

# UPDATE - OEB 2006 Rate Decisions

Application of TLF's

Revenue Metering Sub-Committee Meeting

Sept 6, 2006

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# Background

- **May 16, 2006 IESO met with the OEB**
- **Agenda items include;**
- **Tariff of Rates and Charges includes TLF approvals**
  - SFLF and DLF components are not detailed in 2006 Rate Order
- **Review Market Manual 3.7 Appendix D; Metering Settlement Principles**
  - **Has definition of TLF changed?**
    - $TLF = DLF \times SFLF$
    - Does TLF include SS component?
  - **Definition of Primary/Secondary Metered Customer**
  - **5000kW Threshold; How is threshold determined?**
  - **Pancaking of TLF's and DLF's**
    - Require DLF and SFLF components
    - Is application correct and appropriate?
  - **Implementation of TLF's for LDC's**
    - May 1, 2006 is not practical given the number of registration changes to be implemented
    - May require coordination with multiple MSP's at some facilities
- **Need to prioritize TLF update submissions**
  - **End use Market Participants (non LDC's)**
    - MSP's have been contacted
  - **All others (LDC's)**

## Registration of TLF change

- All registration changes to a totalization table must be initiated by the MSP
  - Includes update to the TLF
- Effective date of the totalization table update is determined by the Preliminary Push date of the trade day (implementation day)
- Approximately 380 embedded metering installations are currently registered
  - Majority embedded within Hydro One
  - Approx. 50 belong to industrial end use Market Participants (non-LDC's)

# TLF Principles



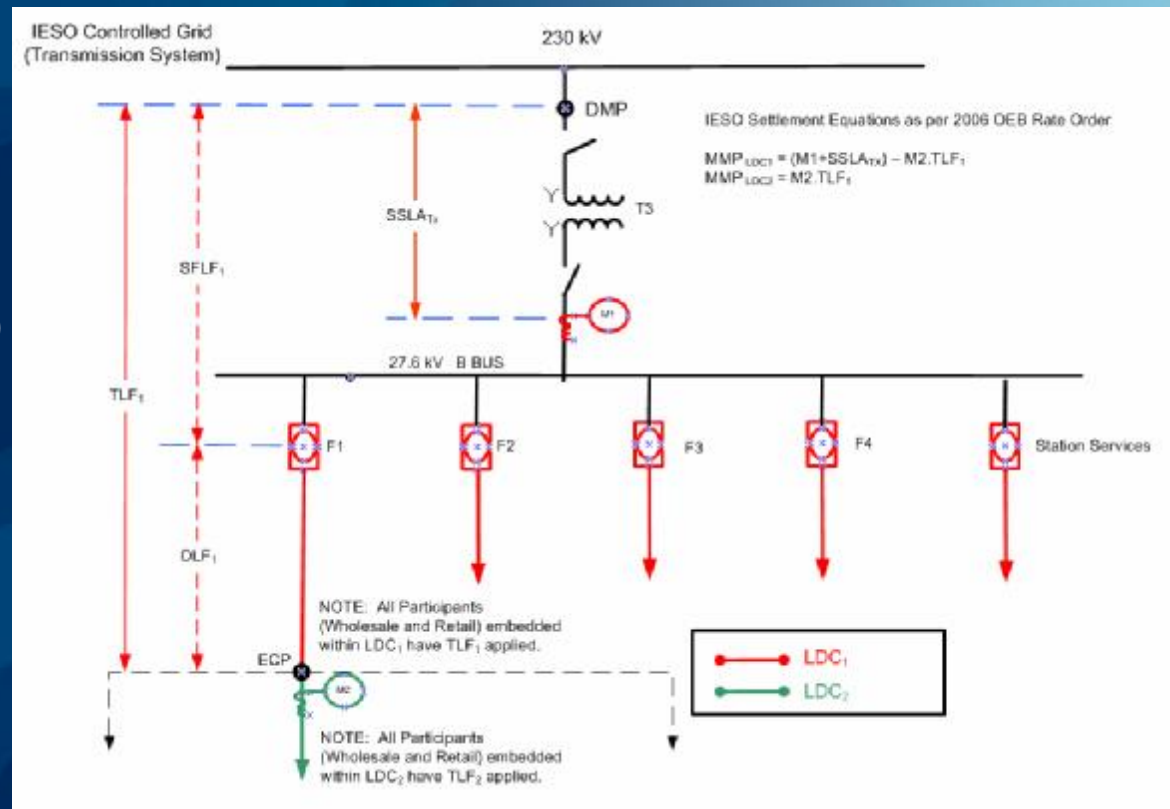
- **Application of Principles detailed in Market Manual 3.7 – Appendix D: Settlement Principles**
- **MSP/MMP responsible for ensuring application of principles are appropriate to their situation**
- **MMP responsible for ensuring their respective OEB approved loss factors are applied in a manner consistent with their respective rate order**

