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Buffalo Ranch Solar and Battery Energy Storage System Projects

Learn about the proposed projects and share feedback

July 15, 2025 | Public Meeting

Land Acknowledgement

Atura Power respectfully acknowledges that the proposed solar and battery energy storage projects are situated on the traditional territories of the Anishinaabe Peoples, specifically within the homelands of the Wabigoon Lake Ojibway Nation and Eagle Lake First Nation. These lands fall within the area of Treaty 3, also known as the Northwest Angle Treaty of 1873, a solemn agreement between the Crown and the Anishinaabe Nation.

We recognize and honour the ongoing relationship that Indigenous Nations have with these lands, waters, and skies — long before, and long after, project development. We acknowledge the deep cultural, spiritual, and environmental connections that Indigenous communities maintain with this territory and commit to engaging with First Nations in a respectful, inclusive, and meaningful way throughout the life of this project.

As we move forward with clean energy initiatives, we do so with humility, gratitude, and a commitment to reconciliation, working in partnership with Indigenous Peoples and communities to foster long-term environmental stewardship and shared benefits in peace, respect, and friendship.

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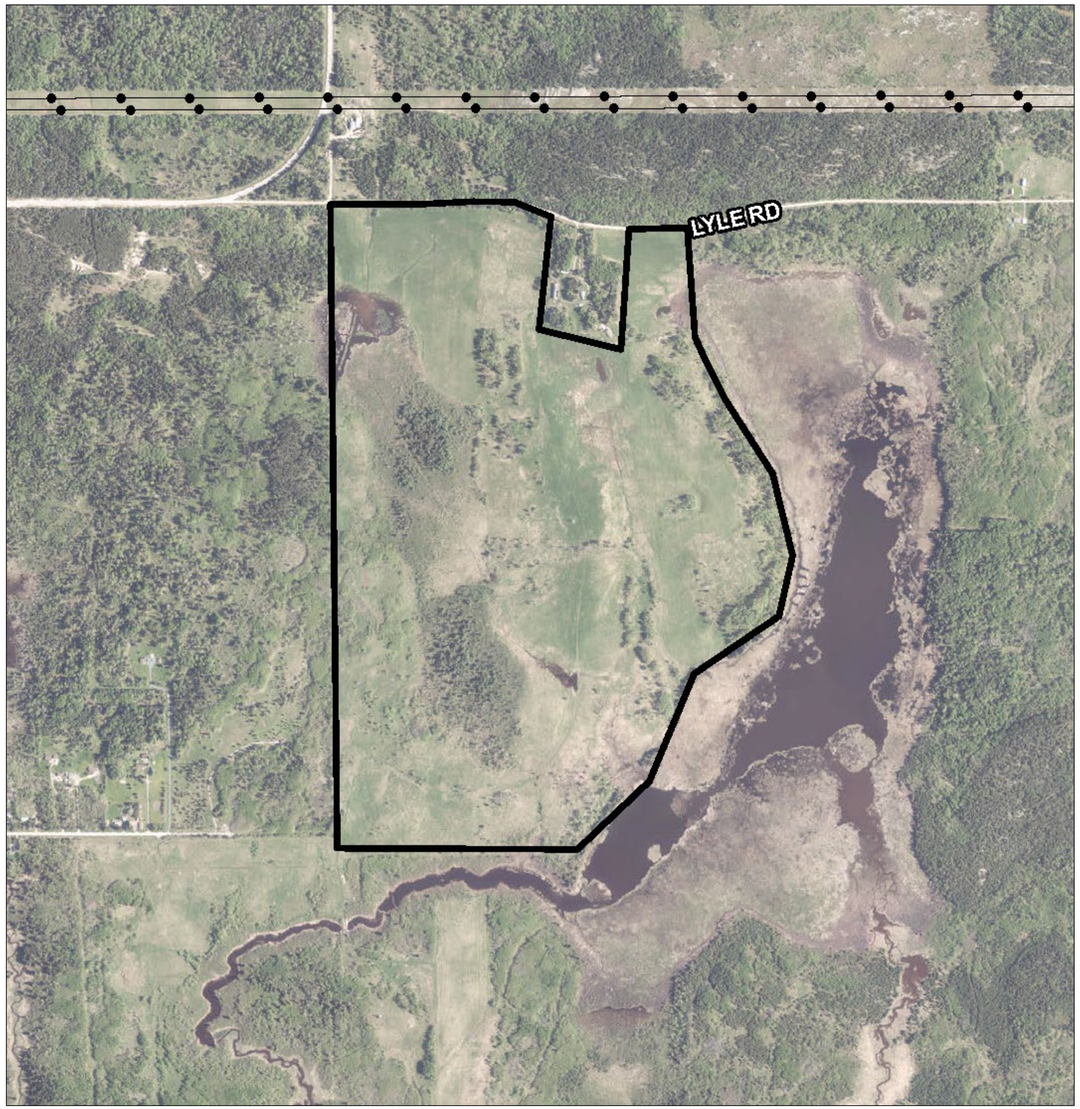
Welcome!

