



# Staff Report

## Administration

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**Report To:** Committee of The Whole  
**Meeting Date:** March 9, 2021  
**Report Number:** FAF.21.032  
**Subject:** Follow up to Council Direction on TC Energy Project in the Municipality of Meaford  
**Prepared by:** Shawn Everitt, Chief Administrative Officer

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### A. Recommendations

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THAT Council receive Staff Report FAF.21.032, entitled "Follow up to Council Direction on TC Energy Project in the Municipality of Meaford" for information purposes.

### B. Overview

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Council directed staff to provide residents of the Town of The Blue Mountains and Council with an update on the process and status of the TC Energy project being proposed within the Municipality of Meaford. This report provides the requested update.

### C. Background

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On November 30, 2020, Council directed staff to provide Council and residents of the Town of The Blue Mountains with an update on the process and status of the TC Energy project being proposed within the Municipality of Meaford.

Town staff consulted with the Municipality of Meaford's Chief Administrative Officer (CAO) and Director of Development Services to gather information regarding the status of the proposed TC Energy Project that is being considering for construction at the Land Force Training Base property within the Municipality of Meaford. The proposed property is controlled and managed by the Department of National Defence. The information and references provided in this report were collected from consulting with the CAO of the Municipality of Meaford and a review of the TC Energy website during the week of January 25, 2021.

### D. Analysis

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#### Consultation with the Municipality of Meaford

The following information was provided through Municipality of Meaford Staff Report CAO-2020-03 (Attachment 1). Staff have confirmed that direction provided by the following recommendations have been completed except for the retaining of a Project Manager. The

retaining of a Project Manager has been postponed until it is known whether approval will be granted for the project to proceed.

1. Direct staff to submit a letter to the Department of National Defence and TC Energy highlighting the issues identified in report CAO-2020-03 and request that the Department of National Defence be satisfied that the issues can be addressed prior to granting approval to proceed with the Project;
2. Declares their support for the proposed TC Energy project proceeding to the applicable Environmental Assessment approvals process, provided the Department of National Defence is satisfied that the issues can be addressed and grants approval to TC Energy to proceed; and
3. Directs staff to retain a Project Manager to coordinate the peer review of studies and negotiate an agreement with TC Energy with regards to compensation of the municipal costs.

#### **TC Energy Proposed Pumped Storage Project Website**

The TC Energy website provides a fulsome summary of the proposal to date as well as additional information regarding the proposed project.

[www.tcenergy.com/operations/power/pumped-storage-project/](http://www.tcenergy.com/operations/power/pumped-storage-project/)

The most recent TC Energy Community Newsletter (November 2020) is included as Attachment 2 to this report. These community newsletters are circulated via Canada Post to the residents of the Town of The Blue Mountains.

#### **Anticipated Project Timeline from TC Energy's Website (January 27, 2021)**

2019 to 2028	Communications and engagement with local communities and Indigenous group
Q2 2019 to Q4 2020	TC Energy Feasibility Assessment
Q4 2020	Department of National Defence (DND) Decision on Site Access
2021 to Q4 2023	Environmental Assessment Process
Q1 to Q2 2024	Anticipated regulatory decisions and permitting process
2024 to 2028	Construction
Commencing 2028	Operations

### **Save Georgian Bay Website**

Save Georgian Bay is comprised of a group of concerned residents primarily from Meaford and the surrounding areas. The objective of the Save Georgian Bay group is to inform the public about the Pumped Storage Hydroelectric Project being proposed. The Save Georgian Bay website provides information and public perspective regarding the proposed project.

[www.savegeorgianbay.ca/](http://www.savegeorgianbay.ca/)

### **Community Liaison Committee**

TC Energy has recently created a [Community Liaison Committee \(CLC\)](#) as noted in their November Newsletter. The purpose of the CLC is to provide a formal structure to facilitate collaborative issue and opportunity-based engagement between community representatives and TC Energy's Pumped Storage Project on a regular and ongoing basis. The CLC will consider various topics of interest to both maximize community/regional benefits and minimize/mitigate effects.

In conclusion, Town staff are committed to maintaining ongoing communications with Municipality of Meaford staff regarding the proposed TC Energy Project. Town of The Blue Mountains staff have also requested that Municipality of Meaford staff provide notice to Town of The Blue Mountains staff regarding correspondence and reports, relating to the TC Energy Pumped Storage Project, that are brought forward for consideration by Municipality of Meaford's Council. Further, Meaford staff have also noted that they would recommend to TC Energy the inclusion of Town of The Blue Mountains staff on any sub-committee of the working group that considers issues that affect the Town. This information will then be brought forward to the Town of The Blue Mountains' Council for their information and will improve our community's awareness of the project.

## **E. Strategic Priorities**

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### **1. Communications and Engagement**

We will enhance communications and engagement between Town Staff, Town residents and stakeholders.

### **2. Community**

We will protect and enhance the community feel and the character of the Town, while ensuring the responsible use of resources and restoration of nature.

### **3. Quality of Life**

We will foster a high quality of life for full-time and part-time residents of all ages and stages, while welcoming visitors.

## **F. Environmental Impacts**

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The material provided on the TC Energy Project website and the Save Georgian Bay website provides information regarding the environmental impacts of the project from a range of perspectives.

## **G. Financial Impact**

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There are no Financial Impacts identified for the Town at this stage.

## **H. In consultation with**

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Municipality of Meaford CAO, Rob Armstrong

## **I. Public Engagement**

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The topic of this Staff Report has not been subject to a Public Meeting and/or a Public Information Centre as neither a Public Meeting nor a Public Information Centre are required. However, any comments regarding this report should be submitted to Shawn Everitt at [cao@thebluemountains.ca](mailto:cao@thebluemountains.ca).

## **J. Attached**

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1. Meaford Staff Report CAO-2020-03
2. TC Energy November 2020 Community Newsletter

Respectfully Submitted,

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Shawn Everitt  
Chief Administrative Officer

For more information, please contact:  
Shawn Everitt, Chief Administrative Officer  
[cao@thebluemountains.ca](mailto:cao@thebluemountains.ca)  
519-599-3131 extension 234





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<b>Date</b>	Monday, June 01, 2020
<b>From</b>	Rob Armstrong, CAO / Director of Development Services
<b>Subject</b>	<b>TC Energy Issues Report</b>
<b>Report No.</b> CAO2020-03	<b>Roll No.</b> N/a

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## Recommendation

That Council of the Municipality of Meaford:

1. Directs staff to submit a letter to the Department of National Defence and TC Energy highlighting the issues identified in report CAO2020-03 and request that the Department of National Defence be satisfied that the issues can be addressed prior to granting approval to proceed with the project;
2. Declares their support for the proposed TC Energy project proceeding to the applicable Environmental Assessment approvals process, provided the Department of National Defence is satisfied that the issues can be addressed and grants approval to TC Energy to proceed; and
3. Directs staff to retain a Project Manager to coordinate the peer review of studies and negotiate an agreement with TC Energy with regard to compensation of the municipal costs.

## Background

In 2019, staff presented a report to Council (Report CAO2019-22) as an update on the Trans Canada Energy Pumped Storage Proposal at the 4<sup>th</sup> Canadian Division Training Centre (the Base). The following directions were provided by Council:

1. Direct staff to bring back a report prior to the March deadline with a comprehensive list of matters that the Municipality is looking to be addressed as part of the formal approval process;

2. Direct staff to retain the appropriate consultants to peer review the applicable detailed reports if this project moves forward to the formal approval process; and
3. Direct staff to conduct a Public Meeting prior to the submission of any Municipal Comments as part of the formal approval process.

The purpose of this report is to provide an update to Council on the process and to outline the comprehensive list of matters that staff are seeking to be addressed as part of the formal process as noted in direction number 1. In addition, the report also recommends commencing the process of peer review, through the retaining of a Project Manager.

### Policy Direction

Under normal processes, land use decisions or municipal comments are evaluated against the Provincial Policy Statement or other Provincial Policy (ie. The Niagara Escarpment Plan) and the applicable land use designations of the County of Grey Official Plan and the Municipality of Meaford's Official Plan.

In accordance with the Section B2.8 of the Meaford Official Plan, the area proposed for this development is noted as Federal Lands with the following statement:

"This designation, as shown on Schedule A-1 (4<sup>th</sup> CDTC), applies to lands that are under the jurisdiction of the Government of Canada. These lands are not subject to this Plan as long as they are under the jurisdiction of the Federal Government. If the lands cease to be under the jurisdiction of the Government of Canada, in whole or in part, an Amendment to this Plan will be required to ensure the use of these lands is consistent with the vision, principles and policy framework contained in this Plan."

As a result, as long as the lands proposed for the Pumped Storage Facility remain under the jurisdiction of the Government of Canada, then the Official Plan would not appear to technically apply. It is staff's opinion however that the proposal could have impacts on lands that are affected by the Official Plan and therefore it should be evaluated in accordance with the Goals and Objectives and other policies of our Official Plan.

The following are some of the key goals and objectives that influence our comments on this proposal:

## Community Vision

The Municipality has a number of significant environmental and topographical features that contribute to the 'sense of place' felt by many of the Municipality's residents. These features include the Georgian Bay shoreline, the Niagara Escarpment, the Meaford Harbour, the Big Head River and its tributaries, the Bruce and Georgian trails and the large forest tracts, valleylands, smaller woodlots and wetland areas that support diverse wildlife and plant communities. The protection of these attributes is a key underlying principle in this Official Plan and for this reason, this Official Plan establishes an 'environment-first' philosophy in the Municipality. This means that protecting significant natural heritage features and functions shall take precedence over development.

## Goals and Strategic Objectives

### A2.1 The Natural Environment

#### A2.1.1 Goal

It is a goal of this Plan to protect and enhance significant natural heritage features and functions in the Municipality and to support the rehabilitation of those that have become degraded.

#### A2.1.2 Strategic Objectives

1. To ensure that the protection of significant environmental features and their associated ecological functions takes precedence over the development of such lands.
2. To ensure that an understanding of the natural environment, including the values, opportunities, limits and constraints that it provides, guides land use decision-making in the Municipality.
3. To make planning decisions that contribute to the protection, conservation and enhancement of water and related resources on an integrated watershed management basis with particular focus on the protection of ground water recharge areas, cold water streams, lakes and other surface waters for their habitat, recreational, ecological and drinking water benefits.

4. To make planning decisions which discourage the loss or fragmentation of significant woodland features and the habitats and ecological functions they provide.
5. To prohibit changes to the water quality and hydrological and hydrogeological characteristics of watercourses, lakes, aquifers and wetlands and to restrict development that will negatively impact the critical functions and processes of these features.
6. To make planning decisions which aim to prevent the loss or fragmentation of Provincially Significant Wetlands and Areas of Natural and Scientific Interest and the habitats and ecological functions they provide.
8. To encourage the establishment of an open space system that links environmental and recreational resources both within and beyond the boundaries of the Municipality as part of the development of a Natural Heritage/Recreational Strategy.
9. To make planning decisions that contribute to the protection of air quality and the minimization of air-born contaminants.

