

**Hydro One Networks Inc.**

483 Bay Street  
7th Floor South Tower  
Toronto, Ontario M5G 2P5  
HydroOne.com

**Joanne Richardson**

Director, Major Projects and  
Partnerships

**T** 416.345.5393

**C** 416.902.4326

Joanne.Richardson@HydroOne.com

**BY EMAIL AND RESS**

April 22, 2022

Ms. Nancy Marconi  
Registrar  
Ontario Energy Board  
Suite 2700, 2300 Yonge Street  
P.O. Box 2319  
Toronto, ON M4P 1E4

Dear Ms. Marconi,

**EB-2019-0151 – Waasigan Transmission Line Project ("WTL") – Bi-Annual Report**

On May 5, 2020, Hydro One Networks Inc. ("Hydro One") received a letter (the "Letter") from the Ontario Energy Board ("OEB") asking for Hydro One to furnish bi-annual Project reports regarding the development of the WTL Project. The Letter outlined the elements the OEB expected to be included in the reporting.

In accordance with the aforementioned Letter, the attached report covers the period October 1, 2021 through March 31, 2022. Reports are to be submitted to the OEB within 15 business days of the close of the reporting period to which the WTL Project report pertains.

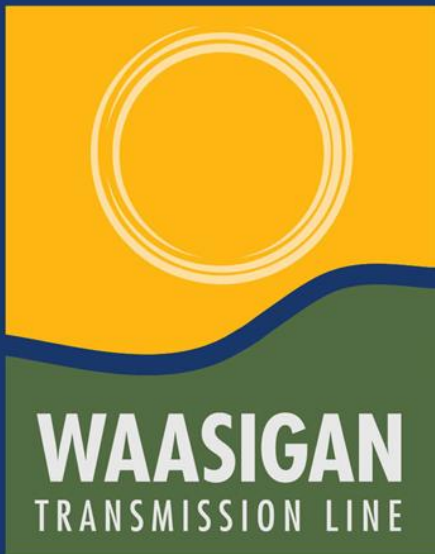
The WTL Project reporting will continue to be submitted to the OEB until such time a leave to construct application for the WTL Project is filed.

An electronic copy of the complete bi-annual report has been filed using the Board's Regulatory Electronic Submission System (RESS).

Sincerely,

A handwritten signature in black ink, appearing to read "Joanne Richardson", written in a cursive style.

Joanne Richardson



WAASIGAN TRANSMISSION LINE

Ontario Energy Board  
Progress Report

October 1, 2021 to March 31, 2022



## EXECUTIVE SUMMARY

The Waasigan Transmission Line Project (Project), formerly called the Northwest Bulk Transmission Line, is a priority project identified in the 2013 Long Term Energy Plan. On December 11, 2013, the Ontario Government issued an Order in Council directing Hydro One Networks Inc. (Hydro One) to undertake development activities and seek all necessary approvals for the Project. In October 2018 the Independent Electricity System Operator (IESO) confirmed that supply needs West of Thunder Bay and even North of Dryden will be met by electricity infrastructure. The IESO also recommended that Hydro One begin development work on Phases 1 and 2 of the Project as soon as possible to shorten the Project lead time required to have the assets ready to be in service to meet the electricity capacity needs when they materialize (expected mid-2030s but could occur earlier).

In a letter dated May 5, 2020, the Ontario Energy Board (OEB) requested that Hydro One prepare semi-annual reports to the OEB that update the OEB on the following matters: overall progress of the Project, Project cost, development work schedule, risks, and issues. Reports are to be filed in October for the reporting period of April 1 to September 30 and in April for the reporting period of October 1 to March 31.

Hydro One continues to proceed with Project development work on schedule. Ongoing consultation and engagement are occurring with Indigenous communities and organizations (19 Indigenous communities and 2 regional organizations), government agencies, the public and other interested parties. Work is being done to promote and advance Indigenous knowledge, training, and procurement in the development phase of the Project. The environmental assessment amended Terms of Reference<sup>1</sup> was approved<sup>2</sup> by the Ministry of the Environment, Conservation and Parks resulting in the advancement of environmental studies. A Community Roundtable continues to meet biannually to provide feedback to Hydro One. Indigenous communities, municipal officials and staff, industry, businesses, and educational institutions that continue to be consulted throughout all stages of the project. In addition, two engineering, procurement and construction contractors have been advancing preliminary design to support development work and have been meeting with Indigenous communities to better understand employment, training, and procurement.

