

November 21, 2011

Dear

**Subject: Recurrent Energy - RE Smiths Falls 6 Solar Project
Proposed Project Changes**

RE Smiths Falls 6 ULC proposes several modifications to the design of RE Smiths Falls 6 Solar Project (hereinafter referred to as the "Project"). These changes are as a result of requests from neighbours and the public from the consultation activities (e.g., public meetings) and Project refinements resulting from the initiation of the detailed project design.

All REA documentation was reviewed in light of these proposed Project changes. Table 1.1, attached, provides a summary of the changes in each affected document including the type of change, existing text, proposed change, rationale for the change, any altered effect associated with the design change, any new mitigation and new environmental effects monitoring requirements.

In all cases the altered effect will not result in a change to the footprint of the facility, there are no new negative environmental effects (with the exception one), and the altered effect is positive, neutral, or minimal impact. The exception is the proposal to burn brush should a re-use option not be feasible. Through mitigation, the impact should be temporary and minimal.

This information and the revised Noise Assessment Report will be available on the Project website as of Monday, November 28, 2011.

If you have any questions, please do not hesitate to contact me at 905-374-5200.

Yours truly,



Kimberley Arnold
Environmental Lead - Energy
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cc. B. Leah, Recurrent Energy

Table 1.1 RE Smiths Falls 6 Solar Project – Table of Proposed Modifications, Rational for Change, Potential Environmental Effects and Mitigation Measures

Item Number	Item	Page No.	Existing Text	Design Change	Rationale for Change	Altered Effect	Additional Mitigation Required	Additional Environmental Effects Monitoring
Construction Plan Report								
1	Layout Changes	5		A 10-m wide setback from the municipal road allowance has been incorporated	Setback incorporated to meet Township of Rideau Lakes setback requirements.	Visual impact of the facility from the roadway will be slightly lessened.	N/A	N/A
2		5		Substation moved slightly off the property lines	Change made to incorporate setbacks from road frontage and side lot lines, as well as optimization of location within the general substation area.	Visual impact of the facility from the roadway will be slightly lessened.	N/A	N/A
3		5		3.5-m wide gravel fire break around periphery of site	Guidance from ESA for a fire break around perimeter of facility.	Improvement to facility fire protection and safety.	N/A	N/A
4		5		Revised access road and inverter locations	Revised road and inverter location optimized design based on other changes.	No Change (Noise Assessment Study shows modified facility is compliant with noise emission requirements)	N/A	N/A
5		5		Panels removed from the Hydro-One Networks Inc. (HONI) easement crossing the property.	Development is not permitted within the HONI easement.	Panels further away from the eastern side of the property, lessening visual effect on neighbours in that location.	N/A	N/A
6		5		Setbacks around periphery resulting altered panel layout, but no change in overall footprint	Increased setbacks due to municipal setbacks, HONI easement and shading concerns reduced available space necessitating a re-design of the panel layout.	No Change	N/A	N/A
7		5		Visual screening added to the Site Plan layout	Visual screening already present in drawings in Appendix C of the Design and Operations Report, but added to the Site Layout for completeness.	No Change	N/A	N/A
8	Groundwater well	11	A water well will be installed for construction purposes...	No water well installation required	Water will be trucked to the site from an approved off site source, with a valid permit to take water, if necessary.	No groundwater withdrawal from a well which would have potentially resulted in a minor, short-term decrease in the local groundwater table in the vicinity of the well as previously discussed in Section 3.2 of Appendix A to the Construction Plan Report (CPR).	No longer is mitigation required as described in Section 4.2 of Appendix A to the CPR.	N/A
9	Organic debris disposal	12	Larger trees will be felled using chainsaws and limbed and cut into smaller lengths for transport off-site...Trees could be chipped and processed on site for use as temporary erosion control. Excess material will be collected on site and transported off-site to a licensed landfill operation.	Section is amended to include burning of organic debris (brush) as a potential option should re-use not be feasible. Any burning of vegetation on site will be performed in accordance with all local laws and ordinances and after obtaining any required permits.	Since re-use may not always be feasible, burning is proposed. Burning will only be performed during unfavourable conditions such as winter with snow cover or wet conditions that preclude onsite disposal of vegetation by other means such as chipping and spreading.	Potential adverse effects on local air quality due to burning of debris and potential increase in fire risk due to burning of debris on-site.	Any burning of vegetation on site will be performed in accordance with all local laws and ordinances and after obtaining any required permits. A fire emergency response plan will be prepared as part of the application for a permit.	None.

