AGENDA
COUNCIL COMMITTEE MEETING
MUNICIPAL DISTRICT OF PINCHER CREEK
May 28, 2019
9:00 am

1. Approval of Agenda

2. Dust Control Discussion
   - Email from Operations, dated May 21, 2019

3. Delegation – 10:00am AESO/AltaLink

4. Round Table Discussions

5. Adjournment

Aaron Benson

From: Aaron Benson
Sent: May 21, 2019 11:29 AM
To: 'bhammond@mdpinchercreek.ab.ca'
Cc: Troy MacCulloch; Bev Everts; Quentin Stevick; Terry Yagos; Rick Lemire
Subject: FW: Dust Control: Pricing

Hi Brian,

Please find the cost break down for dust control by Mike Killoran. I have also C.C the other council members in this email so they will be aware of the email and of pricing. Please let me know if you have any other questions or clarifications in this email. Again, thankyou or your time.

Regards,

Aaron

Aaron Benson, B.Tech, C.E.T
Director of Operations
Municipal District of Pincher Creek No. 9
1037 Herron Drive, PO Box 279
Pincher Creek, AB T0K-1W0
Phone: 403-627-3130
AdminDirOps@mdpinchercreek.ab.ca

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From: Mike Killoran <PWPurchaser@mdpinchercreek.ab.ca>
Sent: May 21, 2019 8:42 AM
To: Aaron Benson <AdminDirOps@mdpinchercreek.ab.ca>
Cc: Jared Pitcher <PWManager@mdpinchercreek.ab.ca>
Subject: Dust Control

We have a few projects with no length recorded
The MD did close to 35 Km (Includes private 5-6 km) of dust control for a labour & equipment cost of $ 179.514.33
Average Equipment cost $ 5,128.98 per km.

Sinnott did a 22.1 km for a Labour & equipment cost of $ 100,782.50
Average equipment cost $ 4,560.00 per km.
(Sinnott did fewer privates than the MD, so his mob is less than the MD)

Our material cost was $ 0.36 litre and we used 752,677.03 litres (we sold 11,900 litres to the Town) $ 270,963.72

Sinnott used 284,401 liters
MD Used 480,176.03 litres

So 35 Km + 22 km = 57 km total

Material	$ 270,963.72
Sinnott Equip/labour	$ 100,782.50
MD Equip Labour	$ 179,514.33
	==========
	$ 551,260.55

$ 551,260.55 Divide by 57 km = $ 9,671.00 per km or **$ 967.12 per 100**
We charge $ 250.00.

Hope this helps

Mike Killoran

Public Works Purchaser
Municipal District of Pincher Creek No.9
1051 McLeod Street
Box 279
Pincher Creek, Alberta, Canada
Phone 403-627-3130
Fax 403-627-3474
Direct line 403-904-8026

http://www.mdpinchercreek.ab.ca

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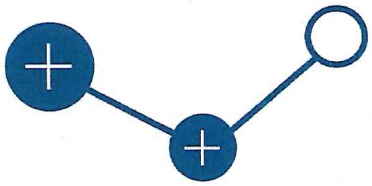
Chapel Rock to Pincher Creek Transmission Development & Alberta-British Columbia Intertie Restoration

May 28, 2019

Discussion items

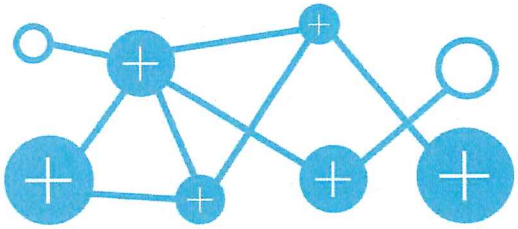
- About the AESO
- REP Round 1, 2 & 3 review
- Project history
- Need
- Solution
- Alberta – British Columbia Intertie Restoration
- Next steps