Hydro One's first semi-annual report issued on October 22, 2020, forecast development phase cost of \$69M. As of March 31, 2022, the overall forecast development phase cost is estimated to

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<sup>1</sup> Amendments were submitted on June 18, 2021

<sup>2</sup> Approved February 18, 2021





remain unchanged at \$69M. The Project is being monitored continually for risks and risk mitigation is implemented as a matter of routine activity by the Project team. COVID19 remains a risk that is being managed, however; increased vaccination rates and effective health and safety protocols have enabled opportunities for in-person meetings to resume. Delays in regulatory approvals remain an active risk that Hydro One is working with regulators to manage. Should these risks have a greater impact on the Project they will be included in greater detail in subsequent progress reports.





## Table of Contents

Background .....	1
Overall Project Progress .....	4
Costs.....	7
Schedule .....	9
Risks and Issues Log.....	13

## List Tables of

Table 1: <i>Project Development Costs</i> .....	8
Table 2: <i>Project Schedule</i> .....	11
Table 3: <i>Major Risks and Issues</i> .....	13





## Background

The Waasigan Project (Project), formerly called the Northwest Bulk Transmission Line, is a priority project identified in the 2013 Long Term Energy Plan. On December 11, 2013, the Ontario Government issued an Order in Council directing Hydro One to undertake development activities and seek all necessary approvals for the Project. In January 2014, the OEB amended Hydro One's transmission's licence to include the following condition:

*The Licensee shall develop and seek approvals for the expansion or reinforcement of a portion or portions of the Licencee's electricity transmission network in the area west of Thunder Bay (the "Northwest Bulk Transmission Line Project"). The scope and timing of the Northwest Bulk Transmission Line Project shall be in accordance with the recommendations of the Ontario Power Authority.*

In March 2015, the OEB approved Hydro One's request to establish the North West Bulk Transmission Line Deferral account (EB-2014-0311). Thereafter, Hydro One recorded in the account expenses related to preliminary engineering, design and environmental assessment work associated with the Project prior to the point from which the costs would qualify to be recorded in construction work-in-progress.

In December 2018, Hydro One requested to change the nature of the North West Bulk Transmission Line Deferral account, from a deferral account to a tracking account, and to change the name of the tracking account to the Waasigan Transmission Tracking Deferral Account. This request was a result of the October 2018 IESO letter that confirmed that supply needs West of Thunder Bay and North of Dryden will be met by electricity infrastructure. The letter also recommended that Hydro One begin development work on Phases 1 and 2 of the Project as soon as possible to shorten the Project lead time required to have the assets ready to be in service to meet the electricity capacity needs when they materialize (expected mid-2030s but could occur earlier). The OEB approved these requests in September 2019.

In Hydro One's 2020-22, Transmission Rate Application<sup>3</sup>, the OEB approved the disposition of approximately \$877k<sup>4</sup> that was recorded in the North West Bulk Transmission Line Account. This was prior to receiving the OEB's approval to change the nature, and name, of the account to a tracking account, rather than a deferral account, as outlined above. Having satisfied the

<sup>3</sup> EB-2019-0082 – Decision and Order dated April 23, 2020, Pg. 159

<sup>4</sup> Balance as at December 31, 2018





capitalisation criteria, as of January 1, 2020, project costs were recorded as construction-work-in-progress ("CWIP") with the account recording what are known as 'tracking'<sup>5</sup> entries in the approved deferral account.

Having advanced development activities on the project, in particular in the area of engagement with Indigenous communities, in alignment with Hydro One's strategy to remain as a trusted partner to Indigenous communities, Hydro One is confident the Waasigan Transmission Line will be owned by a partnership comprising Hydro One and a number of Indigenous communities. The date of formation of this partnership is yet to be determined, however; in alignment with other Indigenous partnerships that Hydro One has formed, it is likely to be close to the in-service date for the transmission line.

