

RENEWABLE ENERGY APPROVALNUMBER 7195-8JVJYV
Issue Date: August 3, 2011

First Solar Development (Canada), Inc.
5115 Blackwell Sideroad
Sarnia, Ontario
N7T 7H3

Project: St. Clair - Sombra Solar Farm
Location: Bentpath Line Part of Lot 1 & 2, Concession 11
St. Clair Township, County of Lambton
N0N 1M0

You have applied in accordance with Section 47.4 of the Environmental Protection Act for approval to engage in a renewable energy project in respect of Class 3 solar facility consisting of the following:

- the construction, installation, operation, use and retiring of;
 - (a) twenty (20) arrays of photovoltaic (PV) modules or panels with a total name plate capacity of 20 megawatts, with each one (1) megawatt PV array consisting of approximately 16, 860 PV modules and one Power Conversion Station which includes one (1) 1000 kilovolt ampere isolation transformer, and two (2) 500 kilowatt inverters, and
 - (b) associated ancillary equipment, systems and technologies including on-site access roads, switchgear, underground cabling and overhead distribution lines,

all in accordance with the application for a Renewable Energy Approval, dated April 22, 2010 and signed by Peter Carrie, Vice President, First Solar Development (Canada), Inc., and all supporting documentation submitted with the application including an Acoustic Assessment Report entitled “*Noise Impact Assessment – Sombra Solar Farm, St. Clair, ON* .” dated January 2011, and prepared by Golder Associates.

For the purpose of this renewable energy approval, the following definitions apply:

1. "Act" means the *Environmental Protection Act* , R.S.O 1990, c.E.19, as amended;
2. "Adverse Effect" has the same meaning as in the Act;
3. "Application" means the application for a Renewable Energy Approval dated April 22, 2010, and signed by Peter Carrie, Vice President, First Solar Development (Canada), Inc, and all supporting documentation submitted with the application including an Acoustic Assessment Report entitled "*Noise Impact Assessment - Sombra Solar Farm, St. Clair, ON* " dated January 2011 and prepared by Golder Associates;
4. "Approval" means this Renewable Energy Approval issued in accordance with Section 47.4 of the Act, including any schedules to it;
5. "A-weighting" means the frequency weighting characteristic as specified in the International Electrotechnical Commission (IEC) 123 or IEC 179 and intended to approximate the relative sensitivity of the normal human ear to different frequencies (itches) of sound. It is denoted as "A";
6. "A-weighted Sound Pressure Level" means the Sound Pressure Level modified by application of the A-weighting. It is measured in decibels, A-weighted, and denoted "dBA";
7. "Class 1 Area" means an area with an acoustical environment typical of a major population centre, where the background sound level is dominated by the activities of people, usually road traffic, often referred to as "urban hum";
8. "Class 2 Area" means an area with an acoustical environment that has qualities representative of both Class 1 and Class 3 Areas:
 - sound levels characteristic of Class 1 during daytime (07:00 to 19:00 or to 23:00 hours);
 - low evening and night background sound level defined by natural environment and infrequent human activity starting as early as 19:00 hours (19:00 or 23:00 to 07:00 hours);
 - no clearly audible sound from Stationary Sources other than from those under impact assessment.
9. "Class 3 Area" means a rural area with an acoustical environment that is dominated by natural sounds having little or no road traffic, such as the following:

- a small community with less than 1000 population;
 - agricultural area;
 - a rural recreational area such as a cottage or a resort area; or
 - a wilderness area.
10. "Company" means First Solar Development (Canada), Inc., and includes its successors and assignees;
 11. "Decibel" means a dimensionless measure of Sound Level or Sound Pressure Level, denoted as dB;
 12. "Director" means a person appointed in writing by the Minister of the Environment pursuant to section 5 of the Act as a Director for the purposes of section 47.5 of the Act;
 13. "District Manager" means the District Manager of the appropriate local district office of the Ministry where the Facility is geographically located;
 14. "Equipment" means the one (1) 1000 kilovolt ampere isolation transformer, and two (2) 500 kilowatt inverters within each one (1) megawatt PV array identified in this Approval and as further described in the Application, to the extent approved by this Approval;
 15. "Equivalent Sound Level" is the value of the constant sound level which would result in exposure to the same total A-weighted energy as would the specified time-varying sound, if the constant sound level persisted over an equal time interval. It is denoted L_{eq} and is measured in dB A-weighting (dBA);
 16. "Facility" means the renewable energy generation facility, including the Equipment, as described in this Approval and as further described in the Application, to the extent approved by this Approval;
 17. "Ministry" means the Ontario Ministry of the Environment;
 18. "Point of Reception" has the same meaning as in Publication NPC-232 and is subject to the same qualifications described in that document;
 19. "Publication NPC-232" means Publication NPC-232, Sound Level Limits for Stationary Sources in Class 3 Areas (Rural), October, 1995 or its successor document;
 20. "O.Reg. 359/09" means Ontario Regulation 359/09 "Renewable Energy Approvals under Part V.0.1 of the Act" made under the Act;
 21. "Sound Level" means the A-weighted, Sound Pressure Level.

