Ontario Energy Board | Commission de l'énergie de l'Ontario

Electricity Generation Licence Application

Vale Canada Limited

1. Application Type

1. (a) Application Type

○ New ● Renewal

1. (b) Licence Number

EG-2003-0303

1. (c) Expiry Date

January 01, 2024

1. (d) If the licence has already expired, please advise why the applicant failed to renew the licence before expiry.

Renewal form sent to individuals no longer with the Energy team or No longer employed by Vale. It is important to note that we do not supply energy outside of the Vale Grid. Everything is consumed in the company.

1. (e) Has the applicant generated electricity or provided ancillary services for sale after the licence expiry?

○ Yes ● No

2. The Applicant

2. (a) Legal Name of the Applicant

Vale Canada Limited

2. (b) Business Classification

○ Sole Proprietorship ○ Partnership ● Corporation ○ Other

2. (c) Date of Formation or Incorporation

January 01, 2016

2. (d) Province/State of Formation or Incorporation

Not Applicable (Federal Corporation)

2. (e) Country of Formation or Incorporation

Canada

2. (f) If the applicant is an individual, are they at least 18 years old?

If the applicant is an individual, the applicant must be at least 18 years old.

○ Yes ○ No ● Not Applicable

2. (g) Head Office or Business Address of the Applicant

Street Address: Suite 1500, 200 Bay Street, Royal Bank Plaza

City: Toronto

Province/State: Ontario

Country: Canada

Postal/Zip Code: M5J2K2

Website: www.vale.com/canada

Main Phone Number and Email Address

Phone Number: 1-416-361-7511

Email Address: luc.forget@vale.com

2. (h) Please describe the applicant's current or intended line of business and business activities.

Mining

3. Licence Primary Contact

The licensee shall designate a person who will act as a primary contact with the Ontario Energy Board (OEB) on matters related to the licence.

3. (a) Licence Primary Contact

Salutation: Mr.

Last Name: Forget

First Name: Luc

Title/Position: Ops Superintendent

Company: Vale

Phone Number: 7059234304

Email Address: Luc.Forget@vale.com

3. (b) Is the Licence Primary Contact address the same as the Head Office or Business address?

◯ Yes ● No

Licence Primary Contact Address

Street Address: 18 Rink St

City: Copper Cliff

Province/State: Ontario

Country: Canada

Postal/Zip Code: P0M1N0

Website: Vale.ca\Canada

4. Application Primary Contact

The primary contact for the licence application may be a person within the applicant's organization other than the licence primary contact noted above. An applicant may also choose to designate a consultant, lawyer, etc. to be the primary contact for the licence

application. The OEB will communicate with this person during the course of the application review process, but with the licence primary contact after a licence is issued.

4. (a) Is the Application Primary Contact the same as the Licence Primary Contact?

- [x] Yes
- [ ] No

5. Trade Names

The electricity generation licence authorizes the licensee to conduct business using the name under which the licence is held (i.e. the applicant's legal name). It also provides for the use of trade names by the licensee.

5. (a) Does the applicant intend to use trade names?

- [ ] Yes
- [x] No

6. Applicant's Licensing Status and History

6. (a) Has the applicant, an affiliate of the applicant, or an associated entity (e.g. a partnership or limited partnership) ever been licensed by the OEB?

- [x] Yes
- [ ] No

The *Business Corporations Act* definition for "affiliate" can be found at www.e-laws.gov.on.ca.

If yes, please provide current and expired licences.

Licensee Name	Relation to the Applicant (e.g. applicant itself, affiliate, partner, etc.)	Licence Number
Vale Canada Limited	Parent Compant	EG-2003-0303

6. (b) Does the applicant, an affiliate of the applicant, or an associated entity (e.g. a partnership or limited partnership) have any other application(s) before the OEB?

- [ ] Yes
- [x] No

6. (c) Has the applicant, an affiliate of the applicant, or an associated entity (e.g. a partnership or limited partnership) ever undertaken energy sector activity in any other jurisdiction within North America?

