

Table 4: Noise Study Summary (continued)

Point of Reception ID	Point of Reception Description	Time Period ^[1]	Total Sound Level at PoR ^[2] (dBA)	Verified by Acoustic Audit ^[3] (Yes/No)	Performance Limit ^[4] (dBA/dBAI)	Performance Limit Source ^[4] (C / M/ D)	Compliance with Performance Limit (Yes/No)
		Night-time	40	No	40		Yes
POR75	Vacant Lot Receptor 26	Daytime	38	No	45	D	Yes
		Evening	38	No	40		Yes
		Night-time	38	No	40		Yes
		Daytime	33	No	45		D
Evening	33	No	40	Yes			
Night-time	33	No	40	Yes			
POR76	Vacant Lot Receptor 27	Daytime	35	No	45	D	Yes
		Evening	35	No	40		Yes
		Night-time	35	No	40		Yes
POR77	Vacant Lot Receptor 28	Daytime	34	No	45	D	Yes
		Evening	34	No	40		Yes
		Night-time	34	No	40		Yes
POR78	Vacant Lot Receptor 29	Daytime	34	No	45	D	Yes
		Evening	34	No	40		Yes
		Night-time	34	No	40		Yes
POR79	Vacant Lot Receptor 30	Daytime	34	No	45	D	Yes
		Evening	34	No	40		Yes
		Night-time	34	No	40		Yes
POR80	Vacant Lot Receptor 31	Daytime	33	No	45	D	Yes
		Evening	33	No	40		Yes
		Night-time	33	No	40		Yes

Notes :

- 1 Daytime occurs from 0700-1900h. Evening occurs from 1900h to 2300h. Night-time occurs from 2300-0700h
- 2 Worst-case cumulative sound level from all applicable sources operating.
- 3 Has an acoustic audit (as defined in Publication NPC-233) been conducted with source in place and operating?
- 4 Applicable worst-case NPC-205 / NPC-232 sound level limit.
- 5 Performance limit (aka guideline limit) based on following:
 - C = Calculated based on road traffic volumes in compliance with NPC-206 requirements.
 - M = Measured based on monitoring for a minimum 48 hour period, in accordance with NPC-233 requirements.
 - D = Default guideline minima per NCP-205 / NPC-232, as applicable (e.g., 50 dBA daytime for NPC-205)

8.0 CONCLUSIONS

A *Draft Noise Study Report* has been completed for the proposed Sol-Luce Kingston Solar PV Energy Project in Kingston, Ontario to support a Renewable Energy Approval (REA) application, as required under Ontario Regulation 359/09. As presently configured, the proposed project is expected to be in compliance with MOE NPC-232 guidelines and therefore no additional noise mitigation is required.

9.0 REFERENCES

Canadian Standards Association, 2007. C227.4-06 (R2011) Three-Phase, Pad-Mounted Distribution Transformers with Separable Insulated High-Voltage Connectors.

International Organization for Standardization (ISO), ISO-9613-1. Acoustics – Attenuation of Sound during propagation outdoors. Part 1 – Calculation of the absorption of sound by the atmosphere.

International Organization for Standardization (ISO), ISO-9613-2. Acoustics – Attenuation of Sound during propagation outdoors. Part 2 – General method of calculation.

Ontario Ministry of the Environment (MOE), “Basic Comprehensive Certificates of Approval User Guide”, Version 2.1, March 2011.

Ontario Ministry of the Environment (MOE), October 1995, Publication NPC-205, Sound Level Limits for Stationary Sources in Class 1&2 Areas (Urban).

Ontario Ministry of the Environment (MOE), October 1995, Publication NPC-232, Sound Level Limits for Stationary Sources in Class 3 Areas (Rural).

Ontario Ministry of the Environment (MOE), October 1995, Publication NPC-233, Information to be Submitted for Approval of Stationary Sources of Sound.

Ontario Ministry of the Environment Publication NPC-104, "Sound Level Adjustments", published under the Model Municipal Noise Control Bylaw, 1977.

Ontario Ministry of the Environment (MOE), Publication PIBS 7234e, Information about Approval Process on Solar Facilities

SunE Westbrook Solar Farm Acoustic Assessment Report dated March 2012 by Genivar Inc.

Kingston Gardiner Hwy 2 South Noise Report dated January 26, 2012 by Hatch.

FIGURES