



# Metering at the Transformer

**The Elimination of Theft Using Interval  
Metering**

**Ontario Energy Board  
September 17, 2004**



# Design Considerations

- End theft of power
- Incorporate interval technology at the residential level
- Does not interfere with line staff operations
- Provides customer access to meter information
- Limited disruption to customer
- Revenue approved metering



# Meter Characteristics

- 1, 5, 15, 30, 60 minute intervals
- On demand, daily, weekly, monthly reading schedules
- New residential services or retrofit existing residential services
- Web access to meter data
- Measurement Canada approved for billing



# Other Characteristics

- ESA/CSA Approved
- Bell Canada Approved on Communication link and service access
- Prevents theft of power
- Allows access of an unlimited number of meters per phone line



# Billing

- With Interval reads, price structures and time of use applications become a function of Billing rather than a function of the meter.
- This allows for greater flexibility in the rate structures without having to reprogram meters





5660

5660

5660

DANGER





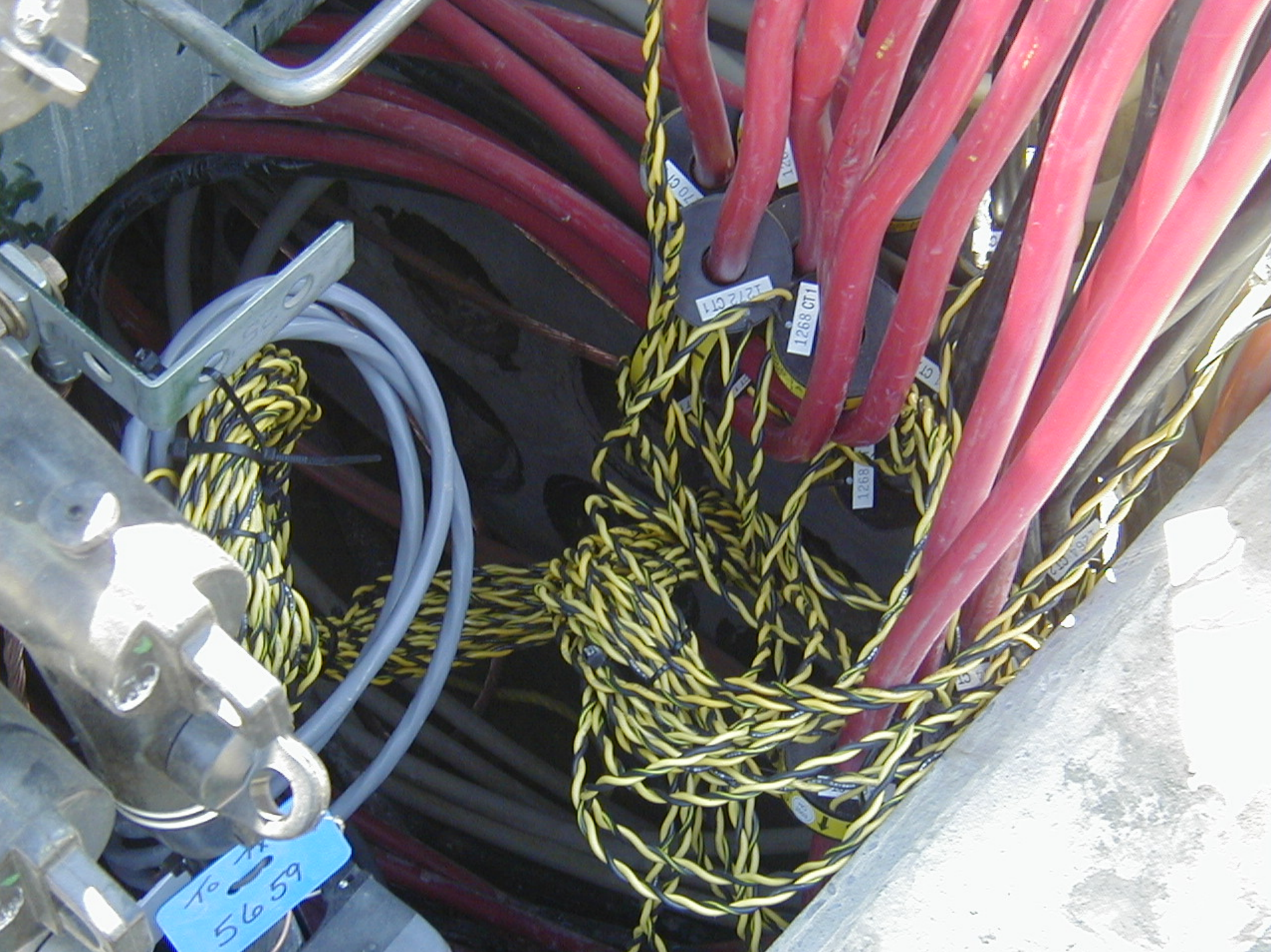
WARNING  
ELECTRIC SHOCK  
OR BURNING MAY  
OCCUR IF YOU  
OPEN THE COVER  
OR DO NOT  
REPAIR  
DANGER