- [ ] Yes
- [x] No

6. (d) Is the applicant, an affiliate of the applicant, or an associated entity (e.g. a partnership or limited partnership) an Independent Electricity System Operator (IESO) market participant?

- [x] Yes
- [ ] No

If yes, please provide information on the IESO market participant(s) below.

Registered IESO Organization Name	Relation to the Applicant	Participant/Program/Service
VALE CANADA LIMITED (104349)	Independent Electricity System Operator (IESO)	Load Connected Customer

7. Officers, Directors and Key Individuals

7. (a) Please confirm the number of officers, directors and key individuals in your organization.

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7. (b) In the table below, identify the key individuals that are responsible for executing the following functions for the applicant: matters related to regulatory requirements and conduct, financial matters and technical matters.

Key individuals include the Chief Executive Officer, the Chief Financial Officer, other officers and directors, partners or proprietors.

NOTES:
1. List a minimum of 3 key individuals in the table below. Additional information about each key individual is required in Section 16.
2. One of the listed key individuals must sign the completed application. See Section 18 for signing authority details.

Name of Key Individual	Email	Title/Position within Applicant's Business (or identify company if not the Applicant's Business)
Gord Gilpin	gord.gilpin@vale.com	Head, Ontario Operations
Claire Parkinson	claire.parkinson@vale.com	DIRECTOR, PROCESSING - ON - NORTH ATLANTIC
Kathleen Quintilio	kathleen.quintilio@vale.com	MGR, ENERGY NA

8. Intended Markets and Services

8. (a) Does the applicant intend to sell electricity into the IESO-administered markets?

○ Yes ● No

8. (b) Does the applicant intend to sell ancillary services into the IESO-administered markets?

The *Ontario Energy Board Act, 1998*, (OEB Act), defines "ancillary services" as services necessary to maintain the reliability of the IESO-controlled grid, including frequency control, voltage control, reactive power and operating reserve services.

● Yes ○ No

If yes, please provide particulars.

We participate with the IESO activities, but we do not sell energy to the market. All generation is consumed within our 69 KV Grid

8. (c) Does the applicant intend to sell electricity to another person?

○ Yes ● No

8. (d) Does the applicant intend to sell electricity to a consumer, defined as a person who uses for the person's own consumption, electricity that the person did not generate?

○ Yes ● No

If yes, the applicant may require a retailer licence. The electricity retailer application form along with information regarding when a retailer licence is required can be found on the OEB's Apply for a licence web page. If required, the electricity retailer application should be filed as soon as possible.

9. Facility Description

Please provide the number of facilities the applicant intends to generate electricity for sale from.

5

Facility #1

(a) Generation Type

○ Natural Gas ● Water ○ Wind ○ Solar ○ Other

(b) Installed Capacity (in Megawatts)

29.60 MW

NOTE: A person who owns or operates 1 or more facilities each with a total name plate capacity of 500 kilowatts or less is exempt from the need to obtain an electricity generation licence.

(c) Number of Units

3

(d) Facility Name

Big Eddy

(e) Facility Address

1150 High Falls Road
Worthington, Ontario
P0M 3H0

(f) Licensee Responsibility/Qualification Sought

● Owner and operator ○ Owner only ○ Operator only

Facility #2

(a) Generation Type

○ Natural Gas ● Water ○ Wind ○ Solar ○ Other

(b) Installed Capacity (in Megawatts)

10.00 MW

NOTE: A person who owns or operates 1 or more facilities each with a total name plate capacity of 500 kilowatts or less is exempt from the need to obtain an electricity generation licence.

