## DNV·GL

# NATION RISE WIND FARM Spill Control and Response Plan

**Nation Rise Wind Farm Limited Partnership** 

Document No.: 10021027-CAMO-R-15 Issue: A, Status: FINAL Date: 21 February 2019



#### IMPORTANT NOTICE AND DISCLAIMER

- 1. This document is intended for the sole use of the Customer as detailed on the front page of this document to whom the document is addressed and who has entered into a written agreement with the DNV GL entity issuing this document ("DNV GL"). To the extent permitted by law, neither DNV GL nor any group company (the "Group") assumes any responsibility whether in contract, tort including without limitation negligence, or otherwise howsoever, to third parties (being persons other than the Customer), and no company in the Group other than DNV GL shall be liable for any loss or damage whatsoever suffered by virtue of any act, omission or default (whether arising by negligence or otherwise) by DNV GL, the Group or any of its or their servants, subcontractors or agents. This document must be read in its entirety and is subject to any assumptions and qualifications expressed therein as well as in any other relevant communications in connection with it. This document may contain detailed technical data which is intended for use only by persons possessing requisite expertise in its subject matter.
- 2. This document is protected by copyright and may only be reproduced and circulated in accordance with the Document Classification and associated conditions stipulated or referred to in this document and/or in DNV GL's written agreement with the Customer. No part of this document may be disclosed in any public offering memorandum, prospectus or stock exchange listing, circular or announcement without the express and prior written consent of DNV GL. A Document Classification permitting the Customer to redistribute this document shall not thereby imply that DNV GL has any liability to any recipient other than the Customer.
- 3. This document has been produced from information relating to dates and periods referred to in this document. This document does not imply that any information is not subject to change. Except and to the extent that checking or verification of information or data is expressly agreed within the written scope of its services, DNV GL shall not be responsible in any way in connection with erroneous information or data provided to it by the Customer or any third party, or for the effects of any such erroneous information or data whether or not contained or referred to in this document.
- 4. Any energy forecasts estimates or predictions are subject to factors not all of which are within the scope of the probability and uncertainties contained or referred to in this document and nothing in this document guarantees any particular energy output, including factors such as wind speed or irradiance.

#### **KEY TO DOCUMENT CLASSIFICATION**

| Strictly Confidential    | : | For disclosure only to named individuals within the Customer's organization.  |
|--------------------------|---|---|
| Private and Confidential | : | For disclosure only to individuals directly concerned with the subject matter of the document within the Customer's organization.   |
| Commercial in Confidence | : | Not to be disclosed outside the Customer's organization.  |
| DNV GL only              | : | Not to be disclosed to non-DNV GL staff   |
| Customer's Discretion    | : | Distribution for information only at the discretion of the Customer (subject to the above Important Notice and Disclaimer and the terms of DNV GL's written agreement with the Customer). |
| Published                | : | Available for information only to the general public (subject to the above Important Notice and Disclaimer).  |

| Project name:   | Nation Rise Wind Farm                             | DNV GL - Energy              |  |
|-----------------|---|------------------------------|--|
| Report title:   | Spill Control and Response Plan Advisory Americas |                              |  |
| Customer:       | Nation Rise Wind Farm Limited Partnership         | 4100 Rue Molson, Suite 100,  |  |
|                 | 219 Dufferin St. Unit 217C                        | Montreal, QC, H1Y 3N1 CANADA |  |
|                 | Toronto, Ontario M6K 3J1                          | Tel: 514 272-2175            |  |
| Contact person: | Kenneth Little                                    | Enterprise No.: 860480037    |  |
| Date of issue:  | 21 February 2019                                  |                              |  |
| Project No.:    | 10021027  |                              |  |
| Document No.:   | 10021027-CAMO-R-15                                |                              |  |
| Issue/Status    | A/FINAL   |                              |  |

| Prepared by:  | Verified by:  | Approved by:  |  |  |
|---|---|---|--|--|
| Gabriel Constantin<br>Team Leader, Environmental and<br>Permitting Services | Frederic Gagnon,<br>Project Manager, Environmental and<br>Permitting Services | Michael Roberge,<br>Head of Section, Environmental and<br>Permitting Services |  |  |
| Strictly Confidential Drivets and Confidential                              |   |   |  |  |
| Commercial in Confidence  |   |   |  |  |
| DNV GL only   | DNV GL only   |   |  |  |
| Customer's Discretion   |   |   |  |  |
| ⊠ Published   |   |   |  |  |
| © 2019 GL Garrad Hassan Canada Inc /  | All rights reserved.  |   |  |  |
| Reference to part of this report which ma                                   | ay lead to misinterpretation is not permissible                               | 2.  |  |  |

| Issue | Date             | Reason for Issue | Prepared by   | Verified by | Approved by |
|-------|------------------|------------------|---------------|-------------|-------------|
| А     | 21 February 2019 | Initial report   | G. Constantin | F. Gagnon   | M. Roberge  |

