



Irma Wind Power Project Connection

PIP Summary

1.0 Participant Involvement Program (PIP)

From August 2016 to July 2017, the AESO conducted a Participant Involvement Program (PIP) to assist in preparing its *Irma Wind Power Project Connection Needs Identification Document* (NID). The AESO directed one of the transmission facility owners (TFOs) involved in the Project, in this case AltaLink Management Ltd. (AltaLink), in its capacity as general partner of AltaLink, L.P., to assist the AESO in providing notification as part of the AESO's PIP.

The AESO's PIP has been conducted in accordance with the requirements of Section 6.2.2, NID27 and Appendix A2 of the current Alberta Utilities Commission (Commission) Rule 007, effective July 4, 2017.

1.1 Stakeholder Notification

The AESO's PIP was designed to notify the parties notified in AltaLink's PIP and other parties that the AESO has determined may have an interest in a needs identification document, including but not limited to:

- i. occupants, landowners or residents;
- ii. local authorities, agencies and government which have responsibilities related to electric transmission line development;
- iii. First Nations and Métis; and
- iv. market participants

(collectively, Stakeholders).

The AESO developed a one-page AESO Need Overview document that notified Stakeholders of the following items:

- a description of the need for development;¹
- a description of the AESO's preferred option to respond to the system access service request;
- identification of the general area where facilities could be installed to implement the AESO's preferred option to respond to the system access service request;

Alberta Electric System Operator

¹ The AESO Need Overview identified Irma Wind Farm Ltd. as the market participant that submitted the request for system access service. Subsequent to the distribution and posting of the AESO Need Overview, the market participant changed to Irma Wind LP, by its general partner Irma Wind GP Inc.



- the AESO's contact information, including telephone, email and website, for further information; and
- the AESO's next steps, including the AESO's intention to apply to the Commission for approval of the need.

copy of the Need Overview was posted to the AESO website at https://www.aeso.ca/grid/projects/irma-energy-connection/ on September 6, 2016 and a notice was published in the AESO Stakeholder Newsletter on September 6, 2016. Copies of the Need Overview posting and the AESO Stakeholder Newsletter notice have been included as Attachments 1 and 2, respectively.

Stakeholders Notified in AltaLink's PIP

AltaLink has advised the AESO that its PIP included notification within 800 m of the proposed transmission line right-of-way and substation boundary in accordance with AUC Rule 007.

In total, AltaLink notified a total of 42 private or individual landowners, occupants, and residents and approximately 31 agency and industry stakeholders. The Need Overview was included with the TFO's project-specific information packages that were distributed to these Stakeholders between August 26, 2016 and April 13, 2017.

The 31 notified agency and industry stakeholders and AltaLink's rationale for their inclusion in the PIP are listed in the following table.

Table 1: Summary of Notified Agencies and Industry Stakeholders

Stakeholder	Rationale for Inclusion in PIP	
Alberta Agriculture and Rural Development	Provincial Requirement	
Alberta Culture and Tourism	Provincial Requirement	
Alberta Environment and Parks (2 departments)	Provincial Requirement	
Alberta Transportation	Provincial Requirement	
Alliance Pipeline Ltd.	Oil and Gas Facility Owner in the	
	Notification area	
ATCO Pipelines Ltd.	Oil and Gas Facility Owner in the	
	Notification area	
Battle River Rural Electrification Association	Legal owner of an electric distribution	
	system in the Notification area	
Cardinal Energy Ltd.	Oil and Gas Facility Owner in the	
	Notification area	
Cenovus Energy Inc.	Oil and Gas Facility Owner in the	
	Notification area	
ConocoPhillips Canada Operations Ltd.	Oil and Gas Facility Owner in the	
·	Notification area	
County of Minburn	Municipal Requirement (land use	
•	authority)	
Devon Canada Corporation	Oil and Gas Facility Owner in the	



	Notification area
Ducks Unlimited Canada	Special Interest Group with land rights
	in the Notification area
Encana Corporation	Oil and Gas Facility Owner in the
	Notification area
Enerplus Resources Corporation	Oil and Gas Facility Owner in the
	Notification area
FortisAlberta Inc.	Legal owner of an electric distribution
	system in the Notification area
Husky Oil Operations Limited	Oil and Gas Facility Owner in the
	Notification area
Iron Creek Gas Co-Op	Oil and Gas Facility Owner in the
	Notification area
Kinder Morgan Cochin ULC	Oil and Gas Facility Owner in the
	Notification area
Municipal District of Wainwright – Chief	Municipal government representative
Administration Office	
Municipal District of Wainwright (2 departments)	Municipal requirement (land use
	authority)
MLA Battle River-Wainwright	Provincial government representative
	for the area
Pine Cliff Energy Ltd.	Oil and Gas Facility Owner in the
	Notification area
Signalta Resources Ltd.	Oil and Gas Facility Owner in the
	Notification area
Spur Resources Ltd.	Oil and Gas Facility Owner in the
	Notification area
Suncor Energy Inc.	Oil and Gas Facility Owner in the
- N. d. I. d.	Notification area
Taqa North Ltd.	Oil and Gas Facility Owner in the
T	Notification area
Telus Communications Inc.	Telecommunication Facility Owner in
	the project area
Transport Canada – Aerodromes and Air	Federal Requirement
Navigation	

