# Public Open House
# Manitoba-Minnesota Transmission Project

# Welcome

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# Purpose of the Open House

- Provide information about the proposed Manitoba-Minnesota Transmission Project
- Gather feedback on alternative routes and border crossings.
- Identify interests, opportunities and constraints to inform the route selection and environmental assessment; and
- Answer questions and address local concerns.

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# Project Need

**The Manitoba-Minnesota Transmission Project is needed to:**

- Export electric power based on current sales agreements.
- Improve reliability and import capacity in emergency and drought situations; and
- Increase Manitoba Hydro access to markets in the United States.

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# Why does Manitoba export and import power?

- In 2012–13 Manitoba Hydro export sales totaled $353 million with 88 per cent derived from sales in the U.S. market, and 12 per cent from Canadian markets.
- Manitoba Hydro's utility customers in the United States want long-term price certainty and stability. These utilities see value in purchasing hydroelectricity through long-term fixed contracts that are not linked to volatile natural gas prices and will not be subject to future changes in regulatory requirements associated with air emissions.

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# Why does Manitoba export and import power?

- This project will meet a 250-mega watt (MW) power sale with Minnesota Power and will allow for increased access to markets in the United States.
- Manitoba Hydro also imports power in drought conditions to meet provincial demand when it exceeds Manitoba Hydro's generating capacity.

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# Project Description

- **The Manitoba-Minnesota Transmission Project includes:**
  - construction of a 500-kV AC transmission line in southeastern Manitoba
  - upgrades to associated stations at Dorsey, Riel, and Glenboro
- **The transmission line will travel to one of three border crossings.**
- **The project will connect at the Minnesota border to the Great Northern Transmission Line, constructed by Minnesota Power**
- **Anticipated in-service date is 2020.**
- **Estimated cost is $350 million.**

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# Station Modifications

## Dorsey & Riel Converter stations

- Upgrades (equipment) needed to accommodate the 500-kV AC line.
- All upgrades will be undertaken within fenced area of both stations.

## Glenboro station

- Station expansion needed (east).
- Equipment upgrades.
- Current terminus of an existing import/export line.
- Tower relocation will be necessary.
- Engagement process being undertaken with local residents to explain the expansion and address any concerns.

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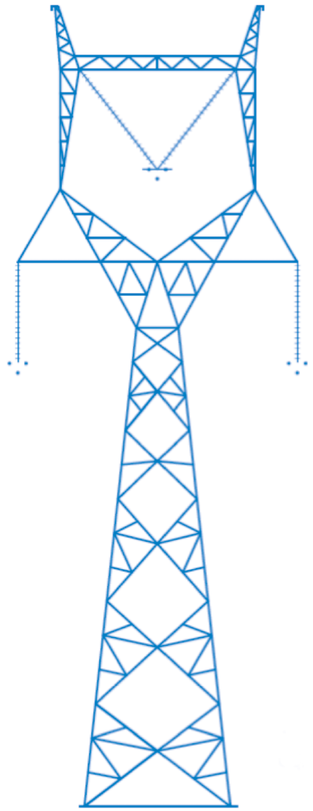
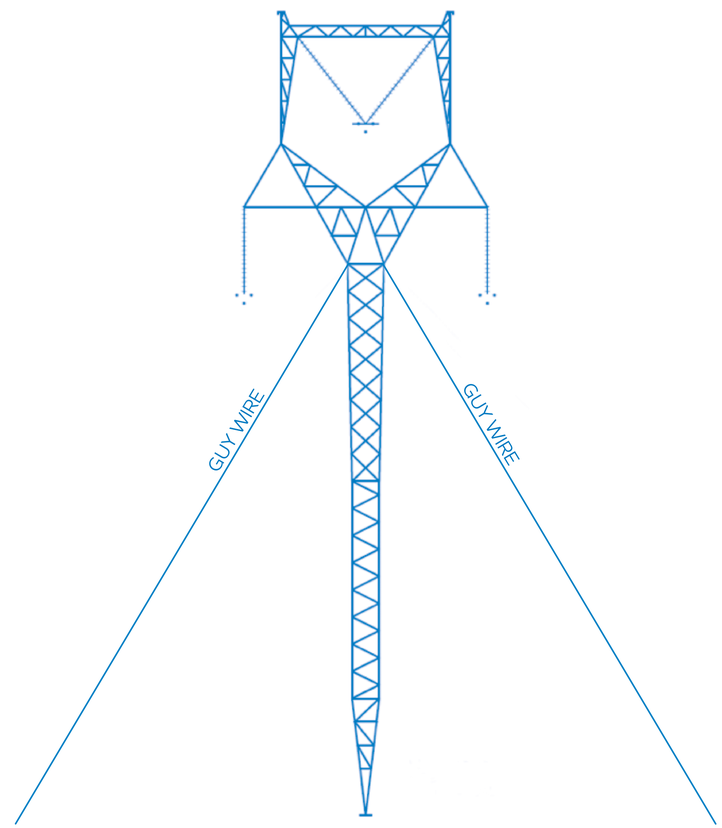
# Preliminary Tower Design



Self Supporting Structure (cultivated lands).
(Towers are not drawn to scale — conceptual only.)