(c) Number of Units

4

(d) Facility Name

High Falls #1 Generating Station

(e) Facility Address

1150 High Falls Road
Worthington, Ontario
P0M 3H0

(f) Licensee Responsibility/Qualification Sought

- [x] Owner and operator
- [ ] Owner only
- [ ] Operator only

Facility #3

(a) Generation Type

- [ ] Natural Gas
- [x] Water
- [ ] Wind
- [ ] Solar
- [ ] Other

(b) Installed Capacity (in Megawatts)

7.90 MW

NOTE: A person who owns or operates 1 or more facilities each with a total name plate capacity of 500 kilowatts or less is exempt from the need to obtain an electricity generation licence.

(c) Number of Units

1

(d) Facility Name

High Falls #2 Generating Station

(e) Facility Address

1150 High Falls Road
Worthington, Ontario
P0M 3H0

(f) Licensee Responsibility/Qualification Sought

- [x] Owner and operator
- [ ] Owner only
- [ ] Operator only

Facility #4

(a) Generation Type

- [ ] Natural Gas
- [x] Water
- [ ] Wind
- [ ] Solar
- [ ] Other

(b) Installed Capacity (in Megawatts)

4.50 MW

NOTE: A person who owns or operates 1 or more facilities each with a total name plate capacity of 500 kilowatts or less is exempt from the need to obtain an electricity generation licence.

(c) Number of Units

3

(d) Facility Name

Nairn Falls

(e) Facility Address

Latitude 46.34391, Longitude -81.57315
Worthington, Ontario P0M 3H0
Canada

(f) Licensee Responsibility/Qualification Sought

- [x] Owner and operator
- [ ] Owner only
- [ ] Operator only

Facility #5

(a) Generation Type

- [ ] Natural Gas
- [x] Water
- [ ] Wind
- [ ] Solar
- [ ] Other

(b) Installed Capacity (in Megawatts)

4.00 MW

NOTE: A person who owns or operates 1 or more facilities each with a total name plate capacity of 500 kilowatts or less is exempt from the need to obtain an electricity generation licence.

(c) Number of Units

2

(d) Facility Name

Wabageshik Generating Station

(e) Facility Address

134 Power House Road
Worthington, Ontario
P0M 3H0

(f) Licensee Responsibility/Qualification Sought

- [x] Owner and operator
- [ ] Owner only
- [ ] Operator only

10. Facility Status

Facility #1

(a) Facility Status

- [x] Existing facility in commercial service
- [ ] New facility
- [ ] Existing facility not in commercial service

When did this facility achieve commercial operation?

January 1, 1929

Is the applicant the original owner and operator?

- [x] Yes
- [ ] No

(b) Please provide a list of all regulatory approvals required (e.g. environmental, municipal, etc.) and identify the status of each approval.

Spanish Vermillion Water Management Plan

(c) Is the generation facility under construction or extensive rehabilitation?

○ Yes ● No

(d) Has the applicant secured financing?

● Yes ○ No

If yes, please provide particulars.

Part of our operational Budget

Facility #2

(a) Facility Status

● Existing facility in commercial service ○ New facility ○ Existing facility not in commercial service

When did this facility achieve commercial operation?

January 1, 1905

Is the applicant the original owner and operator?

● Yes ○ No

(b) Please provide a list of all regulatory approvals required (e.g. environmental, municipal, etc.) and identify the status of each approval.

Spanish Vermillion Water Management Plan

(c) Is the generation facility under construction or extensive rehabilitation?

● Yes ○ No

If yes, please provide the projected capital cost.

$5 million

(d) Has the applicant secured financing?

● Yes ○ No

If yes, please provide particulars.

We have secured financing part of our 1 to 5 year capital finance spend

Facility #3

(a) Facility Status

● Existing facility in commercial service ○ New facility ○ Existing facility not in commercial service

When did this facility achieve commercial operation?

January 1, 1917

Is the applicant the original owner and operator?

● Yes ○ No

(b) Please provide a list of all regulatory approvals required (e.g. environmental, municipal, etc.) and identify the status of each approval.

Spanish Vermillion Water Management Plan

(c) Is the generation facility under construction or extensive rehabilitation?

○ Yes ● No

(d) Has the applicant secured financing?

