

INTRODUCTION
To The
City Light Department

Presentation to the Budget Committee
August 2010

PRESENTATION OUTLINE

▶▶ **City Light at a Glance**

- *Physical Plant*

- *Budget and Organization*

▶▶ **Trends**

▶▶ **Benchmarks**

▶▶ **Challenges**

Physical Plant

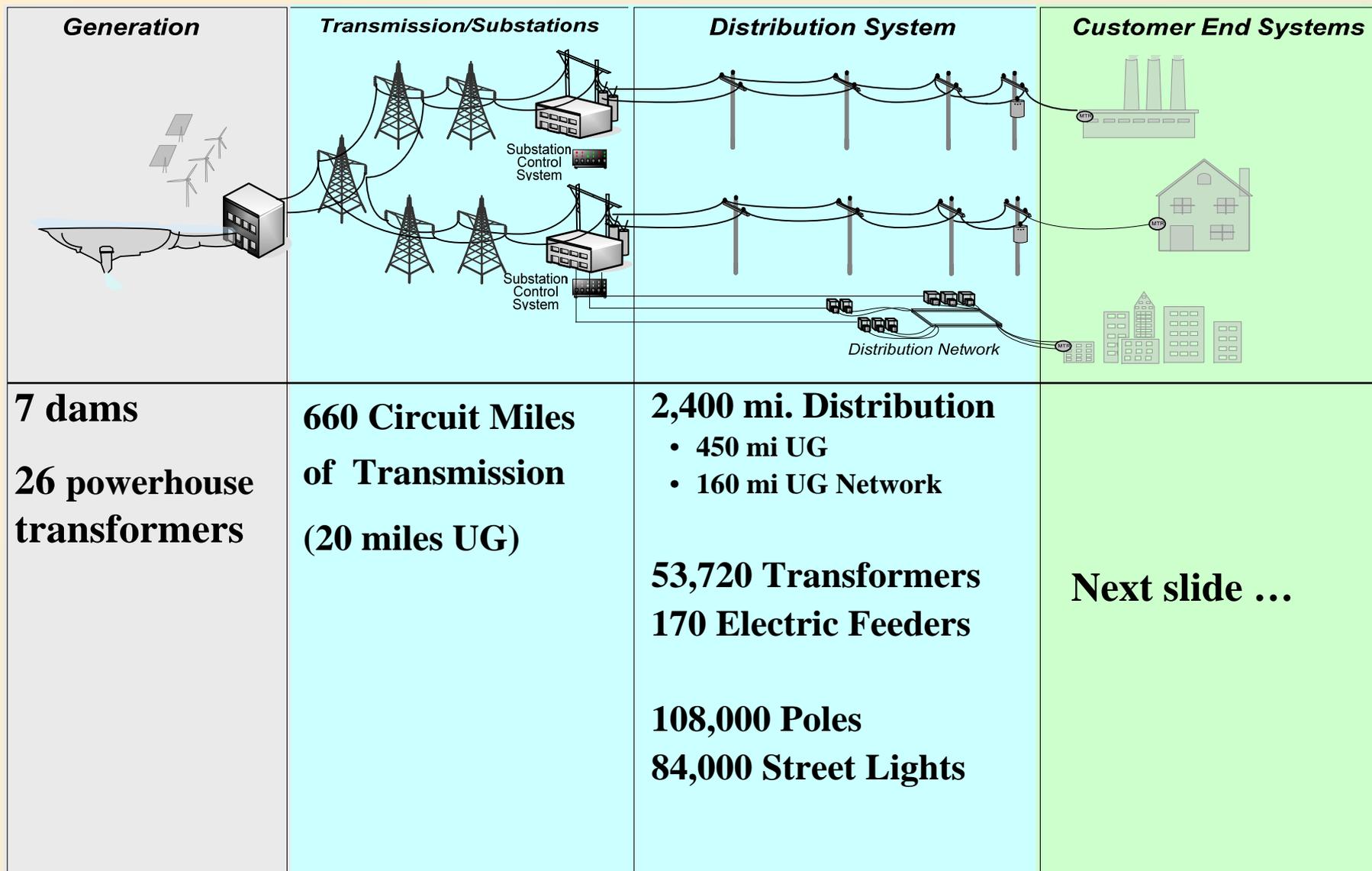
Function

At its most basic, City Light is charged with meeting the electricity needs of its customers. To do this it

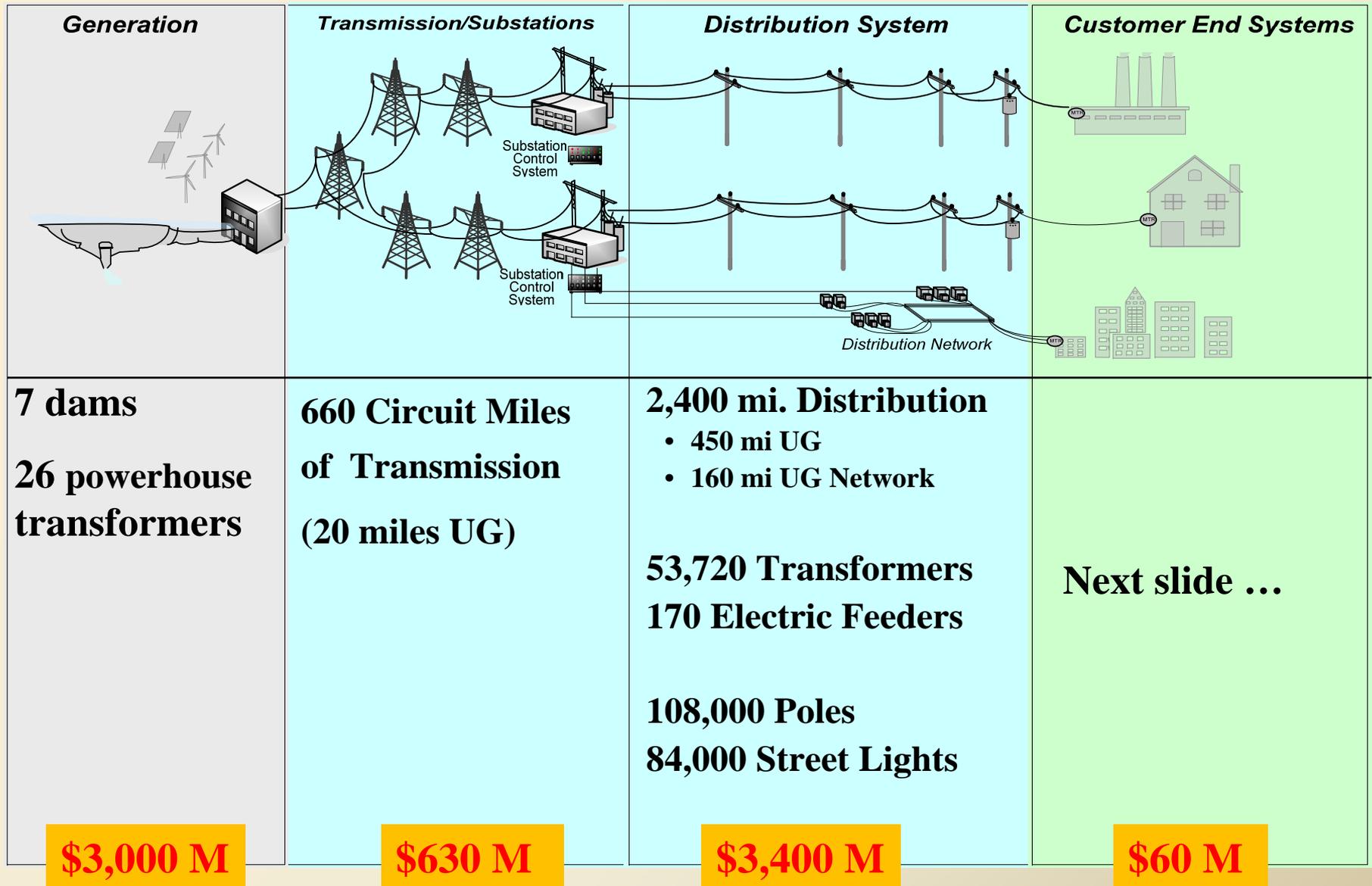
- Own and operates electricity generating plants
- Owns and operates an electricity delivery system
- Has long-term contracts to purchase electricity
- Continually trades electricity in the wholesale market