## A2.4 Rural Character

### A2.4.1 Goal

It is a goal of this Plan to maintain and enhance the open space character of the rural area.

### A2.4.2 Strategic Objectives

1. To protect and enhance the natural character of the Georgian Bay shoreline.
2. To encourage the development of passive low-intensity recreational and eco-tourism uses in the rural areas of the Municipality provided the use has a minimal impact on the character of the rural area and is properly sited.
4. To avoid the intrusion of land uses that are incompatible with the rural character and/or resource activities of the area.

## A2.5 Economic Development

### A2.5.1 Goal

It is a goal of this Plan to provide opportunities for economic development and the creation of jobs.

#### A2.5.2 Strategic Objectives

1. To foster a competitive and positive business climate in the Municipality.
3. To encourage opportunities for a range of job opportunities and a broad range of commercial and service facilities geared specifically to meet the needs of residents of the Municipality and the wider area.
10. To protect the Municipality's natural attributes, such as its rural character and its Natural Heritage System and to ensure that the recreational and tourism uses that rely upon these attributes continue to thrive.

Additional provisions can be found in Part C- Environmental and Groundwater Management Policies, Part D2 – Transportation and D9 – Sustainable Community Development.

#### Process Update

Since the last report in November, staff attended the Public Meetings held by TC Energy at the Meaford and St. Vincent Community Centre wherein the Department of National Defence (DND) and TC Energy gave an overview of the proposal and the process that both parties are engaged in. The key point in these meetings was for the public to learn more about the project, to ask questions and to share their concerns with the proponents.

The original deadline for comments to DND was March 31, 2020, however this was extended until July 31, 2020. It is staff's understanding that these comments are part of the process for DND and the Federal Government to consider whether this project can proceed to the formal approval process under the Federal and Provincial Environmental Assessment Acts.

Planning Staff from the County of Grey have also submitted comments to DND and a copy of their letter is attached as Appendix 1.

## Analysis

### Process

There has been some discussion with Council and the community with regard to the need for the Municipality to undertake Public Meetings at this stage in the process. The initial report to Council noted that the Municipality would hold one or more Public Meeting on the proposal to share comments based on the peer review of the proponent's studies. Staff are still of the opinion that any Public Meeting at this time would be of no benefit, as the Municipality does not have any answers to the questions that would be asked about the project by the public. It is more appropriate for the Municipality to continue to encourage DND and TC Energy to engage the public in meetings as further information becomes available.

The previous report noted that the Municipality will seek funding from TC Energy to retain qualified professionals to peer review the studies that are submitted in advance or as part of the Environmental Assessment process, should the project proceed. In addition, staff are concerned with regard to the ability to manage the review process, given our current demand of projects. In this regard, staff have contacted the Municipality of Greater Napanee with regard to their engagement with TC Energy and the process they had in place to peer review the studies related to a similar proposed TC Energy project. The CAO of Greater Napanee noted agreements that they had with TC Energy and also Waste Management for a proposed landfill, wherein they also funded the cost for a project manager. It is staff's opinion that the Municipality should engage a Project Manager from our engineering roster of consultants with expertise in environmental issues, and negotiate an agreement with TC Energy to cover municipal costs related to project management and peer review. The TC Energy letter attached as Appendix 3 notes a willingness to this process.

Staff also reached out to the County of Grey with regard to jointly undertaking the peer review and Planning staff have agreed to this approach. This is similar to the peer review process that the Municipality and the County undertake on larger scale developments.

### Issues List

The following Section of the report will identify a range of issues that are a concern to staff and to which the Municipality should require TC Energy and Department of National Defence to address as part of the approvals process,

should the project proceed. The issues have been broken out into 5 different categories.

## Environment

### **Turbidity and Water Quality**

It is imperative that the proposed Pumped Storage Facility not result in any impacts on water quality including turbidity issues affecting the pristine waters of Georgian Bay. There is the potential that the speed to which the water returns to the bay could result in high levels of turbidity. The municipal intake for the Meaford Water System is located approximately 6.6 km south of the proposed outfall and this intake must not be impacted in anyway. For baseline monitoring purposes, the Municipality does regular monitoring of water quality and turbidity. Further, a large number of residents along the Nottawasaga Bay shoreline north of Centreville Road to the 4<sup>th</sup> CDTC receive their water from shore wells. Unlike a Municipal Water Plant, which has advanced filtration, many homes only have basic UV filtration systems, which can be severely impacted by poor water quality and high turbidity.

Section C4 – Water Resource Management of the Official Plan identifies required studies in support of major applications with an outline of criteria that must be addressed including:

- a) how to maintain or enhance the natural hydrological characteristics of the water resource;
- b) how to minimize or eliminate the effect of the proposed use on the groundwater recharge function;
- c) how to minimize or eliminate the effect of the proposed use on the quality and quantity of drinking water in adjacent private and municipal wells;
- d) how to maintain or enhance sensitive groundwater recharge/discharge areas, aquifers and headwater areas;
- e) whether it is required to monitor water budgets for groundwater aquifers and surface water features;
- f) how to ensure that the quality of the watercourses affected by the development are maintained; and,

g) how to ensure that there will be no negative impacts on the water quality of Georgian Bay.

On this basis, the Municipality should require the necessary studies in accordance with our Official Plan.

### **Fish Habitat**

Section C11 – Shoreline of Georgian Bay of the Official Plan states the following:

The shoreline also provides habitat for fish and other wildlife species. In keeping with the 'environment first' approach, this Plan encourages the maintenance of vegetative buffers, migratory bird stopovers/roosts/nesting grounds and fish spawning areas along the shoreline.

There has been significant concern expressed by the public with regard to the potential impact on fisheries.

Although the commercial fishing industry has basically disappeared in the area, recreational fishing plays a vital role in the regional economy from a tourism perspective. As result, any adverse impacts on fisheries, is a concern of the Municipality.

It is staff's position that, based on the Official Plan provisions, the fisheries requirement for this project should be based on the standard of no impact as is applied on all municipal projects.

Should the federal Department of Fisheries and Oceans consider mitigation or offsets with regard to impact on fisheries, staff believe that the Municipality should request that these be made in a manner that improves fish habitat in the immediate vicinity of our Municipality and not elsewhere in the Lake Huron basin.

### **Shoreline Erosion and Coastal Impacts (physical limnology)**

The Municipality and our shoreline residents are experiencing significant impacts of shoreline erosion resulting from high-water. With the potential construction of break walls and additional infrastructure, staff are concerned with the potential impacts of this proposed development on the shoreline of Nottawasaga Bay. In this regard, the Municipality requires a report from a Coastal Engineer that demonstrates that there will be no adverse impacts resulting from this development affecting the shoreline in Meaford.



## **Species at Risk**

The Official Plan for the Municipality of Meaford outlines the requirement for an Environmental Impact Study (EIS) and what it must consider (Section C6). With regard to Species at Risk, the EIS must demonstrate that the proposal will not lead to species loss or negative impacts on endangered, threatened or vulnerable species and/or their habitat.

A development of this scale has the risk of impacting various species (plant and animal). We acknowledge that an EIS is underway and, as with any other EIS, the Municipality will undertake a peer review of the study by a qualified consultant. One potential challenge is that as part of the peer review process, there is typically a site inspection to verify the findings. In this regard staff will request confirmation on how this can happen being on DND lands.

## **Light and Noise**

The Municipality is concerned with the potential impacts from light and noise to residents living in close proximity to the proposed development. This would be both from a construction and an operational perspective. In order to first understand this impact, it should be made clear, what the separation distance would be from the boundaries of 4<sup>th</sup> CDTC. There has been a couple of concepts provided for the proposed development, which indicate significant differences in setbacks. It is staff's opinion that a substantial buffer be provided from adjacent development. One of the concepts had shown a setback of approximately 800 – 1000 metres.

With regard to Light, Section D9.2.5 of the Official Plan states that appropriately placed and designed outdoor lighting can improve energy efficiency and reduce 'dark sky' and environmental impacts. Further it is a policy of the Municipality to:

- a) use and promote the use of responsible lighting practices that eliminate or reduce light pollution and glare, while maintaining sufficient light levels for a safe built environment;
- b) use energy efficient lighting fixtures in all new and retrofitted municipal facilities and properties, and in transportation corridors owned and/or maintained by the Municipality, such as roads, trails and parking lots;

Further information on lighting is requested in order to evaluate the proposal against the policy.

Staff acknowledge that there is already noise impacts that result from operations at 4<sup>th</sup> CDTC, however the construction and operational impacts that could result from this development would be more consistent and impact the quiet enjoyment of resident's homes and seasonal dwellings. It is common that a noise attenuation study be undertaken between residential and industrial forms of development to assess impact and applicable mitigation be required where there is impact.

## **Air Quality**

With the amount of earth movement required to create the reservoir, there is also potential negative impacts on air quality. Section D9.2.2 of the Official Plan notes that:

Air quality can impact us as individuals (health effects), as a society (health care costs) and on a global scale (climate change), but there are many ways to improve and maintain air quality. It is a policy of the Municipality to:

- a) ensure that municipal operations and facilities meet or exceed applicable Provincial regulations with respect to air quality and support incremental reduction of greenhouse gas emissions and air pollutants;

In this regard, details are requested on how this will be addressed as part of the construction phase.

## **Risk Analysis**

There have been some concerns identified by the public with regard to a potential breach of the reservoir, which could have potential catastrophic impacts on the residences below the escarpment. Staff believe a risk analysis or a dam break analysis should be provided as part of the detailed design of the reservoir.

## **Visual Impact**

### **Niagara Escarpment**

The lands are not included with the Niagara Escarpment Plan, likely for the same reasons that the Official Plan for the Municipality does not apply to

Federal Lands. Background mapping for the initial Niagara Escarpment Plan from the 1970's does however indicate that the waterline(s) that run from the Bay to the reservoir would traverse the escarpment. Further, the proposed reservoir would be located on top of the escarpment. We note that these locations became the Escarpment Natural designation which garnered the highest level of protection under the Niagara Escarpment Plan.

The Objectives of the Escarpment Natural Designation are as follows:

1. To recognize, protect and where possible enhance the natural heritage and hydrological systems associated with the Niagara Escarpment Plan area.
2. To protect the most natural Escarpment features, valleylands, wetlands and related significant natural areas.
3. To conserve cultural heritage resources, including features and areas of interest to First Nations and Métis communities.
4. To encourage compatible recreation, conservation and educational activities.
5. To maintain and enhance the scenic resources and open landscape character of the Escarpment.

The Escarpment Natural Designation does permit Infrastructure which includes Utilities and Utilities is defined as:

A water supply; storm or sanitary sewage system; gas or oil pipeline; the generation, transmission and distribution of electric power, including renewable energy projects as defined in the Green Energy Act, 2009, commercial or otherwise, and all associated infrastructure; the generation, transmission and distribution of steam or hot water; telegraph and telephone lines and other cabled services; a public transportation system; licensed broadcasting, receiving and transmitting facilities; or any other similar works or systems necessary to the public interest

Part 2 of the Niagara Escarpment Plan is the Development Criteria applied to new or redevelopment of land. Particular to this development are the General Development Criteria (2.2), Development affecting Steep Slopes and Ravines (2.5), Development affecting Water Resources (2.6), Development affecting Natural Heritage (2.7) and Infrastructure (2.12).

