
Hydropower Joint Ownership Project with Saskatoon Tribal Council

Recommendation

That the Standing Policy Committee on Environment, Utilities and Corporate Services recommend to City Council:

1. That the Administration be directed to prepare a Memorandum of Understanding with the Saskatoon Tribal Council that outlines a joint ownership model to begin a feasibility study for a hydropower station in Saskatoon; and
2. That the Memorandum of Understanding be brought forward to the Standing Policy Committee on Environment, Utilities and Corporate Services, and City Council for City approval.

Topic and Purpose

The purpose of this report is to provide an update on the proposed hydropower project and present the benefits of a partnership between the Saskatoon Tribal Council and the City.

Report Highlights

1. Saskatoon Light & Power has explored the feasibility of a hydropower station at the Saskatoon weir.
2. Joint ownership of the project between the City and the Saskatoon Tribal Council will bolster all aspects of the project and benefit both parties. A partnership will strengthen applications to senior governments for rates and capital contributions, and the combined resources of both agencies result in a stronger project team during the investigatory and construction phases, should the project proceed to construction.
3. The project provides an opportunity for the Saskatoon Region and the Saskatoon Tribal Council to realize economic and social benefits.
4. Earlier stakeholder and community engagement shows support for a green power project at the weir that maintains its visual beauty, serenity and natural ecology. Continued engagement is planned as part of a new feasibility study.

Strategic Goals

The recommendations in this report support the short- and long-term strategies to strengthen relations with local Aboriginal organizations under the Strategic Goal of Quality of Life and the 2017 commitment to the Truth and Reconciliation Commission (TRC) Calls to Action.

The recommendations in this report support the long-term strategy to increase revenue sources and reduce reliance on residential property taxes under the Strategic Goal of Asset and Financial Sustainability. The report also supports the long-term strategy to

create new sources of green energy where feasible under the Strategic Goal of Environmental Leadership. Identifying opportunities to replace conventional energy sources with green energy technologies and finding alternate ways of generating capacity to support operations is in line with the City's four-year priorities.

Background

In 2009, Saskatoon Light & Power commissioned pre-feasibility engineering and environmental baseline studies of several possible design concepts for a hydropower station at the Saskatoon Weir, including a white water park feature. While there was interest and potential for the hydropower project to generate revenue for the City, the project requires a substantial up-front capital contribution.

When the hydropower facility was discussed publicly in 2009, one potential feature suggested was a white water park at the weir. At the time it was not known the level of community support or the impact on the operations of a hydropower facility at this location. In 2014/15, during the development of the City's Recreation and Parks Master Plan, through extensive public consultation and research, a number of indoor and outdoor recreation facility priorities were identified (both upgrades to existing facilities and building new facilities). A facility such as a white water park was not identified in the list of high priorities and as recommended in the Master Plan. As facilities become more specialized or serve a smaller segment of the population, the funding model for this type of project should include a combination of private/non-profit investment, fundraising, user fees, and potentially some public taxes. Therefore any consideration for such a facility would most likely require leadership interest from either a developer, private operator, or non-profit organization.

At its meeting held on April 27, 2015, City Council considered the Proposed Hydropower Station at the Saskatoon Weir – Update report and resolved:

“That the Administration be directed to report back to the Standing Policy Committee on Environment, Utilities and Corporate Services with development options and potential next steps to advance the hydropower initiative.”

Report

Hydropower Station at the Saskatoon Weir

The City's target is to produce or generate 10% of its annual energy requirements from local, renewable resources. Currently, the City is generating green power with the Landfill Gas Collection & Power Generation system, a multi-partner Solar Photovoltaic Demonstration Site, and a limited-subscriber Green Power program that offers environmentally preferred electricity at a higher rate.

The Saskatoon Weir is an ideal location for expanding the City's clean power generation program to hydropower and there is support from the community and governing bodies in concept. Hydropower projects have been successfully implemented in other communities across Canada, although many don't maintain the low-profile design that will be proposed.

The pre-feasibility work completed to date clearly indicates that the hydropower station is expected to generate a positive internal rate of return, which means that the project is economically viable and would result in a profit for the project owners. Gross annual revenue streams are expected to be in the range of \$3.6 to \$5.1 Million, which would be used to repay capital and fund ongoing operating costs. This conclusion from the pre-feasibility study would need to be confirmed through a full feasibility study. The City's conclusion that the project is expected to be economically viable is further supported by the fact that two proponents have approached the Administration, requesting to build the project at no cost to the City.

