

Station Service Metering

Revenue Metering Standing Committee
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Background

- Station service means energy withdrawn from ICG to power the on-site maintenance and operation of transmission, connection and generation facilities
- Market Rules permit connection station services to be estimated if unmetered
 - ‘Unmetered’ means energy associated with station service consumption is not captured by RWM
- Market Rules permit connection station service consumption to be allocated between participants
 - Typically when two or more participants are connected at a common connection facility
 - Allocation based on agreement between the participants
 - Agree to estimated station service consumption
 - Agree to percent allocation of station service consumption
 - Under certain metering configurations, MR’s prescribe how station services are to be allocated

Background

- There are approximately 95 metering installations registered as 'estimated station service'
 - 58 are classified as 'unmetered station services' (energy associated with station service consumption which is not captured by RWM)
 - 37 are classified as 'metered station services' (energy associated with station service which is captured by RWM and registered for the sole purpose of allocating station services as per agreement)
- IESO 2010/2011 meter installation audit program included audit of station service estimates
 - Focused only on the 58 'unmetered station service' (energy consumption associated with station services is exposed to ICG)

Estimated Station Services

- MM3.7, section 2.3.1 describes how to determine/register an estimate for unmetered station service based on equipment loading
 - Determine connected loads of equipment at station
 - Determine percent usage of connected load (default value is 75% if percent usage cannot be determined)
 - Adjust values to the Defined Meter Point (2%)
 - Value of station service factor rounded to the nearest kW
 - Annual checks performed annually to confirm estimate is valid
 - Signed and stamped by Professional Engineer

Estimated Station Services

- MM3.7, section 2.3.2 describes how to determine/register an estimate for unmetered station service based on a retail meter
 - Estimate based on annual energy consumption determined from meter readings of the retail meter
 - Estimate must take into account losses between location of the retail meter and the Defined Meter Point (1% loss for each level of transformation is acceptable)
 - Value of station service factor rounded to the nearest kW
 - Annual readings of the retail meter must be recorded and reviewed to confirm estimate is still valid
 - Signed and stamped by Professional Engineer
- In both cases, the station service factor is submitted using IMO-FORM-1311 “Connection Facility Station Service – Not metered by a RWM”

Estimated Station Services Audit Findings Summary



- Of the station service estimates which were audited:
 - Most were determined as per MM3.7, section 2.3.1 – equipment loading
 - Most have been registered since market opening
 - Annual checks to confirm if station service estimate is valid is not being done
 - In some cases, estimated methodology did not meet market manual requirements
- IESO has compliance concerns

Estimated Station Services Next Steps



- IESO working with Market Participants to develop compliance plan
 - A sample of the estimated station services has been reviewed to determine impact to market
 - Results indicate that estimates are on average 10% higher than actual consumption
- MACD will be involved in the compliance program
- IESO will communicate compliance concerns to all MSP's
- IESO to assess compliance via metering installation audit program