Purpose of Public Meeting:

- Build relationships
- Share information about the Buffalo Ranch Solar and Battery Energy Storage System (BESS) projects
- Answer questions and receive feedback



***Pictured**: Aerial image of proposed Buffalo Ranch Solar and BESS Projects*

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Who We Are

Atura Power plays a key role in Ontario's electricity system by generating safe and reliable electricity when it's needed most.

- Subsidiary of Ontario Power Generation
- Owns and operates the largest fleet of combined-cycle gas turbine electricity generating stations
- Developing new non-emitting energy projects including battery energy storage and hydrogen

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Project Need

According to Ontario's Independent Electricity System Operator (IESO), the province's demand for electricity will increase 75 per cent by 2050.

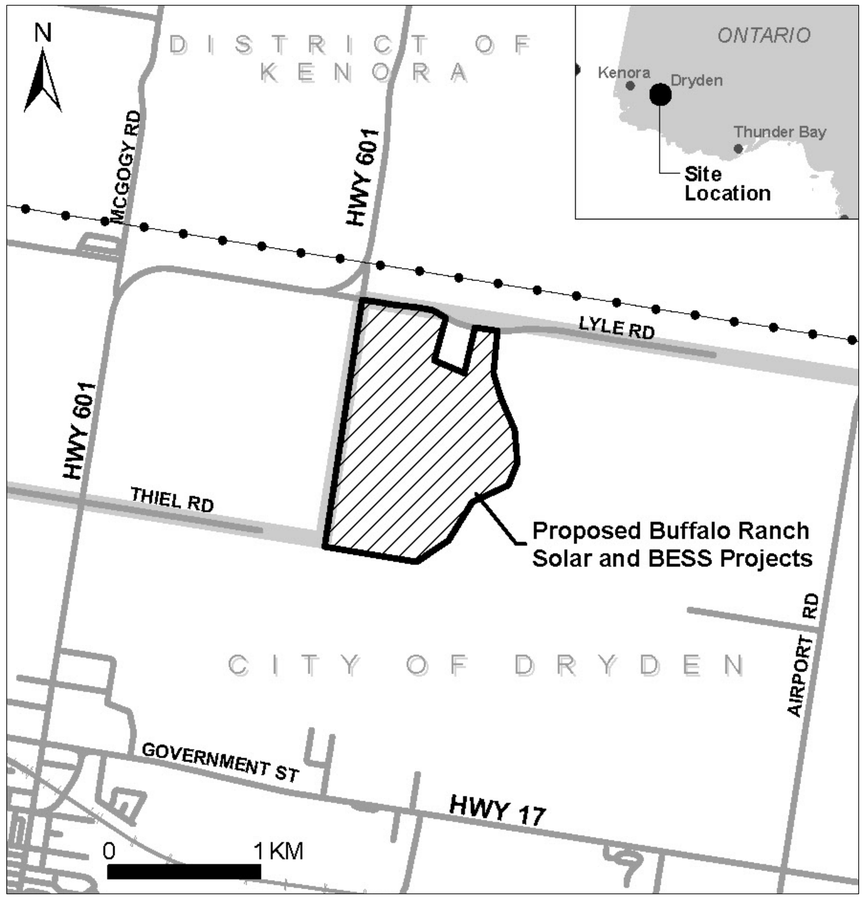
Ontario is increasing its capacity for renewable energy sources – including solar-generated electricity and energy storage systems – to meet this growing electricity need.

