



# The Corporation of the Town of Milton

Report To:	Council
From:	Glen Cowan, Chief Financial Officer/Treasurer
Date:	September 16, 2019
Report No:	CORS-058-19
Subject:	Loan Guarantee and New Corporation Approval for the Milton Hydro Battery Project
Recommendation:	<b>THAT CORS-058-19, Loan Guarantee and New Corporation Approval for Milton Hydro Battery Project, be received for information</b>

## EXECUTIVE SUMMARY

- Due to changes in the loan amount required as well as the need for Council approval of a new corporate entity between Milton Energy and Generation Solutions Inc. (MEGS) and Baseload Power Corp.(Baseload), Council's approvals related to the recommendations in report CORS-005-19 cannot proceed as directed
- The financial projections associated with the Vanadium Redox Battery (VRB) project have been updated by MEGS and reflect higher cost and lower revenue, reducing the financial returns previously forecasted during the initial 10-year period
- Details relating to the revised financial projections and corporate/agreement structures between MEGS, Baseload, the equipment supplier and the IESO are included in the attached letter from Milton Hydro.
- **Should Council wish for the VRB initiative to proceed, additional resolutions (relative to the recommendation above) will need to be approved and are outlined in this report**

## REPORT

### Background

On January 21, 2019, Milton Council approved borrowing by Milton Energy and Generation Solutions Inc. (MEGS) for an amount up to \$9,400,000 for a vanadium redox battery (VRB) project, as well as a guarantee in the favour of TD Bank for the loan amount. It was noted that MEGS intended to acquire the rights to an agreement with Ontario's Independent Electricity System Operator (IESO) from Baseload Power Corp. and utilize the borrowed funding to acquire the VRB with an initial capital cost of \$9.3 million. After the cost of borrowing was considered, the initiative was expected to generate positive cash flow of \$1,655,190 over the first 10 years, and leave MEGS with an asset with an estimated useful life of a further 15 years. As the timeframe for revenue generation with the IESO



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## Background

began in November 2019, approval by Council in January was timely given the acquisition and installation time required for the battery. Further details of the project and approval can be found in [CORS-005-19](#).

Since the time of Council approval of the loan guarantee amount, MEGS has continued to pursue the various agreements required to implement the VRB process as envisioned. Several of the variables and expected terms that were outlined in CORS-005-19 have since changed including:

- the estimated capital cost has increased
- there have been changes to the projected operating cash flows
- in order to secure the rights to the IESO revenue, a new corporation created in partnership between MEGS and Baseload Power Corp. will be required

As such, further approvals from Milton Town Council will be required in order for this initiative of MEGS to proceed.

## Discussion

Attached to this report is a letter from Frank Lasowski, President/CEO of Milton Hydro. It outlines the details of the revised financials/business case, as well as the proposed corporate structure to facilitate the acquisition of the VRB and revenue with the IESO. All financial figures have been prepared by MEGS based on their expertise in this field, and the agreements prepared to date and corporation structure have been discussed with O'Connor MacLeod Hanna (OMH) on MEGS' behalf. At the time of writing report CORS-058-19, it is expected that the updated business case and requests for the Town will be presented to the MEGS Board during the week of September 9<sup>th</sup> for approval.

At the time of presenting report CORS-005-19, Town staff were supportive of the original request by MEGS for the Town's guarantee of a loan of up to \$9.4 million for a VRB. There were risks associated with the project noted in that report, but they were considered tolerable given that:

- The forecast anticipated overall net revenue generation of \$1.65 million in the first 10 years (7% internal rate of return). The 10 year period coincided with the duration of the loan payments and therefore the exposure the Town would have through the loan guarantee.
- Further benefits were expected for the remainder of the 25-year anticipated lifespan of the VRB.
- Prior to the finalization of the Town's loan guarantee, the major financial variables were to be mitigated through MEGS securing the rights to the agreement with the IESO, additional warranty coverage, as well as the confirmation of the capital cost at the project's outset.



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## Discussion

CORS-005-19 was considered timely in January of 2019 as it was to provide sufficient time for MEGS in advance of the IESO revenue beginning in November of 2019.

