



**NOTES:**

- A. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
- B. INSTALLATION OF NET METERED SERVICE SUBJECT TO HYDRO OTTAWA APPROVAL.
- C. REFER TO HYDRO OTTAWA REVENUE METERING SPECIFICATION GCS0008 FOR ADDITIONAL REQUIREMENTS AND INFORMATION.
- D. SINGLE LINE DIAGRAMS (SLD'S) FOR ALL ENERGY RESOURCE FACILITIES (ERF'S) SHALL BE SUBMITTED TO HOL. THE SLD'S SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER FOR ALL ERF'S EXCEPT FOR NET-METERED FACILITIES ON SINGLE-RESIDENCE PREMISES:
  - i. WHICH HAVE  $\leq 10$  kW OF GENERATION; AND
  - ii. IN WHICH ALL GENERATION IS COVERED UNDER OESC SECTION 64, "RENEWABLE ENERGY SYSTEMS".
- E. THE PROPOSED INSTALLATION SHALL COMPLY WITH THE ONTARIO ELECTRICAL SAFETY CODE (OESC) AND IS SUBJECT TO THE ELECTRICAL SAFETY AUTHORITY (ESA) INSPECTION AND APPROVAL.
- F. 120V/240V, 1-PHASE, 3-WIRE, 200A RATED BI-DIRECTIONAL SMART METER.
- G. FOR 120V/240V, 1-PHASE,  $\leq 200$ A SERVICES, ONLY USE KING-SIZE CSA APPROVED METER SOCKET BASES; REFER TO HYDRO OTTAWA REVENUE METERING SPECIFICATION GCS0008, TABLE 2, FOR LIST OF APPROVED METER SOCKET BASES.
- H. OUTDOOR CONDUIT SHALL BE RIGID PVC, WITH EXPANSION COUPLING, SIZED AS APPROPRIATE.
- I. DG SYSTEM FUSED DISCONNECT SWITCH RATED, INSTALLED, AND LABELED AS PER HYDRO OTTAWA REVENUE METERING SPECIFICATION GCS0008.
- J. REFER TO MCS0105 & MCS0106 FOR MINIMUM CLEARANCE REQUIREMENTS IN FRONT OF METER TO CUSTOMER PROPERTY LINE AND/OR NEXT TO METER EQUIPMENT AND DG FUSED DISCONNECT SWITCH
- K. METER SOCKET BASE AND DG SYSTEM FUSED DISCONNECT SWITCH SHALL BE INSTALLED IN AN ACCESSIBLE EXTERIOR LOCATION ONLY AND APPROVED BY HYDRO OTTAWA.
- L. CUSTOMER/CONTRACTOR RESPONSIBLE TO ATTACH A LAMACOID PLATED ELECTRICAL SINGLE LINE DIAGRAM (SLD) AT THE DG SYSTEM FUSED DISCONNECT SWITCH. THE SLD MUST BE PLAINLY AND PERMANENTLY MARKED, SHOWING THE SWITCHING ARRANGEMENTS, THE LOCATIONS OF THE DISCONNECT, AND THE TYPE AND NAMEPLATE RATING OF THE DISTRIBUTED GENERATOR.
- M. A PERMANENT LABEL INDICATING THE CURRENT AND VOLTAGE RATING OF THE INVERTER SHALL BE ATTACHED TO THE DG SYSTEM FUSED DISCONNECT.
- N. THE DG SYSTEM FUSED DISCONNECT SWITCH SHALL BE INSTALLED WITHIN THE FOLLOWING MINIMUM AND MAXIMUM HEIGHTS ABOVE FINISHED GRADE:
  - i. MINIMUM - 1200 [4]
  - ii. MAXIMUM - 1800 [6]
- O. THE CUSTOMER/CONTRACTOR IS RESPONSIBLE TO ATTACH WARNING LABELS INDICATING "WARNING POWER FED FROM MORE THAN ONE SOURCE" MUST BE POSTED AT THE METER SOCKET BASE, CUSTOMER OWNED SERVICE PANEL, AND DG SYSTEM FUSED DISCONNECT SWITCH.

**DEFINITIONS:**

"DG SYSTEM FUSED DISCONNECT" MEANS AN ELECTRICAL SAFETY AUTHORITY (ESA) APPROVED DEVICE WITH FACTORY INSTALLED OVER-CURRENT PROTECTION RATED AT EITHER 100% FULL-LOAD AMPS (FLA) OR 80% OF THE AVAILABLE FAULT AMPS OF THE CUSTOMER'S GENERATION OR ENERGY STORAGE EQUIPMENT, WHICHEVER IS GREATER; MOULDED CASE BREAKERS ARE NOT ACCEPTABLE. IT SHALL PROVIDE AN OBVIOUS VISIBLE OPEN POINT. THIS DEVICE IS USED TO ISOLATE THE CUSTOMER'S DISTRIBUTED GENERATION (DG) EQUIPMENT, OR ENERGY RESOURCE FACILITY (ERF) EQUIPMENT, FROM THE UTILITY DISTRIBUTION SYSTEM.

REVISIONS			PREP	CHKD	APPD	 www.hydroottawa.com	TITLE	
REV: 1	DATE: 2016-02-05	JD	SMC	CSM	PREP: G. MOLNAR CHKD: S. McNALLY (E.I.T.) APPD: C. MALONE P.Eng DATE: 2014-09-03 SCALE: N.T.S. @ ANSI B		ENGINEERING SPECIFICATION	
CHANGE: UPDATE NOTES, UPDATE TITLE	GM	BP	CSM	ERF/RES 120V/240V, 1PH, 3W, $\leq 400$ A				
REV: 2	DATE: 2016-12-07	EV	ED/PL	RH			LOAD DISPLACEMENT (NET-METERING)	
CHANGE: REVISED LAYOUT & NOTES	MOVED DG SYSTEM FUSED DISCONNECT TO OUTDOOR LOCATION, REMOVED LOP DETECTION DEVICE, REVISED NOTE 'J', REMOVED NOTE 'P'				WITH GANGED METER TROUGH CONSTRUCTION DETAIL			
						NO:		1 OF 1 REV: 3
							<b>MCS0084</b>	