Of particular concern with the proposed development is the visual impact. In this regard, the Municipality requests that Visual Impact Assessment be undertaken in accordance with the NEC Visual Assessment Guidelines. The

Municipality would undertake a peer review of this assessment as outlined earlier in this report.

## **Hydro Corridor**

Another major concern would be the potential visual impact of a hydro corridor running through the Municipality. As noted in our Official Plan, one of the key objectives is to protect the rural landscape and a new Hydro Corridor could be contrary to this policy. TC Energy has noted that they would need to connect to the grid in Essa Township to facilitate this development. To do so, they would have to go overland with a new corridor to Stayner or with a submersible line at the bottom of Nottawasaga Bay that would come out in the vicinity of Wasaga Beach and then down to Stayner.

Considering the policies of our Official Plan, staff prefer that the transmission line to be a submersible line if the project gets approval. It is understood that this is subject to the Environmental Assessment process.

## **Socio-Economic Impact**

Recently, the Municipality was provided with the Regional Impact Study prepared by ERM Consultants Canada Limited for TC Energy. The following issues are the municipal concerns related to the Economic Impact of the project on the Municipality:

### **Employment**

The recent Economic Impact Study has identified that once the facility is constructed, it will require approximately 20 full-time jobs to operate the facility on-site. This limited number of jobs is welcomed and does not present a concern to the Municipality. The report also identified that 141 direct and 482 in-direct and induced jobs at the peak will be required to construct the facility. It is anticipated that this will consist of hired trades and direct employment. Considering the current limited labour market in the area, it is staff's opinion that this would place a significant burden on the Municipality and residents who seek to obtain contractors over this period.

The Municipality is already challenged at times to obtain bids for work on municipal projects. With a number of the trades working on this proposed development, should it proceed, staff expect that there will be a shortage of experienced and available construction companies, which will presents a concern.

### **Housing**

It is staff's opinion that the current state of housing within the Municipality and the larger region will not support an influx of workers into the area. Although it is recognized that a certain number will consist of workers who already live in the area there will still be an interim need for housing in the vicinity of the development.

There are a number of options that could be considered to address this need during the construction phase, however staff recommend an option, wherein housing would be constructed in the urban area of Meaford on services. Following the use as housing for construction works, it could become an affordable housing project owned and operated by the County of Grey. There is an identified need for this housing in our community and the region. This would similar to some Olympic athlete villages wherein the developments are utilized for affordable housing projects post-Olympic use.

### **Regional Impact Study**

The Municipality has not undertaken a comprehensive review of this recently submitted study, nor has the study been submitted for review by a peer review consultant. Staff note, however, that some of the potential adverse impacts noted are consistent with some of the concerns noted in this report. Further, the report addresses regional impacts and they note that they would engage in further discussions with the Municipality to address the local impacts.

It is the intent of staff to have this study reviewed in a similar fashion to all detailed reports submitted as part of the approval process.

### **Transportation Infrastructure**

Staff are concerned with regard to the impacts on municipal roads resulting from the potential four year construction period. In particular, the 7<sup>th</sup> Line would provide the most direct access to the proposed facility. In addition, the intersection of the 7<sup>th</sup> Line and Highway 26 would be impacted as well.

As noted in the Grey County comments, there is also potential impacts on Grey Road 112, which is the main road accessing the 4<sup>th</sup> CDTC and intersects with Highway 26.

As with any other development of this scale, the Municipality requires the submission of a Traffic Impact Study (TIS). The TIS would be peer reviewed by the Municipality, the County of Grey and the Ministry of Transportation as

all jurisdictions would be impacted by the proposed development. The first step would be to develop a Terms of Reference for the study.

It should be noted that the Municipality is currently in the process of developing a Transportation Master Plan. As part of this Plan, a consultant working on behalf of the Municipality has undertaken traffic counts on a large number of municipal roads. These will be available to the consultant undertaking the study as the baseline data.

## Other Considerations

A number of other concerns that are not directly related to the mandate of the Municipality such as alternative sites, designs, and technologies, Carbon emissions and site decommissioning have been identified to the Municipality. Although the Municipality does not have jurisdiction over these issues, the Municipality is still interested in receiving a response to these matters. Based on our knowledge and confirmed in the TC Energy letter, the Environmental Assessment process must address these issues as part of that process.

## Municipal Position

As noted in our previous report, the current consideration by the Department of National Defence is whether the proposal can occur on the Base and not impact their operations. This is not a matter that the Municipality can provide an opinion on. Staff believe that it is appropriate that the Department of National Defence also consider the issues list from the Municipality and that they should be satisfied that the issues can be addressed when they consider their decision to proceed.

Should the Department of National Defence consider the various issues raised by this report and public feedback, and believes that those issues can be resolved, staff support moving to the formal approval process under the federal and provincial Environmental Assessment Acts. This will provide the Municipality the ability to receive, review and formally submit comments on detailed studies under a legislated process.

During that formal approval process, the Municipality will have opportunity to provide additional comments to the proponent and to the federal government regarding the impact on the Municipality.

## Financial Impact

The report notes that the Municipality will seek an agreement with TC Energy to cover the costs of the project management and the peer review of the various reports submitted as part of this project. Based on the comments by TC Energy, staff do not anticipate a financial impact resulting from this review.

Potential positive and negative financial impacts on the Municipality will need to be reviewed further in conjunction with the Economic Impact Study. Further, TC Energy has suggested the Municipality consider a Community Benefit Agreement to address economic and social impacts. Save and except for the project management and peer review costs which can be part of this agreement, staff are of the opinion that the consideration of a community benefit agreement to address other financial matters is premature.

## Implications

Staff have outlined a number of potential adverse implications that could result from this proposed development. This report outlines the process to consider these and the issues will be summarized in a letter to the Department of National Defence.

## Strategic Priorities

This report supports the mission, vision and values of the Municipality of Meaford, as well as the goals and objectives set out in Council's Strategic Priorities, particularly with respect to:

- Investing in Infrastructure
- Ensuring Sustainability
- Growing our Economy
- Leading Municipal Government
- Strengthening our Community

## Consultation and Communications

Municipal Staff met with representatives from Save Georgian Bay to discuss a number of concerns that have been raised by this group. Staff recognize that some members of this group are very knowledgeable with regard to certain elements of this project and appreciate the background to some of

their concerns. Attached as Appendix 2 is a report to Meaford Council that was provided to staff following this meeting.

TC Energy has also been following up with staff on the process and requested that they provide a letter to be included in this report (Appendix 3). Of note within their letter is the fact that although the DND deadline is now July 31, 2020, TC Energy does not have a defined comment period. Further they have provided a summary of their public meetings, where individuals can obtain responses to questions at this point in time, studies that are currently being undertaken to address the DND requirements, environmental impacts, and timeline.

Senior Management Team

County of Grey Planning Staff

## Conclusion

Staff acknowledge that various studies will be undertaken as part of the formal approval process and the purpose of this report is to outline the matters that staff need to see addressed as part of this process and further the process and manner to which the issues should be considered. These would be summarized in a letter to DND and TC Energy.

The report also outlines the need for an agreement with TC energy to address the process and financial assistance necessary for the Municipality to engage in the process. This would include project management and peer review consultants.

## Supporting Documentation

Appendix 1 – Grey County Letter

Appendix 2 – Save Georgian Bay Report to Council

Appendix 3 – TC Energy Letter

Respectfully Submitted:

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Rob Armstrong, CAO / Director of Development Services





## Planning and Development

595 9<sup>th</sup> Avenue East, Owen Sound Ontario N4K 3E3  
519-372-0219 / 1-800-567-GREY / Fax: 519-376-7970

January 23, 2020

TransCanada Energy Storage Project

\*Sent via E-mail

[energy\\_storage@tcenergy.com](mailto:energy_storage@tcenergy.com)

**RE: County of Grey's Comments on the Proposed Pumped Storage Energy Project in Meaford**

Dear TransCanada Energy,

This correspondence is in response to the above noted pumped storage energy proposal in the Municipality of Meaford, County of Grey. We have had an opportunity to review the proposal in relation to the Provincial Policy Statement (PPS) and the County of Grey Official Plan (OP), Recolour Grey. We offer the following staff comments.

The proposed would utilize pumped storage to generate approximately 1,000 MW of energy. The project would see water pumped out of Georgian Bay to a reservoir on the Canadian Army's 4<sup>th</sup> Canadian Division Training Centre, and then released back into the Bay. Transmission lines feeding this project would be routed either across land, or in a path through the Bay, both of which leading to Hydro One's Essa Transmission Station. County staff would note that TC Energy's project benefits estimate \$3.3 billion in private sector investment, and the need for approximately 800 construction jobs over 4 years.

Staff would note that the County Official Plan has no jurisdiction on federally regulated projects, or federally owned lands. In addition, staff note the provincially regulated processes also associated with the approvals. Any references to the County Plan should be read for guidance purposes only. Although the County Plan does not have effect over this project, it is a statement of the County's values, goals, and objectives. Aside from the County Official Plan, County staff would highlight that there is County owned infrastructure (e.g. Grey Road 112) that may be impacted by this proposal. The County appreciates the opportunity to provide comments on this energy proposal.

The County Official Plan balances growth opportunities with the need for environmental and resource protection. In 2019 a new County Official Plan, Recolour Grey, was approved by the Province. Leading up to the approval of this Plan, the County

undertook widespread public consultation to determine how County residents and visitors wanted to see the County evolve over the coming years. The need for; environmental protection, diversification of our economy, including job creation, and addressing our affordable housing supply needs, were all strong messages we heard from the public. The County Official Plan attempts to balance those demands in a manner which supports the needs of current and future generations of County residents.

County staff also had the opportunity to attend the TC Energy public open house on December 11<sup>th</sup>. We note the high level of public interest in this project, and that the theme of environmental protection was expressed at this meeting from members of the community.

County staff see the potential for community benefits from this project including energy generation, job creation, and possible new housing construction. In realizing these benefits, County staff want to see any environmental and social impacts considered and appropriately mitigated. Staff have also identified some potential challenges with this project, that the County would be interested in seeing TC Energy explore further. County staff would be happy to work with TC Energy and other community stakeholders to work to find solutions to these challenges.

Some of the key items for consideration have been highlighted below under individual subheadings.

### **Environmental Impacts**

Aside from any direct impacts to Georgian Bay, which is of primary importance to the County, the County also maps a number of other environmental features and constraints in the area of the energy project including;

- intake protection zones,
- petroleum wells,
- core areas,
- significant woodlands,
- areas of natural and scientific interest (ANSIs),
- other identified wetlands, and
- fish habitat through various watercourses and waterbodies.

