



**The Corporation of the City of Sault Ste. Marie
Special Meeting of City Council
Agenda**

Monday, July 9, 2018

4:30 pm

Council Chambers

Civic Centre

Pages

1. Approve Agenda as Presented

Mover Councillor P. Christian

Seconder Councillor J. Krmpotich

That the Agenda for the 09 07 2018 Special City Council Meeting as presented be approved.

2. Declaration of Pecuniary Interest

3. Appointment of Mayor Provenzano as Proxy for Shareholder

Mover Councillor S. Butland

Seconder Councillor J. Krmpotich

Resolved that City Council is now authorized to meet in open session as the sole shareholder of PUC Services Inc.; and

Further Be It Resolved that City Council appoints Mayor Christian Provenzano as Council's proxy to vote on a resolution of the shareholder of PUC Services Inc.

4. Closed Session

Mover Councillor S. Butland

Seconder Councillor O. Grandinetti

Resolved that this Council proceed into closed session as the shareholder to consider one item – Sault Ste. Marie Smart Grid.

(Municipal Act R.S.O. 2002 – section 239 (2) (j) a trade secret or scientific, technical, commercial or financial information that belongs to the municipality or local board and has monetary value or potential monetary value)

5. Sault Smart Grid – PUC Services Inc.

3 - 20

Representatives of PUC Services Inc. will be in attendance.

A report of the Chief Administrative Officer is attached for the information of Council.

6. Adjournment

Mover Councillor S. Butland

Seconder Councillor O. Grandinetti

That this Council shall now adjourn.



Sault Smart Grid

SSM City Council, July 9, 2018



Smart Grid & Regulation

- ❖ 1998 Electricity Act – some regulatory definition provided
- ❖ OEB Regulatory understanding & oversight developing
- ❖ 2009 - Green Energy & Green Economy Act
- ❖ Mar 25, 2010 – OEB Filing Requirements: Distribution Plans – Filing under Deemed Conditions of Licence
- ❖ Nov 23, 2010 – Min. of Energy Order in Council to OEB - ...steps in relation to the establishment, implementation and promotion of a smart grid.
 - (objectives from Electricity Act + objectives from Green Energy Act)

What is a Smart Grid?

- ❖ Sault Smart Grid has two main components:
 - Voltage Optimization (VVO)
 - Controls the voltage to increase efficiency and lower power consumption
 - <https://www.youtube.com/watch?v=7uco3UuHbVk>
 - Distribution Automation (DA)
 - Self-healing grid
 - Increases reliability of system
 - <https://www.youtube.com/watch?v=V6haWLM0Rrs>

Other Smart Grid Benefits

- ❖ Grid Insight
 - Allows us to have greater understanding of the system and to make more effective data driven decisions
- ❖ Allows for increased Distributed Energy Resources (DERs)
 - E.g. Electric Vehicle, Small home generation
- ❖ Significant GHG emission reductions
 - Reduction of 2,804 tonnes CO₂ annually directly from Sault Smart Grid

2018 Project

❖ Timeframe:

- Start fall 2018 (engineering work)
- Construction starts spring 2019
- Project completed early 2020





2018 Project Proposal

Project Cost (direct)	\$32,751,469
Funding (approx.)	\$(14,340,000)
Net Project Cost	\$18,501,469



Monthly Costs

Item	Monthly Payment
LEASE PAYMENT TOTAL	\$123,989 indexed
Maintenance	\$62,487 indexed
TOTAL	\$186,476 indexed



Monthly Benefits

Item	Monthly Amount
Energy Savings	\$129,500 indexed
Avoided CapEx	\$28,559
LDC Efficiencies*	\$2,568 indexed
Depreciation Tax Benefit	\$28,930
TOTAL MONTHLY SAVINGS	\$189,557 indexed

* Conservative



Bill Impacts

Residential	Fixed portion	Variable portion	Total
SSG cost	\$0.66	\$1.01	\$1.67
SSG Efficiency Gain			\$(1.78)
Impact to bill (direct savings vs costs)			\$(0.11)
Reliability gain (Leidos analysis)			\$(3.27)
Direct and Indirect Impact			\$(3.38)