22. "Sound Level Limit" is the limiting value described in terms of the one hour A-weighted Equivalent Sound Level Leq;
23. "Sound Pressure" means the instantaneous difference between the actual pressure and the average or barometric pressure at a given location. The unit of measurement is the micro pascal (μPa);
24. "Sound Pressure Level" is twenty times the logarithm to the base 10 of the ratio of the effective pressure (μPa) of a sound to the reference pressure of $20 \mu\text{Pa}$; and
25. "UTM" means Universal Transverse Mercator coordinate system.

You are hereby notified that this approval is issued to you subject to the terms and conditions outlined below:

TERMS AND CONDITIONS

GENERAL

1. The Company shall construct, install, use, operate, maintain and retire the Facility in accordance with the terms and conditions of this Approval and the Application.
2. Where there is a conflict between a provision of this Approval and any document submitted by the Company, the conditions in this Approval shall take precedence. Where there is a conflict between one or more of the documents submitted by the Company, the document bearing the most recent date shall take precedence.
3. The Company shall ensure a copy of this Approval is:
 - (1) accessible, at all times, by Company staff operating the Facility and;
 - (2) submitted to the clerk of each local municipality and upper-tier municipality in which the Facility is situated along with the Application.
4. If the Company has a publicly accessible website, the Company shall ensure that the Approval and the Application are posted on the Company's publicly accessible website within five (5) business days of receiving this Approval.
5. The Company shall, at least six (6) months prior to the anticipated retirement date of the entire Facility, or part of the Facility, review its Decommissioning Plan Report to ensure that it is still accurate. If the Company determines that the Facility cannot be decommissioned in accordance with the Decommissioning Plan Report, the Company shall provide the Director and District Manager a written description of plans for the decommissioning of the Facility.
6. The Facility shall be retired in accordance with the Decommissioning Plan Report and any directions provided by the Director or District Manager.

EXPIRY OF APPROVAL

7. Construction and installation of the Facility must be completed within two (2) years of the later of:
 - (1) the date this Approval is issued; or
 - (2) if there is a hearing or other litigation in respect of the issuance of this Approval, the date that this hearing or litigation is disposed of, including all appeals.
8. This Approval ceases to apply in respect of any portion of the Facility not constructed or installed before the later of the dates identified in Condition No. 7.

PERFORMANCE LIMITS

9. The Company shall ensure that:
 - (1) the Sound Levels from the Equipment, at the Points of Reception identified in Schedule B of this Approval comply with the Sound Level Limit of 40 dBA as described in Publication NPC-232.
 - (2) the Equipment is constructed and installed at either of the following locations:
 - a) at the locations identified in Schedule A of this Approval; or
 - b) at a location that does not vary by more than 10 metres from the locations identified in Schedule A of this Approval and provided that,
 - i) the Equipment will comply with Condition No. 9 (1) and
 - ii) all setback prohibitions established under O.Reg. 359/09 are complied with.
10. If the Company determines that some or all of the Equipment cannot be constructed in accordance with Condition No. 9 (2), prior to the construction and installation of the Equipment in question, the Company shall contact the Director in writing.
11. Within three (3) months of the completion of the construction of the Facility, the Company shall submit to the Director a written confirmation signed by the Vice President of First Solar Development (Canada), Inc., that the UTM coordinates of the “as constructed” Equipment comply with the requirements of Condition No. 9 (2).

STORMWATER MANAGEMENT

12. The Company shall employ best management practices for stormwater management

and sediment and erosion control during construction, installation, use, operation, maintenance and retiring of the Facility, as outlined in the Application.

WATER TAKING ACTIVITIES

13. The Company shall not take more than 50,000 litres of water on any day by any means at the project location during the construction, installation, use, operation, maintenance and retiring of the Facility.

ARCHAEOLOGICAL RESOURCES

14. If archaeological resources are discovered, the Company shall immediately contact any authorities it is legally obligated to contact, and shall notify the Director as soon as reasonably possible.

OPERATION AND MAINTENANCE

15. Before construction and installation of the Equipment, the Company shall prepare a written manual for use by Company staff outlining the operating procedures and a maintenance program for the Equipment that includes as a minimum the following:
 - (1) routine operating and maintenance procedures in accordance with good engineering practices and as recommended by the Equipment suppliers;
 - (2) emergency procedures;
 - (3) procedures for any record keeping activities relating to operation and maintenance of the Equipment; and
 - (4) all appropriate measures to minimize noise emissions from the Equipment.
16. The Company shall;
 - (1) update as required the manual described in Condition No. 15; and
 - (2) make the manual described in Condition No. 15 available for review by staff of the Ministry upon request.
17. The Company shall ensure that the Facility is operated and maintained in accordance with the Approval and the manual described in Condition No. 15.

