

VARSITY NORTHWEST

Transmission Line Letter of Enquiry Application

Request for Approval to Maintain Current Overhead Structures on a Permanent Basis



APPLICATION OVERVIEW

ENMAX Power Corporation (ENMAX Power) owns and operates transmission lines 15.62L and 16.63L (respectively, 15.62L and 16.63L), which are 69-kilovolt (kV) transmission lines that provide electrical services to nearby communities in northwest Calgary. Both lines run through the community of Varsity, with 15.62L travelling in a north-south alignment along 53 Street NW and 16.63L travelling in an east-west alignment along Varsity Estates Drive NW. The lines converge at the junction of Varsity Estates Drive NW and 53 Street NW, where they connect with ENMAX No. 16 Substation. These transmission lines share the same transmission structures.

ENMAX Power intends to apply to the Alberta Utilities Commission (AUC) for approval to leave temporary overhead portions of 15.62L and 16.63L in place permanently.

ENMAX Power replaced underground cable portions of 15.62L and 16.63L with overhead transmission lines in 2009 and 2014, respectively. These replacements were requested on a temporary basis to expediently restore service after faults occurred on those underground cables. The overhead transmission line structures are made up of a total of four steel self-supporting monopoles (three single circuit and one double circuit) and three wood poles (two double circuit and one single circuit).

AUC approvals were granted on the condition that the overhead transmission lines would remain in place until permanent arrangements were approved. ENMAX Power has since evaluated various options for permanent arrangements, guided by its obligation to operate and maintain its transmission facilities in a safe, reliable, and economic manner.

ENMAX Power has assessed potential permanent arrangements in the context of technical and external drivers, including the viability of leaving the temporary overhead portions in place permanently. ENMAX Power has determined that maintaining the current overhead lines is the most reasonable and prudent solution as it avoids incremental impacts to customers (including financial impacts) associated with new configurations. The overhead facilities are capable of being operated for several decades.

Cable fault: Unintentional short circuit between energized cable conductors or between energized cable conductors and ground.

Conductor: A wire typically made up of multiple aluminum strands around a steel or copper core that together carry electricity. A conductor is strung between transmission structures.

Double circuit: A double circuit refers to two transmission lines on the same transmission structure, with each single circuit made up of three sets of conductors.

Single circuit: A single circuit refers to a single transmission line circuit. Each circuit is made up of three sets of conductors.

Steel self-supporting monopole: A self-supporting steel pole structure designed to support and carry overhead transmission lines.

Transmission lines: High voltage power lines that transport large quantities of electricity over long distances.

Wood pole: A wood pole structure designed to support and carry overhead transmission lines. Wood pole structures may require guy wires where technically required.

PROPOSED SCHEDULE

ENMAX Power plans to file a Letter of Enquiry Application with the AUC for approval in Q4 2022.

VARSITY NORTHWEST

Transmission Line Letter of Enquiry Application

Request for Approval to Maintain Current Overhead Structures on a Permanent Basis

DETAILS OF CURRENT OVERHEAD CONFIGURATIONS WHICH WOULD BE MAINTAINED ON A PERMANENT BASIS

The Letter of Enquiry Application will seek AUC approval to allow the following existing structures to remain in place as a permanent overhead arrangement:

STRUCTURE NUMBER	SINGLE OR DOUBLE CIRCUIT	EXISTING STRUCTURE DESCRIPTIONS	LOCATION
69-16.63-1	Single	Wood pole	Near the corner of Varsity Estates Road NW and Varsity Estates Drive NW
69-16.63-1A	Single	Steel self-supporting monopole	North side of Varsity Estates Drive NW
69-16.63-1B	Single	Steel self-supporting monopole	North side of Varsity Estates Drive NW
69-16.63-1C/ 69-15.62-1C	Double	Steel self-supporting monopole	Northwest corner of No. 16 Substation, within the substation fence line
69-15.62-1A	Single	Steel self-supporting monopole	West side of No. 16 Substation, within the substation fence line
69-16.63-1D/ 69-15.62-1D	Double	Wood pole	North side of No. 16 Substation, within the substation fence line
69-15.62-1E	Single	Wood pole	North side of No. 16 Substation, within the substation fence line

TRANSMISSION STRUCTURES

The existing structures are approximately 20 meters in height, running along approximately 350 meters of transmission line.



Example of Steel Self-Supporting Monopole



Example of Wood Pole

VARSITY NORTHWEST

Transmission Line Letter of Enquiry Application

Request for Approval to Maintain Current Overhead Structures on a Permanent Basis



VARSITY NORTHWEST
Transmission Line Letter of Enquiry Application, Request for Permanent Overhead Solution
Newsletter Map

Legend

- ★ Existing Steel Monopole to remain as permanent overhead solution
- Existing Wood Pole to remain as permanent overhead solution
- ⊗ Existing Lattice Transmission Structure
- Existing Wood Pole
- Existing Overhead Transmission Line to remain as permanent overhead solution
- Existing Overhead Transmission Line
- Existing ENMAX Substation
- LRT
- Buildings
- Natural Area



1:2,000 0 10 20 30 40 50 100 m

November 2022



The data contained is for information purposes only. ENMAX Power Corporation does not make any representations or warranties as to the accuracy or completeness of the information contained herein or its verification. ENMAX does not guarantee that the information will not change at any time. This data is a representation of ENMAX owned and operated facilities only and may not depict the exact locations on the ground. This document is being furnished on a confidential basis and is not to be distributed to any other parties.

Data sources:
 Civil and Circularity: ENMAX 2022;
 Landbase: City of Calgary 2022.

T:\GDrive_ENMAX_GISS\Enmax_GIS_Projects\Stakeholders\Transmission_16_63L_20220715\Work\Stakeholder_Newsletter_16_63L_8x11_20221027.mxd



VARSITY NORTHWEST

Transmission Line Letter of Enquiry Application

Request for Approval to Maintain Current Overhead Structures on a Permanent Basis



COMMITMENT TO COMMUNITY

We are committed to being a responsible corporate neighbour. Our commitment includes providing timely and meaningful engagement with stakeholders about our projects and applications. We provide opportunities for stakeholders, including residents, occupants and landowners, to be informed about our projects and applications, and to engage with us at all stages.

ABOUT ENMAX CORPORATION

Headquartered in Calgary, Alberta, with operations across Alberta and Maine, ENMAX Corporation (ENMAX) is a leading provider of electricity services, products and solutions. Through its subsidiaries, ENMAX Power Corporation and Versant Power, ENMAX owns and operates transmission and distribution utilities in Calgary, Alberta and northern and eastern Maine, safely and reliably delivering electricity to all Calgary homes and businesses and more than 162,000 customers in Maine. Through ENMAX Energy Corporation, ENMAX owns and operates 1,522 MW of generation and offers a range of innovative electricity, natural gas and energy services to approximately 700,000 residential, commercial and industrial customers across Alberta. ENMAX is a private corporation and The City of Calgary is its sole shareholder.

CONTACT INFORMATION

Your input is valuable to us. The ENMAX Power Stakeholder Relations team is committed to providing answers to your questions.

For more information about the Letter of Enquiry Application, contact:

ENMAX POWER CORPORATION

Phone: 403-514-1471

E-mail: stakeholderrelations@enmax.com

Website: enmax.com/varsitynorthwest

For questions about the regulatory process, contact:

ALBERTA UTILITIES COMMISSION

Phone: 403-310-4282

Email: info@auc.ab.ca

Website: auc.ab.ca