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To 5659

1212 CT1

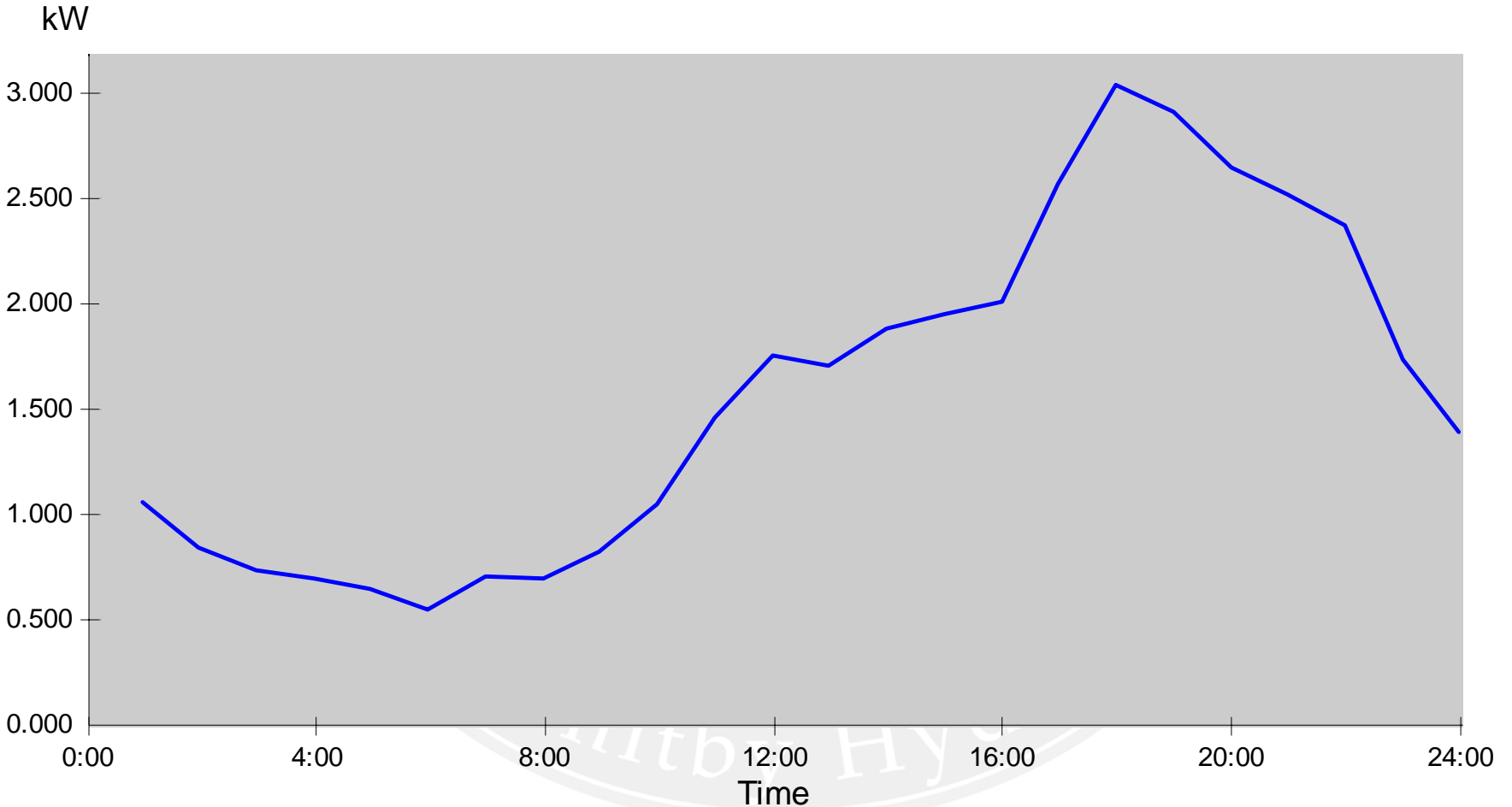