About the AESO

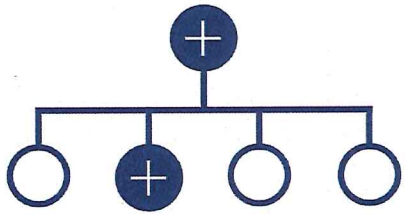


Connect
CUSTOMERS

PLAN
transmission



Operate the
GRID



Plan and Operate the
MARKET

ALBERTA SYSTEM OVERVIEW

26,000 KM
of transmission lines

Installed generation **16,106 MW**

Peak demand **11,697 MW**

Single control area of
660,000 KM²

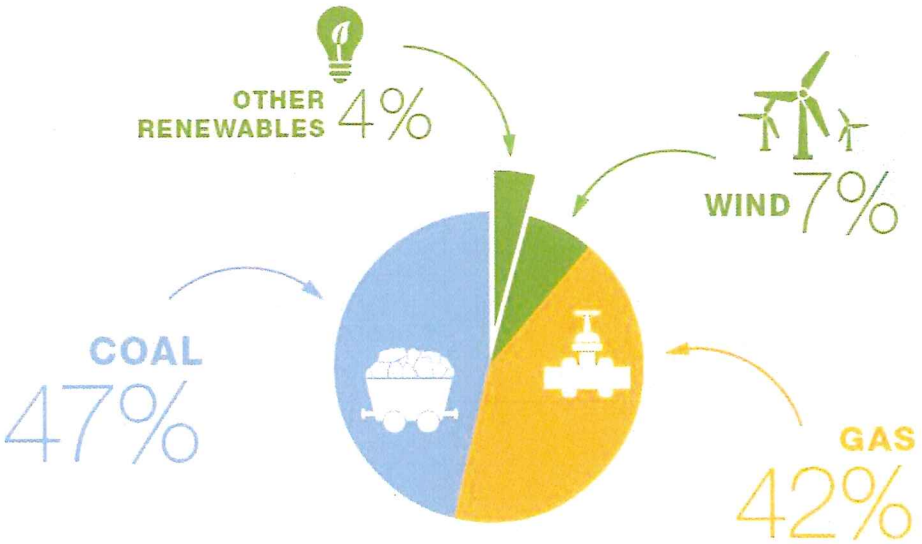
284
generating units

~201
market participants

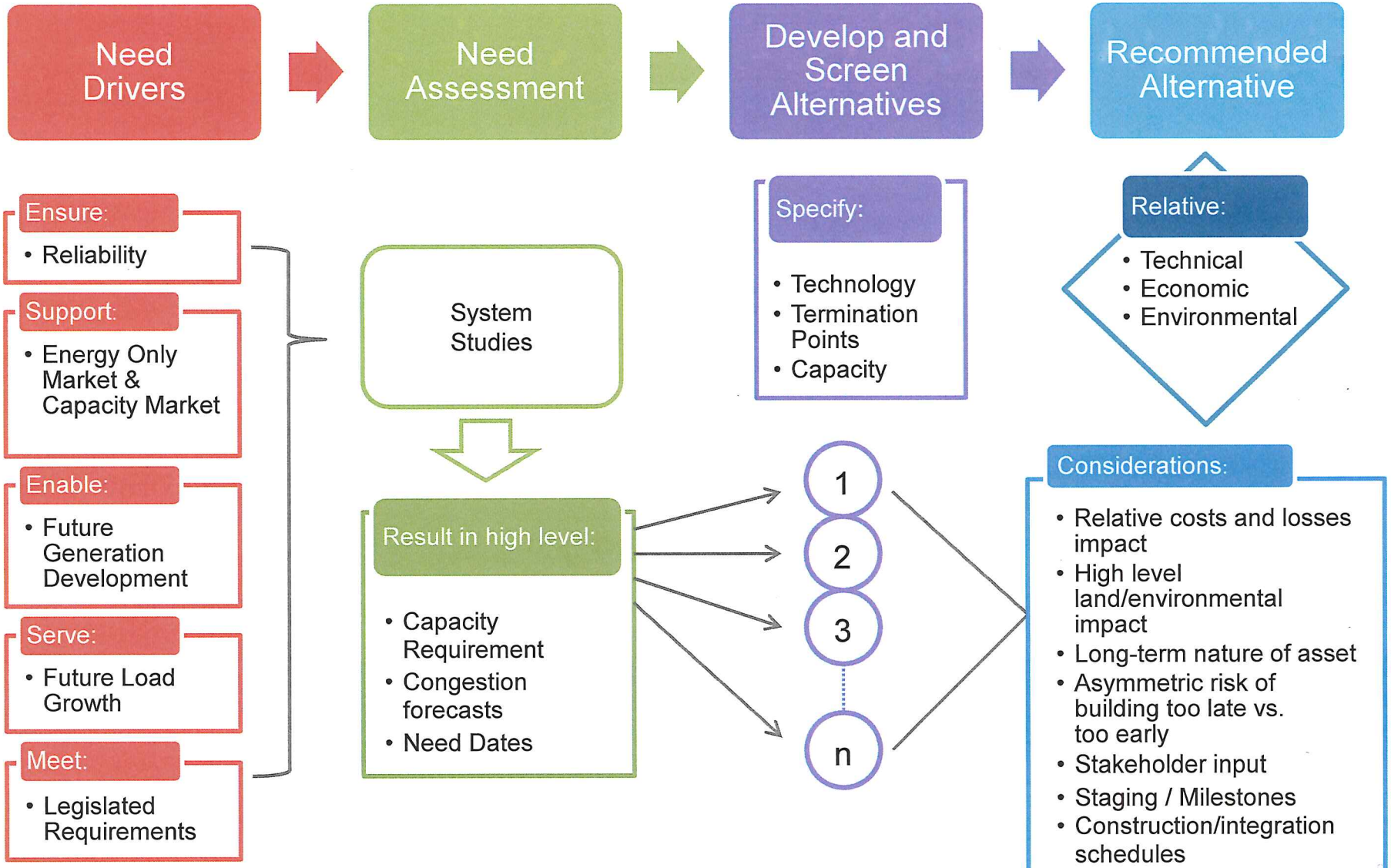
3 interties
to BC, SK and
Montana

As of February 2019

NET TO GRID GENERATION

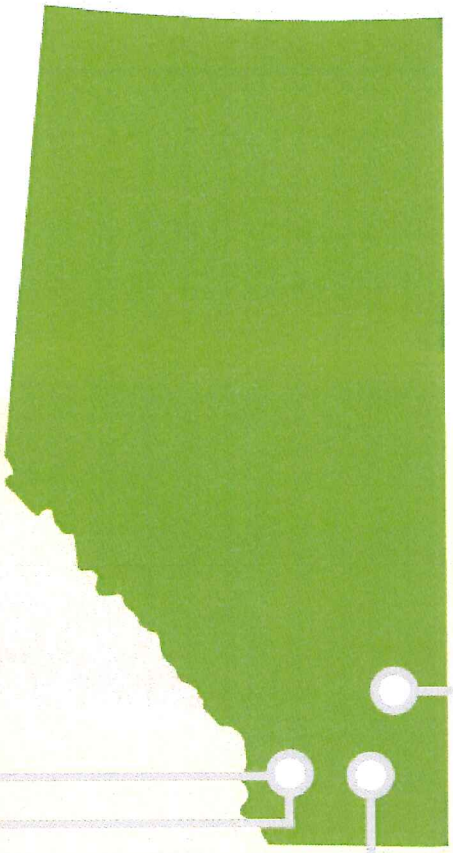


How does the AESO plan?