In addition, the annual reduction in greenhouse gas emissions is estimated at 21,120 tonnes. A new feasibility study is required before any negotiations on power rates can begin.

In addition to economic and environmental benefits, the project includes necessary restoration to the weir infrastructure and an extension of the existing 33rd Street multi-purpose pathway, improving accessibility across the river.

Saskatoon Tribal Council

The Saskatoon Tribal Council's agreement with the Federation of Sovereign Indigenous Nations identifies it as the representative for the seven First Nations communities in the Saskatoon area. Joint submission with the Saskatoon Tribal Council opens up additional funding and sponsorship opportunities for this project through the First Nations Power Authority and their agreement with SaskPower to support green power generation projects.

The combined strengths of the City of Saskatoon and the Saskatoon Tribal Council will result in a partnership where both partners are needed; both will be essential to the success of the project; and both will realize significant benefits.

Community Support

Earlier stakeholder and community engagement shows a majority of citizens would support the project, as long as the current visual beauty, serenity and natural habitat is maintained. Attachment 1 provides new engagement activities identified for critical stages of the feasibility study to ensure this legacy project reflects the pride and community spirit of citizens, possibly as a signature project to recognize the spirit and importance of Honouring the Truth, and Reconciling the Future.

Next Steps

Once the Memorandum of Understanding has been drafted by the Administration and the Saskatoon Tribal Council, it will be brought forward to each respective government for execution. Once approved, the partners will work together to resolve next steps including a procurement approach for further consideration by each agency.

Approval of the recommendations of this report do not give the Administration authority to proceed with procurement or construction. The Memorandum of Understanding is a partnership agreement to jointly investigate the next steps of the project. Subsequent reports will provide City Council with the information it needs to determine whether or not it will proceed with construction of the project.

Options to the Recommendation

The City could approach SaskPower independently to negotiate a Power Purchase Agreement for the proposed hydropower station. This option is not recommended because the City would realize all of the benefits of a partnership with the Saskatoon Tribal Council identified in the report.

SL&P could interconnect the hydropower station to its own grid and offset bulk power purchases from SaskPower. This would be a wholly City led project, and the City could use the project towards its corporate or community emissions targets. This option is not recommended as the internal rate of return is lower than all other development concepts.

Public and/or Stakeholder Involvement

Informal and formal conversations will be on-going with major stakeholder groups such as SaskPower, Meewasin Valley Authority, University of Saskatchewan, Saskatchewan Ministry of the Environment, Water Security Agency; community-based special interest groups; and adjacent residents.

Communication Plan

While many of the project details are unknown until further work is carried out, citizens can find information about the project at saskatoon.ca/hydropower. Communications planning will be ongoing as the project progresses and will include website updates, media relations and advertising where required to promote accomplishments and opportunities for citizens to engage.

A list of Frequently Asked Questions is included in Attachment 2.

A preliminary set of conceptual artist renderings of the proposed hydropower station is shown in Attachment 3, demonstrating the low-profile infrastructure and responsive design of the small facility that houses the controls.

Financial Implications

Project investigation to date has been funded from Capital Project #1281 - Sustainable Power Generation Options.

The capital costs are expected to be in the order of \$61.5 million to \$65.2 million, although this is a preliminary estimate. Because the project is expected to be financially viable and provide a positive rate of return, there will be net financial benefit to the City. The cost of capital will need to be repaid, and after that the intent is that the project would provide a legacy source of revenue for the partners. In the short term, the City

may be able to construct the pedestrian walkway at no direct cost to the City, and rehabilitate the existing weir as part of the project. The amount of short-term revenue available to the City will be known once the feasibility study is complete and the first phases of the procurement process are complete.

Other Considerations/Implications

There are no policy, environmental, privacy, or CPTED implications or considerations.

Due Date for Follow-up and/or Project Completion

Administration will present a proposed Memorandum of Understanding with the Saskatoon Tribal Council for City Council approval in 2017, to include terms of a partnership and proposed strategy for developing the hydropower project.

Public Notice

Public Notice pursuant to Section 3 of Policy No. C01-021, Public Notice Policy, is not required.

Attachments

1. Critical Activity and Community Engagement Timeline
2. Frequently Asked Questions – Hydropower Project
3. Rendering of Proposed Hydropower Station

Report Approval

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