Events to Date

- ❖ Financial Due Diligence completed by Navigant (2016) and PUC (2018)
 - Results included in this presentation
- ❖ Technical Due Diligence completed by Navigant
- ❖ PUC Board approval June 26th, 2018
- ❖ Legal Due Diligence underway
- ❖ Project Agreement
 - Draft completed
 - Final version subject to funding amounts/timing, OEB conditions

Next Steps

- ❖ With Shareholder approval, next steps are:
 - Confirm funding amounts and negotiate agreements
 - Expect to have in place in early fall
 - Submit Interim Capital Module (ICM) to Ontario Energy Board (OEB)
 - Submission in early fall, decision in early 2019.

Pre-Work Plan

- ❖ Prior to OEB approval, we will proceed with some engineering work to get the project underway



Resolution

WHEREAS the PUC Services Board has approved the Smart Grid Proposal as presented on June 26, 2018 subject to the following conditions precedent:

- Federal/Provincial funding approved (>\$9 million)
- Shareholder approves the project
- OEB approval for the first of two consecutive ICMs in place

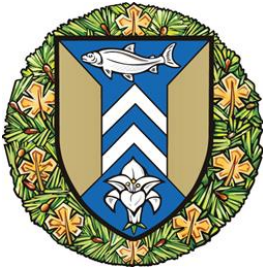
AND WHEREAS the PUC Services Inc. Board is required to seek Shareholder approval for a single capital expenditure in excess of \$5 million or any capital expenditure in aggregate in excess of \$10 million. An approval decision is now being requested for the Smart Grid Proposal by the Shareholder

BE IT RESOLVED THAT the Shareholder approves the Sault Smart Grid proposal as presented subject to the following remaining Conditions Precedent:

- Federal/Provincial funding approved (>\$9 million)
- OEB approval for the first of two consecutive ICMs in place



Questions?



**The Corporation of the
City of Sault Ste. Marie**

C O U N C I L R E P O R T

July 9, 2018

TO: Mayor Christian Provenzano and Members of City Council

AUTHOR: Al Horsman, Chief Administrative Officer

DEPARTMENT: Chief Administrative Officer

RE: Sault Smart Grid Project – Sault Ste. Marie PUC Services

PURPOSE

The purpose of this report is to recommend to Mayor and Council as the Sault Ste. Marie PUC Services Shareholder approval for the recommendation of the PUC Services Board respecting the Sault Ste. Marie Smart Grid Project.

BACKGROUND

The (Utility Distribution) Smart Grid project has been under consideration by PUC Services senior management for some time. This review has included significant negotiation with the proponent Infrastructure Energy (IE) as well as on-going consultation under non-disclosure agreements with key stakeholders including the City Chief Administrative Officer (CAO), Sault Ste. Marie Innovation Centre (SSMIC) Executive Director, and Sault Ste. Marie Economic Development Centre Chief Executive Officer.

Most recently at its meeting of November 20, 2017 City Council received a report from the City CAO that provided an overview of the socio-economic and development benefits of the proposed project. This report noted that investigation of the technical and financial components of the initiative was being led by PUC Services senior staff and would be presented to the PUC Services Board for review and final decision. At its meeting of December 11, 2017, Council endorsed a grant application by PUC Services in support of the project.

The technical and financial review of the project has now been completed and the project was approved by the PUC Services Board at its meeting of June 26, 2018, subject to grant applications for the initiative being successful and Ontario Energy Board (OEB) approval being secured. At its Special Meeting of July 9, 2018 Council as Shareholder is being asked to approve the PUC Services Board recommendation to proceed with the project subject to the conditions described above. A short presentation on the project will be made by PUC Services senior management at the July 9, 2018 Shareholder meeting.