Solar:

- Will increase Ontario's electricity supply and help advance Ontario's path to a low-carbon energy future
- Solar installations help reduce reliance on fossil fuels and support a more diversified electricity system

BESS:

- Will store power in periods of low demand and provide peaking power during times of high demand for up to eight hours
- Supports a more reliable system by providing power when it is needed most



***Pictured**: Location of proposed Buffalo Ranch Solar and BESS projects*

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IESO Long-Term 2 Procurement

- Atura Power is proposing the Buffalo Ranch Solar and BESS projects through the IESO Long-Term 2 (LT2) procurement process
- Securing new electricity resources, like Buffalo Ranch Solar and BESS, helps address growing demand and ensures availability of reliable and affordable electricity
- The IESO is requesting proposals for 20-year energy contracts

ieso
Connecting Today.
Powering Tomorrow.

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Project Descriptions – Solar & BESS

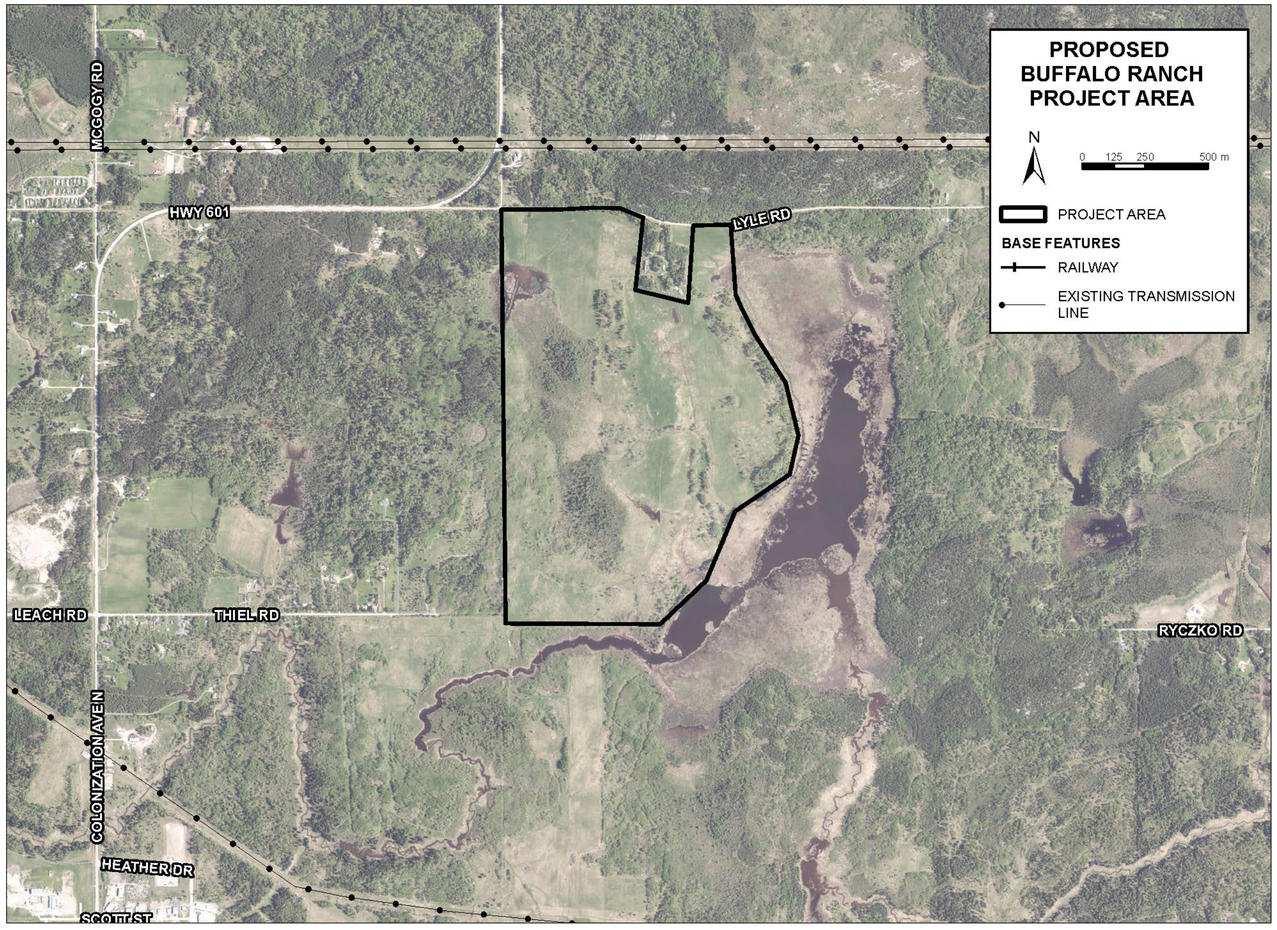
The projects will be in the City of Dryden, Ont., on former ranch land at 188 Lyle Rd.