MEGS met with the Town in August 2019 to provide an update with respect to the project. Due to the limited time available to the Town to review the updated information, and more importantly Town staff's limited knowledge in matters relating to this technology and the proposed corporation/contract structures, CORS-058-19 is being presented to Council for information with the relevant details attached in a letter from MEGS. Representatives from MEGS will be available at the Council meeting to respond to any questions that Council may have. Presentation of the updated information to Council as soon as possible was considered urgent for MEGS given that the IESO agreement provides revenue beginning in November of 2019, and with the time required to acquire and install the VRB each additional month may result in further lost revenue from the project.

**If Council wishes for the VRB initiative to proceed the following resolutions will need to be approved by Town Council in accordance with Town By-law 076-2000:**

THAT Council approve the borrowing and capital expenditure by Milton Energy and Generation Solutions Inc. in the amount of up to \$10,300,000 from TD Bank for the capital investment in the Vanadium Redox Battery Project as described in report CORS-058-19 ("MEGS Loan") as well as a \$200,000 Letter of Credit for the IESO;

AND THAT the Town of Milton provide a grant to Milton Energy and Generation Solutions Inc. in the form of a guarantee in favour of TD Bank, on terms and conditions satisfactory to the CAO guaranteeing the indebtedness of Milton Energy and Generations Solutions Inc. to TD Bank, pursuant to the MEGS Loan and Letter of Credit;

AND THAT Council approves the joint venture with Baseload Power Corporation and eventual acquisition by MEGS of a newly incorporated entity owned by Baseload Power Corporation or its principal owner, which is to become a subsidiary of MEGS, subject to terms and conditions that are to the satisfaction of MEGS;

AND THAT the Mayor and the Town Clerk be authorized to sign any required guarantees, agreements or other documents to implement the foregoing matters.



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## Financial Impact

In the original report pertaining to the VRB, a sensitivity analysis was undertaken on the projected financial results and the primary financial risks associated with the loan and project were related to the construction cost, the cost of borrowing and any potential loss in IESO guaranteed revenue. These risks were to be managed through the agreements that secured MEGS' rights to the IESO revenue, warranty coverage and tender award, as well as timely initiation of the project in advance of November 2019.

As shown in the attached letter, the financial projections have been revised and reflect both higher cost and lower revenue during the 10 year period during which the Town is guaranteeing the loan. It was noted in CORS-005-19 that if a negative financial return occurred during the period of the loan, MEGS would need to identify alternate revenue sources. As such, the revised projections developed by MEGS suggest that this potential is greater than previously presented.

Based on the financial information attached, a net return of \$1,422,194 is projected for the initial 10 year period after the interest on the debt that will be issued is considered. It is important to note that this figure includes an estimate for the residual salvage value of the VRB at the end of the tenth year. If the salvage value were to be removed (as it is MEGS' intention to retain the asset) it would present a deficit cash flow during the period of (\$135,975). These figures also assume construction initiation in October 2019 followed by IESO revenue beginning in June 2020. Every month of potential delay could jeopardize approximately \$155,469 in monthly revenue anticipated from the IESO and other sources.

As noted in the letter attached, there are other revenue opportunities and benefits not reflected in the cash flow projections prepared by MEGS as the amounts are either uncertain or in the form of savings to be received directly by Milton Hydro customers.

Respectfully submitted,

Troy McHarg  
Commissioner, Corporate Services / Town Clerk

For questions, please contact: Glen Cowan

Phone: Ext. 2151

### Attachments

Attachment 1: Letter from Frank Lasowski on behalf of MEGS

Attachment 2 (under separate cover): Confidential Attachment to Letter from Frank Lasowski on behalf of MEGS



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CAO Approval  
Andrew M. Siltala  
Acting Chief Administrative Officer





**MILTON ENERGY AND GENERATION SOLUTIONS INC.**  
 200 Chisholm Drive, Milton, Ontario L9T 3G9  
 Telephone (905) 876-4611 • Fax (905) 876-2044

To: Members of Milton Town Council

**Re: Milton Energy and Generation Solutions Inc. (MEGS)  
 Vanadium Redox Battery Project**

The purpose of this letter is to provide to Town Council an update with respect to the Vanadium Redox Battery (VRB) Project and request various approvals that will be required in order for the project to continue under new terms and conditions. The most recent update had been provided to Council in January of 2019 and resulted in Council approval of a loan guarantee of up to \$9.4 Million to support the project. Since that time there has been several changes to the project (explained below), and as the 10-year revenue window provided for in the existing IESO agreement begins in November 2019, timing is of the essence with respect to this project.

