



Town of Massena Electric Department



Background

- Formed in 1981
- 131 sq miles of service territory – Over 9,300 customers
- No rate increase since inception
- 5 Member Independent Board of Directors
- Counter Party to Power Contract with NYPA
- Established relationships with NYPA, NYISO, PSC & NYMPA (Power scheduling agency), National Grid & NYSERDA



Scope

- Establish and Facilitate Strategic Power Industry Partnerships
- Provide Tactical Support
- Economic Development Assistance



Tactical Support

- Power Services
 - Monitor agencies
 - Audit Monthly Sales by NYPA
 - Scheduling of allocated power
 - Power Contracts in addition to NYPA
- Program Availability
 - EDP Power – MED customers only
 - Preservation Power
 - NYMPA
- Interface/Point of Contact for “Ultimate Users”



Power Contracts

- Not just NYPA Contract
- RVRDA & "Ultimate Users"
 - Gather information on customer needs
 - Provide feedback on feasibility and value
 - Develop project cost estimates, including impact of NYISO
 - Assist in developing requirements included in contracts
 - Benefits – Allocated Resources, Loans and Grants
 - Duration of Benefits
 - "Claw Back" provision
 - Determine Program Availability



Power Contracts cont.

■ MED & NYPA

- Keep Records in compliance with NYPA requirements
- Provide savings benefit of “Ultimate User” as required
- Monitor NYPA Changes
 - Tariff
 - Rates – Including Rate Stabilization Reserve (RSR)
 - Low Flow



Power Contracts cont.

- MED & “Ultimate User”
 - Agreement for Supplemental Power
 - Monthly Billing
 - Credit Pass through if outside MED
 - “Flex Rate” provisions if applicable
 - Financial Arrangement on Capital Investment
 - Interface with National Grid if outside MED



Economic Development

- Input in:
 - RVRDA Marketing
 - Targeted Advertising
 - Resource availability
 - Value of Power
 - Application Process
 - Forms
 - Information Required – MED Checklist
 - Selection Criteria
 - Load Factor
 - Jobs per MW ratio
 - General Support