Solar:

- Buffalo Ranch Solar will generate **up to 75 megawatts (MW)** of electricity
- Pending a contract and required approvals, construction is planned for 2028, with commercial operation to begin in 2029

BESS:

- Buffalo Ranch BESS will store and output **up to 200 MW** of electricity for **up to eight hours**
- Pending a contract and required approvals, construction is planned for 2027, with commercial operation to begin in 2030



***Pictured**: Location of proposed Buffalo Ranch Solar and BESS projects*

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Community and Economic Benefits

The **Buffalo Ranch Solar and BESS** projects represent a significant investment in the City of Dryden and will create community and economic benefits including:

Municipal Tax Revenue	**Increase municipal tax revenue**, supporting economic opportunities and growth for local businesses
Employment and Contract Opportunities	Creation of **local and full-time employment** throughout construction, operations and maintenance
Community Benefit Funding	May include **funding** for education, recreation, health, safety, environment, etc. negotiated with the city
Clean Electricity	Solar generation facilities help **reduce reliance on fossil fuels** and support a more **diversified energy system**
Clean Electricity	**BESS improves** electricity grid **reliability and efficiency** by shifting overnight electricity production to daytime periods

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Project Technology – Solar

Buffalo Ranch Solar will include:

- Solar panels
- Inverters
- Mounting systems
- Electrical infrastructure

Designed to capture sunlight and convert it into electricity for distribution to the power grid.

***Pictured**: Stock image of solar panels*

How Solar Projects Work

PHOTOVOLTAIC SOLAR PANELS
Silicon based; convert solar energy into direct current (DC) electricity

INVERTER
Converts DC to alternating current (AC) electricity

TRANSFORMER
Increases voltage to match electrical grid

ELECTRICAL GRID
Supplies generated electricity to grid

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Project Technology – BESS

Buffalo Ranch BESS will include:

- Lithium-ion battery units
- A system converting electrical alternating current to direct current
- Transmission connection and transformers
- Emergency power and support buildings
- On-site operation and monitoring