More on Long-Term transmission planning: www.aeso.ca > Grid > Long-term Transmission Plan

Renewable Electricity Program (REP) Round 1



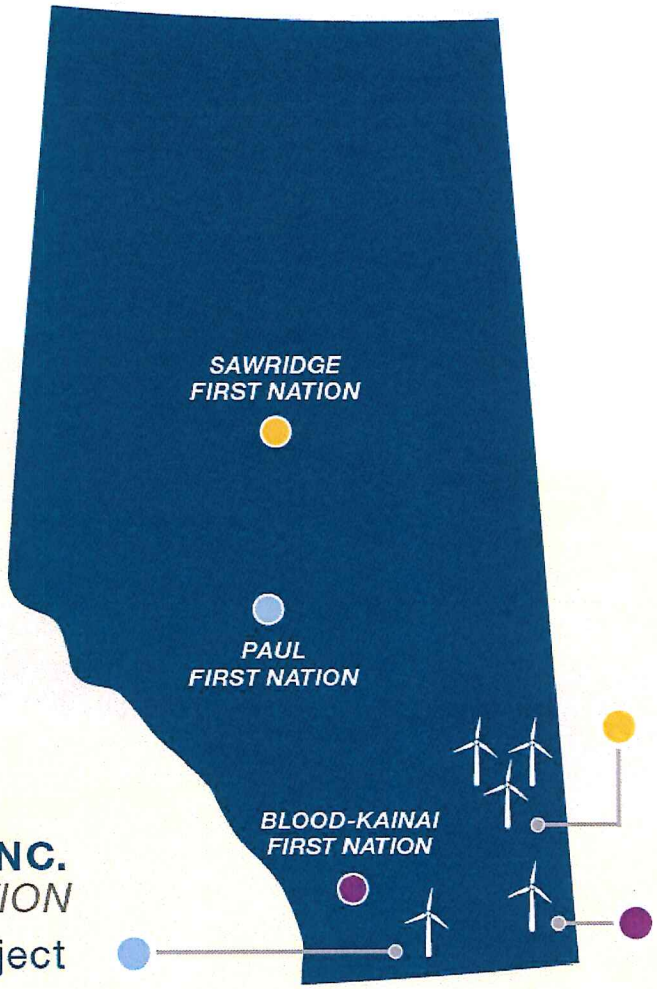
EDP RENEWABLES
Sharp Hills Wind Farm
248 MW

ENEL GREEN POWER
Phase 2 of Castle Rock Ridge Wind Power Plant
31 MW

ENEL GREEN POWER
Riverview Wind Farm
115 MW

CAPITAL POWER
Whitla Wind
202 MW

Renewable Electricity Program (REP) Round 2

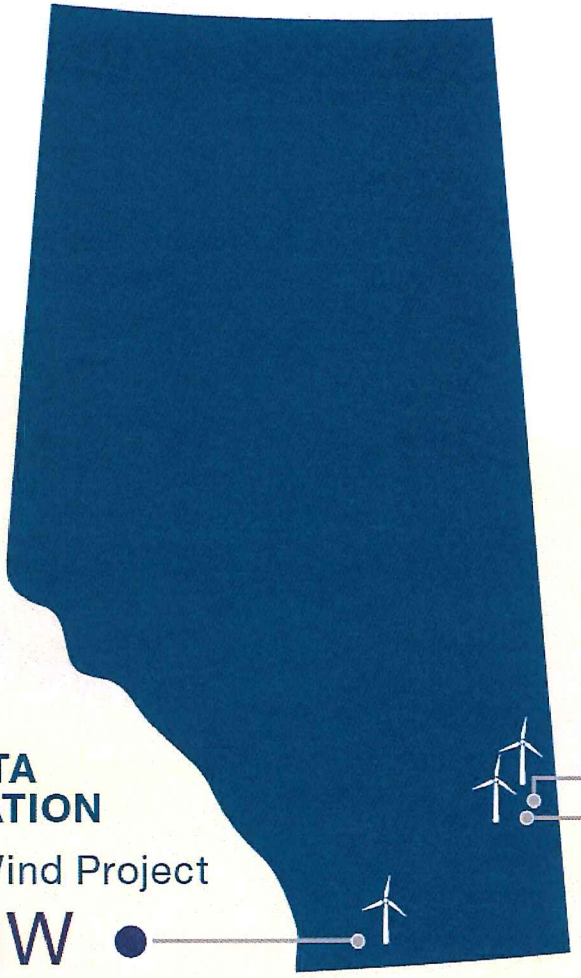


CAPSTONE INFRASTRUCTURE CORPORATION
SAWRIDGE FIRST NATION
Buffalo Atlee
Wind Farms 1/2/3
48 MW

POTENTIA RENEWABLES INC.
PAUL FIRST NATION
Stirling Wind Project
113 MW

EDF RENEWABLES CANADA INC.
BLOOD-KAINAI FIRST NATION
Cypress Wind Power Project
202 MW

Renewable Electricity Program (REP) Round 3



POTENTIA RENEWABLES INC.

Jenner Wind Power Project

122 MW

POTENTIA RENEWABLES INC.