Attachments 3 and 4 include AltaLink's project newsletters, which were included in AltaLink's project-specific information packages. AltaLink's project newsletters included the AESO's contact information, a description of the AESO's role, a reference to the AESO Need Overview, and an invitation to contact AltaLink or the AESO for additional information.

AltaLink's project newsletters and the AESO Need Overview, were also posted on AltaLink's project-specific webpage at http://www.altalink.ca/projects/view/250/irma-wind-power-project-connection



AltaLink informed the AESO that it did not hold any public event for the project as per AltaLink's standard practice on customer connection projects. AltaLink did participant in two public events held by the market participant, on August 30, 2016 and March 16, 2017. The TFO's project-specific information packages, which included the Need Overview, were available at the open houses. In addition, AltaLink had on display information relating to the roles of "Key Players", this included the following information on the role of the AESO:

The ALBERTA ELECTRIC SYSTEM OPERATOR (AESO)

The AESO is an independent, not-for-profit entity responsible for the safe, reliable and economic planning and operation of the Alberta Interconnected Electric System. The AESO determines the need for transmission reinforcement and directs Transmission Facility Owners, such as AltaLink, to submit a Facility Application for permitting and licensing to construct and operate transmission facilities. Find out more at http://www.aeso.ca

Stakeholders Notified by the AESO

The AESO also notified eight market participants that the AESO has determined may have an interest in the NID. The AESO identified that, under certain abnormal (Category B) system conditions, these market participants may be affected following the connection of the Facility. A Market Participant Notification Letter in addition to the Need Overview was sent to the notified market participants on June 28, 2017. The eight notified market participants are as follows:

- Alberta Power (2000) Ltd.
- Balancing Pool
- BluEarth Renewables Inc.
- FortisAlberta Inc.
- Ghost Pine Windfarm LP
- Halkirk Wind Power LP
- Suncor Energy Products Inc.
- TransAlta Corporation

A generic version of the Market Participant Notification Letter was posted to the AESO website on June 28, 2017 at https://www.aeso.ca/grid/projects/irma-energy-connection/. A copy has been included as Attachment 5.

1.2 Filing Notification

Most recently, the AESO notified Stakeholders of its intention to submit the NID to the Commission by posting a Notification of NID Filing to the AESO website at https://www.aeso.ca/grid/projects/irma-energy-connection/ on July 13, 2017 and a notice in the AESO Stakeholder Newsletter on July 13, 2017. Copies of the Notification of NID Filing posting and the AESO Stakeholder Newsletter notice have been included as Attachments 6 and 7, respectively.



1.3 Responding to Questions and Concerns

To ensure that Stakeholders had the opportunity to provide feedback, the AESO provided Stakeholders with the AESO contact information, including a dedicated, toll-free telephone line (1-888-866-2959) and a dedicated email address (<u>stakeholder.relations@aeso.ca</u>). The AESO contact information, along with the AESO's mailing address (2500, 330 5th Ave. SW, Calgary) and website address (<u>www.aeso.ca</u>), and a privacy statement that described how the AESO is committed to protecting Stakeholders' privacy, were included in the Need Overview.

As directed by the AESO, AltaLink was prepared to direct any Stakeholder questions addressed to the AESO, or questions regarding the AESO Need Overview, to the AESO.

1.4 Concerns and Objections Raised

AltaLink has advised that Stakeholders have not identified any concerns or objections with the need for development or the AESO's preferred option to respond to the system access service request. The AESO has not received any indication of concerns or objections from any party about the need for development or the AESO's preferred option to respond to the system access service request.