Preliminary Rate Estimates

- 100% Allocation
- Case 1: 1,000 kW Customer - 2 Shifts, 8 Hrs/Day, 5 Days/Wk

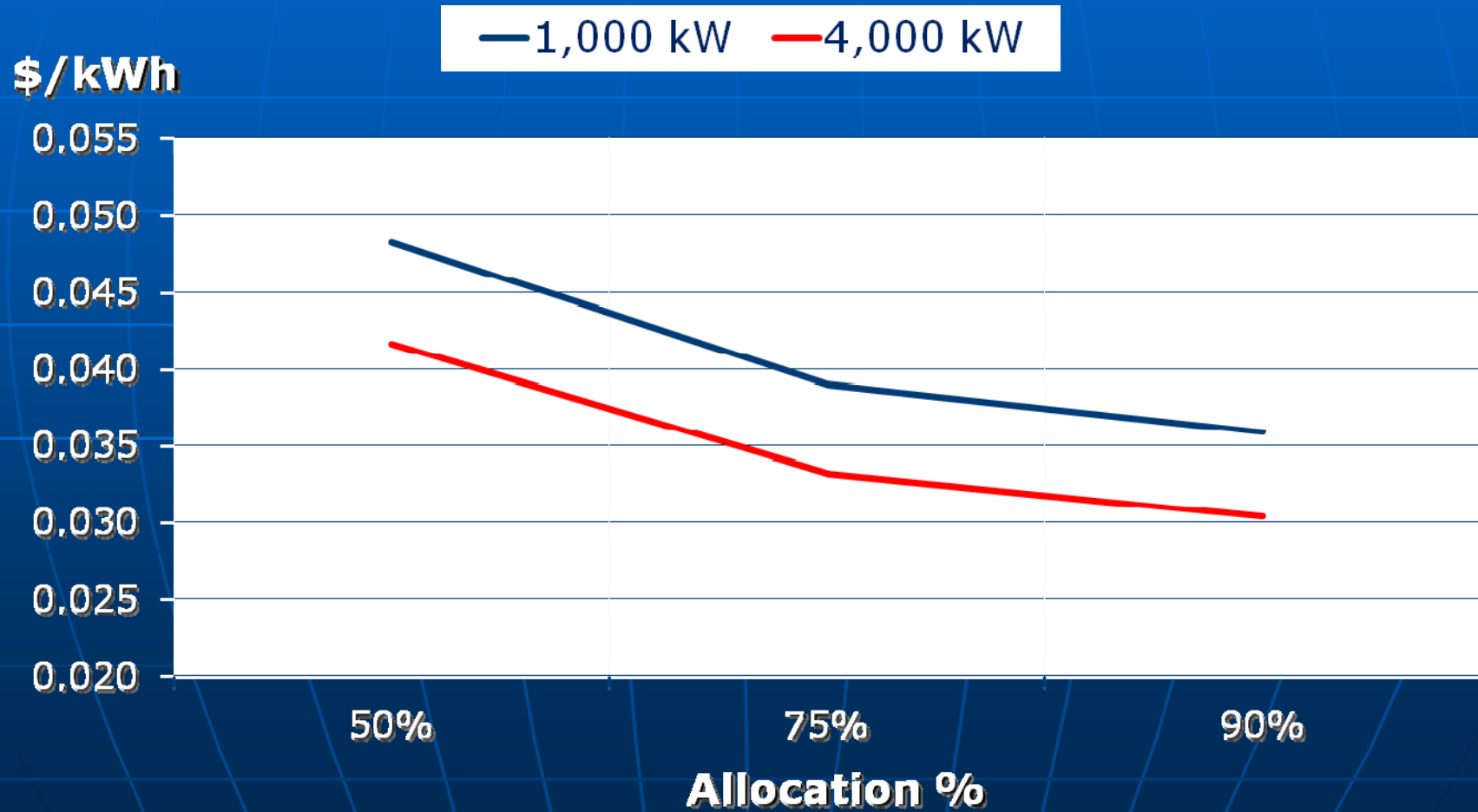
Metered Quantities						
Load Factor	50%					
Demand	1,000					
KWH	365,000					
Applicable MED Rate		SC-8, Individual Service Agreement / "Flex Rate" (assume delivery voltage < 2.2kV)				
Calculation of Monthly Delivery Bill						
Distribution Delivery	1,000	x	\$ 5.00	=	\$ 5,000.00	
Reactive Demand	287	x	0.45	=	129.15	
kWh	365,000	x	0.01015	=	3,704.75	
TOTAL DELIVERY SERVICE					\$ 8,833.90	\$ 0.0242 per kWh
SUPPLY SERVICE						
NYPA Power	365,000	x	\$0.014701	=	\$ 5,365.87	
Transmission Charges						
ISO / kWh	365,000	x	0.005	=	1,825.00	
NYPA / kW Week	4,400	x	0.30	=	1,320.00	
TOTAL SUPPLY CHARGE					\$ 8,510.87	\$ 0.0233 per kWh
18A Surcharge			1.70%	\$	294.86	
TOTAL ELECTRIC					\$ 17,639.63	\$ 0.0483 per kWh

Preliminary Rate Estimates

- 100% Allocation
- Case 2: 4,000 kW Customer – 24 X 7 Operation

Metered Quantities						
Load Factor	90%					
Demand	4,000					
KWH	2,628,000					
Applicable MED Rate						
SC-8, Individual Service Agreement / "Flex Rate"						
(assume delivery voltage > 15kV)						
Calculation of Monthly Delivery Bill						
Distribution Delivery	4,000	x	\$ 4.06	=	\$ 16,240.00	
Reactive Demand	1,146	x	0.45	=	515.70	
kWh	2,628,000	x	0.00615	=	16,162.20	
TOTAL DELIVERY SERVICE					\$ 32,917.90	\$ 0.0125 per kWh
SUPPLY SERVICE						
NYPA Power	2,628,000	x	\$ 0.010354	=	\$ 27,210.31	
Transmission Charges						
ISO / kWh	2,628,000	x	0.005	=	13,140.00	
NYPA / kW Week	17,600	x	0.30	=	5,280.00	
TOTAL SUPPLY CHARGE					\$ 45,630.31	\$ 0.0174 per kWh
18A Surcharge			1.70%		\$ 1,335.32	
TOTAL ELECTRIC					\$ 79,883.53	\$ 0.0304 per kWh