Jenner Wind Power Project 2

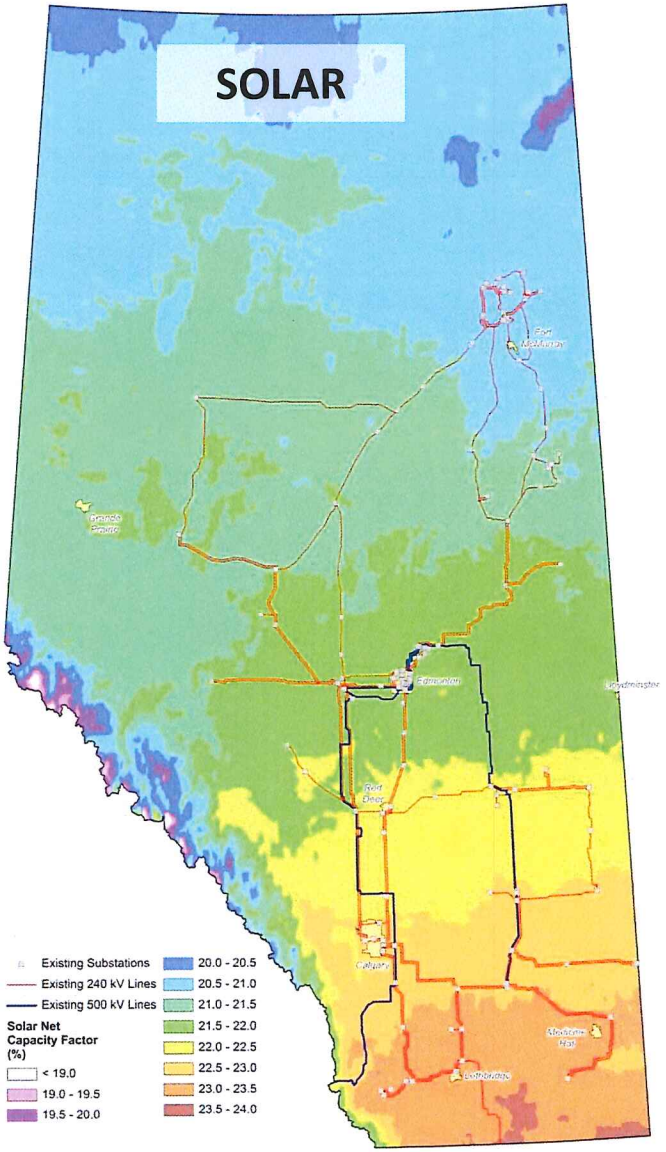
71 MW

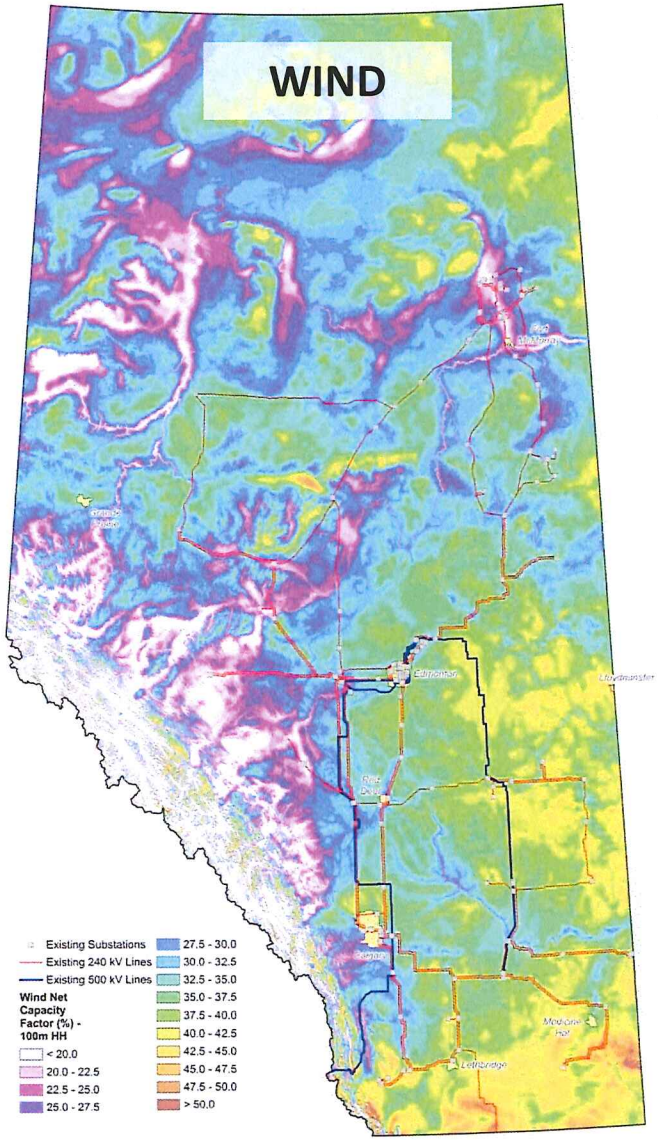
TRANSALTA CORPORATION

Windrise Wind Project

207 MW

Alberta solar & wind resource potential





Data source: AWS Truepower

Need for transmission development

Need for transmission development

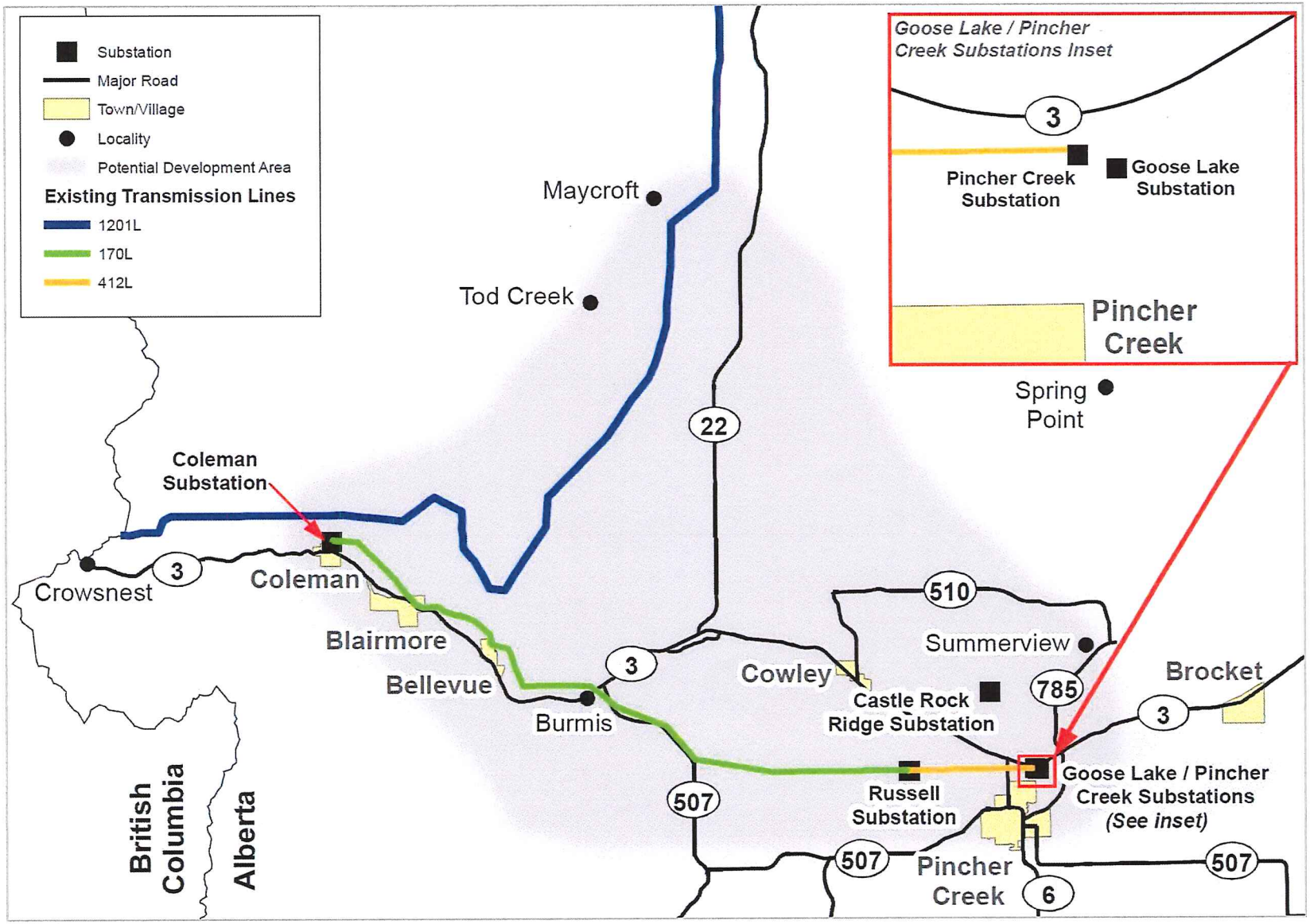
- Renewable generation development in the Pincher Creek area is expected to continue to grow
- Existing transmission system in the area is not capable of transferring the anticipated electricity to where it can be used
- New transmission development is needed to integrate new renewables onto Alberta's grid
- Contributes to the restoration of the Alberta British Columbia intertie to full path rating