1.5 List of Attachments

- Attachment 1 AESO Need Overview
- Attachment 2 AESO Stakeholder Newsletter Need Overview Notice
- Attachment 3 AltaLink's Project Newsletter *Irma Wind Power Project Connection* (August 2016)
- Attachment 4 AltaLink's Project Newsletter Irma Wind Power Project Connection Preferred and alternate route announcement (January 2017)
- Attachment 5 Market Participant Notification Letter
- Attachment 6 AESO Public Notification of NID Filing (AESO Website Posting)
- Attachment 7 AESO Stakeholder Newsletter NID Filing Notice



Attachment 1 – AESO Need Overview



Need for the Irma Energy Connection in the Irma Area

Irma Wind Farm Ltd. (Irma Wind) has applied to the Alberta Electric System Operator (AESO) for transmission system access to connect its proposed wind generating facility (Facility) in the Irma area. Irma Wind's request can be met by the following solution:

PROPOSED SOLUTION

- Modify the existing Buffalo Creek 526S substation, including adding a 138 kilovolt (kV) circuit breaker and associated equipment
- Add approximately 15 kilometres of 138 kV transmission line to connect the Facility to the Buffalo Creek 526S substation

NEXT STEPS

- The AESO intends to apply to the Alberta Utilities Commission (AUC) for approval of the need in early 2017.
- The AESO's needs identification document (NID) application will be available on the AESO's website at **www.aeso.ca/nid** at the time of its application to the AUC.

The following organizations have key roles and responsibilities in providing access to the transmission system:

THE AESO:

- Must plan the transmission system and enable access to it for generators and other qualified customers
- Is regulated by the AUC and must apply to the AUC for approval of its NID

ALTALINK MANAGEMENT LTD.:

- Is the transmission facility owner in the Irma area
- Is responsible for detailed siting and routing, constructing, operating and maintaining the associated transmission facilities
- Is regulated by the AUC and must apply to the AUC for approval of its transmission facilities applications

FAST FACT

Alberta's electric transmission system comprises the towers, wires and related equipment that are a part of moving electricity from where it is generated

to where it is used.

CONTACT US

We appreciate your views, both on the need for transmission system development and proposed transmission plans. If you have any questions or comments, please contact us directly.

Alberta Electric System Operator Jennifer Vollmer

AESO Stakeholder Relations

stakeholder.relations@aeso.ca 1-888-866-2959

2500, 330-5th Avenue SW Calgary, AB T2P 0L4 Phone: 403-539-2450 Fax: 403-539-2949

www.aeso.ca

www.poweringalberta.ca

y @theaeso

WHO IS THE AESO?

The Alberta Electric System Operator (AESO) is a not-for-profit organization with no financial interest or investment of any kind in the power industry. We plan and operate Alberta's electricity grid and wholesale electricity market safely, reliably and in the public interest of all Albertans.

The AESO is committed to protecting your privacy. Your feedback, comments and/or contact information collected by the AESO will be used to respond to your inquiries and/or to provide you with further information about the project. The AESO will not use your personal information for any other purpose and will not disclose your information without consent or a legal obligation. If you choose to communicate by email, please note, email is not a secure form of communication. Security of your communication while in transit cannot be guaranteed.



Attachment 2 – AESO Stakeholder Newsletter Need Overview Notice

Irma Energy Connection – Need for Transmission System Development in the Irma area

Irma Wind Farm Ltd. (Irma Wind) has applied to the Alberta Electric System Operator (AESO) for transmission system access to connect its proposed wind generating facility (Facility) in the Irma area. Irma Wind's request can be met by modifying the existing Buffalo Creek 526S substation, including adding a 138 kilovolt (kV) circuit breaker and associated equipment, and adding approximately 15 kilometres of 138 kV transmission line to connect the Facility to the Buffalo Creek 526S substation.

The AESO has posted a Need Overview for this project on its website. Please <u>click here</u> to view the document or visit the AESO website at <u>www.aeso.ca</u> and follow the path Transmission > Needs Identification Documents > Irma Energy Connection.



Attachment 3 – AltaLink's Project Newsletter – *Irma Wind Power Project Connection* (August 2016)

You are receiving this newsletter because you are near the Irma Wind Power Project Connection and we want your input.

Irma Wind Farm Ltd. (Irma Wind) has requested a connection to the **transmission** system for their proposed new wind power project. AltaLink is proposing to construct a transmission line, operated and maintained by AltaLink, to connect Irma Wind's potential Kinsella **Substation** to AltaLink's Buffalo Creek Substation.

Although AltaLink's project is separate from Irma Wind's project, it is required to facilitate the connection of the new wind power project. Please contact Irma Wind for more information on their new wind power project. Their contact information is on the back of this newsletter.

We are providing you with:

- project details
- the project schedule
- information about how you can provide your input
- maps of the proposed project

ATTEND IRMA WIND'S OPEN HOUSE

We will be available at Irma Wind's open house to share information, gather your input and respond to any questions or concerns you might have.

Date	Location	Address	Time
Tuesday, August	Irma Curling	5120 53 Ave	5:00 p.m. to
30	Club	Irma, Ab	8:00 p.m.