- **Steel lattice towers:**
  - Self-supporting towers in cultivated agricultural areas;
  - Guyed structures will be used in all other terrain.
- **Current design anticipates:**
  - range from 40 to 60 m (130 to 200 ft) in height.
  - average span of 400 to 500 m (1300 to 1650 ft) apart.
  - utilize a right-of-way width of 80 to 100 m (260 to 330 ft).




Guyed Wire Structure (Non-cultivated lands)
(Angle of guy wires depicted on tower are not accurate — conceptual only.)

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# Regulatory

- **The Manitoba-Minnesota Transmission Project is subject to environmental regulatory review and approval, including:**
  - Authorization of an international power line, which is required under the *National Energy Board (NEB) Act*.
  - Environmental assessment by NEB under the *Canadian Environmental Assessment Act*, 2012.
  - Reviewing and licensing by Manitoba Conservation and Water Stewardship under *The Environment Act* (Manitoba); and
  - Under the direction of the Minister, the Clean Environment Commission may hold a public hearing.
- **Further information on the regulatory process will be provided as information becomes available.**

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# Environmental Assessment

- **Construction of the proposed transmission line will require a Class 3 License under *The Environment Act* (Manitoba).**
- **The Environmental Impact Statement (EIS) for the project will include:**
  - Study area characterization;
  - Public engagement program;
  - Assessment of potential environmental and socio-economic effects;
  - Assessment of cumulative effects;
  - Mitigation measures and monitoring plans; and
  - An environmental protection program.

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# Environmental Assessment VCs

- **The environmental assessment determines Valued Components (VCs)**
  - **VC definition:** any part of the human and natural environment that is considered important by the proponent, public, scientists and government involved in the assessment process. Importance may be determined on the basis of societal or cultural values, scientific interest or concern.
- **VCs are selected by:**
  - Utilizing experience from other, similar projects.
  - Getting input from specialists in the various disciplines.
  - Collecting input from interested stakeholders and the public.

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# Stakeholder and Public Engagement

- **Manitoba Hydro will seek input from local landowners, First Nations, the Manitoba Métis Federation, local municipalities, stakeholder groups, government departments and the general public during the route selection and environmental assessment process.**

- **Engagement process will include:**
  - Key Person Interviews;
  - Workshops;
  - Public open houses;
  - Email and telephone contacts;
  - Website and newsletters; and
  - Meetings.

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# Engagement Process

## Round 1:

**October to November 2013**

- Introduce the Project.
- Present alternative routes and proposed border crossings.
- Answer questions.
- Identify and document concerns.
- Use input to guide route refinement & preferred border crossing selection.

## Round 2:

**April to June 2014**

- Present findings of Round 1.
- Present refined alternative routes to preferred border crossing.
- Answer questions.
- Identify and document concerns.
- Use input to guide preferred route selection.

## Round 3:

**October to December 2014**

- Present findings of Round 2.
- Present the preferred route.
- Answer questions.
- Identify and document outstanding concerns.
- Discuss potential effects and possible mitigation measures to minimize effects.

# Route Selection Process

- **The routing process is based on the EPRI-GTC methodology* which includes:**
  - Earlier stakeholder input into the route selection process to help guide alternative route selection;
  - Balancing of multiple perspectives from natural, technical and socio-economic.

For more information on this methodology, visit our project webpage at **www.hydro.mb.ca/mmtp** or speak with a Manitoba Hydro representative.

* Electrical Power Research Institute

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# Project Timelines

| | 2013 | 2014 | | | | 2015 | | | | 2016 | | | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Round 1 – Alternative routes and border crossings | ■ | ■ | | | | | | | | | | | | | | |
| Round 2 – Preferred border crossing to refined alternative routes | | | ■ | ■ | ■ | | | | | | | | | | | |
| Round 3 – Preferred route | | | | | ■ | | | | | | | | | | | |
| EIS filing | | | | | | ■ | | | | | | | | | | |
| Regulatory review | | | | | | | ■ | ■ | ■ | ■ | ■ | | | | | |
| License decision | | | | | | | | | | | ■ | | | | | |
| Construction | | | | | | | | | | | | ■ | ■ | ■ | ■ | ■ |
| In-service date | | | | | | | | | | | | | | | | ■ |

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# The project team wants to hear from you!

- Manitoba Hydro representatives are available to answer your questions.
- Please take a moment to complete a comment sheet so the project team can document your concerns.
- You can also visit a map station to show us where you may have any information or additional considerations regarding the alternative routes.

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# The project team wants to hear from you!

- **Please contact:**
  Licensing & Environmental Assessment Department
  Toll Free: 1-877-343-1631
  In Winnipeg: 204-360-4305
  Email: mmtp@hydro.mb.ca
- **Visit the project webpage at www.hydro.mb.ca/mmtp for up-to-date information, and register to receive project updates**
- **Display boards and the Manitoba-Minnesota Transmission Project comment sheets are also available on the project webpage.**

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# Thank you for attending and providing your feedback!

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