Although a City department in every respect, the revenues City Light generates and the resources it owns can be used only for utility purposes

Vertically Integrated Utility

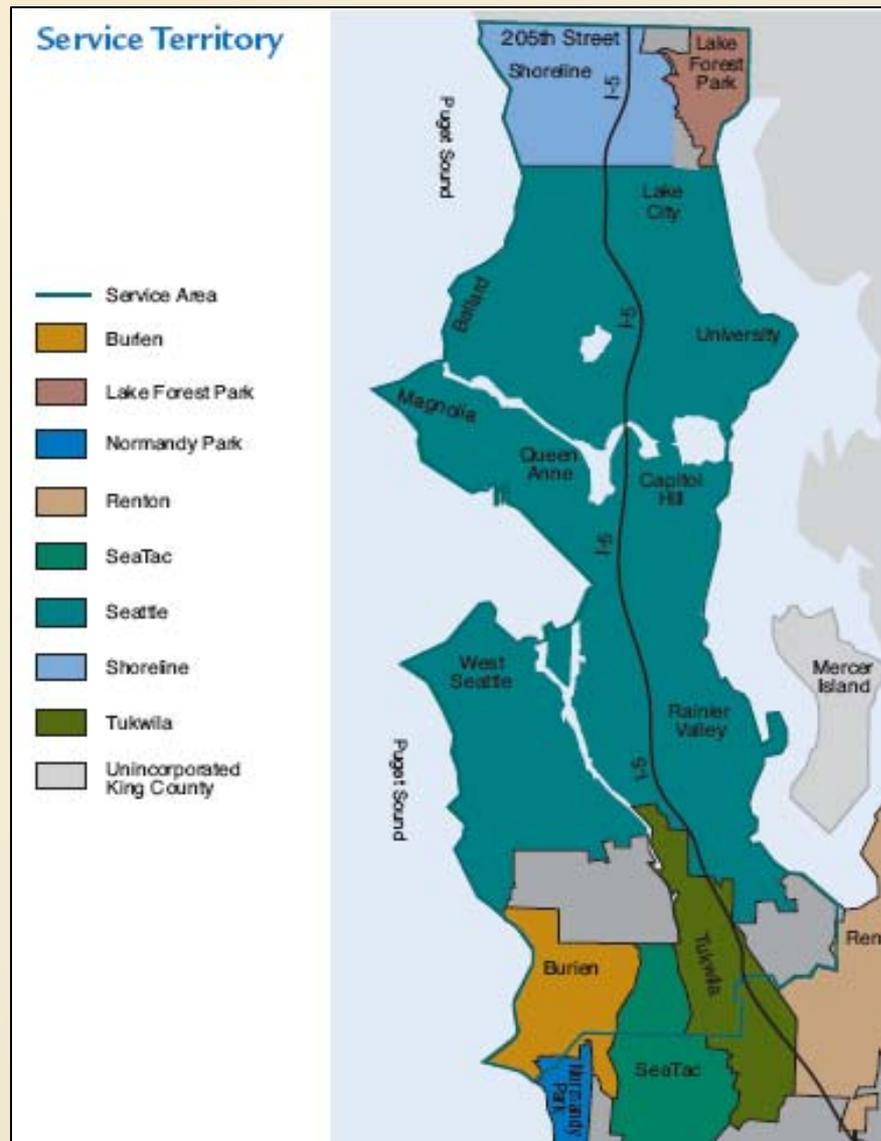


Vertically Integrated Utility

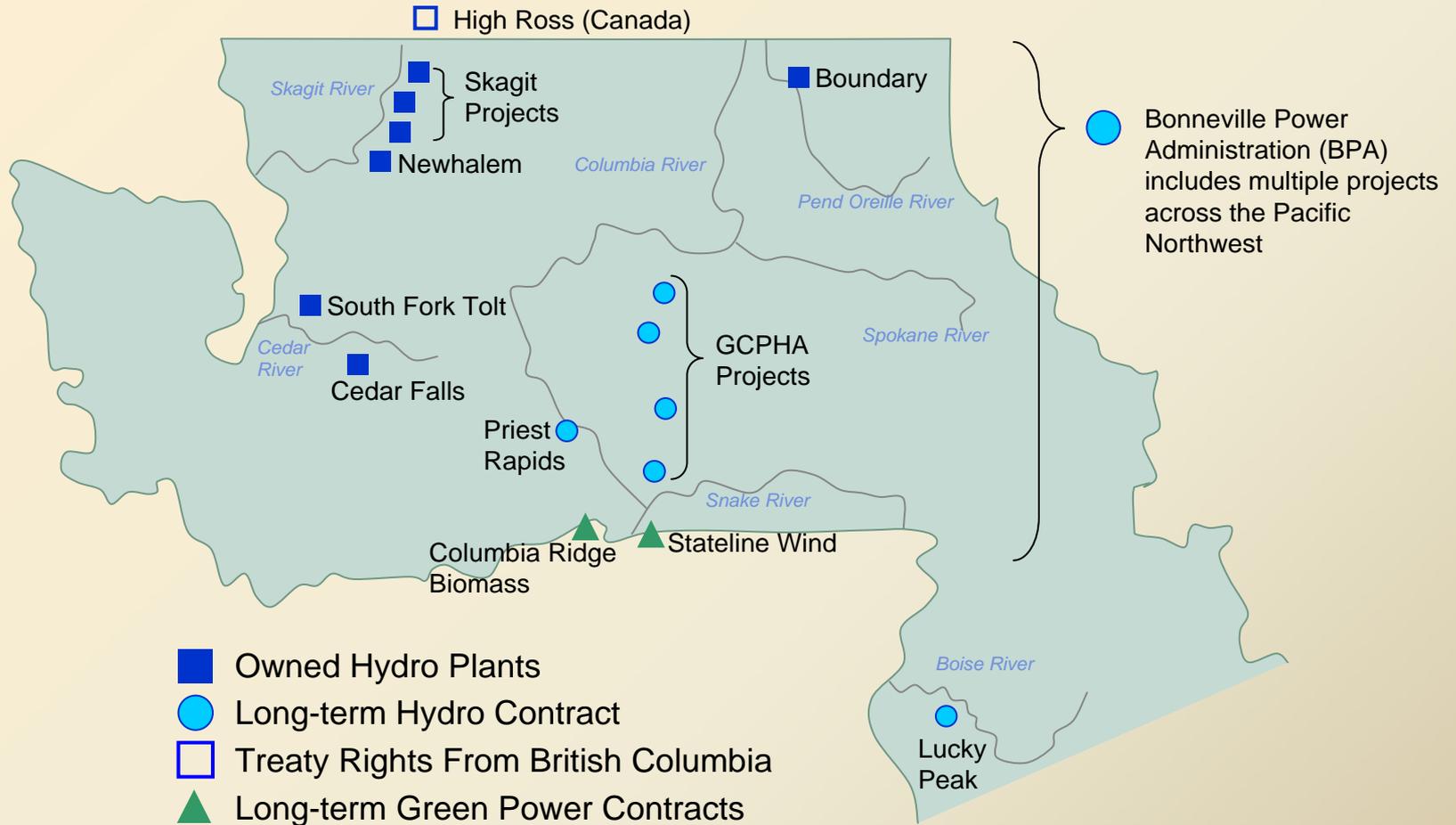


Service Territory

- 130-square-mile service territory
- Seattle & seven franchise areas
- 15 major substations
- Service area population: 750,000
- 400,000 meters – 80% in Seattle
- 10th largest Public Power utility in the US and largest in the Northwest (by customers served)