DEFINITIONS

Transmission

Transmission lines make up
Alberta's electric highway,
linking the places where power
is generated to where power is
used. Transmission lines transport
large amounts of power over long
distances across the province.
The transmission system connects
diverse sources of power generation
including wind, high-efficiency coal,
natural gas and more.

DEFINITIONS

Substation

Substations are the connection points between power lines of varying voltages and contain equipment that controls and protects the flow of power. Substations include transformers that step down and step up the voltage so power can be transmitted through transmission lines or distributed to your community through distribution lines.

CONTACT US

1-877-267-1453 stakeholderrelations@altalink.ca Visit us online at

www.altalink.ca/regionalprojects

Electric and Magnetic Fields (EMF)

AltaLink recognizes that people have concerns about exposure to Electric and Magnetic Fields (EMF) and we take those concerns very seriously.

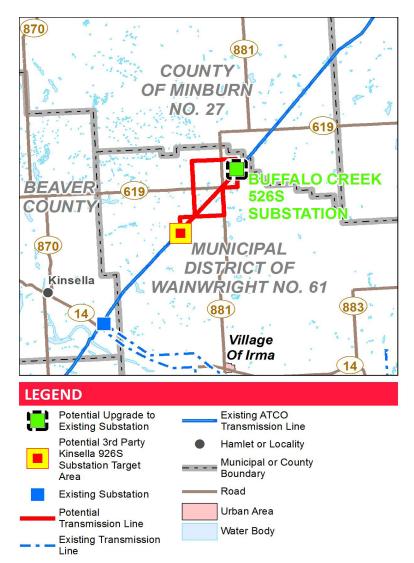
Everyone in our society is exposed to EMF from many sources, including:

- power lines and other electrical facilities
- electrical appliances in your home
- · building wiring

National and international organizations such as the Health Canada and World Health Organization have been conducting and reviewing research about EMF for more than 40 years. Based on this research, these organizations have not recommended the general public take steps to limit their everyday exposure to EMF from high voltage transmission lines.

If you have any questions about EMF please contact us:

Website: www.altalink.ca/emf Email: emfdialogue@altalink.ca Toll-free phone number: 1 -866-451-7817



Project details

Irma Wind has requested a connection to the transmission system to connect AltaLink's existing Buffalo Creek Substation (in SW 12-48-9-W4) to Irma Wind's potential Kinsella Substation.

We are proposing to build approximately 10 to 16 kilometres of 138 kilovolt (kV) transmission line. Final line length is dependent on which proposed route option is selected, and approved, by the Alberta Utilities Commission (AUC). Please see the maps included in this package for an overview of the potential transmission line routes.

AltaLink will also be installing optical ground wiring (also known as OPGW) on top of the new transmission line for protection and telecommunications purposes.

Anticipated project schedule

Notify and consult with stakeholders	Summer 2016
File application with Alberta Utilities Commission (AUC)	Spring 2017
Start construction if project is approved	Fall 2017
Construction complete	Fall 2018

Although we attempt to follow the anticipated project schedule, it is subject to change. We will continue to provide you with updated schedule information if required as the project progresses.



The existing Buffalo Creek Substation

Substation upgrades

To accommodate the new transmission line, we are proposing to upgrade the existing Buffalo Creek Substation. The upgrades include adding one new 138 kV breaker and other associated equipment. An expansion of the substation fence may be required.



Two pole structure



Single pole structure

Transmission structures

The proposed single circuit 138 kV transmission structures will:

- be either single or two pole
- be wood or steel
- be approximately 17 to 23 metres tall
- have a distance between structures of approximately 150 to 250 metres
- have a right-of-way 30 metres wide when on private property or one metre within the road allowance right-of-way

Route selection

We have identified three potential routes that would be suitable to connect the Buffalo Creek Substation to Irma Wind's potential Kinsella Substation target area. The routes and substations are shown on the maps included in this package. AltaLink takes several factors into consideration in an effort to find a route with low overall environmental, social and economic effects. In addition to stakeholder input we also consider agricultural, residential, environmental and visual impacts, as well as cost.

PRIVACY COMMITMENT

AltaLink is committed to protecting your privacy. Your personal information is collected and will be protected under AltaLink's Privacy Policy and Alberta's Personal Information Protection Act. As part of the regulatory process for new transmission projects, AltaLink may provide your personal information to the Alberta Utilities Commission (AUC). For more information about how AltaLink protects your personal information, visit our website at www.altalink.ca/privacy or contact us directly via email privacy@altalink.ca or phone at 1-877-267-6760.

Easements, off rightof-way access and construction workspace

Additional temporary workspace, outside of the right-of-way in certain areas may be required in order to access and construct the transmission line. The construction workspace is intended to be primarily used for equipment access during construction, including the potential stringing areas located behind some corner structures.