Details pertaining to VRB, the Independent Electricity System Operator (IESO) and Baseload Power Corporation (Baseload) were previously outlined in report CORS-005-19. This letter will outline the details related to the new corporation that will be required, the revised financial projections, and other considerations in relation to the new Council approvals that are required.

**Proposed New Corporation**

Baseload Power Corporation (Baseload) is a privately held, North American based energy storage and renewable energy solutions provider with over 20 years of industry experience. An IESO request for proposal was submitted by Baseload after an agreement with Milton Hydro to install the battery at 200 Chisholm Drive. After Baseload was successful in receiving the offer from the IESO for the battery, the benefits of the battery to the electrical grid and other potential customers created an interest from the MEGS Board of Directors in ownership of the Project. The IESO contract contains certain restrictions with respect to the assignment of ownership of the contract namely:

- 1) The initial owner of the IESO must maintain majority ownership until the project achieves one year of successful operation. Also up to the first anniversary of operation, the asset cannot be used as collateral against any loans.
- 2) After the first year of operation, the contract can be assigned to a third party with IESO's written consent, which consent cannot be unreasonably withheld.

MEGS staff has discussed with O'Connor MacLeod Hanna (OMH) a proposal that a new corporation be incorporated with the initial shares being totally owned by Jonathan Sandler, being Baseload's principal shareholder. As the new corporation would be totally controlled by Baseload, the IESO contract



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could be assigned to the new corporation within the guidelines of the IESO contract, namely that the IESO be notified of the change. Once the IESO contract has been assigned to the new corporation, MEGS would purchase 49% of the shares of the new corporation for a nominal amount. The other 51% of the shares of the new corporation would be purchased by MEGS on the first anniversary of successful operation of the battery project once IESO consent has been obtained. For their role in the project, Baseload will be reimbursed the \$200,000 security deposit they previously submitted to the IESO. Baseload will also be reimbursed for costs incurred to bring the battery to operation, with payment upon successful completion of the project. These costs are incorporated into the financial summary that is provided below. Baseload could also receive financial benefit after the 10 year IESO contract expires.

OMH has prepared the incorporation documents for the new corporation and once the required signatures are obtained and the new corporation is incorporated, the intention is to have Baseload assign the IESO Contract to the new corporation and the IESO will be notified of the assignment of the IESO contract from Baseload to the new corporation.

The Board of Directors for MEGS will be meeting during the week of September 9<sup>th</sup> and will be requested to approve the execution of the agreements required to acquire the proposed new corporation and the purchase and installation of the VRB.

In accordance with Town By-law 076-2000, Milton Town Council must approve the battery project and the joint venture with Baseload as well as the full acquisition of the proposed newly incorporated entity from Baseload one year after the battery receives successful operation, whereby the new corporation would then become a subsidiary of MEGS.

### **Updated Business Case & Loan Guarantee Request**

Since Council approval in January, the Japanese battery supplier withdrew their interest in the project, requiring Baseload and LS Energy Solutions LLC (LSES) the supplier of the full battery project to contract with another firm. Negotiations with a North American battery supplier were completed but the project scope, cost and delivery changed. The impact of these changes is summarized below:

- 1) The IESO contract is for 10 years from November 2019 to October 2029. The new battery supplier cannot deliver and install the battery until at least March 2020. Therefore, the revenue over the contract period has been reduced. A request for Force Majeure due to the unexpected withdrawal of the Japanese supplier has been submitted to the IESO. If successful, the contract start date would be extended.




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Due to the uncertainty, the business model assumes an IESO contract start date of November 2019 with revenue beginning in June 2020.

