

# Recommendations for VA Calculation and Demand Response

Revenue Metering Standing Committee  
April 3<sup>rd</sup>, 2008



- Back in September 2007, Measurement Canada presented a final report on VA calculations and demand response.
- MC was soliciting general comments from stakeholders in regards to the final report.
- The consultation period ended November 15<sup>th</sup>, 2007.

## 4.0 – JWG identified 2 factors of potential inequity:

- i. Response type
- ii. Demand interval length

## 4.1 – Thermal Response:

- JWG recommends new thermal demand meters no longer be approved in Canada.

## 4.2 – Exponential Response:

- JWG recommends the exponential function no longer be approved in Canada on new meters.

## 4.3 – Block or Sliding Window Response:

- i. JWG believes block demand leads to load splitting.
- ii. Sliding window is commonly used in N.A.
- iii. JWG recommends customers above 3 MW have a demand meter using a 15-minute integration period with five 3-minute updates.

## 4.4 – Demand Interval Length

- i. JWG recommends all demand meters use a 15 minute demand interval only.

## 5.1 – Calculation of VA and Vah

- i. JWG recommends the time interval for VA source data for demand not exceeds 1 minute intervals

## 5.3 – $\Sigma$ of Elements in a Polyphase Circuit

- i. 2-EL in a 3-W  $\Delta$  service, vectorial VA captures true load

## 5.4 – VAR Calculation Method

- JWG recommends using only measured VAR and exclude calculated VAR from W and VARms.

## 4.3 - Block or Sliding Window Response (15/3min):

- i. In Ontario, transmission service charges based on peak 60 minute block demand for a month.
- ii. We would have to revise software, market rules, and procedures to accommodate new demand.
- iii. The wholesale market is designed for 5-min intervals, not 3-min.
- iv. Specifying the length of demand intervals is rate design.
- v. IESO recommends is to continue to allow demand to be calculated on intervals specified by OEB.

## 5.3 - $\Sigma$ of Elements in a Polyphase Circuit

- i. We support the recommendation that VA be based on vectorial summation.