● Yes ○ No

If yes, please provide particulars.

Financing is part of our operational spend

Facility #4

(a) Facility Status

● Existing facility in commercial service ○ New facility ○ Existing facility not in commercial service

When did this facility achieve commercial operation?

January 1, 1915

Is the applicant the original owner and operator?

● Yes ○ No

(b) Please provide a list of all regulatory approvals required (e.g. environmental, municipal, etc.) and identify the status of each approval.

Spanish Vermillion Water Management Plan

(c) Is the generation facility under construction or extensive rehabilitation?

● Yes ○ No

If yes, please provide the projected capital cost.

$146,000,000

(d) Has the applicant secured financing?

● Yes ○ No

If yes, please provide particulars.

We have secured financing part of our 1 to 5 year capital finance spend

Facility #5

(a) Facility Status

● Existing facility in commercial service ○ New facility ○ Existing facility not in commercial service

When did this facility achieve commercial operation?

January 1, 1909

Is the applicant the original owner and operator?

- [x] Yes
- [ ] No

(b) Please provide a list of all regulatory approvals required (e.g. environmental, municipal, etc.) and identify the status of each approval.

Spanish Vermillion Water Management Plan

(c) Is the generation facility under construction or extensive rehabilitation?

- [ ] Yes
- [x] No

(d) Has the applicant secured financing?

- [x] Yes
- [ ] No

If yes, please provide particulars.

Financing is part of our operational spend

11. Facility Connection

Facility #1

(a) What is the voltage at the perimeter of the applicant's property from the output of the generation facility?

- [ ] 50 kV or less
- [x] greater than 50 kV

NOTE:
The OEB Act defines a "transmission system" as a system for transmitting electricity, and includes any structures, equipment or other things used for that purpose. "Transmit", with respect to electricity, means to convey electricity at voltages of more than 50 kV.

(i) Describe the existing or future transmission system from the output of the generation facility or applicant's distribution system to the connection point with the transmission network (e.g. length of line, transformers, etc.).

The Sudbury Area operation is connected to Hydro One 230 kV circuits X23N and S21N with a peak load of approximately 200 MW. This operation consists of mines, a smelter, internal hydroelectric generation (controlled from one control room) and transmission lines (approx. 300 miles). Internal generation is usually about 20% of load (based on water and loading). We do not generate onto the grid.

(ii) Does (or will) the applicant own and/or operate the transmission system?

- [x] Yes
- [ ] No

If yes, does the applicant own and/or operate the transmission system ONLY for the purpose of conveying electricity from the generation facility to the IESO-controlled grid?

- [ ] Yes
- [x] No

If no, please describe the purpose of the transmission system.

Supply's Power Internal to Vale

NOTE:

If the answer to the question above is no, the applicant may require a transmission licence. The application form along with information regarding when a transmission licence is required can be found at www.oeb.ca. If required, this application should be filed as soon as possible.

(b) Please provide a diagram demonstrating all components of the generation facility, distribution assets to connect to the customer's facility and the connection point to the customer's facility.

69kv-lines-sld-revised-2023-11-01-002.pdf

(c) Please identify the ownership of all components included in the diagram provided in the last question, i.e. if the components are owned by the applicant or the customer.

All components up to the connection to the IESO/Hydro grid is owned by Vale Canada Limited

Facility #2

(a) What is the voltage at the perimeter of the applicant's property from the output of the generation facility?

○ 50 kV or less ● greater than 50 kV

NOTE:
The OEB Act defines a "transmission system" as a system for transmitting electricity, and includes any structures, equipment or other things used for that purpose. "Transmit", with respect to electricity, means to convey electricity at voltages of more than 50 kV.

(i) Describe the existing or future transmission system from the output of the generation facility or applicant's distribution system to the connection point with the transmission network (e.g. length of line, transformers, etc.).