AltaLink will consult with all affected landowners regarding the potential requirement for construction workspace. All construction workspace and off right-of-way access will be determined following further detailed engineering and construction planning for the project and will be discussed with landowners prior to, and during construction of the line.

Where the transmission line is proposed in road allowance, AltaLink may require a 10 metre right-of-way on adjacent property for access and vegetation removal which will be acquired from landowners in the form of an easement agreement. The location of additional right-of-way is shown on the attached Strip Maps 1-4.

Additional right of way for the purposes of guy wires for corner structures may also be required.

INCLUDED IN THIS INFORMATION PACKAGE:

- Project maps
- AESO Need Overview
- AUC brochure: Public involvement in a proposed utility development



How to provide your input

We will contact landowners, residents and occupants near the proposed transmission line project to gather input and address questions or concerns. After the consultation process is complete we will file an application with the AUC. The AUC will review the application through a process in which stakeholders can participate. We will notify stakeholders when we file the application and again once the AUC has reached a decision about the project. To learn more about the AUC process and how you can become involved, please refer to the brochure included in this package titled Public involvement in a proposed utility development.



2611 - 3rd Avenue SE Calgary, Alberta T2A 7W7

Let's talk transmission

www.facebook.com/altalinktransmission



www.twitter.com/altalink



Contact us

To learn more about the proposed Irma Wind Power Project Connection, please contact:

ALTALINK

1-877-267-1453 (toll-free)

Email: stakeholderrelations@altalink.ca Website: www.altalink.ca/regionalprojects

To learn more about Irma Wind Farm Ltd., please contact:

REGIONAL POWER INC.

Alex Tsopelas, Project Manager 905-363-7201 6755 Mississauga Road, Suite 308 Missisauga, ON, L5N 7Y2

To learn more about Alberta's electric system and the need for the project, please contact:

ALBERTA ELECTRIC SYSTEM OPERATOR (AESO)

1-888-866-2959 (toll-free)

Email: stakeholder.relations@aeso.ca

The Alberta Electric System Operator (AESO) is an independent, not-for-profit organization responsible for the safe, reliable and economic planning and operation of the provincial transmission grid. For more information about why this project is needed, please refer to the AESO's need overview included with this package, or visit www.aeso.ca. If you have any questions or concerns about the need for this project you may contact the AESO directly. You can make your concerns known to an AltaLink representative who will collect your personal information for the purpose of addressing your questions and/or concerns to the AESO. This process may include disclosure of your personal information to the AESO.

To learn more about the application and review process, please contact:

ALBERTA UTILITIES COMMISSION (AUC)

780-427-4903

(You can call toll-free by dialing 310-0000 before the number).

Email: utilitiesconcerns@auc.ab.ca

The Alberta Utilities Commission (AUC) ensures the fair and responsible delivery of Alberta's utility services. AltaLink submits applications for new transmission projects to the AUC and the AUC reviews them in a public process.



Attachment 4 – AltaLink's Project Newsletter – *Irma Wind Power Project Connection Preferred and alternate route announcement* (January 2017)



You are receiving this newsletter because you are near the Irma Wind Power Project Connection and we want your input.

Irma Wind Farm Ltd. (Irma Wind) has requested a connection to the **transmission** system for their proposed new wind power project. AltaLink is proposing to construct a transmission line to connect Irma Wind's project to the electric system. We began public consultation in August 2016 for this project and have now identified our preferred and alternate route options.

Although AltaLink's project is separate from Irma Wind's project, it is required to facilitate the connection of the new wind power project. Please contact Irma Wind for more information on their new wind power project. Their contact information is on the back of this newsletter.

We are providing you with:

- project details
- the project schedule
- information about how you can provide your input
- maps of the proposed project

Project details

Irma Wind has requested a connection to the transmission system to connect AltaLink's existing Buffalo Creek **Substation** (in SW 12-48-9-W4) to Irma Wind's potential Kinsella Substation. To accommodate the new transmission line, we are proposing to upgrade the existing Buffalo Creek Substation. The upgrades include adding one new 138 kV breaker and other associated equipment.

AltaLink will also be installing optical ground wiring (also known as OPGW) on top of the new transmission line for protection and telecommunications purposes.

DEFINITIONS

Transmission

Transmission lines make up
Alberta's electric highway,
linking the places where power
is generated to where power is
used. Transmission lines transport
large amounts of power over long
distances across the province.
The transmission system connects
diverse sources of power generation
including wind, high-efficiency coal,
natural gas and more.

DEFINITIONS

Substation

Substations are the connection points between power lines of varying voltages and contain equipment that controls and protects the flow of power.

