



# Performance Diagnostics

**Presentation to  
RRFE Working Group  
January 21, 2013**

*Jay Shepherd, Energy Chambers*



## Sources

- Problem-driven/Oppportunistic/Forensic
  - Prioritization of resources, evolved to
  - “What information do I have available to find out X?”
- Schools
  - Commonly used metrics for operations
  - “Crowdsourcing”
- LDCs
  - Board of Director packages/Business Plans
  - Dialogue



# Types of Metrics

## Symptoms

- Components of costs
- Other financial
- Non-dollar metrics

## Attributes

- Distinguishing Features
- Key is relevance to costs or other metrics

## Results

- Rates/Bills
- Service Quality



# Attributes

- Customer numbers by class (and trends)
  - Size, growth
- Percentage revenue by class
  - Economic vulnerability
- Throughput (and trends)
  - Large customer dominance, economic issues
- Average peak demand
- Density (customers per km. of line)



## **Symptoms – Operating Costs**

- OM&A per Customer
- OM&A by Categories (e.g. G&A)
  - esp. trends to show priorities of management
  - Ratios of total OM&A (new)
- Personnel and Costs
  - FTEEs and categories
  - Dx. Revenue per FTEE
- Losses (esp. trends and anomalies)
- Shared Services and Allocations?



## **Symptoms – Capital**

- PP&E per Customer
  - Comparison for investment level/need
  - Trend for “harvesting the assets”
- Capital additions/Depreciation (%)
  - Asset management – compare to 180%
- Net/Gross PP&E
  - Asset age, depreciation policies
- Average Depreciation Rate
  - Asset mix, policies



## **Data Quality and Access Issues**

- Capitalization Policies
- CGAAP/MIFRS/USGAAP (esp. transition)
- Transformer ownership
- IT Assets can skew annual data
- OM&A Categories applied inconsistently
- Personnel Data Availability (2-K)
- Weighted vs. Simple Averages



## **Symptoms – Financial**

- Financial Net Income and ROE
  - Different from regulatory, but often indicative
- Equity Thickness/Leveraging
- Dividend Patterns
- LTD vs. Affiliate Debt
  - Not always clearly distinguished
- Total Cost of Capital (income+interest+PILs/EBIT)
  - Trends can expose additional real increases in costs
  - As interest rates increase, will work the other way



## **Results – Service Quality**

- Threshold Issue for Schools
  - Good enough, or not
  - Generally very good in Ontario
- Customer care – residential and small business
- Reliability – large users and government
- Limited incremental willingness to pay
- No regular metrics used



## **Results – Rates/Bills**

- Best measure of total cost
  - Peer comparisons are critical
- School-specific metric
- Typical customer bills by class
  - Embed cost allocation/rate design issues
  - Weighting needed to make a robust metric
  - Very good for trends
- Comprehensive measure of rates
  - Still working on it



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<b>Mystery Utility Timeline Data</b>						
<b>Comparator</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
Customers	66,114	66,118	66,606	68,431		
Residential	57,222	58,314	58,669	60,210		
GS<50	8,172	7,105	7,210	7,455		
GS>50	716	696	724	763		
Large User	4	3	3	3		
Percentage Increase		0.01%	0.74%	2.74%		
Volumes Sold (kwh) (millions)	2,092	2,005	2,043	2,025		
Total Losses	2.44%	2.67%	3.41%	2.48%		
Average Peak Demand	228,115	258,166	223,750	263,935		
DX Revenues (000s omitted)	\$32,505	\$36,850	\$38,468	\$38,507		
Residential	\$16,150	\$18,158	\$20,031	\$20,032		
GS<50	\$5,605	\$5,800	\$5,972	\$5,822		
GS>50 and Large	\$9,538	\$9,441	\$9,822	\$9,737		
Other	\$1,212	\$3,451	\$2,643	\$2,916		
Property, Plant & Equipment (000s omitted)	\$78,952	\$78,819	\$82,523	\$84,915		
PP&E per Customer	\$1,194.18	\$1,192.10	\$1,238.97	\$1,240.88		
Percentage Increase		-0.17%	3.93%	0.15%		
Capital Additions/Depreciation	123.7%	135.3%	206.8%	126.6%		
OM&A (000s omitted)	\$16,108	\$19,641	\$19,890	\$21,812		
Operations	\$4,085	\$5,254	\$5,136	\$5,677		
Maintenance	\$1,169	\$1,162	\$1,276	\$1,457		
Administration	\$10,854	\$12,729	\$12,943	\$13,729		
Other	\$0	\$496	\$535	\$949		
OM&A per Customer	\$243.64	\$297.06	\$298.62	\$318.74		
Actual Shareholders' Equity (000s omitted)	\$41,798	\$41,042	\$43,364	\$42,995		
Equity Thickness	37.4%	32.6%	30.7%	30.9%		
LTD & Aff. Debt (000s omitted)	\$39,378	\$41,253	\$45,029	\$46,205		
Net Income (000s omitted)	\$3,912	\$5,819	\$5,498	\$4,297		
Financial ROE	9.36%	14.18%	12.68%	9.99%		
Interest Cost (000s omitted)	\$3,395	\$3,472	\$3,571	\$3,732		
PILs (000s omitted)	\$2,065	\$2,293	\$1,206	\$675		
Total Cost of Capital	\$9,372	\$11,584	\$10,275	\$8,704		

**HR Levels and Costs - Comparison of 2-K Data**

<b>Distributor</b>	<b>Customers</b>	<b>FTEs</b>					<b>Customers per FTEE</b>	<b>Total Compensation</b>	<b>Costs per FTEE</b>	<b>Costs Per Customer</b>	<b>Capitalization Percentage</b>
		<b>Exec.</b>	<b>Mgmt</b>	<b>Non-U/ Other</b>	<b>Union</b>	<b>Total</b>					
<b>Utility A</b>	121,398	13.0	29.0	63.6	150.4	256.0	474	\$26,602,080	\$103,914	\$219.13	31%
<b>Utility B</b>	277,380	23.0	71.0	81.6	269.6	445.2	623	\$52,705,884	\$118,387	\$190.01	30%
<b>Utility C</b>	202,624	6.0	50.0	63.2	193.6	312.8	648	\$35,276,298	\$112,776	\$174.10	17%
<b>Utility D</b>	40,012	4.0	14.0	11.2	80.7	109.8	364	\$10,662,614	\$97,067	\$266.49	28%
<b>Utility E</b>	45,970		14.0	3.7	70.2	87.9	523	\$8,819,870	\$100,317	\$191.86	22%
<b>Utility F</b>	29,262	7.0	7.0	28.3	44.9	87.2	336	\$8,689,671	\$99,652	\$296.96	13%
<b>Utility G</b>	18,301		8.0		20.8	28.8	635	\$2,606,546	\$90,505	\$142.43	25%
<b>Utility H</b>	26,787					69.6	385	\$6,476,051	\$93,047	\$241.76	32%
<b>Utility I</b>	18,478		12.0		22.4	34.4	537	\$3,692,927	\$107,353	\$199.85	13%
<b>Averages</b>							506		\$102,388	\$212.93	23%