



## Arnprior Airport Solar Project Proposal



### Agenda





- Who We Are
- Ontario's Energy Needs
- IESO Long Term 2 RFP (LT2)
- The Proposed Project
- Frequently Asked Questions
- Next Steps

### **About Alectra**

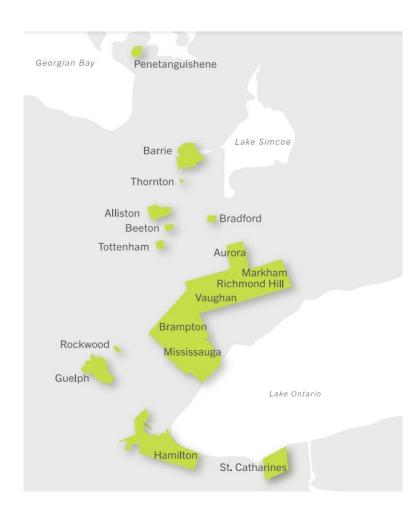


More than **1,000,000** customers

**Largest** municipally-owned utility in Canada

17 communities served

**1,921** square-kilometer service territory



#### **Alectra Utilities**

 Local electricity distribution company serving over 1 million residential and commercial customers; regulated by the OEB

#### **Alectra Energy Solutions (AES)**

- Innovative developer of tailored energy solutions, such as Solar PV, utility-scale Battery Energy Storage Systems (BESS), EV charging infrastructure, microgrids, metering, high-voltage and streetlighting services
- AES currently operates a portfolio of over 100 distributed generation sites in Ontario consisting of solar, natural gas and energy storage.

### KRUGER ENERGY AT A GLANCE







**WIND** 

**HYDROELECTRICITY** 

**SOLAR** 

BIOMASS COGENERATION



**47 PRODUCTION SITES** in Canada, the United States and Guatemala



**INSTALLED CAPACITY** 650 MW

**ANNUAL PRODUCTION** 2,750 GWh

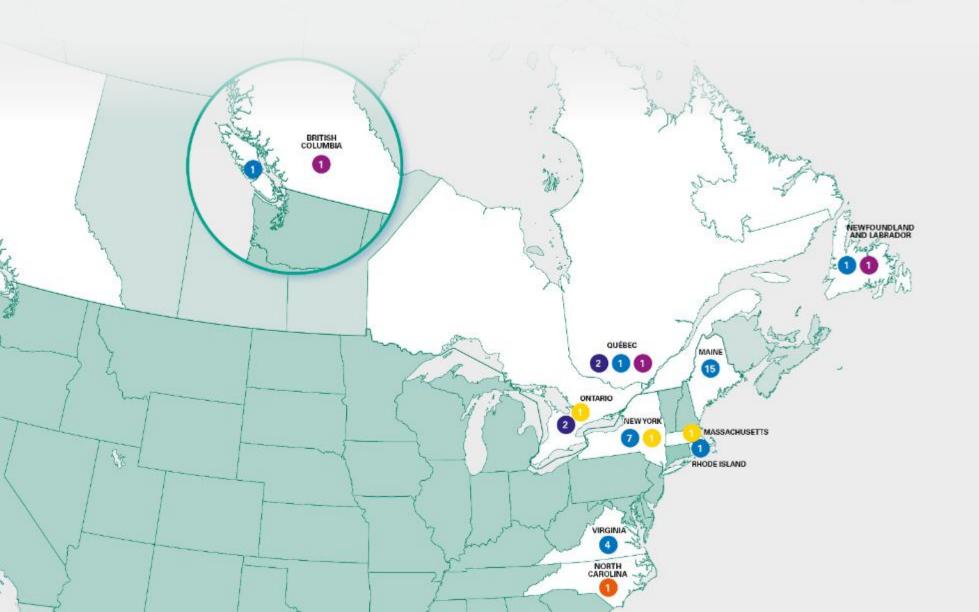


MORE THAN 80 EMPLOYEES



**ESTABLISHED** in 2004

### **KRUGER ENERGY IN NORTH AMERICA**



● WIND	325
Chatham-Kent, Ontario (2 wind farms)	
Montérégie, Québec (2 wind farms)	
HYDROELECTRICITY	197
Brompton (Sherbrooke), Québec	
Deer Lake, Newfoundland and Labrado	r
Zeballos, British Columbia	
Maine (15 hydro plants)	
New York (7 hydro plants)	
Rhode Island (1 hydro plant)	
Virginia (4 hydro plants)	
BIOMASS	117
COGENERATION	
Brompton (Sherbrooke), Québec	
Corner Brook, Newfoundland and Labra	ador
Kamloops, British Columbia	
SOLAR	10
North Carolina (2 solar plants)	
Guatemala (1 solar plant, not illustrated	d)
O ENERGY STORAGE	10
Brampton, Ontario	
Hingham, Massachusetts	
West Harrison, New York	
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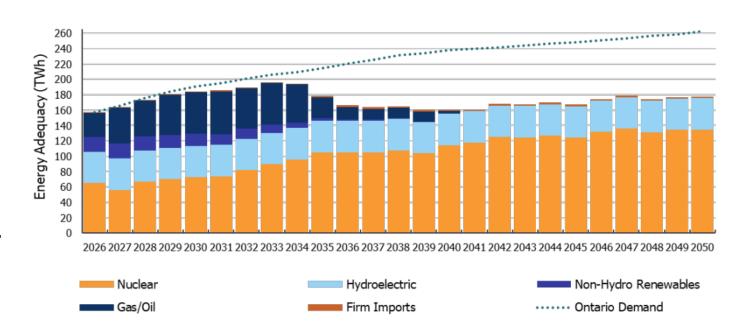
Kruger Energy started to electricity its vehicle fleet in 2022 by introducing its first two all-electric semi-trailer trucks.

