ACP NEWS

SEPT10

ACP CONTRACTOR NEWSLETTER

ACP and microFIT Installations

ESA has been working to streamline inspection requirements, to meet the needs of the Contractor industry involved with microFIT installations. Effective immediately, ESA is introducing an option to ACP Contractors only, that will allow an ACP Contractor the ability to file his microFIT work on two permits – eliminating the need for a disconnect and hold.

THE PROCESS WILL WORK AS FOLLOWS:

1	Contractor will arrange disconnect/reconnect for the original house service only in order to add a two ganged meter base – the second meter will be left blank. NOTE: A new meter is not being installed for the PV system at this point. This will be pre-authorized and a connection authorization issued, providing the service does not exceed 200A	A 1:3 audit ratio will be applied to this work, as per ACP Program rules	Permit price will be $56.80
	NOTE – SERVICE SWITCH: if the alteration to the meter base is completed before the PV installation work is done, the service switch must be installed at this time, to the load side of the blank meter base. This ensures the electrician will not work live to connect to the system at a later date.		
2	Contractor will do the PV installation	When the PV work is complete, a mandatory inspection will take place on the service switch and all other associated wiring. Once the site is PVIS'd, the Inspector will issue the Connection Order for the PV installation.	Permit price will be $250
	NOTE – SERVICE SWITCH: if the PV installation work is done before the alteration to the meter base, the Inspector will require the service switch be installed at this time, so he can complete the inspection on the PV installation.		
	Filing the work over two permits precludes the need for a Disconnect/Hold		

This applies only to the retrofit of an existing single meter to a two-gang meter base for a PV microFIT Installation, where an ACP Contractor wants a pre-authorized connection.

ACP - the key to electrical safety!

CONTACT THE ACP OFFICE AT 800-249-4583

Electrical Safety Authority
www.esasafe.com

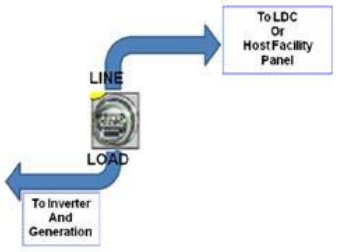
Technical Corner - By Ted Olechna

PV Billing Meter Connection

Question: When installing a billing meter, where do you connect the Service (LDC) feed?

Answer: The requirement in the ESA SPEC-004 is to always have the Line side of the metering cabinet connected to the utility and the Load side connected to the customer to ensure consistency and safety, as per Diagram B1.

Diagram B1 – Generation meter connection



Rationale: When pulling a meter, the standard practice is that the Load side of the metering cabinet will be de-energized and caution is taken around the Line side as it maybe energized. The ESA guideline is consistent with the Ontario Power Authority's (OPA's) "microFIT Contract" which requires bi-directional metering for the generator facility.

Neutral connection for electricity meters

Question: For a parallel metering connection, where the generation meter is on the supply side of the service disconnecting means, do all 4-jaw revenue meters require a neutral conductor to be terminated in the meter base?

Answer: No. According to Rule 10-624(2), the grounded conductor on the supply side of the service disconnecting means is permitted to be used as a bonding conductor for the revenue meter device. In this case the grounded conductor is required to be bonded to the meter mounting device. However, when the grounded conductor is not used as a bonding conductor for the revenue meter device, the grounded conductor can be run through the meter base without being terminated and a separate bonding conductor shall be provided between the service and the meter.

Additional Information: The following documents provide additional information on the installation of solar photovoltaic systems, available on ESA's Website www.esasafe.com :

ESA SPEC-004 "Electrical Guidelines for Inverter-Based Micro Generation Facilities"

- ESA SPEC- 005 " Process Guideline for the Installation of Parallel Generating Systems (10kW or Greater)
- Bulletin 50-1-* Installation of Solar Photovoltaic Systems
- Bulletin 50-2-* Grounding and Bonding of Solar Photovoltaic Systems
- Bulletin 84-1-* Interconnection of Electric Power Production Sources