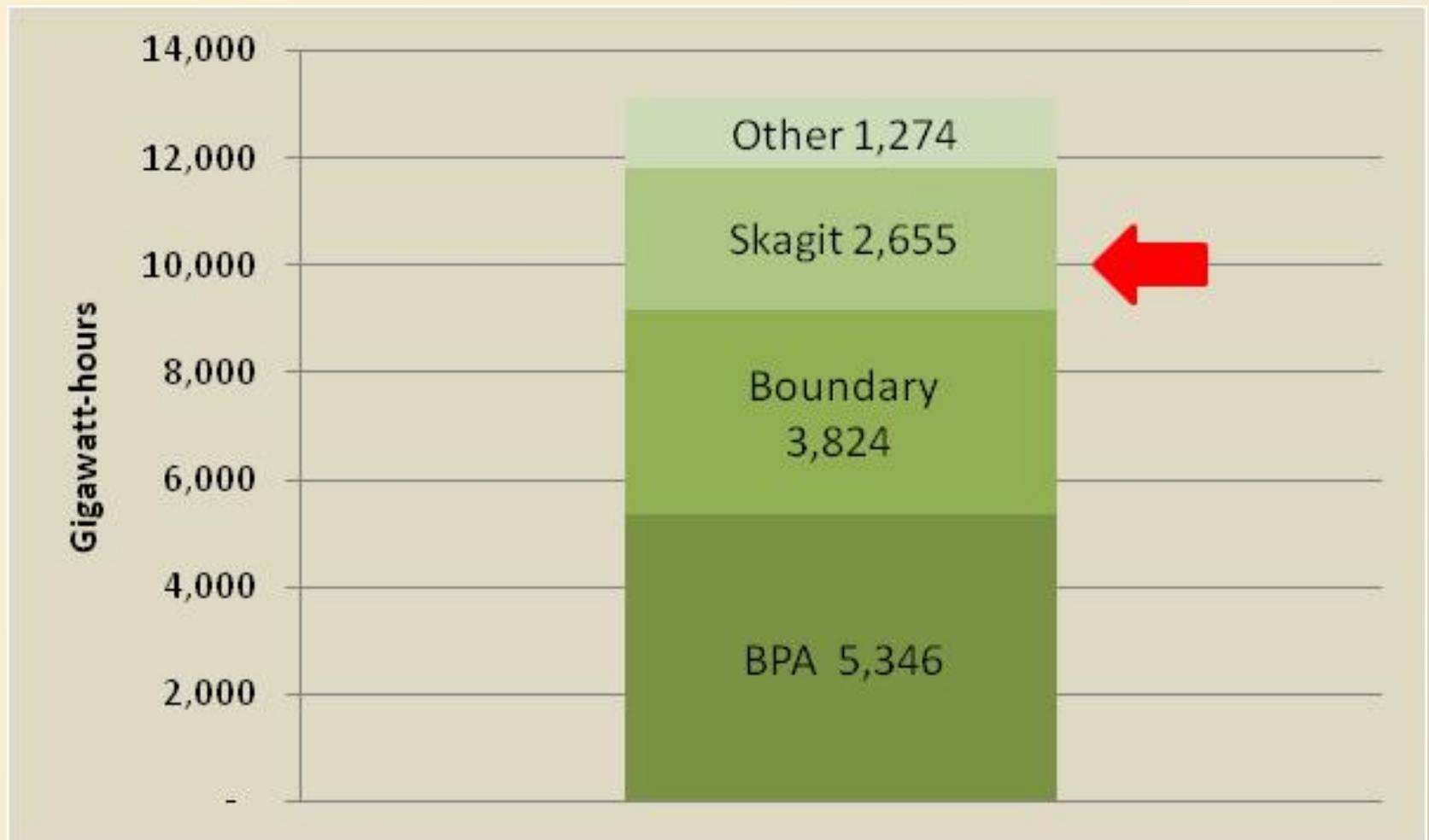


Generation Resources

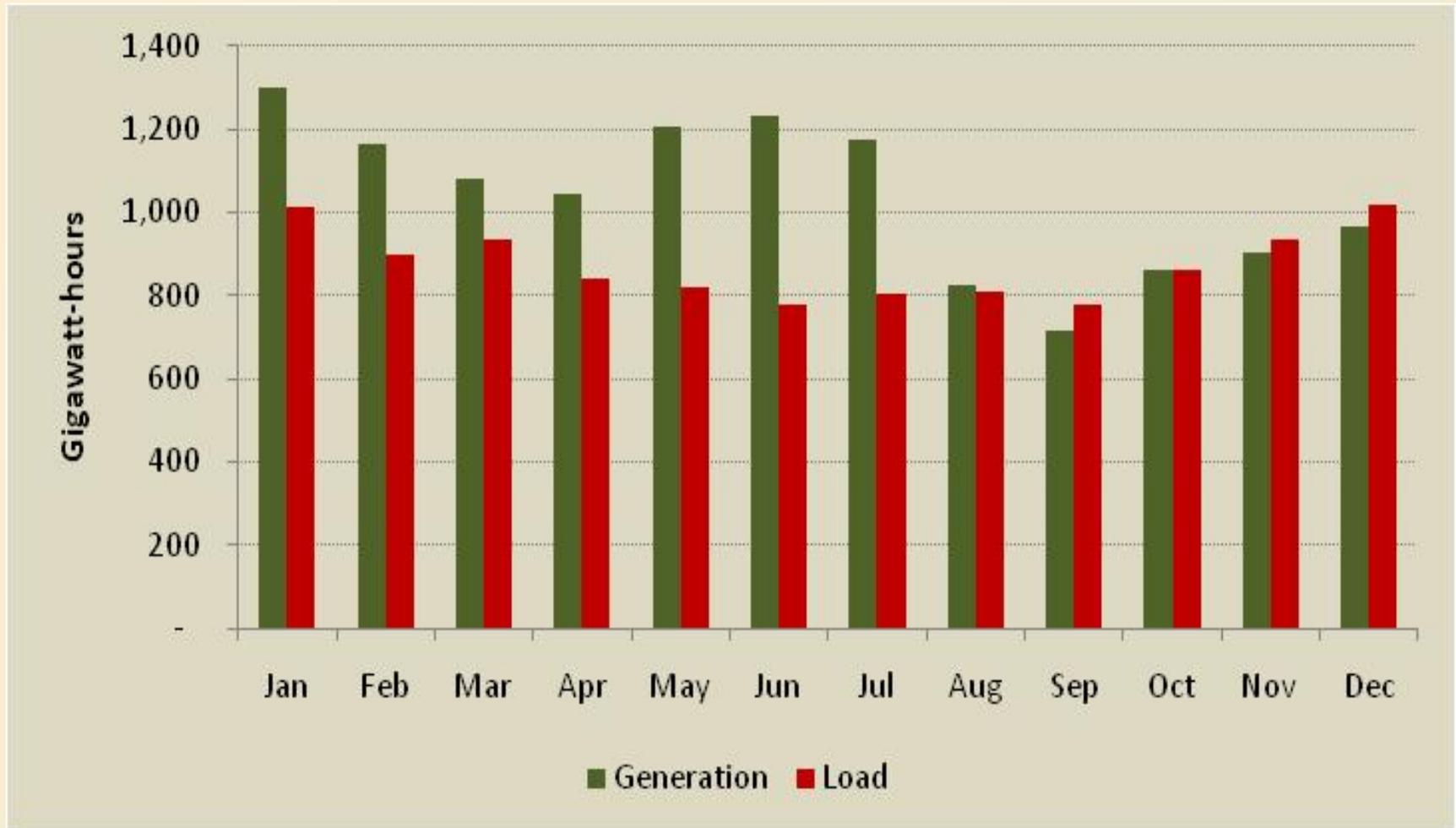


Generation & Demand

Under Average Hydro Conditions



Role of Wholesale Market



Budget & Organization

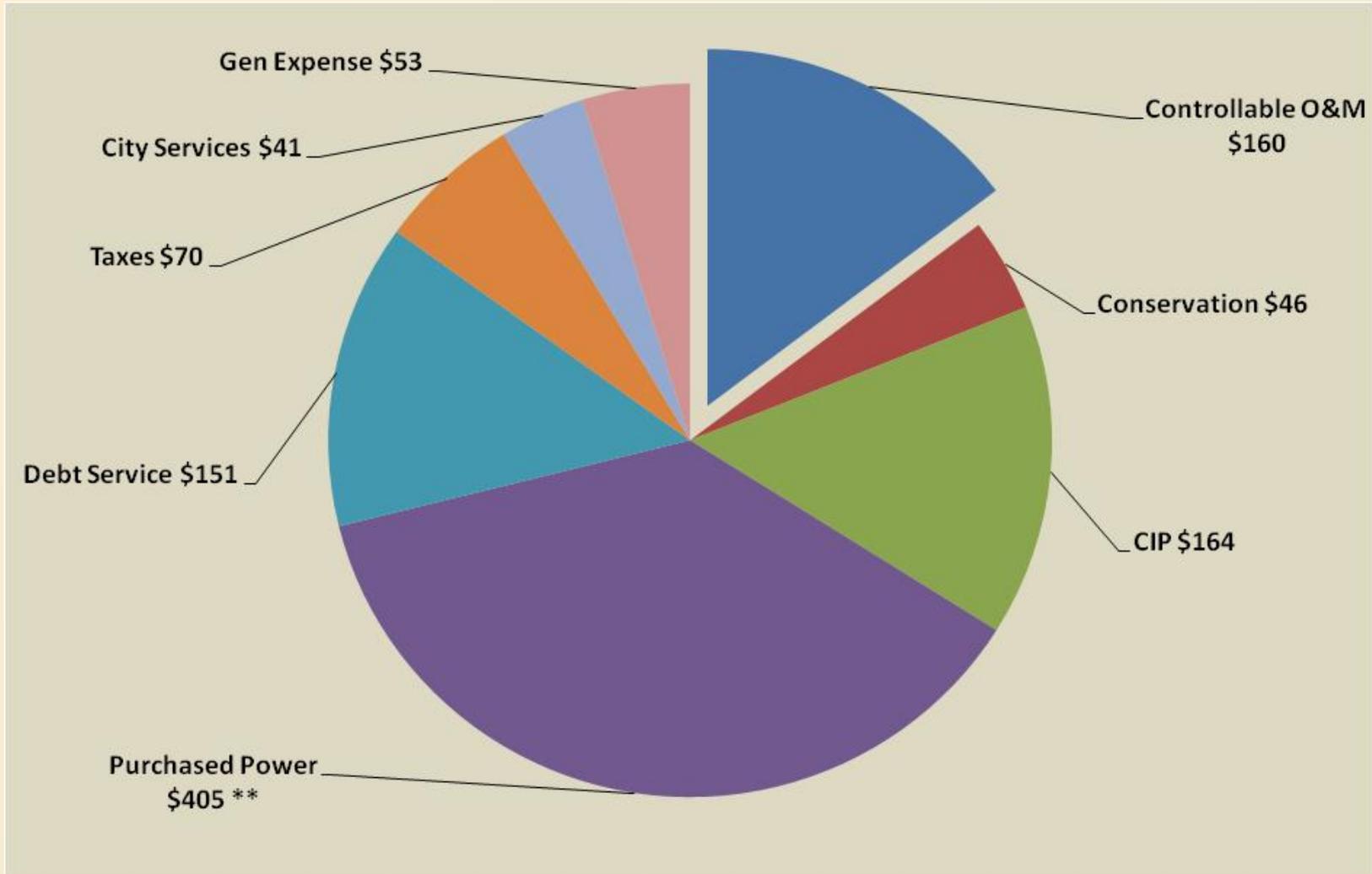
Organizational Structure

Jorge Carrasco

Chief of Staff	Customer Service & Energy Delivery	Financial Service	Power Supply & Environ'l Affairs	Human Resources	Internal Compliance
<u>Vacant</u>	<u>Phillip West</u>	<u>Phillip Leiber</u>	<u>Steve Kern</u>	<u>DaVonna Johnson</u>	<u>Mike Haynes</u>
Govt. & Legislative Affairs	Customer Care	Finance	Integrated Resource Planning	Talent Acquisition	Security & Emergency Mgmt
Communications & Public Affairs	Energy Delivery (Operations)	Accounting	Power Operations & Marketing	Labor Relations	
	Energy Delivery (Engineering)	Risk Mgmt & Strategic Planning	Conservation Resources	Safety	
	Asset Management	Corporate Performance	Utility Support Services	Employee Relations	
	System Operations	Information Technology	Power Contracts & Resource Acq'n		
			Environmental Affairs		
			Power Production		
O&M: \$3.1M	\$85.5M	\$28.9M	\$512.2M	\$6.5M	\$1.8M
CIP: -	\$109.1M	\$6.4M	\$46.2M	-	\$3.0M
FTE: 20	1,068	205	475	58	15