### Table of contents

| 1 PREAMBLE                   | 6  |
|------------------------------|----|
|                              |    |
| 2 SPILL CONTROL AND RESPONSE | 7  |
| 2.1 Procedures               | 7  |
| 2.2 Equipment and Materials  | 8  |
| 2.3 Spill Reporting          | 9  |
|                              |    |
| 3 REFERENCES                 | 10 |

### Appendices

APPENDIX A – SPILL REPORTING FORM

APPENDIX B – PROJECT SPILL LOG

### List of abbreviations

| Abbreviation | Meaning   |
|--------------|---|
| DNV GL       | GL Garrad Hassan Canada Inc.                        |
| EPA          | Environmental Protection Act                        |
| IESO         | Independent Electricity System Operator             |
| LRP          | Large Renewable Procurement                         |
| MECP         | Ministry of the Environment, Conservation and Parks |
| MW           | Megawatt  |
| O.Reg.       | Ontario Regulation                                  |
| REA          | Renewable Energy Approval                           |

### **1 PREAMBLE**

Nation Rise Wind Farm Limited Partnership (the "Proponent") is proposing to develop the Nation Rise Wind Farm (the "Project") which is subject to *Ontario Regulation (O. Reg.) 359/09* (Renewable Energy Approvals (REA) [1] under Part V.0.1 of the Ontario *Environmental Protection Act* (EPA)), as amended. The Proponent was awarded a contract for this Project in March 2016 from the Independent Electricity System Operator (IESO) under the Large Renewable Procurement (LRP), and has received its Renewable Energy Approval (REA) [0871-AV3TFM] from the Ontario Ministry of the Environment, Conservation and Parks (MECP, formerly the Ontario Ministry of the Environment and Climate Change) on 4 May 2018 [2]. The Project will be owned and operated by Nation Rise Wind Farm Limited Partnership, a wholly-owned subsidiary of EDP Renewables Canada Ltd.

The following sections of this Spill Control and Response Plan describe the procedure for responding to potential spill events. This plan should be read in conjunction with the Erosion and Sediment Control Plan for the Project [3], which outlines preventative measures against potential spills.

### **2 SPILL CONTROL AND RESPONSE**

### **2.1 Procedures**

This procedure includes internal and external notification procedures for initiating a response. For minor spills defined as one that poses no significant harm or threat to human health and safety or to the environment, Project personnel will promptly clean up any visible discharge. Minor spills are generally those where:

- The quantity of fuel/oil discharged is not more than 100 Litres and is in an area restricted to the public;
- Discharged material is easily stopped and controlled at the same time of discharge;
- Discharge is located near the source;
- Discharge material is not likely to reach water, groundwater, or field drains;
- There is little risk to human health and safety;
- There is little risk of fire or explosion;
- Arrangements for remediation are made immediately, and
- Records of the spill are maintained.

Major spills are spills that do not meet one or more of the minor spill characteristics described above.

The following actions are recommended in response to the release of pollutant:

#### 1. Stop the Spill

- If possible, up-right a container, close the valve, shut down equipment, or take whatever actions are possible to stop any release. If conditions are hazardous (for example, fire or potential explosion), do not approach.
- If safety is not an issue, call other nearby employees for assistance in stopping the release.

#### 2. Warn Others

- Notify the Site Management Team
- Keep others clear of the area.

#### 3. Isolate the Spill Area

- Use booms or sandbags, dig small trenches, or place absorbent pads to stop the spread.
- Take immediate action to prevent the spill from reaching offsite or surface waters.

• Place booms or pads, dig a diversion ditch, or use soil to form a berm.

- If the release reaches water, attempt to place booms to contain the release, or, if necessary, block drainage downstream of spill to prevent further discharge.
- A list of potential spill response equipment and materials is provided in Section 2.2.

#### 4. Minimize Exposure and Implement Clean-Up

- Limit the spread as much as possible by placing absorbent materials around the spill.
- Do not stand in the spilled material while responding.
- Shovels, brooms and mobile equipment will be used to thoroughly clean the area where the spill occurred. Mobile equipment will be used to install dams in streams or waterways to limit migration potential, as needed.
- Oil contaminated soil in the area will be excavated as needed. All materials and oil contaminated soil will be transported to a secured storage area on site, placed in labeled secondary containment, and then properly transported off site by a MECPapproved 'waste system' hauler for disposal at a facility approved by MECP to receive the subject waste.