In addition to the above-noted mapped features, there is also the potential for other unmapped features such as threatened and endangered species occurrences and habitat, or features identified through traditional knowledge obtained from local First Nations and Metis peoples.

Aside from the lands utilized for the energy storage project itself, there will also be the transmission lines that 'feed' the project. Staff would note that depending on the chosen route for these lines i.e. either overland or through the Bay, there will be additional potential impacts.

Staff understand that there will be extensive environmental study with this project. Staff would generally recommend that budget be allocated towards having an independent 3<sup>rd</sup> party peer review of the environmental work completed, following the completion of the initial studies.

At the open house on December 11<sup>th</sup> there were also some public suggestions about creating a 'closed-loop' system, rather than the current proposal. Is this 'closed-loop' approach something that could be investigated further by TC Energy?

### **Social Impacts**

Members of the community have expressed concern with respect to the social impacts of this proposal. These impacts include, but are not limited to;

- potential for decrease in property values,
- nuisance, such as noise, to existing home and cottage owners,
- the need for expropriation of lands for the transmission lines, and
- impacts stemming from the expropriation of the federally owned lands in the 1940's and the use of those lands for a private energy project.

While County staff realize that not all the above impacts can be addressed by TC Energy, staff recommend that serious attention be paid to how any potential social impacts can be mitigated, should the project move forward. Similar to the environmental impacts, this should be considered not only for the energy storage project itself, but also the associated transmission lines. The social impacts should be considered when looking at the routing of the transmission lines, as well as the design of the energy storage project.

Aside from any impacts on landowners, the County would also seek to minimize any impacts on any tourism or tourist destinations within the County. Grey's waterfront continues to be a significant draw for both permanent residents and visitors. Given the location of the project on the Canadian Army's 4<sup>th</sup> Canadian Division Training Centre the impacts to tourism should be minimal, provided shoreline and Georgian Bay impacts can be duly mitigated.

## **Construction**

Based on the scale of this project, and the timeframe for construction, it is too early to know what the impacts will be on the local road network, including Grey County Road 112. As more details become known, County staff will want to discuss traffic levels, the types of equipment needed, where resources are being delivered from, and the potential for impacts on local infrastructure, including the need for any upgrades or permits.

The construction will be significant and may be well timed for when Bruce Power may be slowing down in their construction. The nature of the construction also suggests that local businesses may be able to participate (construction, quarry work, mining equipment).

Staff also recommend that contingency plans be developed and clearly indicated to the public, should there be any possibility for malfunctions during the construction or operational phases. These plans should include matters such as flooding protection, spills, and water contamination.

## **Labour Pool**

The creation of approximately 800 jobs is an exciting opportunity for the County. Over recent years County staff have observed labour pool shortages in almost all sectors, including numerous skilled trades. The refurbishment of Bruce Power has created many jobs in the area, but also helped contribute towards this overall labour shortage. Staff recommend that TC Energy start investigating labour needs, including liaising with Bruce Power with respect to their project and timeframes. The County, and partners such as the Four County Labour Market Planning Board, would be happy to help with any data needs, or participate in discussions around labour needs.

Aside from the construction jobs on-site, staff anticipate on-going needs for technical inspection and maintenance people visiting the site, which may also positively impact the local accommodation and food sectors.

## **Housing**

Similar to the above comments on labour pool, this level of investment and job creation represents a significant opportunity for the County. That said, the lack of available affordable or attainable housing can be a barrier to labour pool attraction, especially for those relocating from outside of the area. Staff see this as both a challenge and an opportunity. Should there be a desire from TC Energy, or an affiliate, to look at new housing construction to accommodate the desired labour pool, the County would be

interested in exploring this further. Perhaps there could be a model whereby the housing would be utilized for this project, but following the completion of this project the housing could be utilized for other public or privately operated affordable housing needs. County staff would appreciate the opportunity to investigate this further with TC Energy.

### **Spin-off Benefits**

Aside from the potential job creation and investment benefits, staff do see merit in having another large energy generator with low emissions in our area, provided impacts can be appropriately mitigated. As noted above, if there are opportunities to explore other co-benefits such as housing, then staff would be happy to discuss further.

Having a large new energy generation facility also raises questions over whether some of that energy can be used locally to benefit local landowners or businesses. There are other examples across the globe whereby business parks have been established near energy generation facilities, so that the businesses can take advantage of the energy being generated. Although the location of the pumped storage facility on federal lands may not facilitate the creation or expansion of a business park in the immediate vicinity; if there was the ability to feed local businesses or allow for new business growth in nearby settlement areas such as Meaford, then these opportunities should be explored.

### **County Official Plan Policies for Utilities**

Section 8.9.3 of the County Plan provides policies on utilities, which may provide some guidance on both the energy storage facility, but likely more so the future transmission lines. Staff will share these policies below for guidance purposes, but would note that federal and provincial jurisdiction supersede policies in the County's Official Plan.

At this stage staff are unaware of the potential routing of the transmission lines, should TC Energy proceed with an overland route. There is an existing hydro corridor running approximately east – west in Grey County from Poplar Sideroad/The Blue Mountains – Clearview Townline to Superior Street on the edge of Owen Sound. Presumably if the transmission lines are to proceed overland, there would be some effort to connect to this existing corridor for further travel eastward towards Hydro One's Essa Transmission Station. In reviewing the below policies, as they may / may not pertain to future transmission lines, County staff would highlight the designated Agricultural, Special Agricultural, Settlement Area, and Niagara Escarpment Plan Area lands, as well as any mapped or unmapped environmental features (Cores, Linkages, Wetlands etc.) that maybe in the 'path' of the future transmission lines. Impact on landowners, agriculture, the natural environment, and tourism including significant viewsheds should be considered in this future review.

### *“8.9.3 Utilities*

*Utilities for the purposes of this Plan include the transmission of oil, natural gas, hydro/electricity (e.g. hydro corridors), telephone/cable, and broadband/fibre. Utilities are also referred to as infrastructure as defined in the Provincial Policy Statement.*

- 1) The County and local municipalities will plan for and protect corridors for electricity generation (e.g. hydro corridors), utility facilities, and transmission systems to meet current and future needs.*
- 2) Development will not be permitted within planned utility corridors that could impact the use of the future corridor.*
- 3) Preferred routes for utility lines and corridors are existing rights-of-way, property lines, existing easements, and fence lines. Utility poles or towers will be placed either on fence lines or placed sufficient distance from fence lines in order to allow farm equipment to maneuver on the land. Utility lines and corridors should avoid built-up and heavily populated areas, as well as natural heritage features, including Cores Areas and Linkages. Further fragmentation of Special Agricultural and Agricultural land use types, and woodlands should also be avoided.*
- 4) Utility companies will be requested to ensure construction of their lines and facilities has minimal impact on farm operations, residential, and other surrounding land uses.*
- 5) During the construction of utilities, adequate environmental protection will need to be provided with respect to fueling, dust, noise, landscaping, site drainage, erosion control, groundwater wells, and waste disposal.*
- 6) The County will protect agricultural, environmental, and other County wide public interests when entering general agreements with utility companies for utility corridors.*
- 7) Where a utility has been developed within a corridor across the County, the best use and access to that utility is supported subject to the development policies of the local and the County Official Plan.*
- 8) Lot creation for utility purposes will only be supported where it has first been demonstrated that a similar result cannot be done through easement, rights of way, or long term lease. In situations where lot creation is needed it will be necessary for the applicant to demonstrate that the proposed lot will have minimal impact on agricultural, environmental, or aggregate lands, within the County.*
- 9) Consideration will be given to ensuring that above-ground utility facilities or structures are visually attractive and balanced with the surrounding area by screening or buffering such facilities and structures.*

- 10) *The utility company will maintain and be responsible for the corridor, the decommissioning and/or removal of facilities, and any site remediation upon the abandonment of the utility line.*
- 11) *Secondary uses, such as active and passive recreation, agriculture, community gardens, other utilities, and accessory uses to adjacent land uses such as parking lots and outdoor storage are encouraged in utility corridors including on hydro corridor lands, where compatible with surrounding land uses. A proponent should be aware of the primacy of the electricity transmission and distribution facilities and that secondary uses within hydro corridor lands require technical approval from Hydro One Networks Inc. Corridors may also serve to provide separations between incompatible uses. Within the Special Agricultural and Agricultural land use types, these uses will only be permitted in accordance with the policies contained in Sections 5.2 and 5.3 of this Plan.*
- 12) *It is recognized that agricultural uses, agricultural-related and on-farm diversified uses require utilities in order to support these uses and therefore are permitted within the Agricultural and Special Agricultural land use type. Impacts from any new or expanding utilities on surrounding agricultural operations and lands are to be mitigated to the extent feasible."*

Finally, staff recommend and encourage that proponents engage representatives of the First Nations and Metis communities in early consultation. Contact information for First Nations and Metis, can be provided to you should you require this information; however, staff understand that this consultation process has already begun.

We look forward to discussing this project further with your team, and participating in any further consultation processes as they move forward.

If you have any questions or wish to discuss this matter further, please do not hesitate to contact us.

Yours truly,

A handwritten signature in black ink, appearing to read "Scott Taylor", is written over a yellow rectangular highlight.

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## TC Energy Proposed Pump Storage Plant

Yogi Berra once said *“if you don’t know where you are going... you might end up someplace else”*.

The Mayor of Meaford makes this statement in the introduction to Council’s Strategic Priorities. In this document, she acknowledges the critical role of a strategic plan in shaping a community. It creates a focus for the expected outcomes and specific activities needed to address Council’s long-term vision,

*“The place to be on Southern Georgian Bay”.*

Other words of wisdom from Council’s Strategic Priorities include:

*“...we celebrate our culture, heritage and natural beauty...”*

*“...a ‘community of communities’ with sustainable and progressive development in the residential, agricultural, commercial and tourism sectors...”*

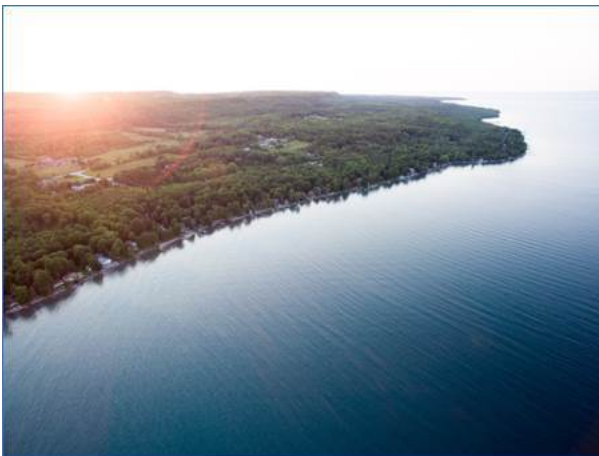
*“Provide leadership and effective governance in the delivery of quality, sustainable services”*

*“Respect – inclusive, open and empathetic”*

*“Integrity – honest, ethical and accountable”*

*“Community – common good, resilient and authentic”*

Let us ensure that these words protect this...



And don’t cause this...



