
TO: GENERAL COMMITTEE

SUBJECT: AUTHORIZATION TO SIGN DEVIATION REQUEST FORM FOR SOLAR PROJECTS

WARD: ALL

PREPARED BY AND KEY CONTACT: B. THOMPSON, MANAGER OF ENERGY, EXT #4557

SUBMITTED BY: R. PEWS, DIRECTOR OF CORPORATE FACILITIES

GENERAL MANAGER APPROVAL: P. ELLIOTT-SPENCER, GENERAL MANAGER OF COMMUNITY AND CORPORATE SERVICES

CHIEF ADMINISTRATIVE OFFICER APPROVAL: C. LADD, CHIEF ADMINISTRATIVE OFFICER

RECOMMENDED MOTION

1. That the City Clerk be authorized to execute the Rodent Deviation Request form attached as Appendix "A" to Staff Report FCT003-17.

PURPOSE & BACKGROUND

2. The Electrical Safety Authority passed rule 64-210(5) to protect roof top solar arrays from rodents. "Rule 64-210(5) requires mechanical protection against rodents for PV source circuit conductors on or above a building, where the dc arc-fault protection (when required) is not located at the module."
3. The problem largely exists with residential installations; however, the rule applies to all rooftop installations.
4. Alectra has determined that there is no commercially viable solution for tilted arrays on commercial rooftops. In Alectra's 88 rooftop installations they have had only one incident of rodent damage and that was to a sensor wire used to monitor the solar generation.
5. ESA will grant an exemption to the rule but Alectra must have the owner sign a deviation form to ensure they are aware of the exemption.

ANALYSIS

6. There is no solution to this issue that would leave Alectra's solar installations economically viable.
7. The Electrical Safety Authority allows the exemptions to commercial installations because the risk of rodent damage is very small in these cases.
8. Alectra's solar systems will be remotely monitored to effectively manage the safe operation of the systems.
9. Alectra's solar systems are fully insured as per the lease agreement with the City of Barrie and nothing changes with regard to risk to the City of Barrie.

10. Alectra is asking all Shareholders to sign the deviation request form for their hosted FIT 4 solar rooftop projects.

ENVIRONMENTAL MATTERS

11. There are no environmental matters related to the recommended motion.

ALTERNATIVES

12. The following alternatives are available for consideration by General Committee:

Alternative #1

General Committee could recommend that the amended agreement not be executed.

This alternative is not recommended as this would require Alectra to install rodent protection which they are indicating is not economically feasible and therefore would cause them to remove the projects.

FINANCIAL

13. There are no direct financial implications for the Corporation resulting from the authorization of the City Clerk to execute the agreement.

LINKAGE TO 2014-2018 STRATEGIC PLAN

14. The recommendation(s) included in this Staff Report are not directly related to the goals identified in the 2014-2018 Strategic Plan.

APPENDIX A



www.esasafe.com

FOR TECHNICAL ADVISOR USE ONLY

Office Use:	Form #
Date Received:	
TA:	

Deviation Request Form

Please complete all sections and submit via fax or mail to the above address.

Applicant Information:				Please Type or Print Clearly			
Name:	Varao			Frank			
	(Family/Last Name(s))	(Middle Initial)	(First Name(s))				
Company Name:	Alectra Energy Solutions			Email: frank.varao@alectrasolutions.com			
Address:	161 Cityview Boulevard		Vaughan	Ont.	L4H 0A9		
	(Street)	(City)	(Province)	(Postal Code)			
Contact Number:	Work: 905-532-1047		Cell: 416-844-8077	Fax: 905-303-4463			
Site Information:							
Address:	Various - See attached facility list		Barrie	Ont.			
	(Street)	(City)	(Province)	(Postal Code)			
Type of Building:	<input checked="" type="checkbox"/> Commercial/Industrial <input type="checkbox"/> Institutional <input type="checkbox"/> Residential <input type="checkbox"/> New Building <input type="checkbox"/> Addition <input type="checkbox"/> Renovation						
Business Name:	City of Barrie		Service Voltage / Amps: See attached facility list				
Owner/Tenant Name:	Dawn McAlpine, City Clerk			Signature:	Date:		
Address of Owner:	70 Collier St		Barrie	Ont.	L4M 4T5		
	(Street)	(City)	(Province)	(Postal Code)			
Electrical Inspection Notification Number:							
Details of Deviation Request:							
OESC Rule Number:	Rule 64-210(5)						
	(Section - Rule #)						
Description of Deviation:	Seeking a deviation of rule 64-210(5) requiring mechanical protection against rodents for PV source circuit conductors on or above a building, where the dc arc-fault protection (when required) is not located at the module.						
Reason and Circumstances for Deviation:	No commercially viable product on the market for a tilted racking solution on a flat roof. Building is of non-combustible construction, and it does not contain a dwelling unit below the roof line. The Owner is aware of deviation request.						
Alternative Measures Proposed to Satisfy Code Intent:	Solar array will be monitored and inspected as per standard Alectra maintenance program. Arc Fault Protection and Rapid Shut-Down design features will mitigate potential rodent issues						

_____ Date _____ Signature of Applicant

OFFICE USE ONLY		
<input type="checkbox"/> Deviation Granted <input type="checkbox"/> Deviation Granted with Conditions <input type="checkbox"/> Deviation Declined		
Comments:		
Note: Deviation applies to this installation only.		
Technical Advisor Signature	Title	Date

BY SUBMITTING PERSONAL INFORMATION TO THE ELECTRICAL SAFETY AUTHORITY, OR ITS AGENTS AND SERVICES PROVIDERS, YOU AGREE THAT ESA MAY COLLECT, USE AND DISCLOSE SUCH PERSONAL INFORMATION IN ACCORDANCE WITH ITS PRIVACY POLICY, APPLICABLE LAWS OR PURSUANT TO OUR ADMINISTRATIVE AGREEMENT WITH THE PROVINCE OF ONTARIO. If you provide us with information on behalf of another individual, you represent that you have all necessary authority and/or have obtained all necessary consents from such individual to enable us to collect, use and disclose such personal information for the purposes set forth in our Privacy Policy. A copy of our policy is located on our website at www.esasafe.com.