Impact Load Factor has on Rates

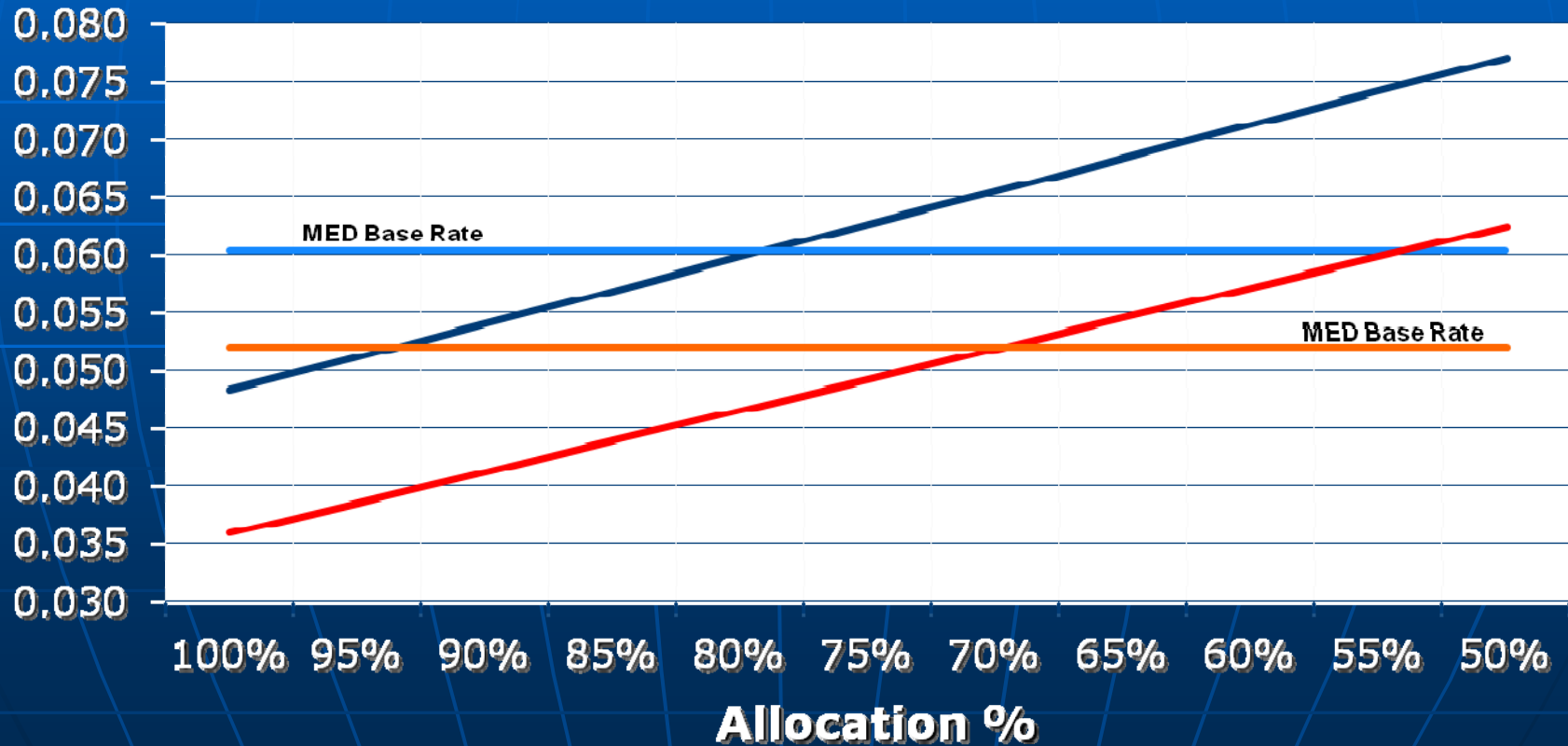


Impact Partial Allocation will Have on Rates

1,000 kW Customer

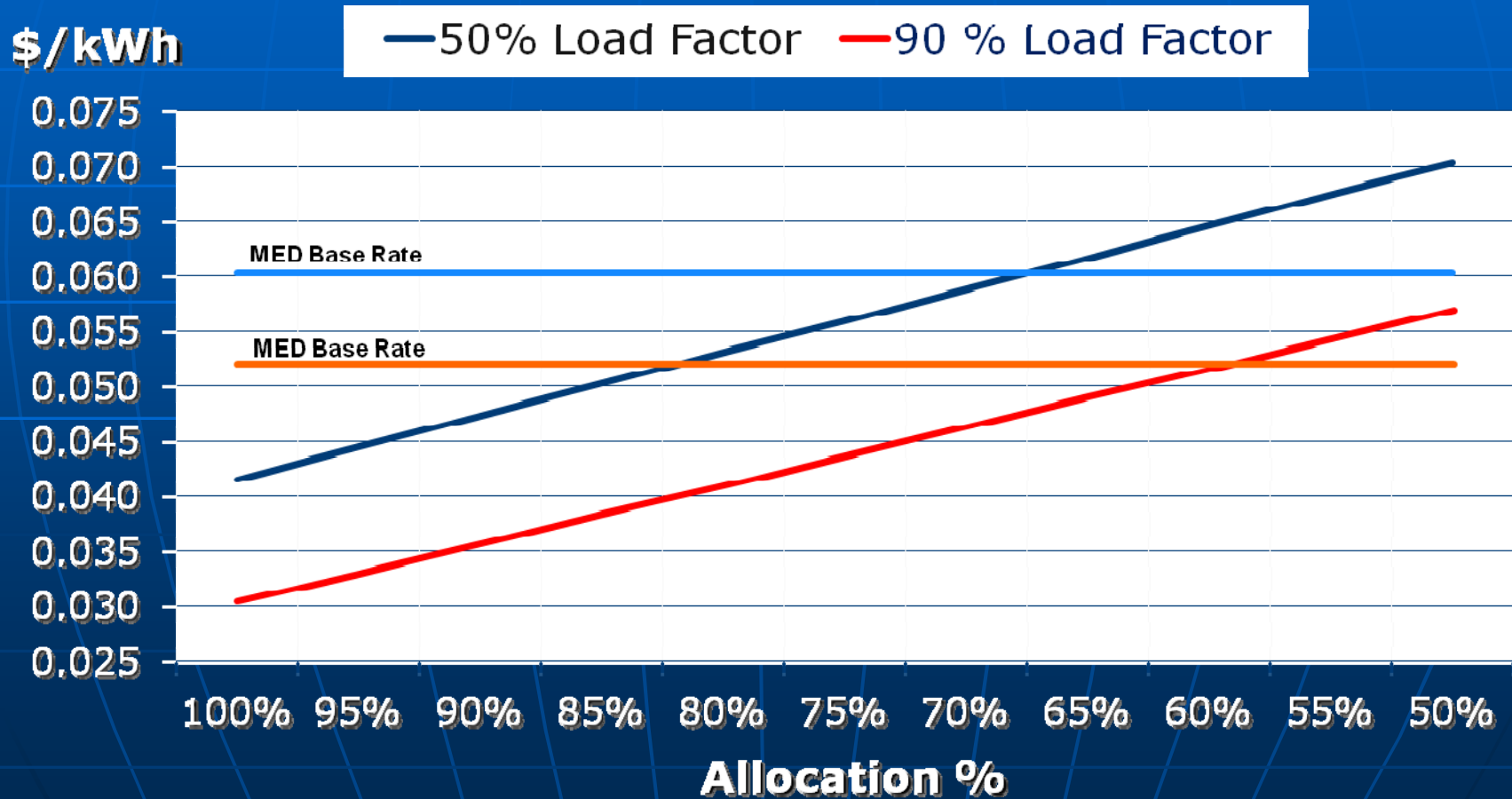
\$/kWh

— 50% Load Factor — 90 % Load Factor