TC Energy (formerly TransCanada Pipeline) proposes to build a hydroelectric pumped storage plant on the shore of Georgian Bay on Department of National Defence land in Meaford, Ontario. The conceptual design follows from a 1960’s design for a plant built at Ludington, Michigan.

This 1960’s plant has not made Ludington *‘the place to be’*. It did not *‘celebrate culture, heritage and natural beauty’*, and it has not created a *‘community of communities’*. In fact, the population of Ludington has steadily declined since the plant was built, from 9,421 in 1960 to 8,022 in 2015.

After a 12-year legal challenge, the Ludington plant was ordered to mitigate the environmental harm it caused. Court documents and compliance monitoring reports provide evidence of destroyed fish habitat

and ongoing fish mortality caused by the offshore breakwalls and shore-based intake, which are the same design features proposed by TC Energy at Meaford.

The Mayor and Council were elected to represent the constituents of Meaford, and to make decisions considering the common good of the municipality. Your constituents and the broader community largely oppose TC Energy's proposed project, as evident by the Save Georgian Bay Petition with nearly 24,000 signatures.

TC Energy, the architect of this venture, strives to acquire long term lucrative assets which are the cornerstone of their business strategy. But their business strategy is incompatible with Council's long-term vision,

*"The place to be on Southern Georgian Bay".*

Yogi Berra's wisdom may well prove true, *"...we might end up someplace else"*.

As such, we ask that the Mayor and Council respect the concerns expressed by their constituents and oppose this project outright. If this ask is too great, then at the very least the Mayor and Council should impose conditions on the Project, as outlined in the sections below.

We recognize some of these conditions may be symbolic as they are beyond the authority of the municipality. Symbolic as they may be, they identify the standard of environmental stewardship expected by the Mayor and Council for a project of this magnitude within our municipality, and provide a means to hold TC Energy to account.

## ENVIRONMENT

### Water Quality

1. Baseline water quality – Currently the water quality of Georgian Bay within the vicinity of the Project site is considered pristine, and likely complies with water quality guidelines of the Canadian Council of Ministers of the Environment and the Provincial Water Quality Objectives. But available data are limited. Council requires TC Energy to implement and maintain a comprehensive surface water quality monitoring program starting immediately and spanning a minimum two-year period prior to submitting their impact assessment report. The monitoring program should provide sufficient spatial and temporal resolution to quantify the frequency and duration of clear flow periods from which background levels of turbidity and other water quality parameters will be defined. The monitoring program should also include such other parameters and meet such other requirements as stipulated by appropriate federal and provincial agencies. Data from this monitoring program will be made available to Council and the community on a quarterly basis through the monitoring period.
2. Turbidity – Turbidity has been identified as a water quality parameter of particular concern since: the waters of Georgian Bay are typically pristine with near zero turbidity; those living along the shoreline or within town source potable water from shore wells or from the bay; construction and operations will disturb the clay nearshore substrate causing turbidity; and construction activities on land will disturb soils causing turbidity. TC Energy claims *"proper design and construction of the outlet and other project structures in Georgian Bay will result in a design that does not contribute to turbidity in Georgian Bay"*. Yet TC Energy has not provided

design details to support their claim, nor does TC Energy seem aware of local site conditions, as demonstrated during the three community meetings hosted by TC Energy in Meaford. Council requires TC Energy to submit a comprehensive assessment detailing: local site conditions, including borehole logs and appropriate geophysical investigations; loading rates of materials causing turbidity from all possible sources affected by the Project during site preparation, construction, operation and decommissioning; design details, including mitigation strategy, monitoring plan, and response plan. This report is to be made available to Council and the community.

3. Water quality criteria – The Canadian Council of Ministers of the Environment and the Ontario Ministry of Environment, Conservation and Parks specify surface water quality objectives for the protection of aquatic life. Among other parameters, these objectives specify allowable limits for turbidity. Council requires TC Energy to comply with the applicable federal and provincial water quality objectives for all parameters. For clarity, the background level and natural state for turbidity shall be taken as the clear flow condition of calm winds, no waves and dry weather. In the event the federal or provincial authorities grant a mixing zone, this mixing zone shall be limited to 100 metres from the edge of the Project footprint, and must not result in toxic conditions or irreparable environmental damage including risk to ecosystem integrity and human health nor interfere with water supply, recreational or other water uses of the adjacent property owners.
4. Potable water – TC Energy's proposed project has the potential to impact the quantity, quality and safety of potable water for those communities along the shoreline or inland that source water from either shore wells or drilled wells. When asked about this potential concern at the 16<sup>th</sup> January 2020 community meeting hosted by TC Energy, representatives of TC Energy stated that TC Energy would construct a water supply main from Meaford to provide potable water to these communities. Council interprets such statements from TC Energy as commitments to the community, and thereby requires TC Energy to fulfil this commitment at no cost to the community.

### **Fish Habitat**

5. Aquatic community characterization – Preliminary investigations identify that at least 23 species utilize the nearshore environment of Georgian Bay within the vicinity of the Project. Several of these species are listed as threatened by COSEWIC. But available data are limited. Council requires TC Energy to retain a third-party subject matter expert of Council's approval to undertake a comprehensive aquatic habitat and aquatic community monitoring program to characterize habitat and organisms prone to impingement and entrainment, and to support the optimization of siting of the intake/outfall, diffuser structures and other offshore structures. The monitoring program should focus on fish, ichthyoplankton, macrozooplankton and benthic invertebrates; extend from the shoreline out to 30 m depth; extend approximately 2 km along the Project site shoreline; and occur throughout the spring, summer and fall seasons. The monitoring program should also include such other requirements as stipulated by appropriate federal and provincial agencies, and be approved by Council. Data and interpretive report from this monitoring program will be made available to Council and the community on a quarterly basis through the monitoring period.

6. Avoidance of sensitive habitat – TC Energy state they will avoid spawning and other sensitive aquatic habitat yet TC Energy has proposed a shore-based intake/outfall structure with offshore breakwalls located immediately within an area of known spawning habitat for Lake Whitefish, Lake Trout and Carp. Council requires TC Energy to locate the intake/outfall and diffuser structures beyond the nearshore habitat zone so as to avoid risk of adverse operational effects. Alternatively, Council requires TC Energy to consider an alternate location for the intake/outfall, or to redesign the plant as a closed loop system contained on land.
7. Mitigation of fish mortality – TC Energy states they will employ mitigation measures to further reduce the potential adverse environmental effects associated with the Project. For the case of the Ludington plant, mitigation was imposed following a 12-year legal challenge, and consisted of a 2 km long net during the open water seasons (April through November). This form of mitigation has limited effectiveness, causes incidental fish mortality, and poses a hazard to boaters. More appropriate mitigation measures include velocity caps or porous veneer structures to reduce the risk of impingement and entrainment. Council requires TC Energy to employ mitigation measures through means other than netting.
8. Fish habitat offsets – TC Energy suggests the use of fish habitat offsets to compensate for impacts associated with death of fish and destruction of fish habitat. As the community most impacted by the Project, Council requires TC Energy to apply fish habitat offsets within areas adjacent to the municipal boundaries of Meaford and in a form considered by Council as beneficial to the community of Meaford.

### **Species at Risk**

9. Species at risk – Preliminary investigations identify that as many as 11 species listed as being at risk may utilize the lands and waters within the vicinity of the Project. But available data are limited. Council requires TC Energy to retain a third-party subject matter expert of Council's approval to undertake a comprehensive monitoring program to characterize habitat and flora and fauna within the area of influence. The monitoring program should start immediately, and include requirements as stipulated by appropriate federal and provincial agencies, and be approved by Council. Data and interpretive report from this monitoring program will be made available to Council and the community on a quarterly basis through the monitoring period.
10. Avoidance of habitat for species at risk – Council requires TC Energy to avoid all habitats associated with species at risk.

### **Light and Noise**

11. Light and noise – TC Energy has acknowledged the plant will emit noise and light during construction and operations, yet they claimed during the 16<sup>th</sup> January 2020 community meeting hosted by TC Energy that local residents would not notice either. Given the nearest resident is located approximately 100 m from the proposed plant, Council requires TC Energy to provide evidence of how they intend to limit noise and light within such a proximus area during both construction and operations.

## **Coastal Processes**

12. Shoreline erosion – The Project includes construction of offshore breakwalls that will impede the natural movement of sediments along the shoreline. Council requires TC Energy to retain a third-party subject matter expert of Council's approval to undertake a comprehensive assessment of coastal processes along the western shore of Nottawasaga Bay, including but not limited to, the potential effects on waves, alongshore currents, sediment transport, and potential erosion and accretion of sediments along the shoreline. This report will be made available to Council and the community. This report needs to project shoreline and current changes over the expected lifetime of the shoreline structures and impacts for the removal of those structures when the operating lifetime of the plant concludes.
13. Physical limnology – The Project as proposed draws and releases a large volume of water from and to the shores of Georgian Bay. This cycle of flows will alter the natural circulation patterns within Nottawasaga Bay and possibly throughout Georgian Bay. It could affect stratification, heat balances and ice formation over large areas, yet nothing is yet known about such potential significant adverse effects. Council requires TC Energy to retain a third-party subject matter expert of Council's approval to undertake a comprehensive assessment of the physical limnology of Georgian Bay and mathematical model predictions of the potential effects of construction, operations and decommissioning on circulation, stratification, heat balance, and ice formation. Further, Council requires TC Energy to take preventive measures to minimize potential disruption of the physical limnology of Georgian Bay.

## **VISUAL IMPACTS**

14. Georgian Bay – TC Energy proposes the construction of an offshore breakwall and two wingwalls, plus a shore-based intake structure along the shore and nearshore of Georgian Bay. They show on their web site an artist rendering of what Georgian Bay will look like after the construction phase. This image is intended to deceive. The image shows from the perspective of someone on a boat in the middle of the bay. It does not show the proximity of these structures to the neighboring community. It does not convey the massive size of the structures, which will be amongst the largest man-made structures on Georgian Bay. Nor does it show what the facility will look like at night when all lights are on. Council requires TC Energy to provide a more representative image of what the site will look like, including its proximity to neighboring homes, and from the vantage point of a boater traveling along the waterfront, and under both night and day time conditions. Council also requires TC Energy to prepare a management plan for Council's approval of how they intend to minimize the visual impact of the Project during construction and operations.
15. Niagara Escarpment – TC Energy proposes to construct a 375-acre reservoir, 1.7 km long penstocks and other supporting infrastructure on the Niagara Escarpment and adjacent lands. The Escarpment is a UNESCO World Biosphere Reserve, and has the oldest forest ecosystem and trees in eastern North America. Many would argue these lands should be protect, yet, TC Energy intends to develop on these lands for their sole benefit. Council requires TC Energy to prepare a



management plan for Council's approval of how they intend to minimize the disturbed area, and what options can be taken to avoid disturbance of the trees and forest ecosystem within area, such as the penstocks.