In a letter dated May 5, 2020, the OEB requested that Hydro One prepare semi-annual reports to the OEB that updated on the following matters:

- Overall Project progress,
- Cost
- Development work schedule
- Risks and Issues Log

Reports are to be filed in October for the reporting period of April 1 to September 30 and in April for the reporting period of October 1 to March 31. In response to Hydro One's initial report, the OEB issued a letter dated December 1, 2020, requesting modification to future reports. This report reflects all the aforementioned matters, including those modifications requested by the OEB in its December 1, 2020 Letter, for the period of October 1, 2021, to March 31, 2022.

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<sup>5</sup> Entries that are made to track the level of costs spent on the project, however the costs are not balances that are expected to be disposed off in a rate filing, the costs are expected to be capitalised when the project is completed and added to the Rate Base of the entity who will ultimately own the assets.





## Hydro One's OEB-Approved Affiliate Transmission Projects Regulatory Account

On October 7, 2021, the OEB approved Hydro One's application for an accounting order to establish a new regulatory account, the "Affiliate Transmission Projects Account" (ATP Account). The ATP Account will be used for a project where:

1. Hydro One has, or will, receive a letter from the IESO identifying transmission system needs, and/or an Order in Council or direction of the Minister of Energy (Energy) for the development or construction of a transmission line project and,
2. All or part of the transmission line project is expected to be owned by and included in the rate base of a new partnership, as a licenced transmitter, such that costs included in the ATP Account Project will not form part of Hydro One's rate base.

Prior to the approval of the ATP Account Hydro One had OEB approval to track project costs in the Waasigan Transmission Tracking Deferral Account (WTTDA). Hydro One will transfer costs, expected to form the rate base of a new partnership, currently tracked in the WTTDA to the ATP Account.







## Overall Project Progress

Between October 1, 2021, and March 31, 2022, the Waasigan Transmission Line Project (Project) advanced environmental approvals, consultation, engineering, and design activities. Hydro One continues to proceed with development work on the Project. The following summarises the work that was undertaken within the reporting period.

### Environmental Approvals

On February 18, 2022, the Ministry of the Environment, Conservation and Parks (MECP) approved the amended Terms of Reference (ToR) for the Waasigan Transmission Line environmental assessment (EA). The Notice of Commencement of EA (Notice) was distributed to Indigenous communities, government officials/agencies, interested persons and organizations starting on March 8, 2022. The Notice was also posted in newspapers and on the Project website. The Notice signifies the start of the EA, which will be executed as outlined in the approved amended ToR.

With the start of the EA, Hydro One is continuing to engage with Indigenous communities, stakeholders, and members of the public. This includes holding open houses to present information and to gather feedback about the project and EA.

Hydro One is preparing to perform field surveys to support the EA. Draft field work plans were shared with government agencies as well as Indigenous communities, for review and feedback in March 2022. Field surveys are expected to begin in May 2022. The field surveys will collect data along the alternative transmission line routes to help inform the evaluation and selection of a preferred transmission line route, as well as the assessment of the preferred route project footprint. For all field surveys, Hydro One is working proactively with Indigenous communities to maximize input into the field work planning and to promote employment opportunities.

### Indigenous Engagement and Consultation

Hydro One has continued to work with 21 Indigenous communities and organizations to advance activities related to the Waasigan Transmission Line between October 2021 and March 2022. Key activities include the following:

Consultation Planning – Hydro One undertook a considerable engagement effort with Indigenous communities between October and December 2021. The purpose was to review





the Consultation Plan as part of the 2016 Memorandum of Understanding between Energy and Hydro One for relevancy, receive further inputs from communities and make any necessary updates/changes to the Consultation Plan. The revised Consultation Plan was approved by Energy in February 2022.

- Community Engagement – Hydro One has continued to hold regular Project meetings with communities to provide information on the Project status, collaborate on the advancement of community specific work plans, support Indigenous Knowledge gathering and studies, provide communications for sharing and distribution, and present opportunities for capacity development including field orientation programs and other opportunities.

In November and December 2021, Community Information Sessions were hosted with Mitanjagaamiing First Nation and the Métis Councils of Region 1 and Region 2. In-person meetings were also held with Lac des Milles Lacs First Nation and the eight member Nations of the Gwayakocchigewin LP.

In early 2022, community engagement activities have focused on ToR approval, sharing updated Project schedules, and supporting communities to update their own Capacity Funding Agreement work plans and budgets based on the 2022-2024 Project needs.