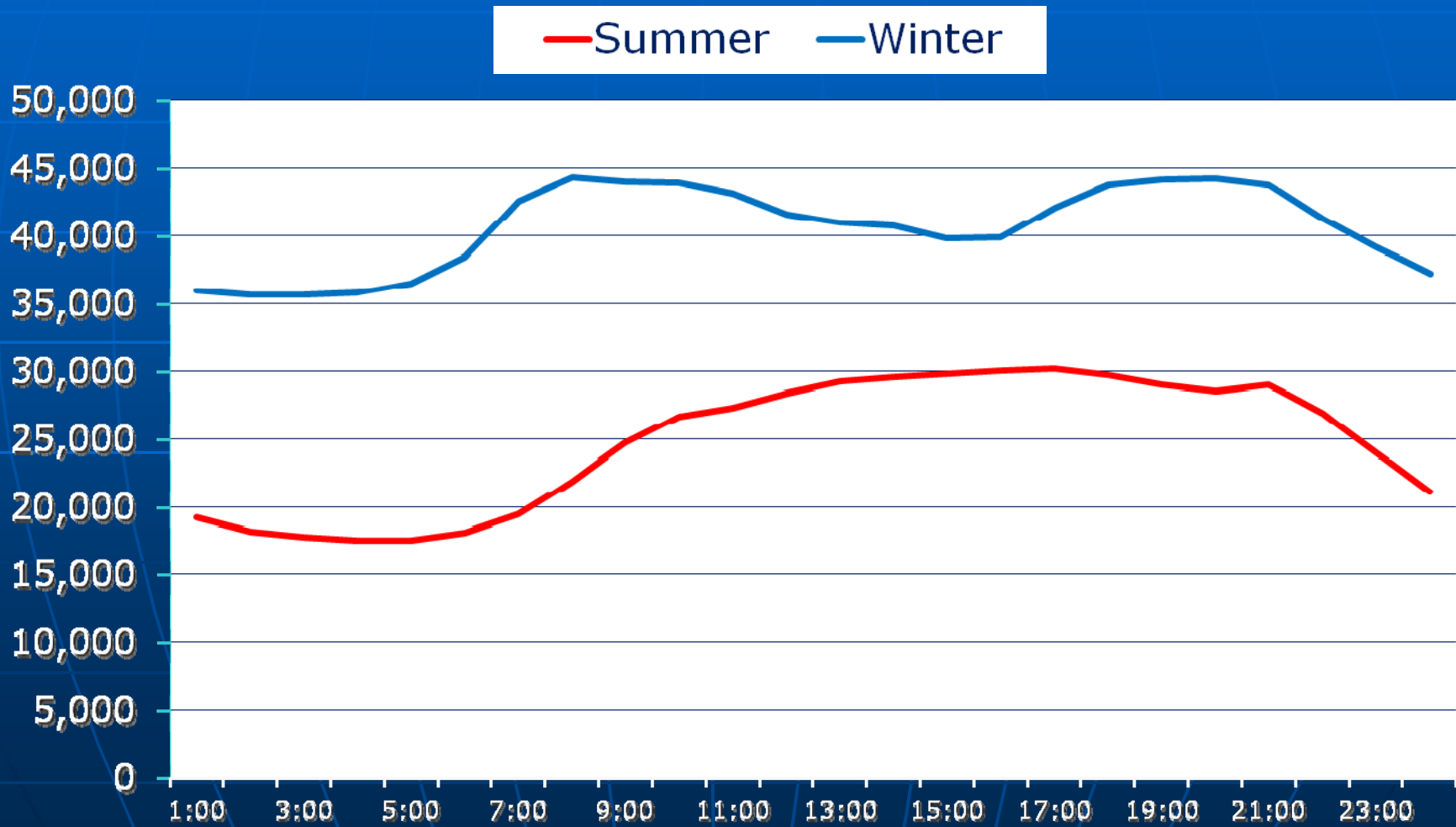


Impact Partial Allocation will Have on Rates

4,000 kW Customer

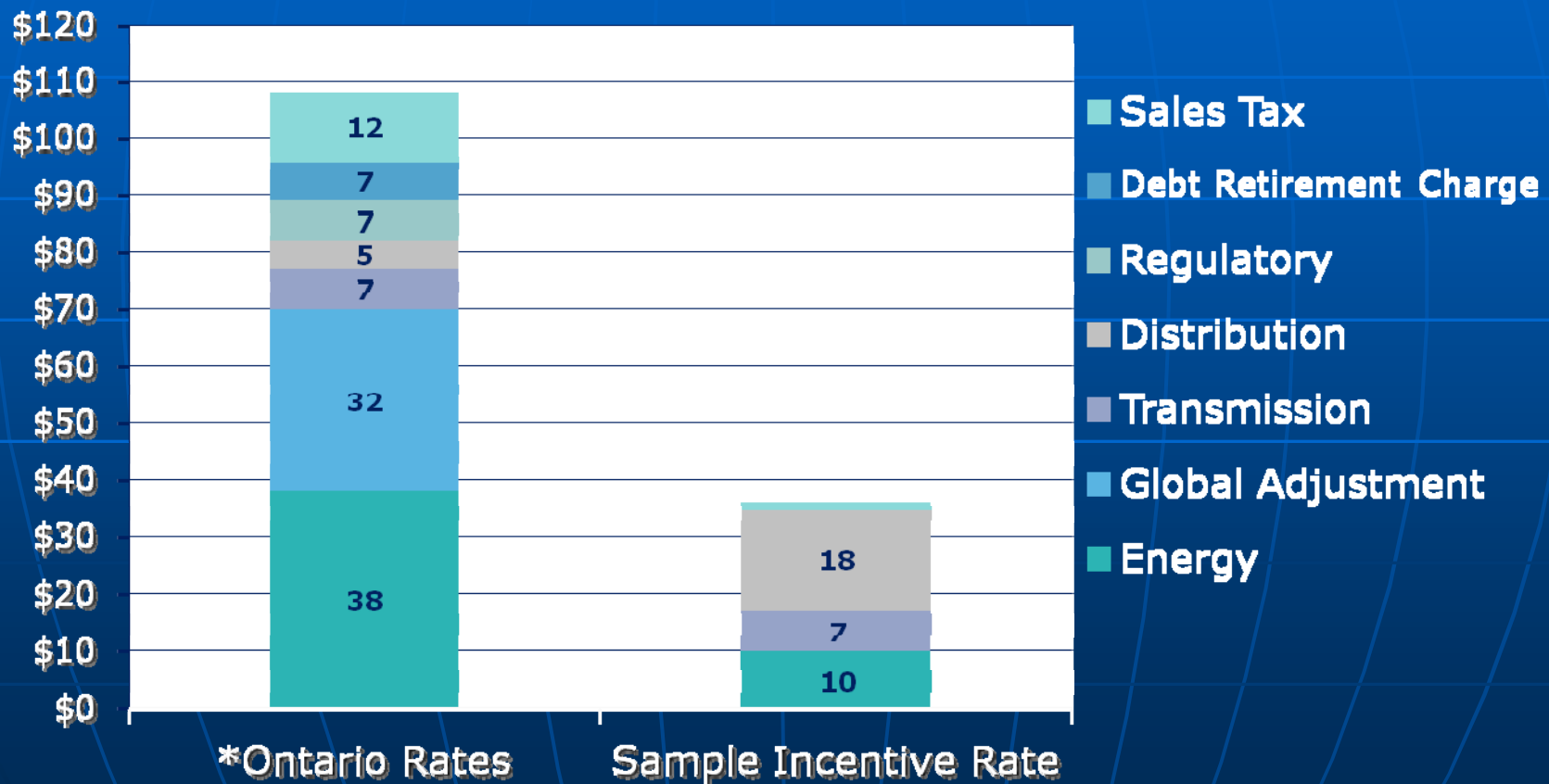


MED Load Profile



Comparison to Ontario Electric Rates

1,000 – 4,000 kW Customer



*From Presentation by Adam White

Target Industries

CCG 2001 Water

- Breweries
- Wood Products
- Paper manufacturing
- Petroleum Refineries
- Chemicals
- Plastics

Target Industries

CCG 2004 Rates

- Chemicals
- Wood Products
- Semi Conductors
- Metal Refinement and Fabrication
- BioTechnology
- Aerospace

Target Industries

CCG 2005 Reliability

- i. CNC Manufacturing
- ii. Clean Room Facilities
- iii. Internet Data Centers
- iv. Microelectronics Industry
- v. Pharmaceuticals / Biotechnology