ Agreement

- Objective: To provide sufficient information in the relicensing to allow FERC to prepare an Environmental Assessment.
- The settlement agreement will hopefully allow the City to eliminate or decrease the scope of many of the studies in favor of using currently available data or easily developable data to determine necessary license requirements.

# Option 3: Relicense w/ Agreement impacts

- Financial Considerations
  - City staff could work with UWRF, agencies, and stakeholders to conduct some studies.
  - Settlement agreement aims to lower cost of studies from Option 2
  - Low Cost = \$191,000                  High Cost = \$397,000
- Flexibility Considerations:
  - Attempts to support Kinni River Corridor Planning efforts
  - Leaves all future options on the table, but commits the City to generate power until some future date determined through the agreement negotiations.

# Option 4: Surrender w/ Facilities

- Objective: 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.
- We cannot be sure how FERC will rule on conditions for surrender.
- A surrender application for a minor project would be in the form of a letter outlining the proposed project disposition.

# Option 4: Surrender w/ Facilities impacts

- Financial Considerations
  - Cannot be certain of FERC conditions on surrender
  - Does not factor in future costs of dam removal
  - Low Cost = \$24,000                      High Cost = \$236,000
- Flexibility Considerations:
  - Pre-determines some aspects of Kinni Corridor Planning
  - Leaves open timeline and options for dam removal
  - Eliminates option of future power generation

# Option 5: Surrender w/ Removal

- Objective: To provide sufficient information in the surrender-removal application to allow FERC to prepare an Environmental Assessment and issue an order
- Commits the City to an extensive study, surrender, and dam removal process in the short-term
  - Annual licenses not to be applied for
- Unknown site conditions lead to a larger range of costs

# Option 5: Surrender w/ Removal impacts

- Financial Considerations
  - Low Cost = \$660,600      High Cost = \$4,450,000
  - Note: Lake George Area Stormwater Treatment Plan (2005) not included in these estimates.
- Flexibility Considerations:
  - Pre-determines many aspects of Kinni Corridor Planning
  - Eliminates option of future power generation
  - Commits the City to significant expenses in short-term (partnerships available for possible partial grant funding)

# Financial Considerations

OPTIONS	LOW	PAYBACK	HIGH	PAYBACK
Extension	\$2,000	Immediate	\$223,000	2019
Relicense	\$218,000	2019	\$444,000	2021
Relicense (w/ Agreement)	\$191,000	2018	\$397,000	2021
Surrender (w/ Facilities)	\$24,000	Immediate	\$236,000	2019
Surrender (w/ Removal)	\$660,600	2023	\$4,450,000	None

\*RJF revised 01/13/2015

# Sample Financials - 2013

<b>Historical Costs vs Revenues</b>	<b>2013</b>
Total Hydraulic Expenses (PSC)	\$ 39,685
Total Hydraulic Depreciation (PSC)	\$ 21,468
Pilot Calculation (PSC)	\$ 14,279
TOTAL EXPENSES (calculated)	\$ 75,432
TOTAL GENERATION (KWH)	1,392,000
Retail Energy Charge (PSC)	0.0977
Electric Sales (calculated)	\$ 135,998
Wholesale rate - Actual (WPPI)	0.0801
Cost per Kwh to generate (calculated)	0.0542
Green Energy rate	0.1001
Cost per Kwh to generate	0.0542
Net Revenues from Generation	\$ 60,567
Net Revenues from Purchasing Power	\$ 24,513
Income Gain/(Loss) by Generating	\$ 36,054

# Flexibility Considerations

- FERC License Extension
  - Provides greatest flexibility in future options
- FERC License Application (Full Relicense)
- FERC License Application with Settlement Agreement
  - Continuing with licensing commits City to generate power for an undetermined period of time.
- FERC License Surrender with Facilities in Place
  - Eliminates future hydro generation, opens City to unknown conditions from FERC, commits City towards specific vision of Kinni River Corridor.
- FERC License Surrender with Dam Removal
  - Eliminates future hydro generation, commits City towards specific vision of Kinni River Corridor, and commits City towards significant expenses in short term.

# Next Steps

- Consider the Resolution items before Council:
  - Endorsing Kinnickinnic River Corridor Planning Strategy
  - Directing staff to apply for a license extension
  - Approve additional review of hydroelectric facilities maintenance expenditures during the extension period
  - Identifying the net position of the Electric Fund-Hydroelectric Operations beginning January 1, 2015