16. Transmission corridor – TC Energy proposed two possible routes to convey electricity to and from the grid – an overland option and an underwater option. The overland option may extend 80 to 100 km through forests, residential and agricultural lands, including parts of the Niagara Escarpment, Beaver Valley and a large portion of the township of Meaford. It will likely cause significant adverse effects to wildlife, terrestrial habitats and private properties. Council opposes this option and requires TC Energy to instead consider only the underwater option.
17. Public notification of transmission corridor – The public is largely unaware of the proposed transmission corridor. Council requires TC Energy to notify all municipalities, residents and business located within 2 kilometers of any prospective corridor so that those communities and stakeholders have an opportunity for input during the initial study phase of the feasibility of the project, with enough notice to fully participate in the DND comment period.

## ECONOMICS

18. Economic evaluation – TC Energy declares the benefit to rate payers to be \$250 million per year (approximately \$17 per year per person), but they have not disclosed the full economic evaluation for the Project. TC Energy will provide a full pro forma projection, sharing the projection of costs and revenues, for review by Council and the community. For clarity, this shall include a projected regulatory return that TC Energy will earn on its estimated \$3.3 billion investment, as this return will ultimately be paid for by the people of Ontario. This analysis must include anticipated ratepayer and provincial cost recovery over the lifetime of the facility through decommissioning.
19. Community housing – TC Energy declared its intent to construct housing units for 800 workers who will be temporarily employed during the four-year construction phase of the Project. TC Energy has offered these housing units to the community of Meaford after completion of the construction phase. They have also promised the same units to First Nations and other municipalities in exchange for their support. As the community most affected by the Project, Council requires TC Energy to allocate no fewer than 75% of the housing units to be constructed within the municipal boundaries of Meaford and to be constructed in locations and of such quality agreeable to Council and consistent with local building codes and municipal master planning.
20. Property taxation – The close proximity of the Project to neighboring communities will devalue homes and properties, causing a reduction in tax revenues to the town of Meaford. Council requires TC Energy to provide funding to the township so they can conduct their own independent assessment of this potential economic impact. This study will be made public.

## RISK ANALYSIS

21. Dam break analysis – The Project includes the construction of a 20 m high concrete dam to contain 23 million cubic meters of water within a reservoir located on the upper levels of the Niagara Escarpment. While the exact details of the design are not yet known, it is presumed it will consist of dams, excavations and impervious liner. Considering the reservoir is to be located upgradient from where many families live, Council requires TC Energy to retain a third-party subject matter expert of Council's approval to undertake a comprehensive dam break analysis to assess the potential loss of life should an unforeseen catastrophic failure of the reservoir occur. This report will be made available to Council and the community.
22. Environmental Site Assessment – It is understood the DND site contains various contaminants from past (and possibly present) operations on site. These contaminants may include Agent Orange, PHC, BTEX, other organics, metals, although no information has been provided to confirm or deny its presence. Given the potential health effects of such contaminants, Council requires TC Energy to retain a third-party expert to undertake a comprehensive environmental site assessment, and depending on the nature of the contaminants found, undertake a comprehensive remediation of the site.
23. Risk analysis – TC Energy will prepare a complete risk analysis of the project and its operation, including public health and safety, environmental health and safety, threats of water or fluid leakage, severe weather or other environmental risks, threats to the eco-system and habitats, water quality and any other risk areas; inclusive of risks and anticipated prevention actions.

## FEDERAL, PROVINCIAL MUNICIPAL CONSIDERATIONS

24. Alternative site locations – TC Energy proposed the current site based on the following criteria: the site provides approximately 150 m of vertical elevation difference between the Niagara Escarpment and Georgian Bay, Georgian Bay provides a source of water at no cost to TC Energy, and the site is located within 100 km of the power grid. TC Energy did not take community or environment into consideration in their site selection, as demonstrated during the 11th December 2019 community meeting hosted by TC Energy. The Australian Renewable Energy Mapping Infrastructure ("AREMI") has identified three prospective sites for pump storage plants within Southern Ontario, and other companies have identified abandoned mines and quarries for use as pump storage plants. Council requires TC Energy to retain a third-party expert of Council's approval to undertake a comprehensive assessment of all potential sites, including, but not limited to, the three prospective sites identified by AREMI and abandoned mines and quarries, considering them individually and in the aggregate. This report will rationalize the best sites with least environmental impacts and most acceptance by the community.
25. Alternative designs – TC Energy proposed the current design based on the Ludington plant. The Ludington plant was approved for construction in the 1960's, and is based on an open system that draws and releases water through a shore-based intake/outfall protected by armourstone breakwalls. The Ludington plant has since caused significant adverse environmental effects, including the destruction of fish habitat and the death of millions of fish per year. TC Energy has not considered alternative designs, as demonstrated during the community meetings hosted by

TC Energy. Council requires TC Energy to retain a third-party expert of Council's approval to undertake a comprehensive assessment of all possible design alternatives, including, but not limited to, closed systems, offshore intakes, velocity caps, energy dissipation structures. This report will rationalize the best design with least environmental impact and most acceptance by the community.

26. Alternative technologies – TC Energy proposed a pump storage plant as their preferred technology for energy storage. They have not considered any other technology, as demonstrated during the community meetings hosted by TC Energy. Yet other companies have used other energy storage technologies elsewhere in Ontario and throughout North America. These other technologies provide the same or improved total life cycle potential for carbon output reduction as what TC Energy claims for the Project yet they can be constructed on brownfields, near urban centers, without need of new transmission corridors, without causing death of fish, destroying fish habitat or habitat for species at risk. Council requires TC Energy to retain a third-party expert of Council's approval to undertake a comprehensive assessment of all possible energy storage technologies and/or load balancing methods, including, but not limited to, lithium-ion batteries, compressed air storage, home energy storage units, pumped thermal storage. This report will rationalize the best technology with least environmental impacts and most acceptance by the community.
27. Agreements with Saugeen Ojibway Nation and other First Nations – TC Energy declared its intent to enter into a partnership with Saugeen Ojibway Nation (SON) and possibly other First Nations and/or Metis Nations with respect to this Project. In the spirit of full transparency, Council requires TC Energy to publicly disclose the terms, conditions and financial arrangements of such partnerships. In the event such partnerships exist and to avoid any possible perception of conflict of interest, Council further requires TC Energy award contracts for monitoring and assessments associated with this Project only to fully independent third-party entities.
28. Site decommissioning – TC Energy declared a 50-year life span for the Project. Council requires TC Energy to submit a comprehensive decommissioning plan for the site, including costing, to restore the site to its current condition. Council does not accept TC Energy's position that decommissioning will be addressed in the future at the end of the project life. TC Energy will establish a bond or other payment mechanism acceptable to Council to fully fund future decommissioning of the site.
29. Carbon emissions – TC Energy declares the Project will result in a reduction in carbon emissions during operations. Council requires TC Energy to provide a carbon balance projection report for the entire project life cycle, including construction and decommissioning, as well as the carbon emissions from the US market in the future when our clean energy is no longer available to them.
30. Planning regulations – It is understood TC Energy intends to lease the land from the DND. Consideration will need to be made in consultation with Council as to whether these lands, once developed, become subject to Meaford planning regulations.
31. Third party review – TC Energy agrees to provide funding to Council and the town of Meaford for legal representation and expert technical review throughout the process starting immediately and extended through the first two years of operation following commissioning of





the plant. The estimate for this funding is \$200,000 for 2020 and 2021 and will be adjusted as needed to meet unforeseen costs associated with the review.



February 14, 2020

Mr. Robert Armstrong, Chief Administrative Officer  
Municipality of Meaford  
21 Trowbridge Street  
Meaford, Ontario N4L 1A1

**Re: TC Energy's Proposed Pumped Storage Project - Update and Next Steps**

Dear Mr. Armstrong,

Thank you for your continued interest in our proposal to study the feasibility of a pumped storage project at the 4<sup>th</sup> Canadian Division Training Centre (CDTC). We are writing to provide the Municipality of Meaford with an update on the status of the project, including a summary of feedback from the community open houses, our plan to address concerns that were raised, information on future community engagement activities and an overview of upcoming project milestones.

**Public Comment Period**

First, we would like to take this opportunity to clarify the public comment timelines associated with the proposed project.

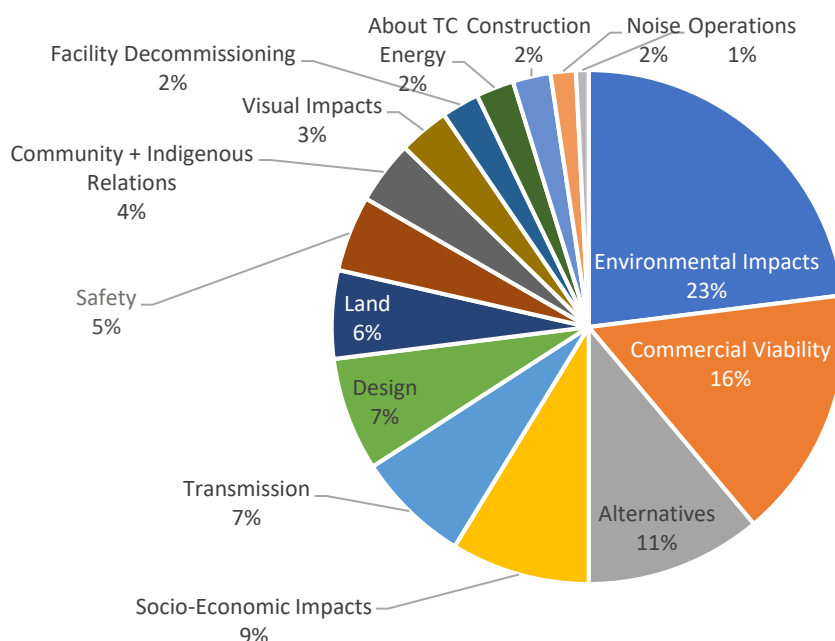
As you are aware, the Department of National Defence (DND) is currently in the preliminary stages of conducting reviews of the proposed project to be certain that such a project would not affect their current or future military training and operations at 4<sup>th</sup> CDTC. DND is undertaking preliminary consultations in order to hear and respond to interests and concerns. As per DND's consultation website, this preliminary consultation period is expected to close March 31, 2020.

TC Energy would like to provide assurance to the community and Municipality that the March 31, 2020 comment deadline reflected on DND's website is separate and distinct from TC Energy's community engagement process. TC Energy does not have a defined public comment period and the project will be accepting comments and providing opportunities for meaningful engagement **throughout all phases of the project**. Ongoing community feedback is vital in shaping the project design, future studies and our engagement programs.

**Community Information Sessions**

TC Energy held its first round of introductory project open houses at the Meaford and St. Vincent Community Centre on December 11, January 16 and January 23. In total, we welcomed over 700 attendees and received over 200 questions from the community (approximately 120 unique questions). Based on the approximate 120 unique questions or comments we received at the open houses, the topic areas that attendees were most interested in learning more about are as follows: environmental impacts, commercial viability of the project, potential alternatives to building the project, and socio-economic impacts. Responses to the questions are available on our project website.