The Sudbury Area operation is connected to Hydro One 230 kV circuits X23N and S21N with a peak load of approximately 200 MW. This operation consists of mines, a smelter, internal hydroelectric generation (controlled from one control room) and transmission lines (approx. 300 miles). Internal generation is usually about 20% of load (based on water and loading). We do not generate onto the grid.

(ii) Does (or will) the applicant own and/or operate the transmission system?

● Yes ○ No

If yes, does the applicant own and/or operate the transmission system ONLY for the purpose of conveying electricity from the generation facility to the IESO-controlled grid?

○ Yes ● No

If no, please describe the purpose of the transmission system.

Supply's Power Internal to Vale

NOTE:
If the answer to the question above is no, the applicant may require a transmission licence. The application form along with information regarding when a transmission licence is required can be found at www.oeb.ca. If required, this application should be filed as soon as possible.

(b) Please provide a diagram demonstrating all components of the generation facility, distribution assets to connect to the customer's facility and the connection point to the customer's facility.

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(c) Please identify the ownership of all components included in the diagram provided in the last question, i.e. if the components are owned by the applicant or the customer.

All components up to the connection to the IESO/Hydro grid is owned by Vale Canada Limited

Facility #3

(a) What is the voltage at the perimeter of the applicant's property from the output of the generation facility?

○ 50 kV or less ● greater than 50 kV

NOTE:
The OEB Act defines a "transmission system" as a system for transmitting electricity, and includes any structures, equipment or other things used for that purpose. "Transmit", with respect to electricity, means to convey electricity at voltages of more than 50 kV.

(i) Describe the existing or future transmission system from the output of the generation facility or applicant's distribution system to the connection point with the transmission network (e.g. length of line, transformers, etc.).

The Sudbury Area operation is connected to Hydro One 230 kV circuits X23N and S21N with a peak load of approximately 200 MW. This operation consists of mines, a smelter, internal hydroelectric generation (controlled from one control room) and transmission lines (approx. 300 miles). Internal generation is usually about 20% of load (based on water and loading). We do not generate onto the grid.

(ii) Does (or will) the applicant own and/or operate the transmission system?

● Yes ○ No

If yes, does the applicant own and/or operate the transmission system ONLY for the purpose of conveying electricity from the generation facility to the IESO-controlled grid?

○ Yes ● No

If no, please describe the purpose of the transmission system.

Supply's Power Internal to Vale

NOTE:
If the answer to the question above is no, the applicant may require a transmission licence. The application form along with information regarding when a transmission licence is required can be found at www.oeb.ca. If required, this application should be filed as soon as possible.

(b) Please provide a diagram demonstrating all components of the generation facility, distribution assets to connect to the customer's facility and the connection point to the customer's facility.

69kv-lines-sld-revised-2023-11-01-0020.pdf

(c) Please identify the ownership of all components included in the diagram provided in the last question, i.e. if the components are owned by the applicant or the customer.

All components up to the connection to the IESO/Hydro grid is owned by Vale Canada Limited

Facility #4

(a) What is the voltage at the perimeter of the applicant's property from the output of the generation facility?

○ 50 kV or less ● greater than 50 kV

NOTE:
The OEB Act defines a "transmission system" as a system for transmitting electricity, and includes any structures, equipment or other things used for that purpose. "Transmit", with respect to electricity, means to convey electricity at voltages of more

than 50 kV.

(i) Describe the existing or future transmission system from the output of the generation facility or applicant's distribution system to the connection point with the transmission network (e.g. length of line, transformers, etc.).

The Sudbury Area operation is connected to Hydro One 230 kV circuits X23N and S21N with a peak load of approximately 200 MW. This operation consists of mines, a smelter, internal hydroelectric generation (controlled from one control room) and transmission lines (approx. 300 miles). Internal generation is usually about 20% of load (based on water and loading). We do not generate onto the grid.

(ii) Does (or will) the applicant own and/or operate the transmission system?

- [x] Yes
- [ ] No

If yes, does the applicant own and/or operate the transmission system ONLY for the purpose of conveying electricity from the generation facility to the IESO-controlled grid?