2010 Adopted Budget: USES

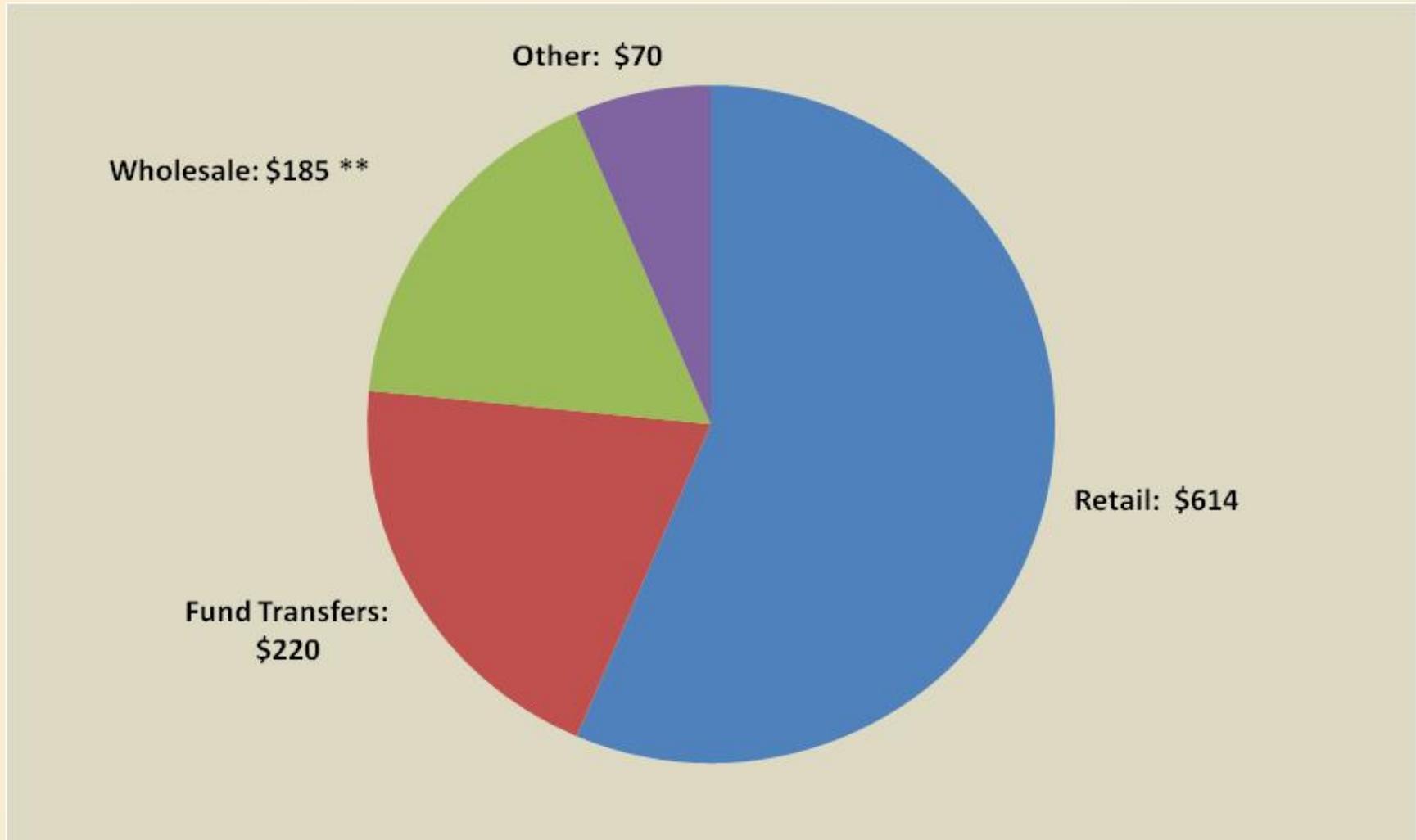
Total = \$1.1 Billion; Amounts shown in Millions



** Includes short-term purchases,
excludes costs of owned generation.

2010 Adopted Budget: SOURCES

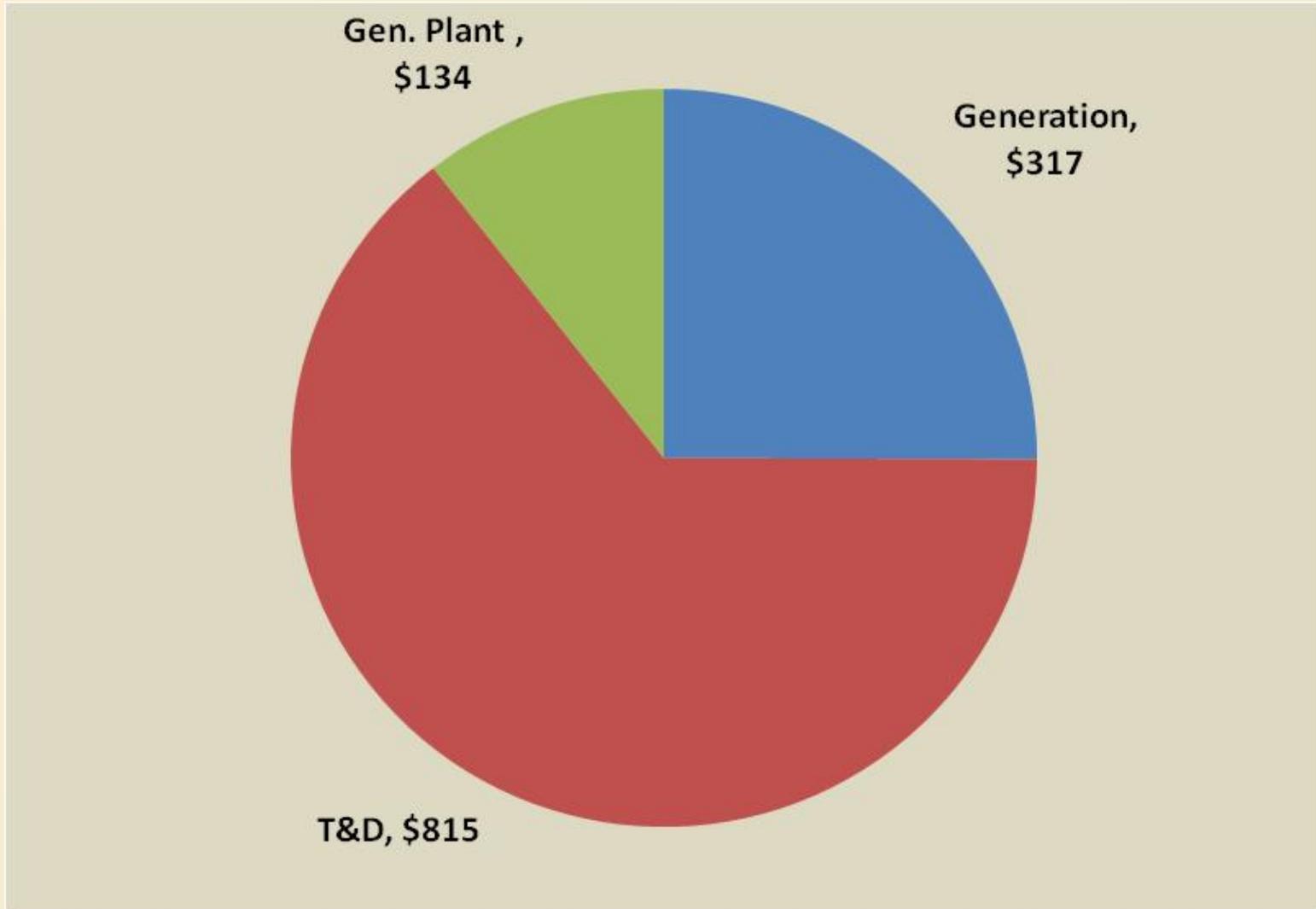
Total = \$1.1 Billion; Amounts shown in Millions