1268 CT1


8921





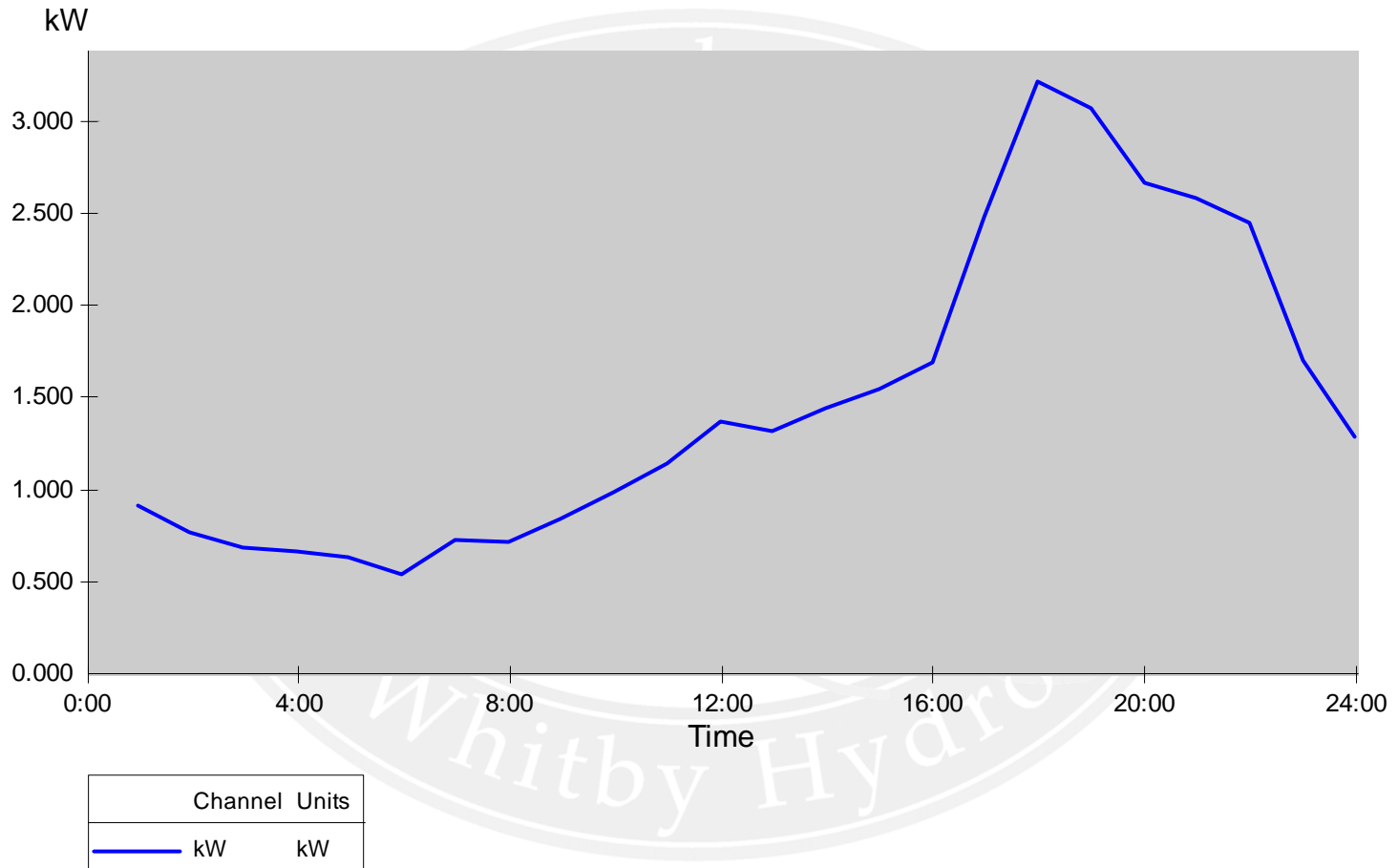
# Average Residential Profile (8 Months)