Solution

Transmission development plans

- New Chapel Rock substation connecting directly to existing 500 kV intertie between Alberta & BC and associated equipment within it
- One 240 kV transmission circuit from new Chapel Rock substation to **one of two** existing, equally viable technical solutions for termination points (Castle Rock Ridge substation **OR** Goose Lake substation)
  - Second transmission circuit future/long-term requirement
- New voltage support equipment at the existing Goose Lake substation

Potential area where facilities could be located – including 170L route option



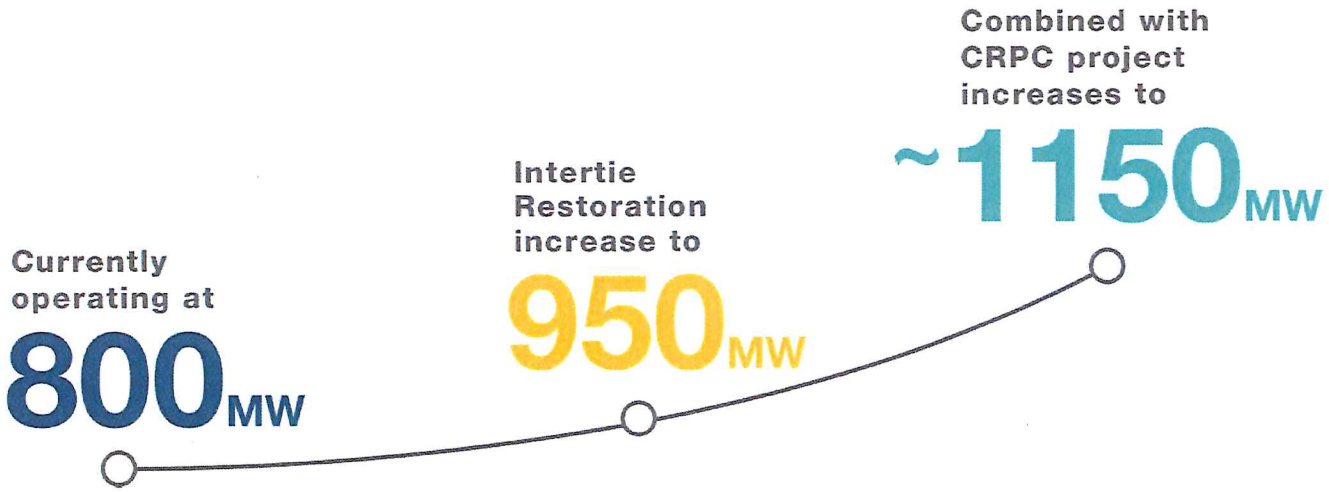
Aligning transmission facilities construction with area generation