Pictured: *Conceptual picture of BESS*

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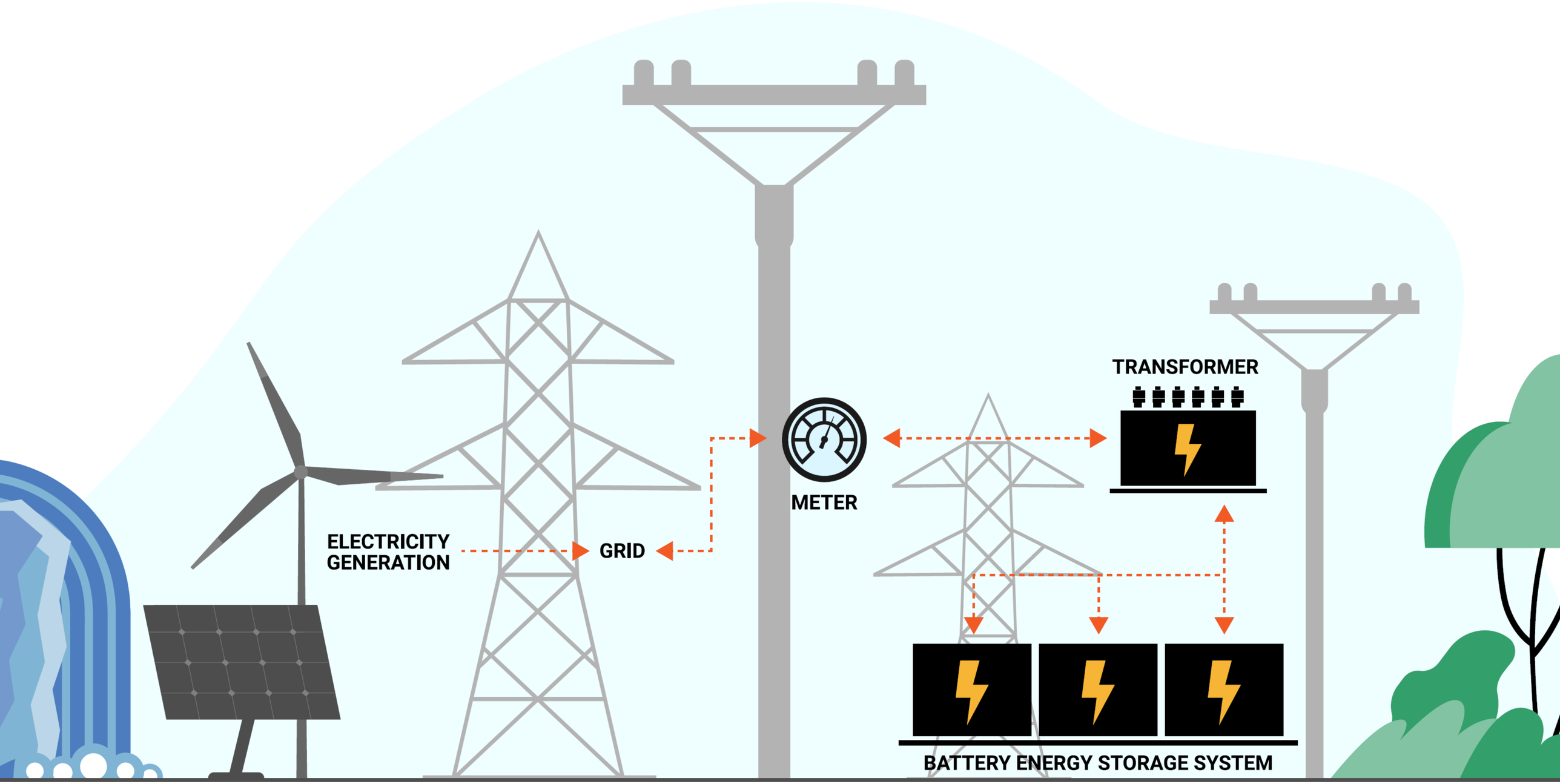
How Battery Energy Storage Works



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Project Timelines

Activity	Solar	BESS
IESO LT2 Proposal Submission*	October 16, 2025	December 18, 2025
IESO LT2 Process Project Award*	April 14, 2026	June 16, 2026
Environmental Permits & Approvals	2026 - 2028	2026 - 2027
Target Construction Start	2028	2027
Operations	2029	2030

*These dates are set by the IESO LT2 Process

Atura Power will complete project-specific Environmental Assessment processes and obtain necessary permits and approvals prior to construction for each project.

Atura Power is engaging with Indigenous communities, agencies and the public throughout the projects.

Project Stages

Pre-construction	• Site Investigations • Environmental and construction approvals
Construction	• Transportation of materials to the project site • Constructing the solar facility and BESS
Operations	• General site maintenance • Repowering/upgrading of equipment as required • Recycling and disposing of replaced materials off-site
Decommissioning & Closure	• Dismantling equipment • Recycling and disposing of materials off-site • Site rehabilitation

Our Commitment to Safety for BESS

Tested and Qualified for Safety

- Facility designed to leading codes and standards including National Fire Code of Canada, National Fire Protection Association 855, and Underwriters Laboratories (UL) 9540
- Battery system tested under UL 9540A to ensure system contains potential fire event

Resilient by Design

- Recent advances in battery systems significantly reduce fire risk compared to earlier systems
- Hardware and software designed with safety features to keep BESS operations within safe operating range

Monitored During Operations

- Facility monitored 24/7 to ensure safe operations
- Comprehensive emergency response plan will be developed with local fire department

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Thank You for Attending!

We value your feedback. Please complete a comment form or speak to a member of the project team if you have comments or questions.

You can also get more information by emailing the project team or visiting the project webpages.

Solar:

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