ANALYSIS

As described in the CAO's Utility Distribution Microgrid Report to Council dated November 20, 2017 there are a number of socio-economic and development benefits that could come subsequent to the project being approved. These most notably include a Centre of Excellence (CENEX) development to be located in the downtown. However, other benefits are the potential of \$9 million in local contract work, increased taxes of \$250,000 annually and approximately 120 new direct and indirect jobs.

While City administration focussed on ancillary benefits, the City CAO was also included in regular updates and negotiation of project terms and is comfortable with and supports the technical and financial components of the project that will be bill neutral to the PUC Services customer. This comfort includes consideration of liability that will not be increased over current levels as a result of this project being approved. It is further understood that much of the infrastructure needs associated with this initiative would still be required using traditional versus Smart Grid technology which contributes to the project being bill neutral.

Staff from the City, SSMECD and SSMIC are also examining ways to leverage this project should it proceed to advance economic development opportunities in the energy sector and sectors requiring high quality power.

City Staff therefore recommend that Council as PUC Services Shareholder approve the recommendation of the PUC Services Board to proceed with the project subject to grant applications being successful and OEB approval being obtained.

FINANCIAL IMPLICATIONS

The Smart Grid project is estimated to be approximately \$36 Million, but will be utility bill neutral. If the project proceeds the proponent will hold responsibility for these capital expenditures under a project agreement with PUC Services. The City is currently not expected to contribute to the technical or financial components of the project although may be approached on the later outcomes for the project – specifically the Energy Services Company (ESCO) and CENEX proposals.

STRATEGIC PLAN / POLICY IMPACT

The Sault Microgrid is supportive of the City of Sault Ste. Marie's Corporate Strategic Plan on the following fronts:

- Infrastructure - Planning for new infrastructure to replace deteriorating assets and create new public spaces will support competitiveness on a global scale. New infrastructure is essential to the City's growth, economic development, citizen safety and quality of life
- Community Development and Partnerships:

- Develop Partnerships with Key Stakeholders - Continued revitalization of public spaces creates opportunities for economic growth, diversity and social interaction. A truly dynamic community demonstrates vibrant social activity. We are committed to ongoing communication and stakeholder consultation to create an environment that encourages engagement and the exploration of mutual goals to grow our community. Collaboration with community partners and stakeholders is essential to our success.
- Maximize Economic Development and Investment - We foster an environment where economic development dollars are maximized so that existing and new business can flourish. Citizens expect true value for their tax dollars. We are committed to maintaining financial viability by strategically embracing our future with careful consideration and calculated risk in all undertakings.

RECOMMENDATION

It is therefore recommended that Council take the following action:

That Council as Shareholder approve the PUC Services Board recommended Smart Grid project that is contingent upon successful grant applications and Ontario Energy Board approval.

Respectfully submitted,



Al Horsman
Chief Administrative Officer
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a.horsman@cityssm.on.ca

**RESOLUTION OF THE SHAREHOLDER OF
PUC SERVICES INC.**

WHEREAS the PUC Services Board has approved the Smart Grid Proposal as presented on June 26, 2018 subject to the following conditions precedent:

- **Federal/Provincial funding approved (>\$9 million)**
- **Shareholder approves the project**
- **OEB approval for the first of two consecutive ICMs in place**

AND WHEREAS the PUC Services Inc. Board is required to seek Shareholder approval for a single capital expenditure in excess of \$5 million or any capital expenditure in aggregate in excess of \$10 million. An approval decision is now being requested for the Smart Grid Proposal by the Shareholder

BE IT RESOLVED THAT the Shareholder approves the Sault Smart Grid proposal as presented subject to the following remaining Conditions Precedent:

- **Federal/Provincial funding approved (>\$9 million)**
- **OEB approval for the first of two consecutive ICMs in place**

The undersigned being the sole Shareholder of the Corporation hereby signs the foregoing resolution pursuant to the provisions of the Ontario Business Corporations Act.

Dated this day of, 2018

The Corporation of the City of Sault Ste. Marie

Per: _____
Christian Provenzano, Mayor

Per: _____
Malcolm White, City Clerk