The primary concerns for response are as follows:

- 1) Ensure the safety of all employees and the public;
- 2) Notify appropriate emergency services for proper response:
  - Site Management Team will communicate information to client and necessary emergency services, as appropriate;
- 3) Get emergency assistance in the event of injury/exposure associated with the event;
- 4) Prevent spill from entering water systems;
- 5) Minimize site personnel exposure by only allowing trained employees to respond;
- 6) Investigate and develop root cause analysis;
- 7) Arrange for timely cleanup; and
- 8) All spent materials and oil contaminated soil will be transported off site by an MECP-approved hauler for the subject waste and disposed at an approved facility.

### 2.2 Equipment and Materials

The list below identifies some of the spill response equipment recommended to be maintained onsite; however, it does not constitute an exhaustive list and the construction contractor of the Project will provide an updated list prior to construction.

- Communication equipment, such as radios and cell phones;
- Standard PPE (Hard hat, safety glasses, work gloves, safety boots)
- Chemical resistant gloves;

- Safety googles and face shields;
- Chemical resistant coverall;
- Universal liquid spill kit;
- Salvage drum for transportation of hazardous goods;
- Boxes of square absorbents;
- Boxes of roll(s) absorbents;
- Fire extinguishers; and
- First aid kits.

### 2.3 Spill Reporting

### 2.3.1 External Notifications

The following stakeholders will be notified within 24 hours of any reportable spills of pollutants as per *O. Reg. 675/98*:

- Ontario's Spills Action Centre (toll-free number 1-800-268-6060);
- the local municipality;
- the owner of the substance (if known); and
- the person in control of the substance (if known).

### 2.3.2 Spill Reporting Requirements

For any reportable spills of pollutants as per O. Reg. 675/98, the following information will be reported:

- Name and phone number;
- Name and phone number of the person or company in control of the product spilled;
- Date, time and location of the spill;
- Duration of the spill (if known) and whether the spill is ongoing;
- Type and quantity of pollutant spilled, including hazard level or toxicity information;
- Source of the spill and information on the cause;
- Description of adverse effects;
- Environmental conditions that affect the spill (weather, traffic, etc.);
- Actions being taken to respond; and
- Other agencies and parties responding.

A template of the spill reporting form is provided in Appendix A. Finally, once active, the Project will record all reportable spills on the template Project spill log, provided in Appendix B.

### **3 REFERENCES**

- [1] Ontario Regulation 359/09, made under the Environmental Protection Act, Renewable Energy Approvals under Part 1.0 of the Act.
- [2] Ontario Ministry of the Environment and Climate Change, Renewable Energy Approval (0871-AV3TFM) – Nation Rise Wind Farm, 4 May 2018.
- [3] Tulloch Engineering Ltd., Erosion and Sediment Control Plan Nation Rise Wind Project, 4 February 2019.

### **APPENDIX A – SPILL REPORTING FORM**

In the event of a reportable spill of pollutant, specific information must be collected. Please fill out the following form immediately following the event and notify the Project Site Manager.

### **Spill Report**

Name and phone number of person reporting spill:

Name and phone number of the person or company in control of the product spilled:

Date, time, and location of the spill:

Date:

Time (24-hour clock):

Location of release:

Duration of the spill (if known) and whether the spill is ongoing:

#### Type and quantity of pollutant spilled, including hazard level or toxicity information:

Type:

Amount:

Hazard level or toxicity information:

Source of the spill and information on the cause:

**Description of adverse effects:** 

Environmental conditions that affect the spill (weather, traffic, etc.):

Actions being taken to respond:

Other agencies and parties responding:

Name:

Phone:

Involvement:

**Other Information**, as appropriate:

### **APPENDIX B – PROJECT SPILL LOG**

Summarize any reportable spill in this log:

| Date | Material | Spill Amount<br>(litres) | Cause | Reportable Y/N |
|------|----------|--------------------------|-------|----------------|
|      |          |                          |       |                |
|      |          |                          |       |                |
|      |          |                          |       |                |
|      |          |                          |       |                |
|      |          |                          |       |                |
|      |          |                          |       |                |
|      |          |                          |       |                |
|      |          |                          |       |                |
|      |          |                          |       |                |
|      |          |                          |       |                |
|      |          |                          |       |                |

#### **ABOUT DNV GL**

Driven by our purpose of safeguarding life, property and the environment, DNV GL enables organizations to advance the safety and sustainability of their business. We provide classification and technical assurance along with software and independent expert advisory services to the maritime, oil and gas, and energy industries. We also provide certification services to customers across a wide range of industries. Operating in more than 100 countries, our 16,000 professionals are dedicated to helping our customers make the world safer, smarter, and greener.