Substations include transformers that step down and step up the voltage so power can be transmitted through transmission lines or distributed to your community through distribution lines.

CONTACT US

1-877-267-1453 stakeholderrelations@altalink.ca Visit us online at www.altalink.ca/projects

Electric and Magnetic Fields (EMF)

AltaLink recognizes that people have concerns about exposure to Electric and Magnetic Fields (EMF) and we take those concerns seriously.

Everyone in our society is exposed to EMF from many sources, including:

- power lines and other electrical facilities
- electrical appliances in your home
- building wiring

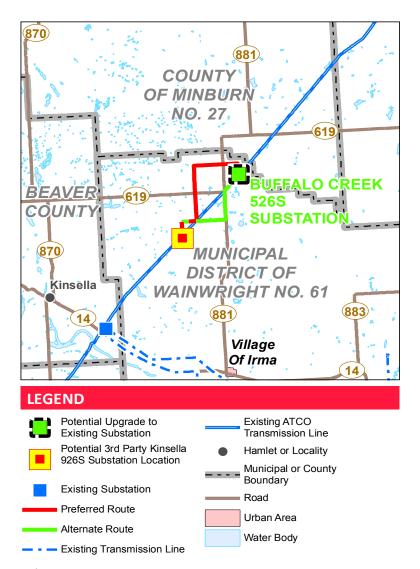
National and international organizations such as the World Health Organization and Health Canada have been conducting and reviewing research about EMF for more than 40 years. Based on this research, these organizations have not recommended the general public take steps to limit their everyday exposure to EMF from high voltage transmission lines.

If you have any questions about EMF please contact us:

Website: www.altalink.ca/emf Email: emfdialogue@altalink.ca Toll-free phone number: 1 -866-451-7817

No longer on a route under consideration? If you are no longer on a route under consideration, you will not receive further updates regarding the project.

If you would like to receive further updates please visit the project page, which can be found at www.altalink.ca/projects. The projects are listed in alphabetical order.



Preferred route

We have identified the north route as the preferred route. The preferred route is approximately 16 kilometres long and 98 per cent of the route is located within a developed road allowance. This route has lower overall impacts when compared to the alternate route. The preferred route also has fewer challenges in terms of constructability when compared to the alternate route.

Alternate route

A combination of the south and centre routes has been selected as the alternate route. The alternate route is approximately 13 kilometres long and 80 per cent of the route is located within a developed road allowance. When not in road allowance the route parallels an existing ATCO transmission line. While the alternate route is a shorter line length, it does have a higher residential impact than the preferred route. The alternate route will also need to cross an existing ATCO transmission line in two locations, shown on the attached maps at designation points C25 and C10. Both crossings will require taller structures.

Routes no longer under consideration

The routing from designation points S10-C5 has been removed from consideration because it has the greatest amount of residences within 150 metres and is directly adjacent to more wetlands. Routing from the Kinsella Substation to designation points C20-C10 has also been removed. This portion has the highest agricultural and environmental impact of any proposed route.

Transmission line structures





Two pole structure

Single pole structure

The proposed single circuit 138 kV transmission structures will:

- be either single or two pole
- be wood or steel
- be approximately 17 to 23 metres tall
- have a distance between structures of approximately 150 to 250 metres
- have a right-of-way:
 - 10 metres wide when located within road allowance
 - 40 metres wide when paralleling the existing ATCO transmission line

Note: At both locations (C25 and C10) along the alternate route where the proposed transmission line crosses an existing ATCO transmission line we may require three or four pole structures, which will be taller than those outlined above. If the alternate route is approved, the design of these structures will be determined following further engineering.

How to provide your input

We will contact landowners, residents and occupants near the proposed transmission line project to gather input and address questions or concerns. After the consultation process is complete we will file an application with the AUC. The AUC will review the application through a process in which stakeholders can participate.

We will notify stakeholders when we file the application and again once the AUC has reached a decision about the project. To learn more about the AUC process and how you can become involved, please refer to the brochure included in this package titled *Public involvement in a proposed utility development*.

Anticipated project schedule

Notify and consult with stakeholders	Early 2017
File application with Alberta Utilities Commission (AUC)	Spring 2017
Start construction if project is approved	Fall 2017
Construction complete	Fall 2018

Although we attempt to follow the anticipated project schedule, it is subject to change. We will continue to provide you with updated schedule information if required as the project progresses.

Easements, off rightof-way access and construction workspace

Additional temporary workspace, outside of the right-of-way may be required in order to access and construct the transmission line.

Where the transmission line is proposed in road allowance, AltaLink may require a 10 metre right-of-way on adjacent property for access and vegetation removal which will be acquired from landowners in the form of an easement agreement.