- Construction of transmission development will closely align with the construction of renewable generation facilities
- Pincher Creek area has ~150 MW available transmission capability post REP Round 1, 2 & 3
- Greater southwest area has ~300 MW available transmission capability post REP Round 1, 2 & 3

Alberta – British Columbia Intertie Restoration

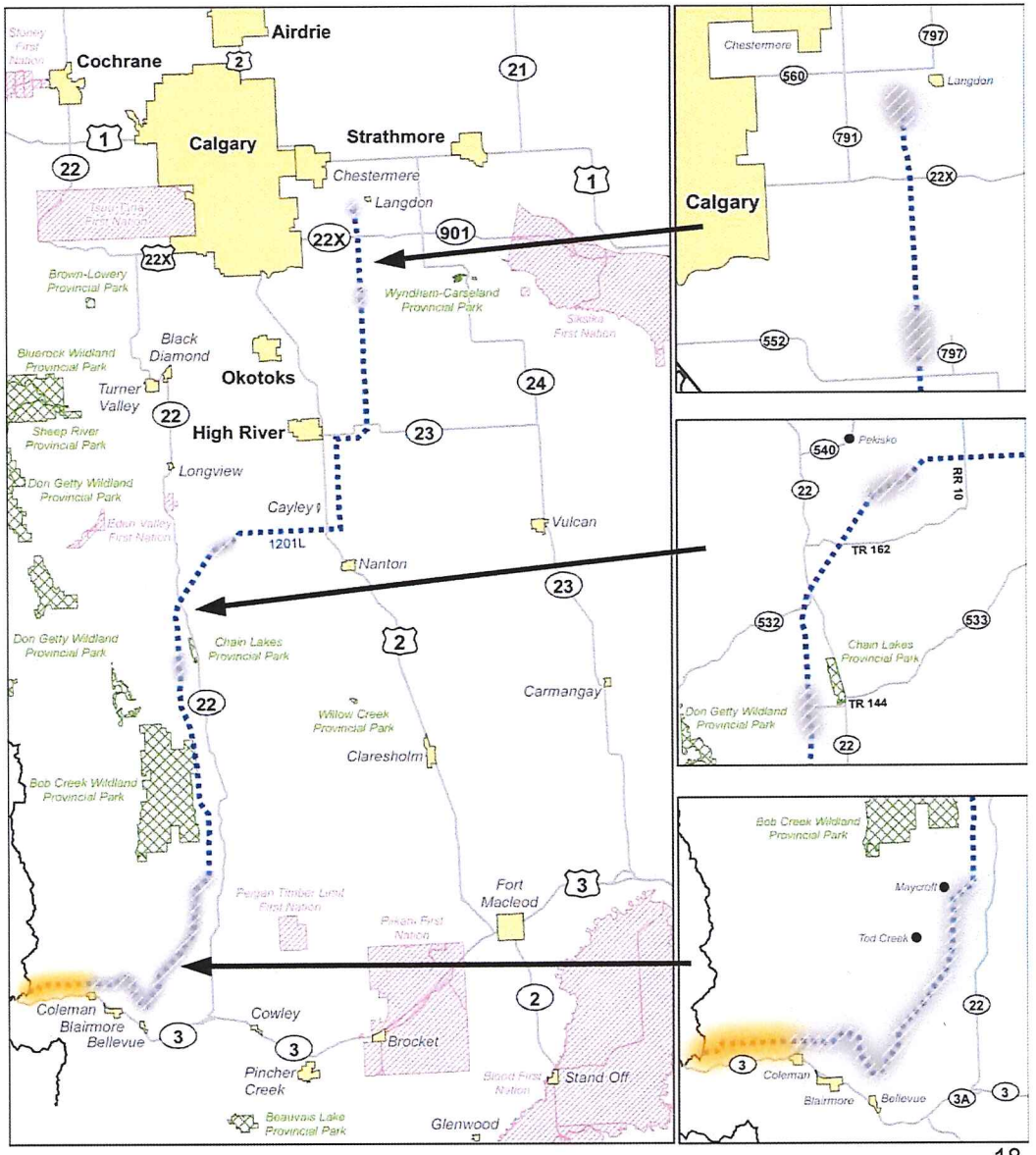
Alberta – British Columbia Intertie Restoration

- Alberta's interconnection to B.C. is not currently operating to it's full import capability
- Restoring the intertie will assist with reliability of electricity supply for Albertans as grid evolves
- Involves:
  - additional equipment underneath the existing 1201L
  - clearance mitigation work on 1201L
  - increase transformer capacity at the Bennett substation, near Langdon



Potential area where facilities could be located

- Insets show a zoomed-in view of potential development areas
- Area where facilities could potentially be located extended to BC border



Existing 1201L
Highways
Potential Development Areas
Extended Potential Development Area
Cities/Towns
First Nations
Provincial Parks

Next steps

Next steps

- Ongoing
  - AltaLink will work with stakeholders to develop potential routes and sites for CR-PC and the AB-BC intertie restoration
- Q4 2019
  - AESO will seek approval from the Alberta Utilities Commission for the CR-PC transmission development and the AB-BC intertie restoration in conjunction with AltaLink's Facilities Applications

Connect with us

- Visit our website
  - www.aeso.ca/grid/projects/SATR-CRPC
  - www.aeso.ca/grid/projects/Intertie-Restoration
- Email us
  - stakeholder.relations@aeso.ca
- Call us
  - 1-888-866-2959

Thank you

Chapel Rock to Pincher Creek Area Transmission Development & Alberta-British Columbia Intertie Restoration