- 2) The new battery supplier has included as part of the capital battery costs the cost to assemble and connect the battery components onsite at 200 Chisholm, which under the January proposal, the Japanese supplier wanted MEGS to complete.
- 3) Due to the restrictions of the IESO contract, it is proposed that the LSES contract for the supply of the battery, inverters and transformers at a capital cost of \$8.6M and warranty costs over the ten years of \$1.1M be assigned from Baseload to MEGS. MEGS would contract and/or complete the additional project scope of work at cost of \$1.6M. These costs would be paid using the \$10.2 M loan from TD. MEGS would then invoice the new corporation a turnkey project of \$10.2M with ownership of the asset transferring to the new corporation upon full energization of the battery at which point MEGS would own 49% of the new corporation. MEGS would have an accounts receivable from the new corporation of \$10.2 M. The \$10.2 M receivable cannot be secured against the asset due to the IESO contract conditions until the battery has been successfully operating for one year. In addition, as per the IESO Contract, MEGS cannot acquire control or 100% ownership of the new corporation until the battery has been successfully operating for one year and IESO has provided its consent, which cannot be unreasonably withheld, under the terms of the IESO Contract.
- 4) The costs of the project changed as follows

Item	As submitted in January	Current Status
Capital Costs	\$9,286,899	\$10,197,847
Warranty Costs	\$1,305,310	\$1,073,310
Operating Costs (10 years)	\$3,108,348	\$2,824,593
Total Costs for 10 years	\$13,700,577	\$14,095,750
Operating Revenue (10 years)	\$17,602,680	\$16,501,082
Salvage Value	\$0	\$1,578,169
Net Cash Flow (excl. financing)	\$3,902,123	\$3,983,502
Net Cash Flow (incl. financing)	\$1,655,190	\$1,442,194

As part of the current IESO contract, Baseload has paid a \$200,000 security deposit. When the IESO contract is assigned to the new corporation, Baseload has requested that the deposit be returned to them and a new letter of credit be issued to the IESO. TD bank is prepared to issue the letter of credit rather than



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a cash payment of \$200,000. The security deposit is reduced by \$100,000 upon successful operation on the battery.

The TD bank has also recommended that the loan be increased to \$10.3 M to provide some allowance for additional costs in the project. Currently only \$1.3 M of the \$10.2 M has not been contracted under a firm price.

The current business model still does not include any additional revenue or savings that will be generated by the battery after the ten year IESO contract even though the asset life of the battery is at least twenty five years. One of the advantages of the flow type battery is that the electrolyte can be added as needed to maintain the effective output of the battery over its full life.

In accordance with Town By-law 076-2000, Milton Town Council's approval is required for the loan request of MEGS, and the capital expenditure by MEGS, at the revised amount of \$10.3 million as well as the Letter of Credit in the amount of \$200,000. Further, Council approval is also required for the Town's guarantee of the loan and letter of credit in favour of MEGS that would be provided by TD Bank.

### **Next Steps**

Should Council approve the revised loan guarantee amount, increased capital expenditure, as well as the formation of the new joint venture and purchase agreement between MEGS and Baseload Power Corp., the next steps are anticipated:

The following agreements and documents will need to be prepared and executed:

- Incorporation of new corporation
- Assignment of IESO Contract to new corporation
- Agreement formalizing the joint venture and agreement between MEGS and Baseload Power Corp. including the purchase of 49% of the shares of the new corporation by MEGS after the IESO Contract has been assigned to the new corporation and the transition and sale of the remaining 51% of the shares of the new corporation to MEGS after the first year of operation of the battery
- Shareholders Agreement between MEGS and Baseload with respect to the new corporation and its operations
- Loan documents with TD Bank
- Assignment of the LSES Equipment Supply Agreement by Baseload to MEGS
- Purchase order issuance to the vendors selected by MEGS/Baseload as well as required agreements to establish the required warranty coverage

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- Sale of the Battery and asset by MEGS to the new corporation once the battery achieves successful operation

MEGS has confirmed that the rights and terms of the existing agreement between Baseload Power Corp. and the IESO can transfer to the newly created corporation.

As noted, time is of the essence as the IESO revenue opportunity during the first 10 year period begins in November 2019 under the terms of the existing agreement. As such we have requested Town staff to facilitate the presentation of this request at the September 16, 2019 meeting of Town Council, and I will be available to answer questions Council may have at that time.

Respectfully,

*Frank Lasowski*

Frank Lasowski P.Eng., CPA/CMA

President and CEO