- Indigenous Knowledge/Traditional Land and Resource Use (IK) – Hydro One continues to work with interested communities to support and develop frameworks for the study of IK. This includes having a dedicated advisor retained by Hydro One to assist communities in advancing IK studies and ensuring communities have capacity to retain the resources they need to undertake studies.

## Other Consultation

Hydro One has continued with engagement efforts across the period of this report. The third Waasigan Community Roundtable (Roundtable) meeting took place in a hybrid fashion<sup>6</sup> in December 2021, and the group welcomed representation from Lac des Mille Lacs First Nation. Members of the Roundtable act in an advisory capacity to Hydro One to ensure that local developments, knowledge, interests and values are considered throughout the various stages of the project. The group will plan to reconvene in the spring of 2022 as meetings are planned twice a year.

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<sup>6</sup> Refer to the 'Risks and Issues Log' section of this Report, below, for examples of these hybrid methods.





Following the approval of the amended ToR from the MECP and the release of the Notice planning is underway for Community Open Houses, both in-person and virtually, for May 2022 and invitations will be broadcast widely using similar methods.

Hydro One also participated in the Thunder Bay Chamber of Commerce's Chair's Luncheon and Annual Meeting in support of the Chamber and their efforts to strengthen and advance business opportunities in the north. Hydro One is preparing to participate at Northwestern Ontario Municipal Association (NOMA)'s annual meeting in April 2022.

## Engineering and Design

In support of the Project's development phase activities Hydro One undertook an extensive competitive procurement process in February 2021 to engage the services of two Engineering Procurement and Construction (EPC) contractors for an Early Contractor Involvement (ECI) procurement model. Within the period of this report, the ECI model has continued to:

- Provide necessary design and engineering information into the environmental assessment and Hydro One's overall development of the Project;
- Advance preliminary identification of Project specific Indigenous and non-Indigenous employment, procurement and training opportunities and requirements through extensive meetings with Indigenous communities and organizations; and
- Identify opportunities for innovation in design, materials, and procurement early in the Project to enable the development of the best project delivery solution.

In addition to supporting the IESO with their bulk and regional planning activities, Hydro One has also been working with the IESO to complete advance system impact studies for Lakehead Transformer Station (TS), Mackenzie TS and Dryden TS and has prepared a draft preliminary planning specification that will assist in advancing project scoping as it relates to transmission station design requirements.





## Costs

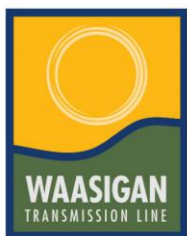
Hydro One's first semi-annual report issued on October 22, 2020, estimated development phase costs to be at \$69M at an accuracy of AACE<sup>7</sup> Class 3 (-10%/+15%). Table 1 below summarizes the project development costs for the current reporting period. As of March 31, 2022, the overall forecast development phase cost is estimated to remain unchanged at \$69M. During the reporting period there were no material cost element variances realized.

The Project is being managed within the forecast development phase cost estimate of \$69M (-10%/+15%). Cost variances may occur as the Project matures and as greater definition is obtained on specific cost elements, redistribution of costs will be required and undertaken within the \$69M.

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<sup>7</sup> Association for the Advancement of Cost Engineering



Table 1: *Project Development Costs*

	Actuals Spent		C	Forecast Budget Variance					I
	A	B		D	E	F	G	H	
	Spent this Reporting Period (Millions)	Total Spent to Date (Millions)	Budget per Oct 22, 2020 Report (Millions)	Forecast Budget Change from Last Report (Millions)	Forecast Budget Change from Last Report (%)	Revised Total Budget (Millions)	G = F - B Budget Remaining (Millions)	H = G/F * 100 Budget Remaining (%)	Reasons for Change
Real Estate	\$0.0	\$0.0	\$2.00	\$0.0	0%	\$2.0	\$2.0	100%	
Engineering and Design	\$2.3	\$6.1	\$2.00	\$0.0	0%	\$7.5	\$1.4	19%	
Environmental Approvals	\$0.7	\$4.5	\$15.50	\$0.0	0%	\$15.5	\$11.0	71%	
Indigenous Consultation	\$1.0	\$5.2	\$23.00	\$0.0	0%	\$23.0	\$17.8	77%	
Project Management	\$0.1	\$1.1	\$4.50	\$0.0	0%	\$3.0	\$1.9	63%	
Contingency	\$0.0	\$0.0	\$4.00	\$0.0	0%	\$4.0	\$4.0	100%	
Other Consultation	\$0.1	\$1.2	\$3.00	\$0.0	0%	\$3.0	\$1.8	60%	
Interest and Overhead	\$0.8	\$2.5	\$15.00	\$0.0	0%	\$11.0	\$8.5	77%	
<b>Total</b>	\$5.0	\$20.6	\$69.00	\$0.0	0%	\$69.0	\$48.4	70%	