October 2023

### **Ontario's Energy Needs**



- Ontario needs a lot of new power; a 75% increase in energy demand is expected by 2050.
- The IESO is currently looking to address energy shortfalls beginning ~2030.
- The Independent Electricity System
   Operator (IESO) is procuring new energy
   generation and storage assets thorough a
   series of competitive procurements (Long Term RFP).
- AES has been awarded 3 battery energy storage projects to date, all of which are currently under construction in Guelph and Vaughan.



### IESO Long Term 2 RFP (LT2)

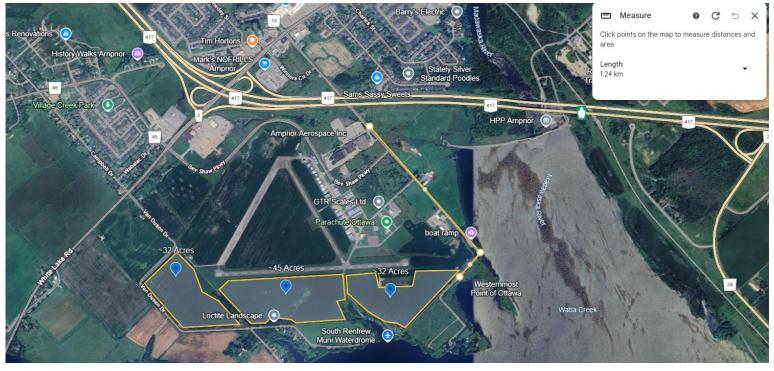


- To meet growing demand, the IESO is undertaking a number of new energy and capacity procurements.
   The current round is called LT2.
- The LT2 procurement is an annual procurement over the next 4 years (currently window 1).
- What are energy vs. capacity resources?
  - Energy resources are generation assets suited to providing low-cost quantities of energy (e.g. solar, wind, hydro)
  - Capacity resources can quickly dispatch power to the grid for a limited amount of time (e.g. energy storage, natural gas)
- The IESO is procuring 14,000GWh of new energy generation in this first round of LT2.
- IESO Contracts are ~20 years after which resources may be re-contracted or continue to participate in the markets
- The IESO will award projects based on the lowest \$/MWh cost, with price adjustments provided for Indigenous equity participation, lands located in northern regions and/or non-prime agricultural areas

### **The Proposed Project**



- AES is proposing a 10 MW solar project, to be located at the Arnprior Airport.
- The project would require approximately 40 to 50 acres of land.
- The point of interconnection is on the eastern side of the Airport, which would utilize the existing hydro easement along Concession road 12.



- All setbacks and environmental attributes are being taken into consideration.
- Airport Operations will not be impacted, AES/Kruger has already engaged NavCanada and Transport Canada.

### **Permitting Process for Solar Projects**



### Utility / IESO Interconnection

#### IESO Deliverability Testing

- IESO & Hydro One Connection / System Impact Assessment (CIA/SIA)
- Ontario Energy Board Registration and Licensing
- IESO Market Participant Registration

#### Municipal Approvals

- Additional public consultation
- Review and comment by local planning authorities, conservation authorities, fire department
- Zoning & Site Plan Approval
- Building permits (if required)

### Provincial Approvals

- Renewable Energy Approvals (REA) by Ministry of Environment, Conservation, and Parks (MECP)
- Includes Natural Heritage, Wildlife, and Cultural Heritage Assessments.
- Noise studies (ie. from transformers, inverters)

#### Electrical Safety Authority (ESA)

- Full Plan Review of the drawings and specs.
- Notifications and Inspections prior to work commencing.
- Equipment
   Approvals; The ESA approves the equipment being installed

### **Community Considerations**



- We are undertaking engagements with Algonquins of Ontario and are offering a 50% equity stake in the project.
- AES is offering \$2,000 per MW awarded, per year, to Arnprior as a community benefit.
- Wherever possible, we look to hire local for the development of the project, and on-going maintenance.
- Additional community engagement and public consultation will be part of the development and approvals process.
- We will be the long-term partners on this project.



### **Frequently Asked Questions**



#### How was this site chosen?

- Several criteria were used to locate potential solar sites for LT2 including:
  - Interconnection capacity and proximity
  - Solar PV must be located on non-prime agricultural areas
  - Constructability of the site, avoidance of waterways etc.
  - Site should be able to minimize visual impact or noise.

#### How will AES/Kruger minimize the visual impact of the project?

- Retain natural vegetative borders, additional fencing and trees can be utilized to limit visual impacts.
- Noise levels from equipment expected to be minimal and will be confirmed through noise study

### **Next Steps**





- Development will be an up to 3-5 year process with multiple instances of engagement with the all levels of government and the community.
- In order to submit a proposal to the IESO, we need a municipal support resolution (MSR).
- The MSR is not a blanket approval of the project, rather a support in principle that allows us to submit into the competitive RFP
- If awarded, AES will undertake all planning and approval steps prior to constructing the project



# Thank You

Thank you for taking the time to listen this evening.

We are happy to answer any questions you may have.

#### Contact:

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