**Gross Revenues

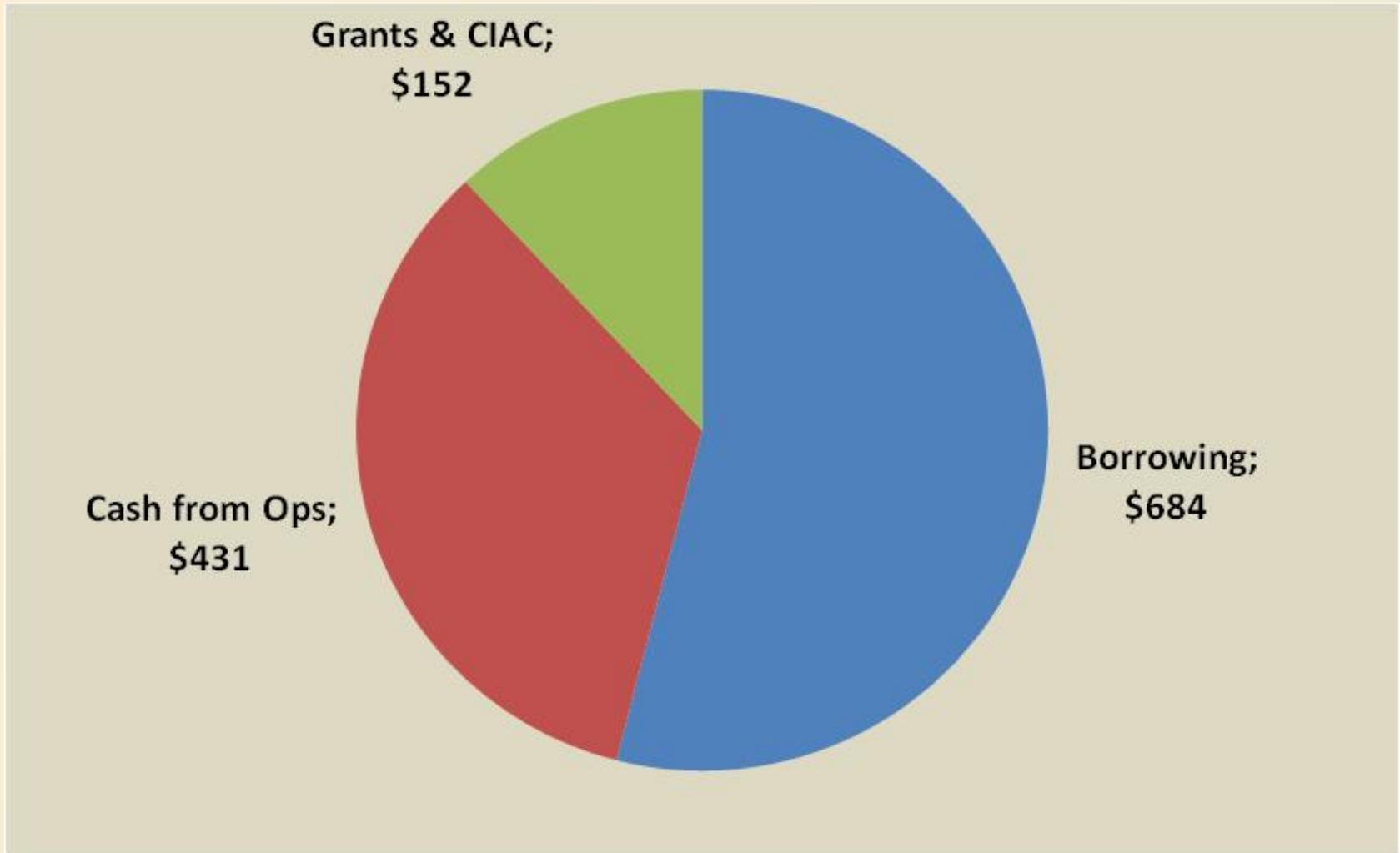
2010-2015 Six-Year CIP: USES

Total = 1.27 Billion; Amounts shown in Millions



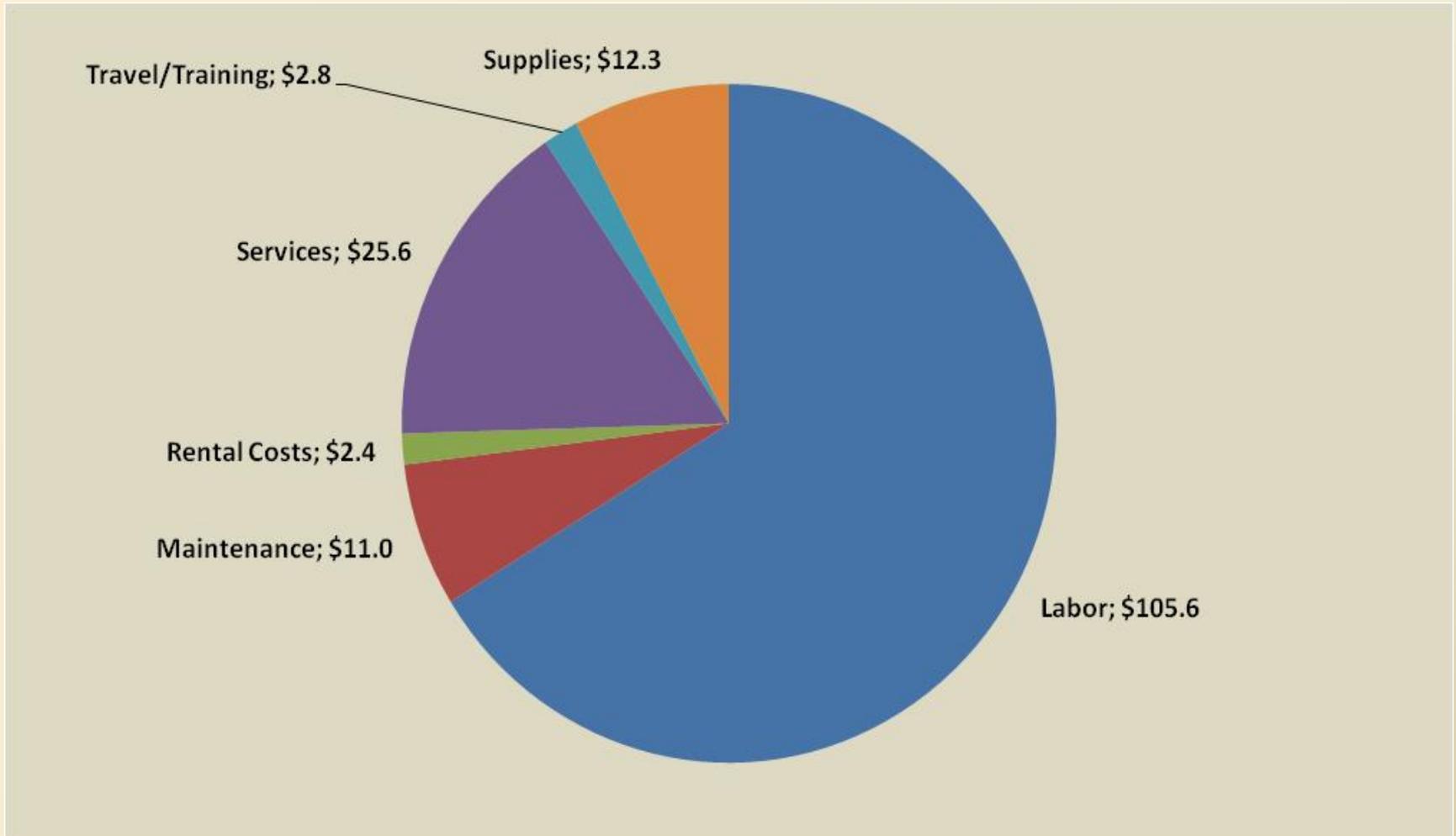
2010-2015 Six-Year CIP: SOURCES