# TLF Definitions

- Total Loss Factor (TLF)
- Calculated as  $SFLF \times DLF$
- Site Facilities Loss Factor (SFLF) includes station service component
- Distribution Loss Factor (DLF) includes all losses within LDC system.
- Calculated as:  

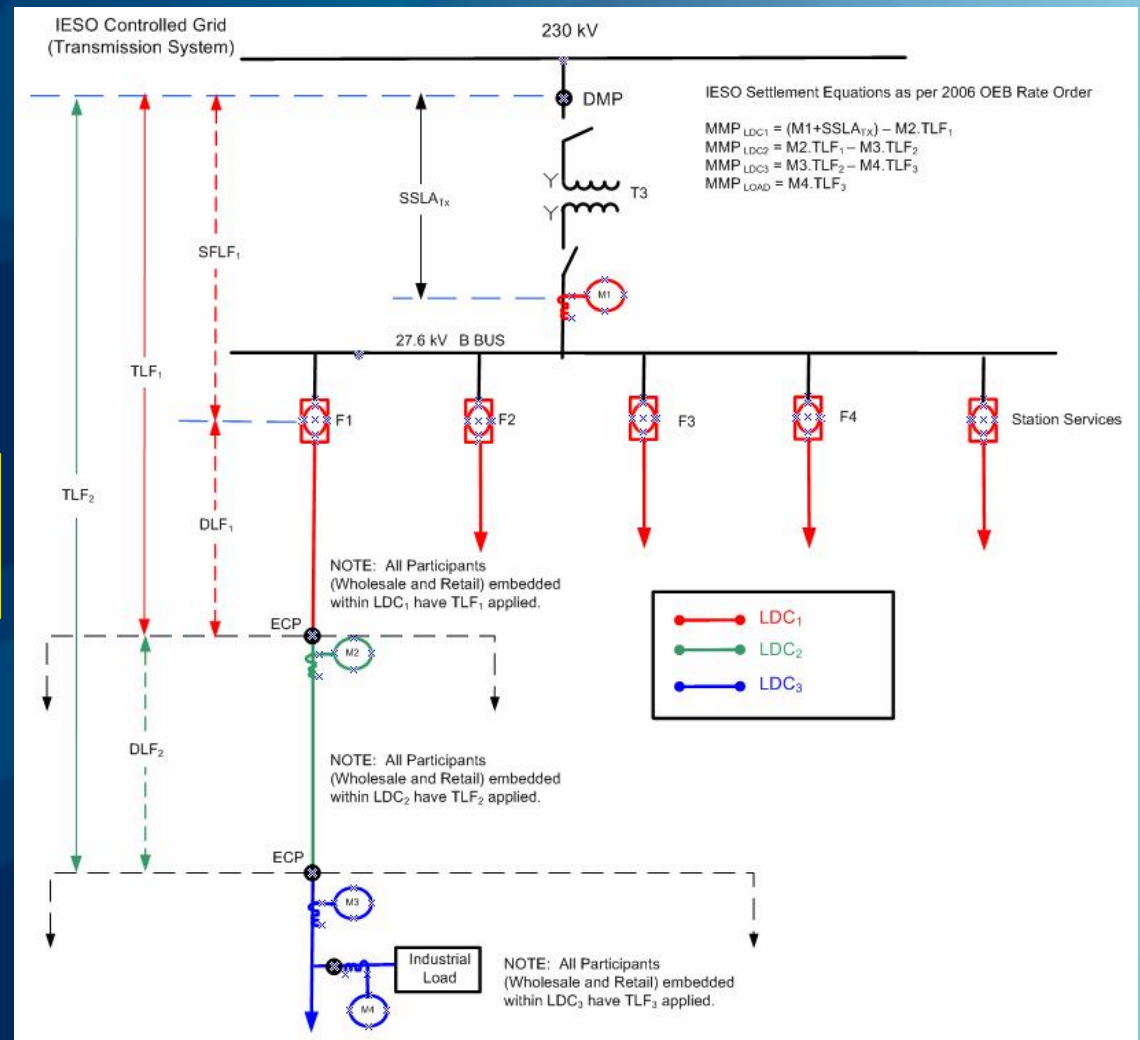
$$\left\{ \frac{kWh_1 - kWh_2}{kWh_1} \right\} + 1$$
 , where  
 $kWh_1 = kWh \text{ Purchased (see note *)}$   
 $kWh_2 = kWh \text{ Sold}$
- TLF is used to adjust for losses from the Embedded Connection Point (ECP) to the Defined Meter Point (DMP)
- TLF is used in both Wholesale and Retail Markets
- $TLF_1 = DLF_1 \times SFLF_1$
- If  $LDC_2$  has only one supply point (embedded within  $LDC_1$ ),  
 $SFLF_2 = TLF_1$