Item Number	Item	Page No.	Existing Text	Design Change	Rationale for Change	Altered Effect	Additional Mitigation Required	Additional Environmental Effects Monitoring
10	Array Foundation	14	Potential for use of steel piles installed by a pile driving rig in Section 3.11.	Pile driving will not be required. Screw piles will be utilized on this site.	Screw piles can be utilized at this site based, on the geotechnical conditions present.	Noise emissions during construction will be lessened since there will be no requirement for pile driving.	N/A	N/A
11	Screw Piles for the substation , transformer and inverter foundations	15	Foundations formed of reinforced concrete	No concrete – screw pile foundations to be used instead for inverter, transformer and substation foundations	Refinement of detailed design requirements	Potential adverse effects to surface water as a result of concrete/cement spills, as discussed in Section 4.1.3 of Appendix A to the CPR is eliminated.	Mitigation measures as discussed in Section 4.13.1 of Appendix A to the CPR are no longer required for this activity.	N/A
12	Use of Cable Tray for Internal Cabling	16	Cable trench and conduits will be installed	Using cable tray in place of trenching conduits	Refinement of detailed design requirements	No Change	N/A	N/A
13	PV Array Materials / Construction	21	2MVA Padmount Transformer to be installed on transformer pad	To be integrated into inverter house, no pad will be installed	Refinement of detailed design requirements	Potential adverse effects to surface water as a result of concrete/cement spills, as discussed in Section 4.1.3 of Appendix A to the CPR is eliminated.	Mitigation measures as discussed in Section 4.13.1 of Appendix A to the CPR are no longer required for this activity.	N/A
14		21	1 MW Power Inverter to be installed on inverter pad	To be installed on pile foundation instead of inverter concrete pad	Refinement of detailed design requirements	Potential adverse effects to surface water as a result of concrete/cement spills, as discussed in Section 4.1.3 of Appendix A to the CPR is eliminated.	Mitigation measures as discussed in Section 4.13.1 of Appendix A to the CPR are no longer required for this activity.	N/A
15		21	Recombiner boxes to be located at various locations within the site	Recombiner boxes will be integrated into the inverter house	Refinement of detailed design requirements	No Change	N/A	N/A
16		21	PV Structures (7x2 panels/structure)	PV Structures (3x7 panels/structure)	Refinement of detailed design requirements	No Change	N/A	N/A
17		21	36,800 PV Modules	42,924 PV Modules	Refinement of detailed design requirements	No Change	N/A	N/A
18	Substation Materials / Construction	23	Transformer to be installed on transformer foundation surrounded by oil containment	FR3 environmentally friendly oil with SorbWeb absorbent system, no holding tank	Environmentally friendly oil considered preferable to conventional design	No change	N/A	N/A
Design and Operations Report								
19	Control Building Size	3	The prefabricated control house building is approximately 6 m x 9 m	The control building will be approximately 4 m x 11 m	Refinement of detailed design requirements	Slightly smaller footprint	N/A	N/A
20	Fencing around Inverter Clusters	3	Chain link security fencing installed around inverters	No fencing will be installed around inverter clusters	Refinement of detailed design requirements	Less visual impact at inverters	N/A	N/A
21	Transportation System	3	Approximately 3,900 m of granular roadways	Approximately 1,800 m of granular road way	Refinement of detailed design requirements	2,100 m reduction in granular roadways. Positive benefit to stormwater management (better infiltration) and wildlife habitat (more ground cover vegetation)	N/A	N/A
22		3	Roadways with widths varying from 3.5 to 4.0 m	Widths of approximately 5.0 m	Road width increased at request of Township to accommodate emergency services vehicles	No Change	N/A	N/A