Total = \$1.2 Billion; Amounts shown in Millions



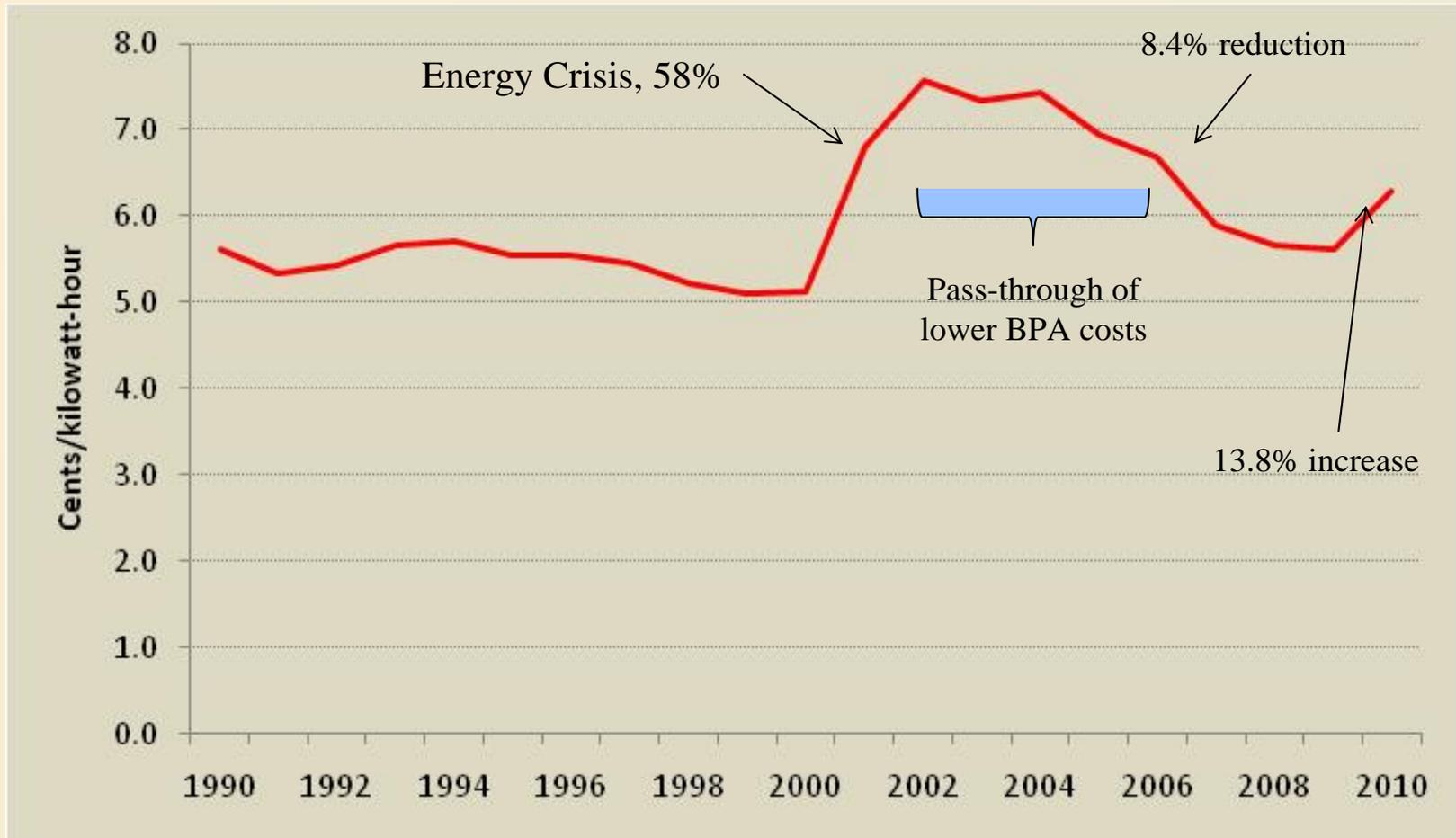
Controllable O&M

Total = \$159.6 Million; Amounts shown in Millions



Trends

Recent Rate History