\* NOTE: If  $kWh_1$  is kWh purchased at DMP, calculation yields TLF. If  $kWh_1$  is kWh purchased at LV connection point, calculation yields DLF.



# Pancaking of TLF Losses

- Applies when an embedded Market Participant ( $LDC_3$ ) is supplied from host  $LDC_2$  which is embedded within  $LDC_1$
- $LDC_1 = (M_1 + SSLA_{TX}) - (LDC_2)$
- $LDC_2 = M_2 \times TLF_1 - (LDC_3)$
- **$LDC_3 = M_3 \times DLF_2 \times TLF_1$   
(As per 2002 Rate Order – No Longer Applicable)**
- $LDC_3 = M_3 \times TLF_2$  (as per 2006 Rate Order)
- Industrial Load =  $M_4 \times TLF_3$
- If Industrial Load is settled in IESO market, then  
 $LDC_3 = M_3 \times TLF_2 - (\text{Industrial Load})$



# Metering Settlement Principles



- **Baseline 16 includes update to Market Manual 3.7 Appendix D – Metering Settlement Principles**
- **SFLF and DLF references removed**
  - Not applicable in the application of rate
- **Pancaking of DLF's and TLF removed**
  - Embedded LDC to have host LDC TLF\*\* applied
- **Include references 'per OEB' where applicable**



# Other Discussions

- **Primary and Secondary Metered**
  - IESO; Metering at voltages other than the supply facility is considered secondary metered
  - OEB; Metering located at the high voltage side of the service transformer (regardless of voltage)
- **Host LDC must apply for approval of rates for the embedded LDC's they serve (TLF for embedded distributor)**
  - As per OEB Rate Handbook
  - Will require fine tuning of Loss Factors
- **Customers served by HydroOne express feeder get an engineering calculation of the losses**
  - Calculation performed in accordance with IESO Market Rules and Manuals
  - May include  $SSLA_{RAD}$ ,  $SSLA_{TX}$  and  $SS_{COMOPONENT}$
- **5000kW threshold determined as the average of the 12 monthly peak demands**
  - It is the responsibility of the host LDC to determine which rate is applicable
- **In agreement with IESO TLF implementation strategy**
  - TLF adjustments are not retroactive to May 1, 2006
- **Discussions regarding Appendix D, Section 8(a) and 8(b) – Embedded Generation**
  - Baseline 16 includes minor changes (wording revisions)
  - Removed pancaking