Item Number	Item	Page No.	Existing Text	Design Change	Rationale for Change	Altered Effect	Additional Mitigation Required	Additional Environmental Effects Monitoring
23	Sewage Collection and Treatment	4	Oil/water separator to be used to contain oil from the substation transformer	Use of FR3 (or equivalent) oil with SorbWeb absorbent system instead of secondary containment	Environmentally friendly oil considered preferable to conventional design	No change	N/A	N/A
24	Transformer Specifications	4	7.5/10 MVA, 44 kV / 13.8 kV	7.5/10 MVA, 44 kV / 27.6 kV	Refinement of detailed design requirements	No Change (Noise Assessment Study has been modified and remains compliant)	N/A	N/A
25		4	These (intermediate) transformers are proposed to be 2 MVA, 13.8 kV / 265 VAC	1.25 MVA, 27.6 kV / 320 VAC	Refinement of detailed design requirements	No Change (Noise Assessment Study has been modified and remains compliant)	N/A	N/A
26		4	A station service transformer rated as 100 kVA three phase...	Rated as 150 kVA	Refinement of detailed design requirements	No Change (Noise Assessment Study has been modified and remains compliant)	N/A	N/A
27	Site Layout	6		A 10-m wide setback from the municipal road allowance has been incorporated	Setback incorporated to meet Township of Rideau Lakes setback requirements.	Visual impact of the facility from the roadway will be slightly lessened.	N/A	N/A
28		6		Substation moved slightly off the property lines	Change made to incorporate setbacks from road frontage and side lot lines, as well as optimization of location within the general substation area.	Visual impact of the facility from the roadway will be slightly lessened.	N/A	N/A
29		6		3.5 m wide gravel fire break around periphery of site	Guidance from ESA for a fire break around perimeter of facility.	Improvement to facility fire protection and safety.	N/A	N/A
30		6		Revised access road and inverter locations	Revised road and inverter location optimized design based on other changes.	No Change (Noise Assessment Study shows modified facility is compliant with noise emission requirements)	N/A	N/A
31		6		Panels removed from the Hydro-One Networks Inc. (HONI) easement crossing the property.	Development is not permitted within the HONI easement.	Panels further away from the eastern side of the property, lessening visual effect on neighbours in that location.	N/A	N/A
32		6		Setbacks around periphery resulting altered panel layout, but no change in overall footprint	Increased setbacks due to municipal setbacks, HONI easement and shading concerns reduced available space necessitating a re-design of the panel layout.	No Change	N/A	N/A
33		6		Visual screening added to the Site Plan layout	Visual screening already present in drawings in Appendix C of the Design and Operations Report, but added to the Site Layout for completeness.	No Change	N/A	N/A
34	Panel Type	7	Suntech Model STP280-24/Vd	Celestica Models: CLS285P CLS280P	Refinement of detailed design requirements	No change	N/A	N/A
35	Inverter Type	7	Satcon PowerGate Plus 1 MW Inverter 420 – 850 VDC input	Equinox 1.25 MW Inverter 420 – 750 VDC input	N/A	N/A	N/A	N/A
36	Substation Materials / Construction	7	Footings and oil containment system for the power transformer;	Use of FR3 (or equivalent) oil with SorbWeb absorbent system instead of secondary containment	Environmentally friendly oil considered preferable to conventional design	No change	N/A	N/A

Item Number	Item	Page No.	Existing Text	Design Change	Rationale for Change	Altered Effect	Additional Mitigation Required	Additional Environmental Effects Monitoring
37	Inverter Construction	8	Inverters and their associated transformers will be mounted on concrete pads	Use of drilled pile foundations instead of concrete pads	Refinement of detailed design requirements	Potential adverse effects to surface water as a result of concrete/cement spills, as discussed in Section 4.1.3 of Appendix A to the CPR is eliminated.	Mitigation measures as discussed in Section 4.13.1 of Appendix A to the CPR are no longer required for this activity.	N/A
38	Transmission Equipment	8	Walk-in metal clad switchgear with 15 kV cells	Remove as this is not applicable.	Refinement of detailed design requirements	Any effect resulting from walk-in metal clad switchgear with 15 kV cells is now removed.	N/A	N/A
39	Transformer Maintenance	10	Check the containment system to ensure the liner is attached and has no signs of perforations or other damage;	Check the absorbent/retention to ensure the liner is attached ...	Refinement of detailed design requirements	No Change	N/A	N/A
40		10	Check the concrete walls for signs of cracks or frost heaving;	Remove as this is not applicable.	Refinement of detailed design requirements	No Change – monitoring component no longer required	N/A	N/A
41	Water Well	10 & 12	A water well will be installed	No well needed. Trucked in purified water to be used instead	Water will be trucked to the site from an approved off site source.	No groundwater withdrawal from a well which would have potentially resulted in a minor, short-term decrease in the local groundwater table in the vicinity of the well as previously discussed in Section 3.2 of Appendix A to the Construction Plan Report (CPR).	No longer is mitigation required as described in Section 4.2 of Appendix A to the CPR.	N/A
Decommissioning Plan Report								
42	Large Scale Compaction Remediation	4	All road and other areas compacted during original construction or by equipment used in the decommissioning, shall be tilled... to the proper density and depth... low areas filled with clean... material... topsoils will be placed to a depth and density consistent with the surrounding field.	Topsoil will be placed after final grading prior to rack placement during the construction process. There will not be any topsoil stockpiled to place during decommissioning.	Refinement of detailed design requirements	Any adverse effects to soil health as a result of stockpiling will be mitigated.	N/A	N/A
43	Topsoil Infilling	5	Following removal of all solar equipment... where practical, topsoil on site will be removed and stockpiled in order to avoid compaction for decommissioning activities. After chiselling, compost will be applied and the topsoil spread and then the entire site will be tilled to further loosen the soil and blend the compost.	No compaction of topsoil or remediation of compacted subsoils is anticipated to be necessary during decommissioning.	Refinement of detailed design requirements	Any adverse effects to soil health as a result of compaction will be mitigated.	N/A	N/A

RE SMITHS FALLS 6 REVISED LAYOUT