AltaLink will consult with all affected landowners regarding the potential requirement for construction workspace. All construction workspace and off right-of-way access will be discussed with landowners prior to, and during construction of the line.

The location of additional rightof-way, temporary workspace, temporary access trails and guy anchor locations on private property are shown on the attached strip map(s).



PRIVACY COMMITMENT

AltaLink is committed to protecting your privacy. Your personal information is collected and will be protected under AltaLink's Privacy Policy and Alberta's Personal Information Protection Act. As part of the regulatory process for new transmission projects, AltaLink may provide your personal information to the Alberta Utilities Commission (AUC). For more information about how AltaLink protects your personal information, visit our website at www.altalink.ca/privacy or contact us directly via email privacy@ altalink.ca or phone at 1-877-267-6760.



2611 - 3rd Avenue SE Calgary, Alberta T2A 7W7

Let's talk transmission

www.facebook.com/altalinktransmission



www.twitter.com/altalink



Contact us

To learn more about the proposed Irma Wind Power Project Connection, please contact:

ALTALINK

1-877-267-1453 (toll-free)

Email: stakeholderrelations@altalink.ca Website: www.altalink.ca/regionalprojects

To learn more about Irma Wind Farm Ltd., please contact:

REGIONAL POWER INC.

Alex Tsopelas, Project Manager 905-363-7201 6755 Mississauga Road, Suite 308 Missisauga, ON, L5N 7Y2

To learn more about Alberta's electric system and the need for the project, please contact:

ALBERTA ELECTRIC SYSTEM OPERATOR (AESO)

1-888-866-2959 (toll-free)

Email: stakeholder.relations@aeso.ca

The Alberta Electric System Operator (AESO) is an independent, not-for-profit organization responsible for the safe, reliable and economic planning and operation of the provincial transmission grid. For more information about why this project is needed, please refer to the AESO's need overview included with this package, or visit www.aeso.ca. If you have any questions or concerns about the need for this project you may contact the AESO directly. You can make your concerns known to an AltaLink representative who will collect your personal information for the purpose of addressing your questions and/or concerns to the AESO. This process may include disclosure of your personal information to the AESO.

To learn more about the application and review process, please contact:

ALBERTA UTILITIES COMMISSION (AUC)

780-427-4903

(You can call toll-free by dialing 310-0000 before the number). Email: utilitiesconcerns@auc.ab.ca

The Alberta Utilities Commission (AUC) ensures the fair and responsible delivery of Alberta's utility services. AltaLink submits applications for new transmission projects to the AUC and the AUC reviews them in a public process.



Attachment 5 – Market Participant Notification Letter



June 27, 2017

[Notified Market Participant]
[Notified Market Participant Address]

Attention: [Notified Market Participant Primary Contact]

Dear [Notified Market Participant Primary Contact]:

Re: Need for the Irma Wind Power Project Connection in the Irma Area

The Alberta Electric System Operator (AESO) would like to advise you that Irma Wind LP, by its General Partner Irma Wind GP Inc., has applied for transmission system access to connect its proposed Irma Wind Power Project (Facility) in the Irma area. A copy of the AESO Need Overview document is attached for your information. The AESO Need Overview describes the AESO's proposed transmission development to connect the Facility and the AESO's next steps, which includes submitting a needs identification document (NID) application to the Alberta Utilities Commission (AUC) for approval.

The purpose of this letter is to advise you that during preparation of the AESO's NID, the AESO identified that, under certain abnormal (Category B) system conditions, the operations of the **[Notified Market Participant Facility]** may be affected following the connection of the Facility.

Connection Assessment Findings

A connection assessment was carried out by the AESO to assess the transmission system performance following the connection of the Facility. This assessment did not identify any system performance issues under normal (Category A) system conditions. However, the connection assessment identified the potential for a system performance issue that may arise under certain Category B system conditions.

To mitigate this identified system performance issue, namely a potential transmission constraint, a new remedial action scheme (RAS) is being proposed. It is anticipated that the requirement for the proposed new RAS will be removed by the Provost to Edgerton and Nilrem to Vermilion Transmission System Reinforcement (PENV) project. The target in-service date for the PENV project is Q1 2021 and the planned in-service date for the Irma Wind Power Project Connection is July 1, 2019.

Transmission Constraint Management

The AESO manages transmission constraints in accordance with the procedures set out in Section 302.1 of the ISO rules, *Real Time Transmission Constraint Management* (TCM Rule). When applied, the TCM Rule could result in the AESO issuing directives for curtailment to source assets that are effective in managing a constraint.

Public

¹ The PENV project was filed with the AUC on December 12, 2016 in Proceeding No. 22274 and Application No. 22274-A001.