- [ ] Yes
- [x] No

If no, please describe the purpose of the transmission system.

Supply's Power Internal to Vale

NOTE:
If the answer to the question above is no, the applicant may require a transmission licence. The application form along with information regarding when a transmission licence is required can be found at www.oeb.ca. If required, this application should be filed as soon as possible.

(b) Please provide a diagram demonstrating all components of the generation facility, distribution assets to connect to the customer's facility and the connection point to the customer's facility.

69kv-lines-sld-revised-2023-11-01-0021.pdf

(c) Please identify the ownership of all components included in the diagram provided in the last question, i.e. if the components are owned by the applicant or the customer.

All components up to the connection to the IESO/Hydro grid is owned by Vale Canada Limited

Facility #5

(a) What is the voltage at the perimeter of the applicant's property from the output of the generation facility?

- [ ] 50 kV or less
- [x] greater than 50 kV

NOTE:
The OEB Act defines a "transmission system" as a system for transmitting electricity, and includes any structures, equipment or other things used for that purpose. "Transmit", with respect to electricity, means to convey electricity at voltages of more than 50 kV.

(i) Describe the existing or future transmission system from the output of the generation facility or applicant's distribution system to the connection point with the transmission network (e.g. length of line, transformers, etc.).

The Sudbury Area operation is connected to Hydro One 230 kV circuits X23N and S21N with a peak load of approximately 200 MW. This operation consists of mines, a smelter, internal hydroelectric generation (controlled from one control room) and transmission lines (approx. 300 miles). Internal generation is usually about 20% of load (based on water and loading). We do not generate onto the grid.

(ii) Does (or will) the applicant own and/or operate the transmission system?

☑ Yes ☐ No

If yes, does the applicant own and/or operate the transmission system ONLY for the purpose of conveying electricity from the generation facility to the IESO-controlled grid?

☐ Yes ☑ No

If no, please describe the purpose of the transmission system.

Supply's Power Internal to Vale

NOTE:
If the answer to the question above is no, the applicant may require a transmission licence. The application form along with information regarding when a transmission licence is required can be found at www.oeb.ca. If required, this application should be filed as soon as possible.

(b) Please provide a diagram demonstrating all components of the generation facility, distribution assets to connect to the customer's facility and the connection point to the customer's facility.

69kv-lines-sld-revised-2023-11-01-0022.pdf

(c) Please identify the ownership of all components included in the diagram provided in the last question, i.e. if the components are owned by the applicant or the customer.

All components up to the connection to the IESO/Hydro grid is owned by Vale Canada Limited

CONFIDENTIAL SECTIONS
Information filed as part of or in support of sections 12 to 16 of this application will be treated as confidential and is not available for public view.

17. Notice

The OEB is authorized, under section 4.14 of the OEB Act, to collect personal information for the purpose of carrying out its duties and exercising its powers under the OEB Act or any other Act.

The information provided both on this form and attached to this form is being collected by the OEB for the purpose of determining whether the applicant is qualified to receive the licence for which it is applying.

In order to verify the information on this form and/or determine whether the applicant is qualified to receive the licence for which it is applying, it may be necessary for the OEB to collect additional information from some or all of the following sources: federal, provincial/state, or municipal governments; licensing bodies; law enforcement agencies; credit bureaus; and banks. Only information relevant to the application or the OEB's determination of the application will be collected by the OEB.

The public official who can answer questions about the collection of the information is:

Registrar
Ontario Energy Board
P.O. Box 2319
2300 Yonge Street, 27th Floor
Toronto, ON M4P 1E4
Tel: 416-481-1967 or 1-888-632-6273

Applicants are reminded that the OEB is subject to the *Freedom of Information and Protection of Privacy Act* (FIPPA). FIPPA addresses circumstances in which the OEB may, upon request, be required to release information that is in its custody or under its control, and generally prohibits the OEB from releasing personal information. "Personal Information" has the meaning given to it under FIPPA.