### *Initial Open Houses – Areas of Interest*



We truly appreciate the candid conversations our team members had with community members and the feedback we received. The preliminary feedback we received at these open houses, including all the questions that were asked of us, will help shape the assessments and studies we plan to undertake and provide important guidance on the information that the community needs. We are in the early days of studying and developing this proposal and input throughout this process is important to ensure that if the project is developed, it addresses the interests and concerns of the community. We want to assure you, and the community, that we are listening to the feedback we have received and are working hard to address the many valid concerns that have been raised.

All the materials that were made available at the community information sessions, including the display panels, a video recording of TC Energy's presentation, informational booklets and fact sheets are available on the project website, so they can be accessed by those community members who were not able to attend the events. The project website can be viewed here: [www.TCEnergy.com/pumpedstorage](http://www.TCEnergy.com/pumpedstorage).

With respect to the issues raised, we have completed the following initial work which addresses some of the main areas of concern:

#### ***Commercial Viability:***

With respect to the climate change related environmental impacts and commercial viability of the project, TC Energy retained the independent expertise of Navigant Consulting Inc. to undertake an economic analysis of the proposed project. Specifically, Navigant's analysis:

- Assesses the potential impact of the project on the cost of electricity for Ontario ratepayers; and,
- Quantifies the potential CO<sub>2</sub> emissions reductions for the electricity sector attributable to the project.

The study confirms the implementation of the project would result in reductions in the cost of electricity over the project lifespan of approximately \$250 million per year and reduce the emissions of greenhouse gases from Ontario's electricity sector by approximately 500,000 tonnes per year over a range of possible future scenarios – this is the equivalent of removing 150,000 vehicles off Ontario roads each year. The study provides a solid economic and environmental rationale for the project to be further developed.

The Navigant study has been posted on the [project website](https://www.tcenergy.com/siteassets/pdfs/power/pumped-storage-project/tc-energy-value-of-pumped-storage-project-report.pdf), and can be viewed here:  
<https://www.tcenergy.com/siteassets/pdfs/power/pumped-storage-project/tc-energy-value-of-pumped-storage-project-report.pdf>

***Socio-Economic Impacts:***

With respect to questions on the social economic impacts of the project, TC Energy has contracted an independent consultant, ERM Consultants Canada Ltd. (ERM), to conduct a preliminary local socio-economic report that will examine characteristics of the region and how the project could impact the local economy and community infrastructure. As part of the study, ERM has been conducting several interviews with local organizations, municipalities and other groups, to ensure a wide range of perspectives are considered. The report will provide insight on: labour force characteristics; employment and business activity; local and regional economic benefits during construction and operations; local infrastructure; emergency and protective services; housing and accommodations; and health, recreation and education/training services.

We anticipate that this preliminary report will be completed shortly at which time we will provide the Municipality of Meaford with a copy. We would be pleased to provide a deputation to Council to present the findings of the report, in addition to arranging a meeting with staff to review the report in further detail. We would like to provide assurance that if the Municipality is interested in reviewing and commenting on the report, this can be completed within a timeframe deemed suitable by the Municipality.

***Project Alternatives:***

With respect to the question of potential alternatives to building the project, this will comprise one component that the federal Impact Assessment Agency will examine as part of a regulatory proceeding, should the proposed project move forward. This process will require TC Energy to demonstrate the following:

- "need for" the project which describes the opportunity that the project is intended to satisfy. It establishes the fundamental justification or rationale for the project from the perspective of a proponent.
- "purpose of" a project wherein proponents must outline what is to be achieved by carrying out the project.
- "alternatives to" the project that the proponent is considering that are technically and economically feasible and are directly related to the project.
- "alternative means" of carrying out the project that the proponent is considering that are technically and economically feasible, including through the use of best available technologies.

TC Energy has tasked an independent engineering firm (Hatch) and ERM to initiate work toward addressing these federal requirements. To the extent that components of this assessment are completed should the project advance, we will share the information when available.

### ***Environmental Impacts:***

With respect to the questions regarding potential environmental impacts of the project, TC Energy is in the early planning phase of the environmental assessment. Site-specific environmental studies will be undertaken as part of the environmental assessment required under provincial and federal regulations. We plan to begin preliminary environmental field studies in 2020. These studies are needed to support project design and the regulatory approvals process. We currently anticipate it will take approximately three years to complete the environmental regulatory process and obtain all permits and approvals.

For many of the questions that have been raised with respect to environmental impacts, we simply will not have the answers until the site work, environmental studies and engineering design is completed. However, the input received to date from the community will help inform this upcoming work and we are committed to sharing information as it becomes available and providing opportunities for input.

As part of early planning we will be undertaking numerous studies that will gather site-specific information about the land, environment and communities within the vicinity of this proposed project. Studies will be conducted in areas of potential impacts and examples of these studies include, but are not limited to:

- The aquatic environment, including fish and fish habitat, water levels, water quality and currents
- The terrestrial environment, including vegetation, wildlife and soils
- The physical environment, including air quality and noise
- Local cultural and socio-economics, including archaeological and cultural resources, land and water use, recreation activity, population, infrastructure and community services

The results of the studies will be analyzed, and the potential environmental effects will be assessed for the project in the environmental assessment.

We will engage early, openly and frequently with the Municipality and the community throughout the regulatory processes, including offering information sessions which will provide opportunities to share key findings and seek feedback about the various environmental and socio-economic studies underway and the regulatory filings that will be prepared.

As noted we have provided answers to the many questions asked of TC Energy at the open houses. To the extent that additional information becomes available through assessment work that addresses some of the community concerns, we will seek opportunities to share this information with the community. These recent open houses are the first of many opportunities we anticipate offering for public involvement and input should the project move forward.

### **Anticipated Project Timeline Q1 to Q4 2020**

The following provides a high-level overview of key milestones/project activities we anticipate for the remainder of the year.

Continued public engagement opportunities (for example: community information sessions, presentations, workshops, meetings, etc.)	Spring – December 2020
Issuance of Preliminary Socio-Economic Report	Spring 2020
TC Energy's preliminary feasibility work	Spring/Summer 2020
Initial environmental field data collection	Spring – December 2020
DND decision on feasibility assessment	Late Summer 2020
Initiation of provincial and federal environmental assessment processes	Late 2020

## Feasibility Assessment

TC Energy is currently conducting a number of preliminary field studies at the proposed project site to support the feasibility assessment. These studies will help provide insight for TC Energy, DND and the community as to whether 4<sup>th</sup> CDTC is a feasible location for a proposed pumped storage facility from an engineering and environmental perspective.

The following provides an overview of the specific feasibility assessments that are currently underway and how these studies will help inform TC Energy's assessment of the project site.

Feasibility Assessments	What it studies	How it's studied	How it informs preliminary project planning
Unmanned Aerial Vehicle (UAV) LIDAR Survey	Topographic conditions/physical features of the project site area.	A drone is mounted with a LIDAR sensor and flown across the project site area.	Assesses and supports the design of the reservoir, penstocks, powerhouse, intake and discharge structures.
Bathymetry Survey	Underwater depth of Georgian Bay lakebed.	A multibeam echosounder (a type of sonar) is mounted to a boat and pings a beam of sound to the lake floor.	Assesses and supports the design of the intake and discharge structures and provides <i>inputs</i> to 3D hydraulic modelling, which studies water flow in and out of the lake and water turbidity.
Sediment Sampling	Lakebed characteristics such as sediment texture, consistency and smell.	A hand-operated dredge sampler is dropped to the lakebed from a boat. Sediments are then sent to a laboratory for testing.	Supports the design of the intake and discharge structures, provides inputs to 3D hydraulic modelling, which studies water flow in and out of the lake and water turbidity.
Geotechnical Drilling	Characterizes the overburden materials, bedrock elevations and quality of bedrock. Also establishes groundwater levels.	Boreholes are drilled at various depths into the soil and bedrock with a drill rig.	Supports the design of the reservoir, penstocks and powerhouse by determining what the ground is made of and its characteristics.

We anticipate the feasibility studies to be completed in spring 2020. Once all studies are completed and results are studied/analyzed, TC Energy will provide a full assessment of the results to DND, for their consideration in determining whether the project could coexist with the Army at the 4<sup>th</sup> CDTC, and not limit DND's current and future plans to maintain an active training facility. TC Energy would be pleased to share the results of our feasibility work with the Municipality of Meaford in alignment with providing them to DND.

Should the feasibility studies demonstrate that the site is suitable, and DND concludes the same, TC Energy would commence a number of more detailed studies and assessments as part of both the federal and provincial environmental regulatory processes.

### **Deputation to Council**

As expressed over the last several months, TC Energy's offer remains open to provide a formal deputation to Council at a time deemed acceptable by the Municipality of Meaford. Please advise if this is of interest to the Municipality and TC Energy will contact the Clerk's Department to arrange a suitable time.

### **Third Party Review**

To ensure that the Municipality of Meaford and its constituents are satisfied that they have an appropriate level of understanding to assess the proposed project, TC Energy is amenable to providing support to the Municipality for an independent peer review at a time in which the Municipality deems appropriate. We understand this is a common practice for the Municipality to undertake when developments are proposed in Meaford. TC Energy is committed to reimbursing the Municipality for any appropriate expenses borne by the Municipality. We would be pleased to discuss the consideration of third party/independent support with the Municipality at an appropriate time.

### **Our Commitment**

We would also like to provide assurance that the Municipality will not be burdened by any incremental costs associated with the potential assessment or development of the proposed project. If this project moves forward, TC Energy would look to build a long-term relationship with the Municipality and, using results from the local economic report, identify how we can contribute to ensuring it remains a vibrant place for its community members.

If you have any questions about the content of this letter, or the project and our engagement activities, please let us know and we would be pleased to discuss. We look forward to keeping you updated as the project progresses and welcome your feedback as it relates to the proposed project.

Sincerely,



John Mikkelsen, P.Eng., M.A.Sc.  
Director, Power Business Development  
TC Energy



# TC Energy's Proposed Pumped Storage Project

Community Update  
November 2020

## A message from the Project Director



TC Energy has been actively engaging with the local community since late 2019 to introduce the concept of a pumped storage project on the Meaford Tank Range and to receive your feedback, questions and concerns. We thank all of you who have engaged with us so far and welcome your continued input.

Today, we are providing an update on the status of the project and letting you know what comes next. While we are limited in our social interactions during COVID-19, we seek every opportunity to share information and to hear from you.