The connection assessment has identified nine source assets, including the [Notified Market Participant Facility], that are effective in mitigating the potential transmission constraint. These effective source assets could be curtailed to manage the potential transmission constraint under certain Category B

system conditions.

Based on the existing transmission system and connections in the area, the Facility is the most effective source asset to mitigate the potential transmission constraint. The other source assets, including the [Notified Market Participant Facility], are much less effective.

For Further Information

The complete connection assessment will be included in the AESO's NID. Once filed with the AUC, the NID will be posted on the AESO website at: https://www.aeso.ca/grid/projects/irma-energy-connection/

If you have any questions or concerns, please contact the AESO at 1-888-866-2959 or stakeholder.relations@aeso.ca

Yours truly,

Jennifer Vollmer Communications

Attachment: AESO Need Overview

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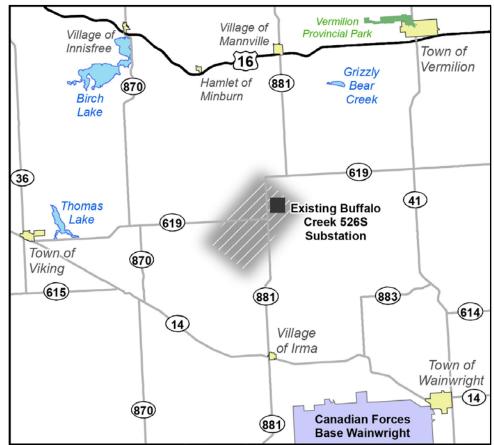
Attachment 6 – AESO Public Notification of NID Filing (AESO Website Posting)

Notification of Needs Identification Document Filing Addressing the Need for the Irma Wind Power Project Connection in the Irma Area

The Alberta Electric System Operator (AESO) advises you that it intends to file a Needs Identification Document (NID) for the Irma Wind Power Project Connection with the Alberta Utilities Commission (AUC) on or after July 28, 2017.

Irma Wind GP Inc. (Irma Wind) has applied to the AESO for transmission system access to connect its proposed Irma Wind Power Project (Facility) in the Irma area. Irma Wind's request can be met by the following solution:

- Modify the existing Buffalo Creek 526S substation, including adding a 138 kilovolt (kV) circuit breaker.
- Add a 138 kV transmission line to connect the Facility to the Buffalo Creek 526S substation.
- Add or modify associated equipment as required for the above transmission developments.



The black square on the map indicates the approximate location of the existing Buffalo Creek 526S substation, which is at SW-12-48-9-W4. The shaded area on the map indicates the approximate location of the proposed transmission developments, including the 138 kV transmission line. The specific transmission facilities may extend beyond the shaded area shown.

AltaLink Management Ltd. (AltaLink) is the transmission facility owner (TFO) in the Irma area. In August 2016, the AESO and the TFO began presenting this need to stakeholders, including residents, occupants and landowners. The AESO will apply to the AUC for approval of the need for this transmission development. Once filed with the AUC, the NID will be posted on the AESO website at https://www.aeso.ca/grid/projects/irma-energy-connection/

In a separate application, called a Facility Application, the TFO will provide more details about the specific facilities associated with the AESO's proposed transmission development, and will request AUC approval to construct and operate these facilities.

Please visit our website, www.aeso.ca for more information, or contact the AESO at 1-888-866-2959 or stakeholder.relations@aeso.ca



Attachment 7 – AESO Stakeholder Newsletter NID Filing Notice

Irma Wind Power Project Connection - Notice of NID Filing

The Alberta Electric System Operator (AESO) advises you that it intends to file a Needs Identification Document (NID) for the Irma Wind Power Project Connection with the Alberta Utilities Commission (AUC) on or after July 28, 2017.

Irma Wind GP Inc. (Irma Wind) has applied to the Alberta Electric System Operator (AESO) for transmission system access to connect its proposed Irma Wind Power Project (Facility) in the Irma area. Irma's request can be met by the following solution:

- Modify the existing Buffalo Creek 526S substation, including adding a 138 kilovolt (kV) circuit breaker.
- Add a 138 kV transmission line to connect the Facility to the Buffalo Creek 526S substation.
- Add or modify associated equipment as required for the above transmission developments.

The AESO intends to file the Irma Wind Power Project Connection Needs Identification Document (NID) application with the Alberta Utilities Commission (AUC) on or after July 28, 2017, requesting that the AUC approve this NID.

The AESO has posted the Notification of NID filing on its website. Please <u>click here</u> to view the document or visit the AESO website at <u>www.aeso.ca</u> and follow the path Grid > Project > Irma Wind Power Project Connection to see all the relevant documents, including the NID application once it is filed with the AUC.