## Schedule

In January 2014, Hydro One's transmission licence was amended by the OEB ordering Hydro One to work with the IESO to establish the scope and timing of the Project, and to develop and seek approvals. In 2016 and 2017, Energy and IESO reassessed the scope and schedule of the Project and reconfirmed the need for the Project to support growth and maintain reliable electricity supply in northwestern Ontario. It was determined that the Project will proceed in phases with development work for the first two phases to proceed at the same time. The phases are as follows:

- Phase One – a line from Thunder Bay to Atikokan.
- Phase Two – a line from Atikokan to Dryden; and,
- Phase Three – a line from Dryden to the Manitoba border, to enable the better integration of provincial electricity grids.

Following this, the IESO issued a letter to Hydro One dated October 24, 2018, which provided an update on the need and scope for the Project, and a recommendation for Hydro One to proceed with development work on Phases One and Two of the Project.

In the above-referred letter, the IESO indicated that the updated forecast considered new loads from potential industrial developments (e.g., mines), the connection of remote communities and the cancellation of the Energy East pipeline conversion project. Based on the forecast, the area west of Thunder Bay and north of Dryden is adequately supplied today, however, a need for additional capacity will arise in the mid-2030s (IESO, 2018). Also, under the IESO's high growth scenario, which considers development of the Ring of Fire mineral deposit area with electricity supplied by the Ontario transmission system, a capacity need could potentially arise in the early 2020s (IESO, 2018). As part of the Regional Planning exercise, the IESO will be issuing its Integrated Regional Resource Plan (IRRP) in 2022 which will be leveraged to better understand the drivers of load growth and to help inform a need date for the Project.

Given the risks associated with load forecast uncertainty and the potential for large industrial projects to add significant load to the area utilizing the remaining capacity margin sooner than anticipated, the IESO recommended that Hydro One begin development work on Phases One and Two of the Project to shorten the lead time required, should the need materialize. The scope of development work includes preliminary design/engineering, cost estimation, engagement and consultation, routing and siting, and the EA. The IESO did not commit to a timeline for the





construction of the Project; however, it was indicated that developments will be monitored to determine when construction of the transmission line should begin.

In consideration of the above, Hydro One has built out a development schedule with the goal of completing all development works by December 31, 2024. Should a change to this date materialize it will be included in subsequent bi-annual Project reports. Table 2, below, presents the key milestones and schedule for completing development phase activities.



Table 2: *Project Schedule*

<b>Milestones</b>	<b>Schedule</b>	<b>Completed</b>	<b>Delayed to</b>
<b>Notice of Commencement of Terms of Reference</b>	April 24, 2019	April 24, 2019	
<b>Development of route alternatives and data collection</b>	Spring 2019 – Spring 2020	June 2020	
<b>Draft Terms of Reference external review</b>	June 2020	June 2020	
<b>Proposed Terms of Reference submitted to the Ministry of the Environment, Conservation and Parks</b>	September/ October 2020	October 16, 2020	
<b>Ministry of the Environment, Conservation and Parks review and approval of the Terms of Reference</b>	December 2020/January 2021	February 18, 2022	
<b>Notice of Commencement of the Environmental Assessment</b>	January 1, 2021	March 9, 2022	
<b>Evaluation of alternative routes and determination of a preferred route.</b>	November 2020 to May 2021		Spring to Fall 2022
<b>Consultation and data collection on the Environmental Assessment study areas</b>	2021 – 2022		2022-2023
<b>Preliminary design and engineering</b>	2021 – 2022		2022-2023
<b>Draft Environmental Assessment review</b>	2022		2023
<b>Cost Estimation</b>	2022		2023
<b>Leave to Construct (S92) application submission*</b>	2022		2023
<b>Decision on Environmental Assessment by Ministry of the Environment, Conservation and Parks</b>	2023/2024		2024
<b>Complete Development Work</b>	By end of 2024		
<b>Leave to Construct (S92) approval</b>	2023/2024		
<b>Start of Execution Phase</b>	To be determined		

\* Leave to construct under Section 92 of the Ontario Energy Board Act is a regulatory process to obtain approval from the OEB to build and operate a transmission line. Hydro One will not apply for this approval until direction is received by the IESO on the timing for the project.