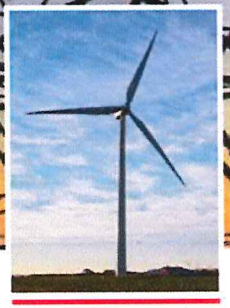
MUNICIPAL PRESENTATION

MAY 28, 2019

JOHN GROVE

COLIN HARVEY

DAVE LEE



ALTALINK
A BERKSHIRE HATHAWAY ENERGY COMPANY

SustainableElectricityApproved™
Canadian Electricity Association

AltaLink at a Glance

- 100% focused on energy solutions
- more than 13,000 km of lines
- more than 300 substations
- Backbone of Alberta's electricity grid
- Serving 85 per cent of Albertans
- Owned by Berkshire Hathaway Energy

Key Industry Players

Alberta Electric System Operator (AESO)

Independent, not-for-profit system planner

Alberta Utilities Commission (AUC)

Independent regulatory body

Transmission Facilities Owner (TFO)

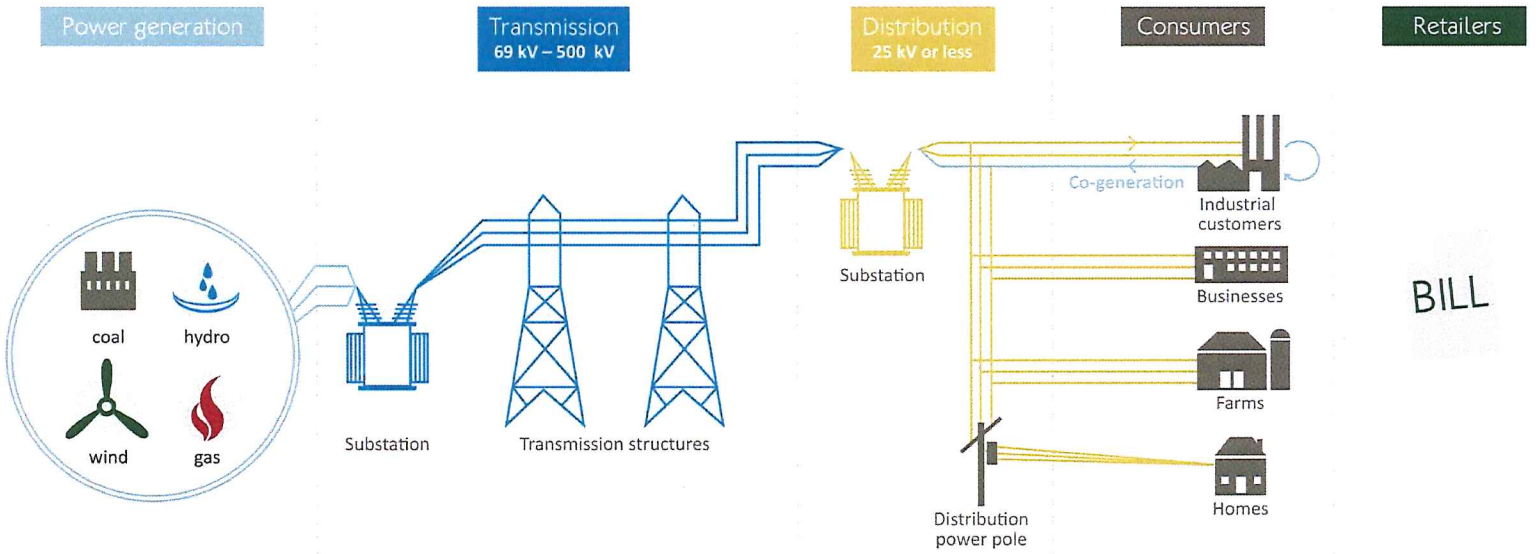
Own and operate transmission facilities

Distribution Facilities Owner (DFO)

Own and operate distribution facilities

Fortis/REA

Alberta's Electric Infrastructure



Power generation

ATCO Power, TransAlta, Capital Power Corporation, ENMAX Energy, wind turbines, cogeneration plants

Transmission

AltaLink, ATCO Electric, Enmax Power (Calgary), EPCOR (Edmonton)