## Pumped Storage

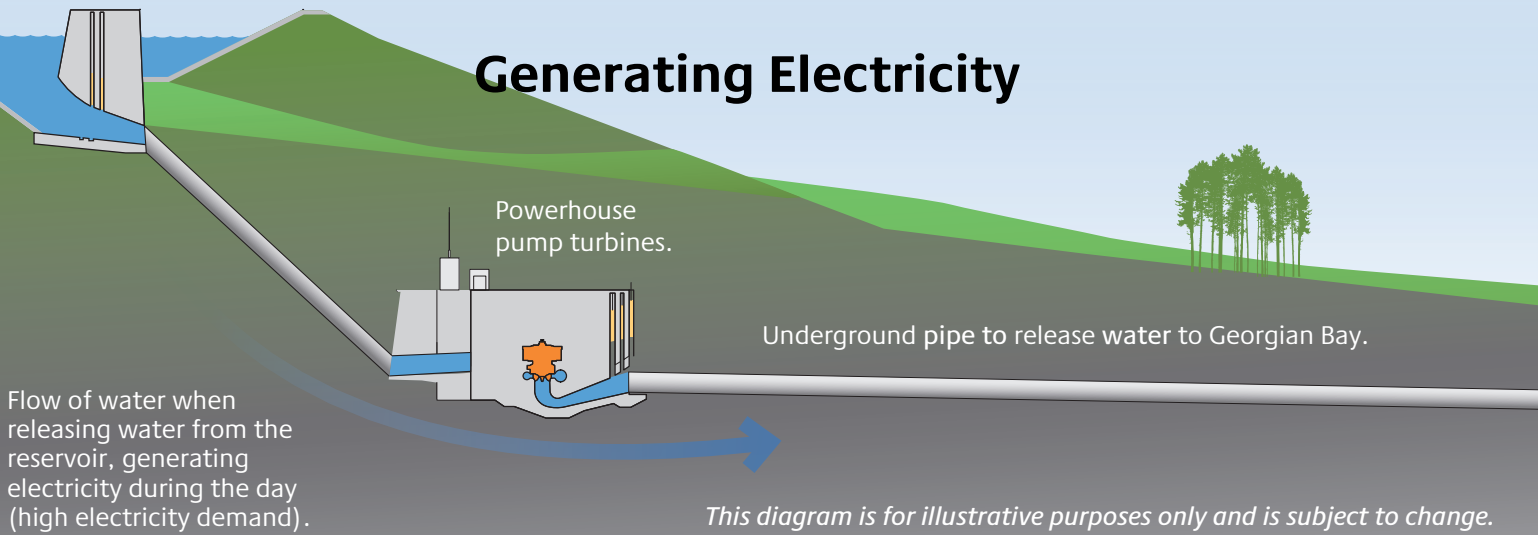
### What is pumped storage?

Pumped storage uses water and gravity to store and generate electricity. It's like a battery, ready to respond to various power demands. At night, when demand for electricity is low, and clean electricity like wind and nuclear electricity is in excess, pumped storage would withdraw water from Georgian Bay and temporarily store it in a newly constructed upper reservoir.

When demand for electricity is high, the water will be released down through the same pipes where it spins turbines and generates electricity for the grid. And that electricity is emission-free, making it better for our environment.



# Generating Electricity



## Why do we need Pumped Storage?

### 1. Improve Ontario's existing electricity system

- Ontario currently produces too much clean energy through the night when we don't require all of it, but not enough during the day when we need it most. This facility would store that excess electricity and redeploy it during the day when demand is high.
- Currently this excess electricity is being exported at a loss to the United States or wasted by stopping production.

### 2. Close the projected power supply gap

- Following the closure of the Pickering Nuclear Generating Station in 2024 – which currently supplies over 10% of Ontario's electricity – there will be a gap between what is needed and what is being generated.
- New electrical power must be connected to the grid in Southern Ontario as there is no capacity in Northern Ontario. This site is close to where Southern Ontario consumers need electricity and can connect to the nearby existing transmission system.

## Design in the Public Eye – Changes reflect community input!

We have been very fortunate that residents have shared their local knowledge, concerns and questions over the past year plus. As a result, the design concept of the project has evolved considerably, and we believe the current proposed design addresses many of the concerns raised about the early project concept.

We have incorporated **three key changes** into the new design.

### 1. Powerhouse moved underground

We plan to build the powerhouse deep underground. It will not be visible from the shoreline and noise from the pump turbines will be substantially eliminated.

### 2. Numerous changes to address water-based environmental concerns.

The results: no shoreline or nearshore structures, no structures visible in the water, protection of fish and fish habitat, as well as maintenance of water clarity.

### 3. No overland transmission

To respond to concerns about overhead electric transmission on land, TC Energy is proposing an underwater transmission route from the project site to a location near Wasaga Beach and continuing underground to the Stayner Transformer Station.

## Benefits of Pumped Storage

This will be Ontario's biggest battery, storing enough clean carbon-free electricity to power nearly a million homes. Some of the benefits include:



produce  
**emission-free**  
electricity



**reduce the need** for  
using and building  
more natural-gas-  
fired power  
generation



Save Ontario  
ratepayers  
**\$250 million**  
per year



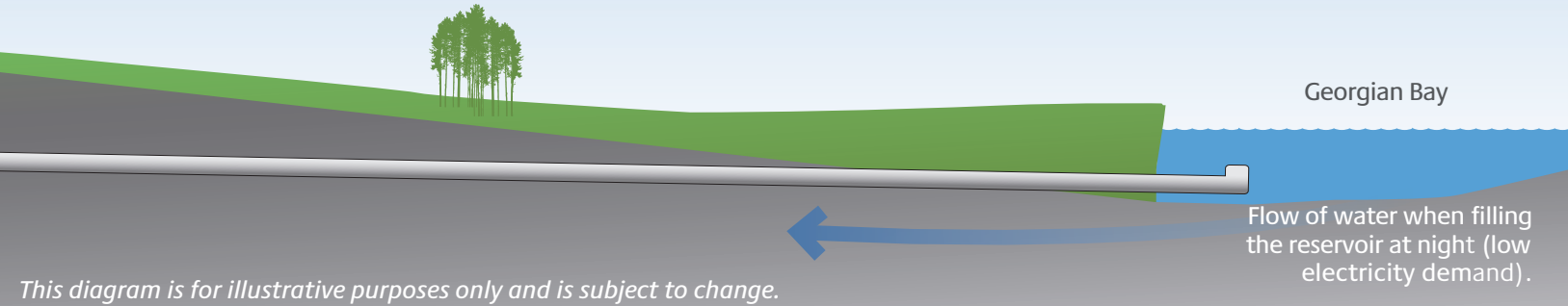
Create **1,000 jobs**  
during development  
& construction



Reduce greenhouse gas (GHG)  
emissions equivalent to  
**removing 150,000 cars**  
off Ontario roads

**1,000 MW** clean energy | **zero** emissions | powers **1 million** homes | **500,000 tonnes/year** avg GHG reduction

# Storing Electricity



## What's Next

In the next few months the Department of National Defence (DND) will determine if the project can co-exist with the activities of the Base. The project would utilize a very small area of the Base (3%) and it would be located with input from DND. If DND agrees, the project will move to the next phase: environmental impact assessment with continued opportunity for community and stakeholder input along the way.

## Environmental Impact Assessment

Since the project would include DND lands, it would trigger both the federal and provincial level environmental assessment processes. Both of these assessments would include various relevant government ministries and agencies.

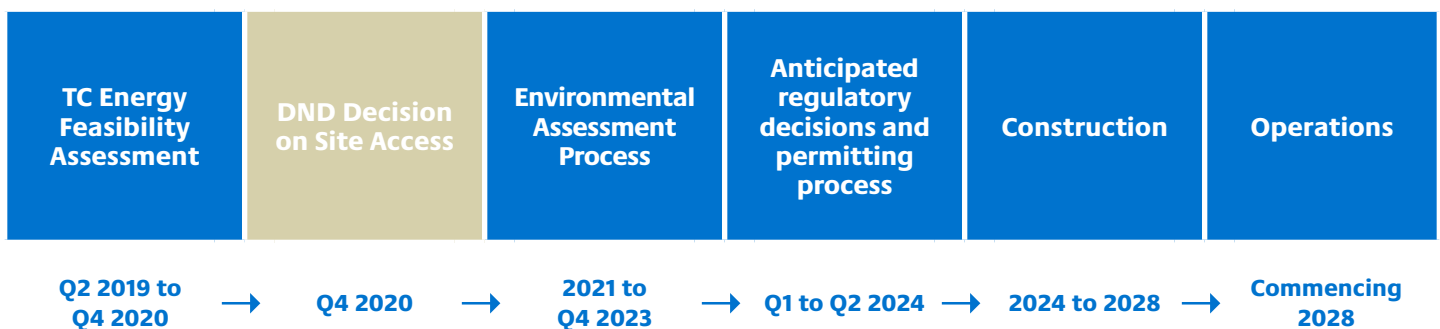
Key components of the environment that are typically addressed in impact assessments include:

- Natural Environment
- Socio-Economic Environment
- Archaeology and Cultural Heritage
- Indigenous Knowledge and Land use

In addition to TC Energy's commitment to public engagement throughout the lifecycle of the project, public consultation is mandated at key points throughout both the provincial and federal assessment processes.



## Anticipated project timeline







## TC Energy in your community

### Who is TC Energy?

We deliver energy to millions of people who depend on it. And we do it in a sustainable way, living by our values of **safety, responsibility, collaboration and integrity**.

We recognize the importance of community engagement in developing successful projects and strive to build long term community relationships and partnerships. We are new to the Meaford area and understand that building trust takes time. We look forward to the opportunity to earn your trust.

To learn more about our approach to community engagement please visit [TCEnergy.com/Communitites](https://www.tcenenergy.com/Communitites).

### Community Benefits

TC Energy supports communities where we live and work. We commit to ensuring that the local community realizes benefits and opportunities from our presence in and around the community at large. This commitment will endure from development and construction through the planned 50-year operational horizon of the Pumped Storage facility. As a starting point, we will form a Community Liaison Committee, which will provide a forum for discussion of socio-economic and environmental opportunities emerging from the project. TC Energy also plans to enter into discussions with the Municipality about annual, long-term local benefits for the life of the project. Our plan, should we be permitted by DND to proceed, is to assist the community by ensuring the delivery of significant local benefits.

### TC Energy Supports Trout Unlimited Canada

For more than 20 years, TC Energy has been working with Trout Unlimited Canada across the country. This year, they identified an opportunity for us right here, in Grey County. We're excited to be supporting the removal of the Town Pond dam in Markdale. Its removal will support the rebuilding of the Brook Trout population that resides in the Rocky Saugeen River and it's the last significant impediment to Brook Trout having free access to the river.

The initiative will commence again in the spring of 2021 with plantings taking place that will help stabilize banks and flats. TC Energy looks forward to participating in the next planting event alongside Trout Unlimited Canada!

### Build Strong

Trout Unlimited Canada is supported through TC Energy's community giving program, called Build Strong. If you know of a cause in your community that could use support, encourage them to apply to Build Strong online at [TCEnergy.com/Apply-For-Funding](https://www.tcenenergy.com/Apply-For-Funding).

### We'd like to hear from you

For more information on the project, visit [TCEnergy.com/PumpedStorage](https://www.tcenenergy.com/PumpedStorage).

If you have any questions or comments about the project, please reach out.

Toll Free Phone –  
1-844-551-0055

[energy\\_storage@tcenergy.com](mailto:energy_storage@tcenergy.com)