During this reporting period the MECP approved the ToR and Hydro One has issued the Notice of Commencement for the EA. Consultation and engagement on the Project continues including Project-specific capacity building (training, funding, procurement, and employment) for Indigenous communities, information sharing, IK gathering and participation in development activities. Alternative routes identified in the ToR will be evaluated with field studies undertaken in 2022. A determination of a preferred route is expected in Q3/Q4 of 2022. Preliminary design and engineering will continue to provide support into development phase activities.

The Project remains on schedule to complete the development work by the end of 2024.





## Risks and Issues Log

The Project is being monitored continually for risks and risk mitigation implemented as a matter of routine activity by the project team. Risks are formally re-evaluated on a quarterly basis. Table 3, below, lists major development risks actively being managed. Project execution risks will be identified at a later date and will be included in Hydro One's Leave to Construct (Section 92) application that will be submitted to the OEB.

Table 3: *Major Risks and Issues*

<b>Risk Description</b>	<b>Likelihood of Occurrence</b>	<b>Impact of Risk on the Project</b>	<b>Mitigation</b>
<b>Consultation</b>	realized; Duty to Consult list has changed	Scope, Schedule and cost	Risk remains that the scope of Indigenous and non-Indigenous consultation could change as the Project matures. Hydro One meets regularly with ENDM and MECP.
<b>Health &amp; Safety</b>	realized; Covid-19	Schedule and cost	Alternative engagement activities, sensitive to health and safety, have been implemented. Duration of risk is unknown.
<b>Regulatory approvals</b>	high	Scope, Schedule and cost	Decisions by various Regulators may result in changes to scope, schedule and cost of the Project. This includes delays to the approval of the Terms of Reference for the environmental assessment by the MECP, delays in the review and comment on environmental field study work plans by MECP Species at Risk Branch and Ministry of Natural Resources and Forestry. Mitigation involves meeting with Regulators to discuss and address issues and providing sufficient time and opportunity for Regulators to undertake their reviews, comments and approvals.

Energy issued an initial Duty to Consult (DTC) letter to Hydro One in October 2018, which was revised in April 2020. Hydro One and Energy have a Memorandum of Understanding (MOU) that outlines the DTC roles and responsibilities of the two parties regarding major projects. Hydro One meets monthly with Energy and other agencies to provide Indigenous consultation and engagement updates, to keep the Crown apprised of any potential challenges in the consultation process and to discuss how Energy and Hydro One can work together to find solutions to those challenges.





COVID-19 has provided unprecedented challenges in the development of infrastructure projects. Timely adaptation from the more traditional in-person to virtual engagement has been required. Hydro One has developed and successfully implemented a wide variety of versatile virtual tools including the use of telepresence meetings, webinars, virtual town-halls and the use of USB storage sticks and tablets to distribute project materials safely. With increasing vaccination rates and the implementation of effective health and safety protocols a return to in-person engagement is happening. Health and safety are a priority to Hydro One and our project activities will continue to be monitored and adapted.

As the Project matures government agencies such as Energy, MECP, Ministry of Northern Development, Mines, Natural Resources and Forestry and other government agencies may influence the schedule and scope of the Project. Hydro One meets regularly with these agencies and provides information to keep them apprised of Project progress and to work with them to manage expectations. Based on comments received during the ToR review process and advice from the MECP, Hydro One amended the ToR and submitted an amended document to the MECP on June 18, 2021. The ToR was approved by the MECP during this reporting period, on February 18, 2022. In addition, during this reporting period Hydro One was asked by Energy to address requests for added consultation with respect to the MOU Consultation Plan. This consultation has been undertaken and was completed.