Distribution

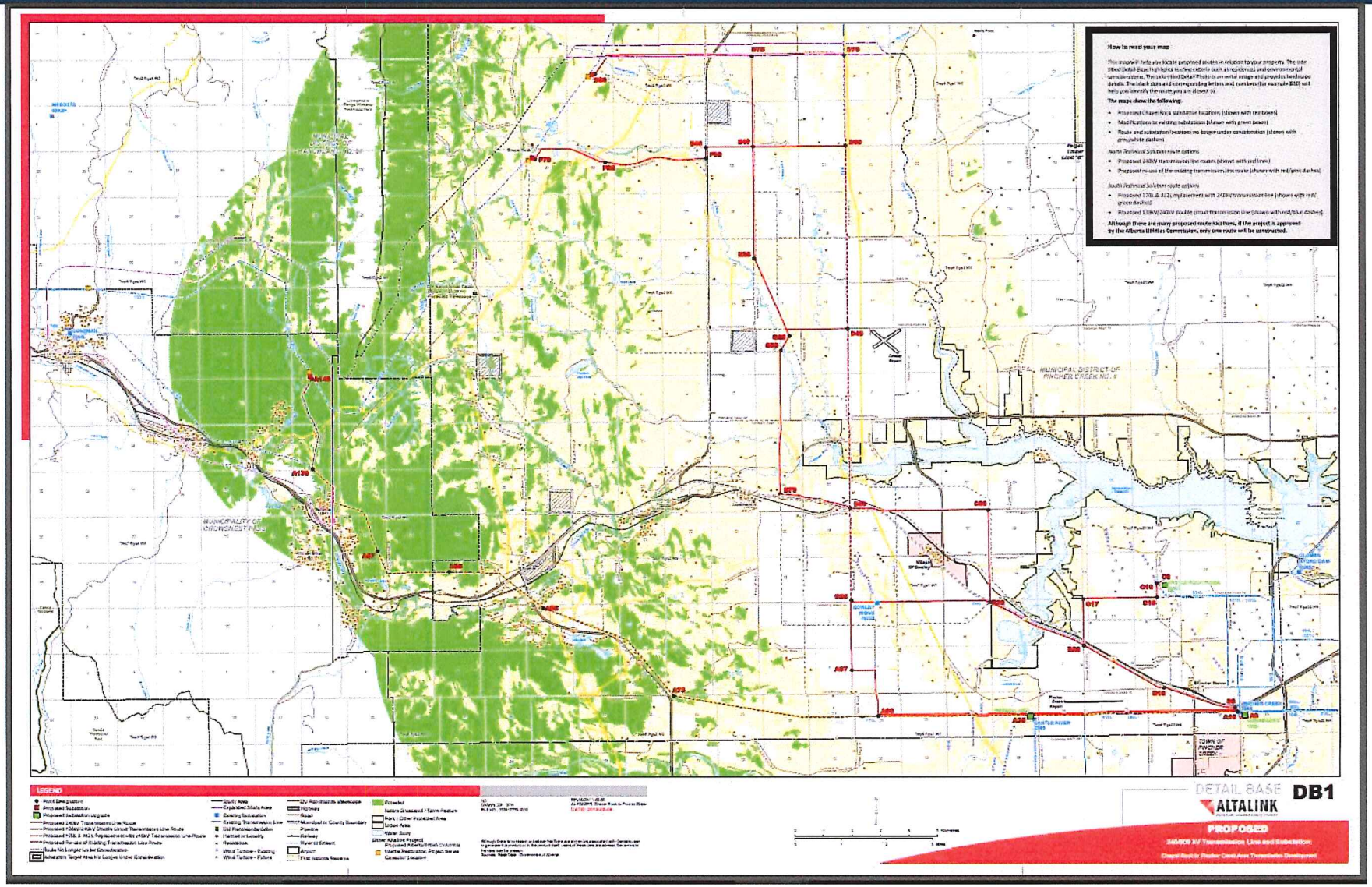
Fortis Alberta, ATCO Electric, ENMAX Power (Calgary), EPCOR (Edmonton), Rural Electrification Associations

You

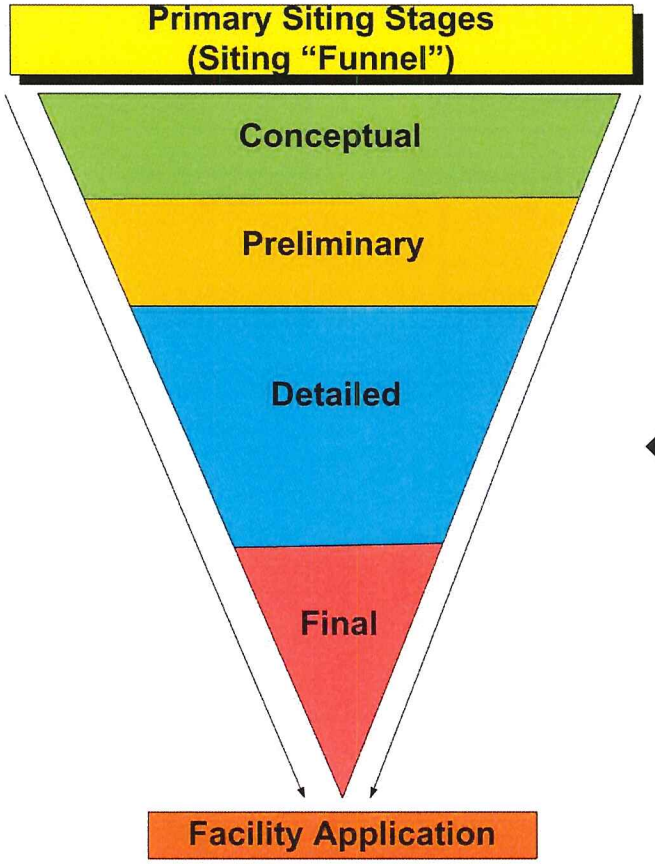
Retailers

Direct Energy, ENMAX (Calgary), EPCOR Energy (Edmonton), Just Energy Alberta, City of Lethbridge Utilities

Map of proposed routes



Siting and Consultation Process



Routes developed for consultation

Routes refined during consultation

Who we talk to

- **Affected landowners**
- **First Nations**
- **Stakeholder groups**
- **Environmental groups**
- **Local and provincial government (elected officials and planning departments)**
- **Economic development agencies**

How we identify routes

Factors used to generate preliminary route options include:

- Agricultural areas
- High residential density
- Environmental areas
- Existing infrastructure - irrigation systems, gas wells
- Future interconnections to other transmission developments.

Public Events

Please join AltaLink and the AESO at:

Tuesday June 25, 2019	**Bellevue, Ab**	**5 to 8 p.m.**	**MDM Community Centre 28022 222 Street Bellevue**
Wednesday June 26, 2019	Lundbreck, Ab	5 to 8 p.m.	Lundbreck Community Hall 304 1 Street Lundbreck
Thursday June 27, 2019	Cowley, Ab	5 to 8 p.m.	Cowley Hall 518 Railway Ave Cowley

Project Schedule

- **Notify and consult with stakeholders:** **Fall 2018 to Summer 2019**
- **File application with the AUC:** **Fall 2019**
- **Start construction if project is approved:** **Fall 2021**
- **Anticipated construction completion:** **2023**

Thank You

Contact information
website: www.altalink.ca/projects
toll-free: 1-877-269-1453

email: john.grove@altalink.ca