RECORD CREATION AND RETENTION

18. The Company shall create written records consisting of the following:
 - (1) an operations log summarizing the operation and maintenance activities of the Facility;
 - (2) within the operations log, a summary of routine and Ministry staff inspections of the Facility; and

- (3) a record of any complaint alleging an Adverse Effect caused by the construction, installation, use, operation, maintenance or retirement of the Facility.
19. A record described under Condition No. 18(3) shall include:
 - (1) a description of the complaint that includes as a minimum the following:
 - a) the date and time the complaint was made;
 - b) the name, address and contact information of the person who submitted the complaint;
 - (2) a description of each incident to which the complaint relates that includes as a minimum the following:
 - a) the date and time of each incident;
 - b) the wind direction at the time of each incident;
 - c) the ID of the Equipment involved in each incident and its output at the time of each incident;
 - d) the location of the person who submitted the complaint at the time of each incident; and
 - (3) a description of the measures taken to address the cause of each incident to which the complaint relates and to prevent a similar occurrence in the future.
20. The Company shall retain, for a minimum of five (5) years from the date of their creation, all records described in Condition No. 18, and make these records available for review by staff of the Ministry upon request.

NOTIFICATION OF COMPLAINTS

21. The Company shall notify the District Manager of each complaint within two (2) business days of the receipt of the complaint.
22. The Company shall provide the District Manager with the written records created under Condition No. 19 within eight (8) business days of the receipt of the complaint.
23. If the Company receives a complaint related to groundwater, the Company shall contact the District Manager within one (1) business day of the receipt of the complaint, to discuss appropriate measures to manage any potential groundwater issues.

CHANGE OF OWNERSHIP

24. The Company shall notify the Director in writing, and forward a copy of the notification to the District Manager, within thirty (30) days of the occurrence of any

of the following changes:

- (1) the ownership of the Facility;
- (2) the operator of the Facility;
- (3) the address of the Company;
- (4) the partners, where the Company is or at any time becomes a partnership and a copy of the most recent declaration filed under the Business Names Act, R.S.O. 1990, c.B.17, as amended, shall be included in the notification; and
- (5) the name of the corporation where the Company is or at any time becomes a corporation, other than a municipal corporation, and a copy of the most current information filed under the Corporations Information Act, R.S.O. 1990, c. C.39, as amended, shall be included in the notification.

SCHEDULE A

Coordinates of the Equipment are listed below in UTM17-NAD83 projection:

Equipment I.D.	Make and Model	Coordinates, UTM (NAD 83 z17)	
		Easting (m)	Northing (m)
S 1	See Details Below	380,166	4,730,268
S 2	See Details Below	380,162	4,730,168
S 3	See Details Below	380,157	4,730,068
S 4	See Details Below	380,152	4,729,958
S 5	See Details Below	380,148	4,729,858
S 6	See Details Below	380,143	4,729,738
S 7	See Details Below	380,138	4,729,638
S 8	See Details Below	380,133	4,729,538
S 9	See Details Below	380,129	4,729,428
S 10	See Details Below	380,124	4,729,328
S 11	See Details Below	380,443	4,730,258
S 12	See Details Below	380,438	4,730,158
S 13	See Details Below	380,434	4,730,058
S14	See Details Below	380,429	4,729,948
S 15	See Details Below	380,425	4,729,848
S 16	See Details Below	380,419	4,729,728
S 17	See Details Below	380,415	4,729,628
S 18	See Details Below	380,410	4,729,518
S 19	See Details Below	380,406	4,729,418
S 20	See Details Below	380,401	4,729,318

Make and Model:- either Scenario 1 or 2:

Scenario #1

One (1) – 1000 kVA transformer
two (2) 500 kW Xantrex inverters

Or Scenario #2:

One (1) – 1000 kVA transformer
two (2) - 500 kW SMA model inverters

SCHEDULE B
Points of Reception Locations

Representative Points of Reception described in the Application are noted below.
Coordinates of the dwellings listed below are in UTM17-NAD83 projection:

Point of Reception ID	Height above ground level (m)	Coordinates, UTM (NAD 83 z17)	
		Easting (m)	Northing (m)
POR008	4.5	381,887.40	4,730,346.99
POR009	4.5	381,717.45	4,730,344.61
POR010	4.5	381,497.99	4,730,482.66
POR011	4.5	381,058.80	4,730,470.13
POR012	4.5	380,959.54	4,730,376.59
POR013	4.5	380,694.97	4,730,477.28
POR014	4.5	380,202.59	4,730,432.22
POR015	4.5	379,960.63	4,730,420.98
POR080	4.5	380,210.69	4,729,144.24
POR081	4.5	380,228.97	4,729,058.92
POR082	4.5	380,698.81	4,729,109.80
POR083	4.5	380,806.88	4,729,020.45
POR084	4.5	381,200.65	4,729,008.15
POR085	4.5	381,204.40	4,729,152.60

The reasons for the imposition of these terms and conditions are as follows:

1. Condition Nos. 1 and 2 are imposed to ensure that the Facility is constructed, installed, used, operated, maintained and retired in the manner in which it was described for review and upon which Approval was granted. These conditions are also included to emphasize the precedence of Conditions in the Approval and the practice that the Approval is based on the most current document, if several conflicting documents are submitted for review.
2. Condition Nos. 3 and 4 are included to require the Company to provide information to the public and the local municipality.
3. Condition Nos. 5 and 6 are included to ensure that final retirement of the Facility is completed in an aesthetically pleasing manner, in accordance with Ministry standards, and to ensure long-term protection of the health and safety of the public and the environment.
4. Condition Nos. 7 and 8 are intended to limit the time period of the Approval.
5. Condition No. 9 is included to provide the minimum performance requirement considered necessary to prevent an Adverse Effect resulting from the operation of the Equipment and to

ensure that the noise emissions from the Equipment will be in compliance with applicable limits set in Publication NPC-232.

6. Condition Nos. 10 and 11 are included to ensure that the Equipment is constructed, installed, used, operated, maintained and retired in a way that meets the regulatory setback prohibitions set out in O. Reg. 359/09.
7. Condition Nos. 12, 13 and 14, are included to ensure that the Facility is constructed, installed, used, operated, maintained and retired in a way that does not result in an Adverse Effect or hazard to the natural environment or any persons.
8. Condition Nos. 15, 16 and 17 are included to emphasize that the Equipment must be maintained and operated according to a procedure that will result in compliance with the Act, O. Reg. 359/09 and this Approval.
9. Condition Nos. 18, 19 and 20 are included to require the Company to keep records and provide information to staff of the Ministry so that compliance with the Act, O. Reg. 359/09 and this Approval can be verified.
10. Condition Nos. 21, 22 and 23 are included to ensure that any complaints regarding the construction, installation, use, operation, maintenance or retirement of the Facility are responded to in a timely and efficient manner.
11. Condition No. 24 is included to ensure that the Facility is operated under the corporate name which appears on the application form submitted for this Approval and to ensure that the Director is informed of any changes.

NOTICE REGARDING HEARINGS

In accordance with Section 139 of the Environmental Protection Act, within 15 days after the service of this notice, you may by further written notice served upon the Director, the Environmental Review Tribunal and the Environmental Commissioner, require a hearing by the Tribunal.

In accordance with Section 47 of the Environmental Bill of Rights, 1993, the Environmental Commissioner will place notice of your request for a hearing on the Environmental Registry.

Section 142 of the Environmental Protection Act provides that the notice requiring the hearing shall state:

1. The portions of the renewable energy approval or each term or condition in the renewable energy approval in respect of which the hearing is required, and;
2. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

The signed and dated notice requiring the hearing should also include:

3. The name of the appellant;
4. The address of the appellant;
5. The renewable energy approval number;
6. The date of the renewable energy approval;
7. The name of the Director;
8. The municipality or municipalities within which the project is to be engaged in;

This notice must be served upon:

The Secretary*
 Environmental Review Tribunal
 655 Bay Street, 15th Floor
 Toronto, Ontario
 M5G 1E5

AND

The Environmental Commissioner
 1075 Bay Street, 6th Floor
 Suite 605
 Toronto, Ontario
 M5S 2B1

AND


The Director
 Section 47.5, *Environmental Protection Act*
 Ministry of the Environment
 2 St. Clair Avenue West, Floor 12A
 Toronto, Ontario
 M4V 1L5

*** Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 314-4600, Fax: (416) 314-4506 or www.ert.gov.on.ca**

Under Section 142.1 of the Environmental Protection Act, residents of Ontario may require a hearing by the Environmental Review Tribunal within 15 days after the day on which notice of this decision is published in the Environmental Registry. By accessing the Environmental Registry at www.ebr.gov.on.ca, you can determine when this period ends.

Approval for the above noted renewable energy project is issued to you under Section 47.5 of the Environmental Protection Act subject to the terms and conditions outlined above.

DATED AT TORONTO this 3rd day of August, 2011



Mansoor Mahmood, P.Eng.
 Director
 Section 47.5, *Environmental Protection Act*

DM/

c: District Manager, MOE Sarnia
 Paul Barrette, Lakeshore Group