Channel Units	
 kW	kW

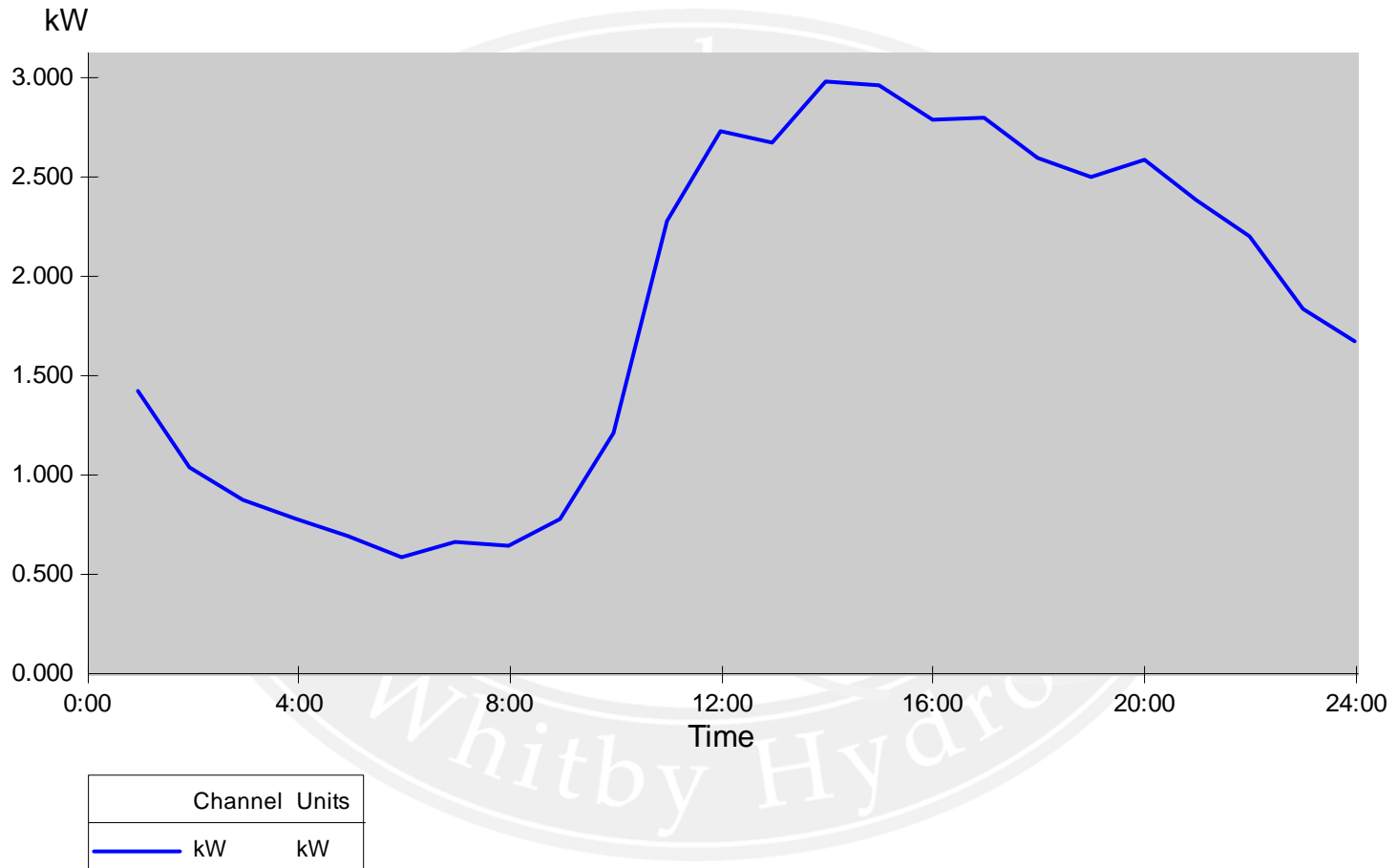


# Average Weekday Profile 3

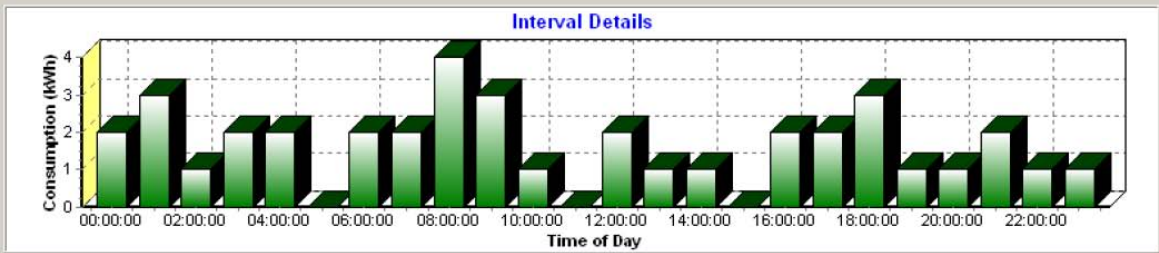
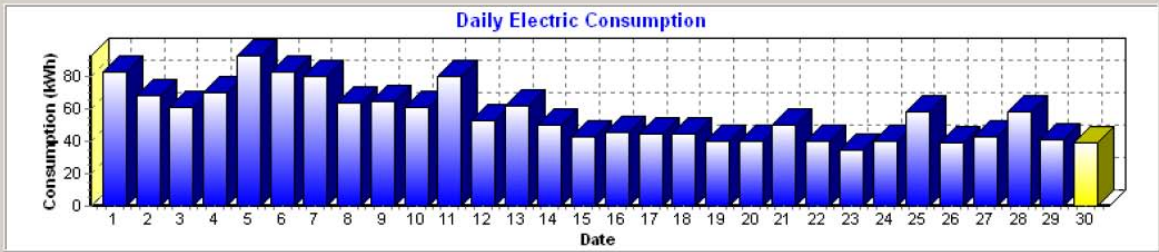
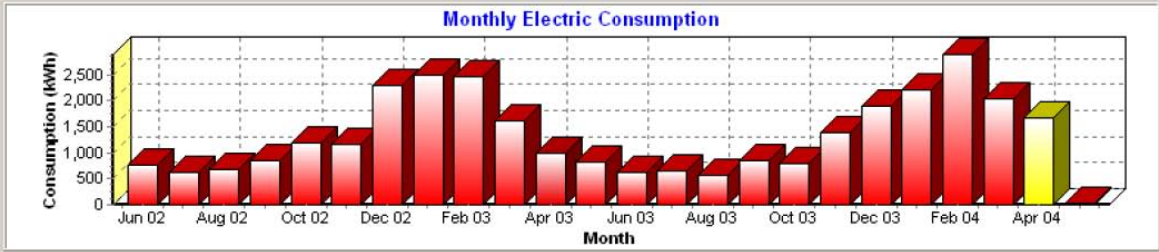




# Average Weekend Profile 3



Viewing consumption for: X  
 In Building: EDWARD





# Benefits

- Theft is eliminated
- Any metering technology can be used as long as it fits
- Any communication protocol can be used – telephone, cable, power line carrier etc.
- Removes the meter base from the house making homes more aesthetically pleasing



# For Further Information

## Contact

Paul Elliott

905-668-5878 ext 225

C 905-424-3202

[pelliott@whitbyhydro.on.ca](mailto:pelliott@whitbyhydro.on.ca)