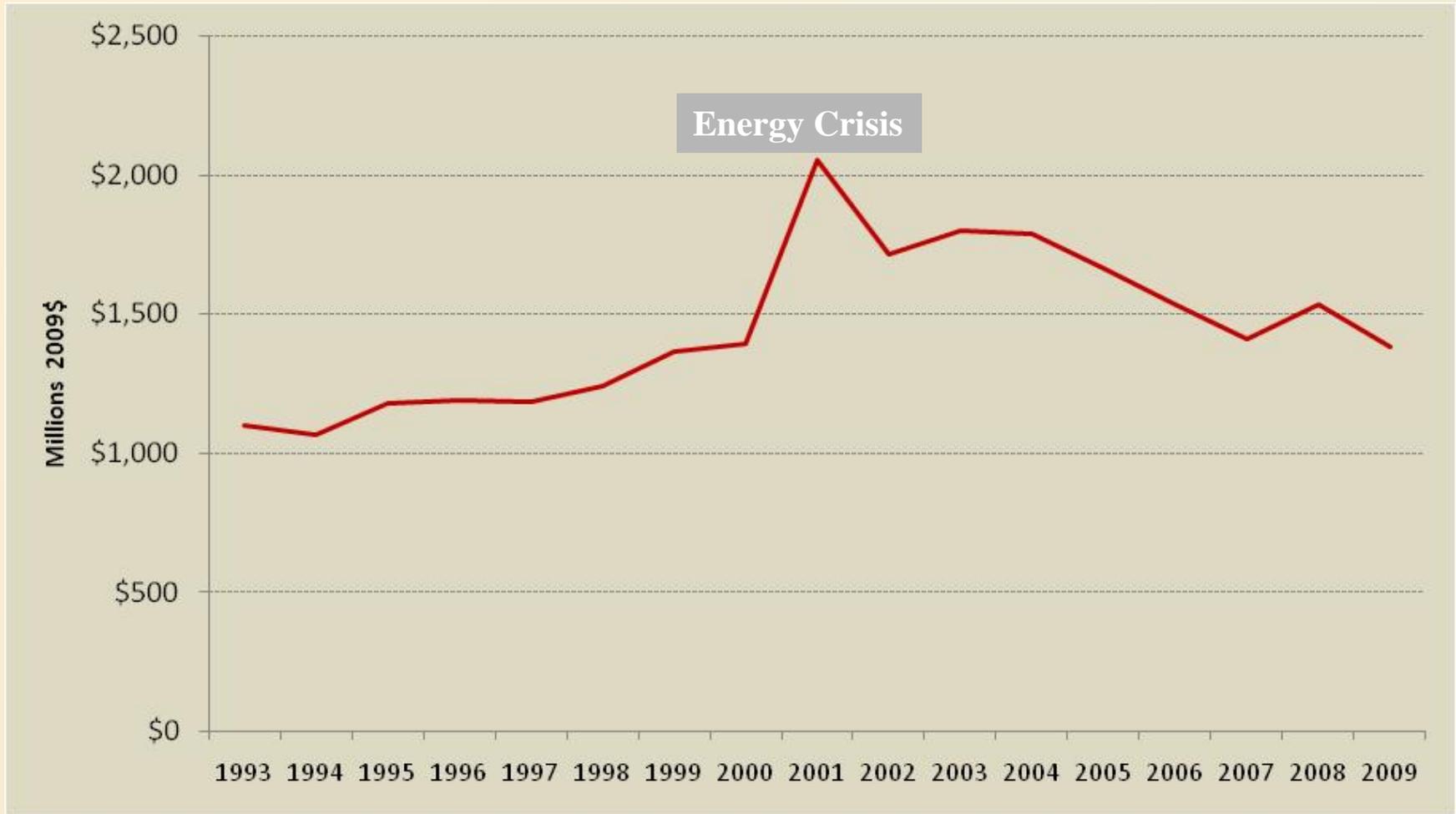


Rates expressed in 2009 dollars

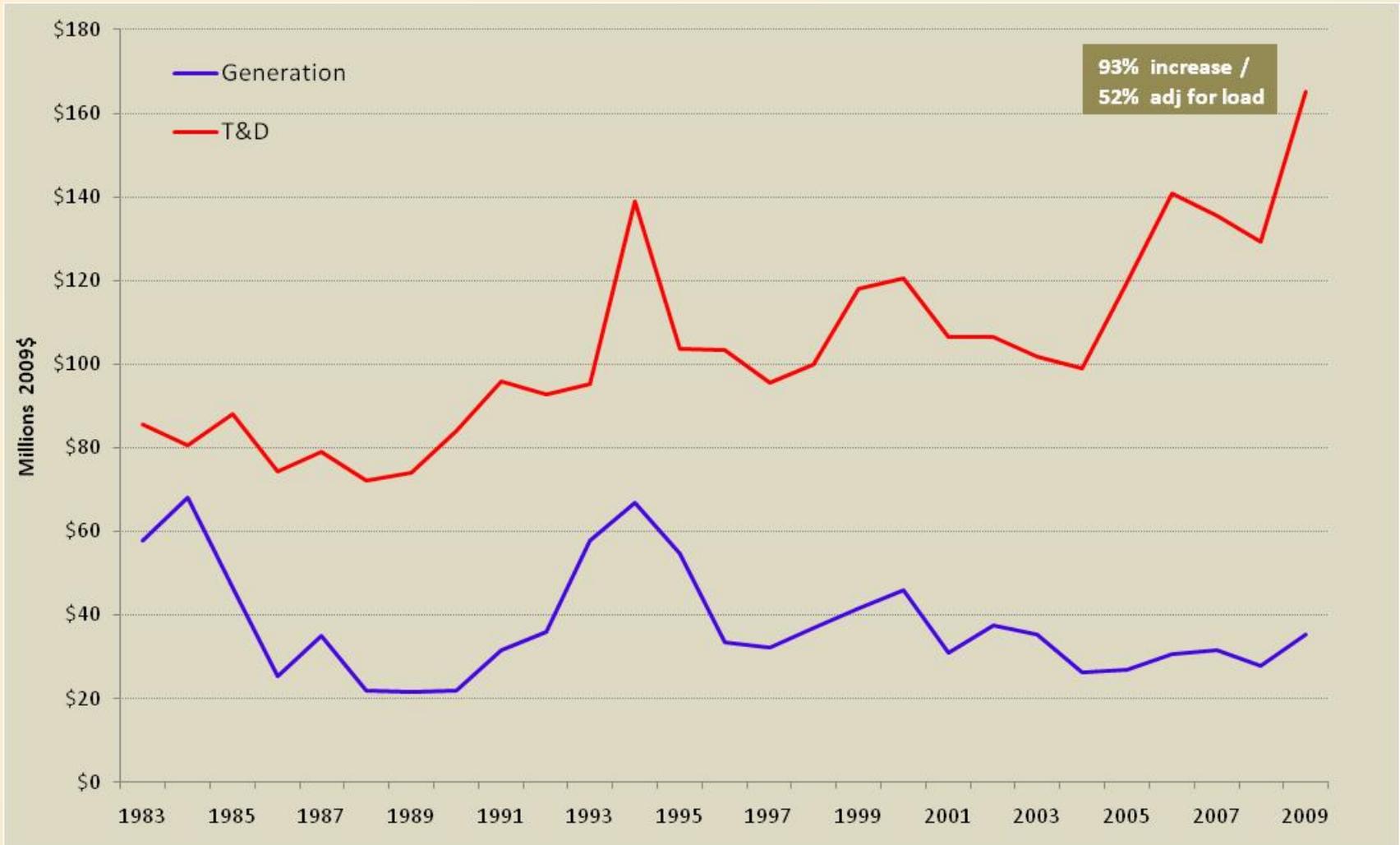
Recent Load History



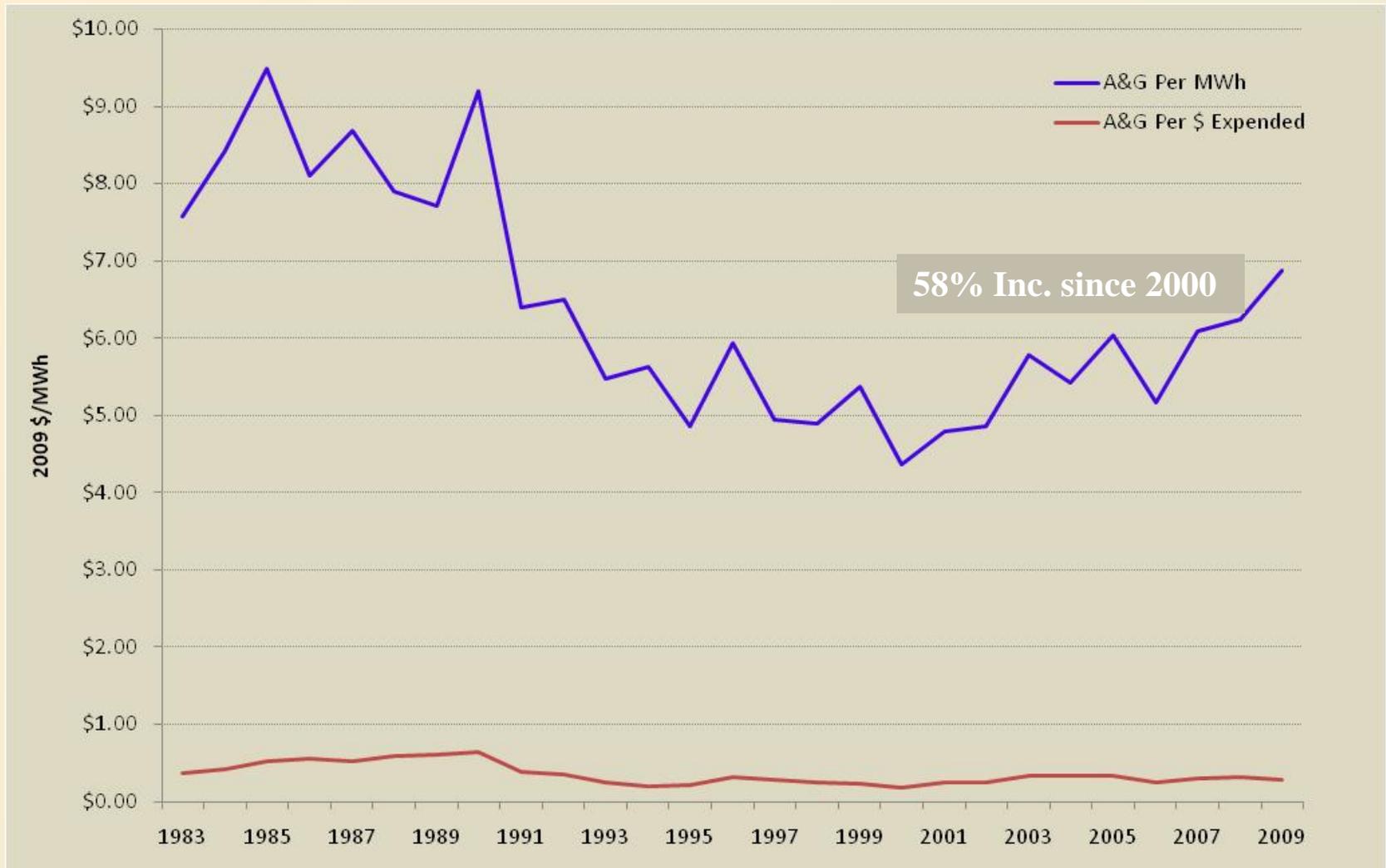
Debt Outstanding



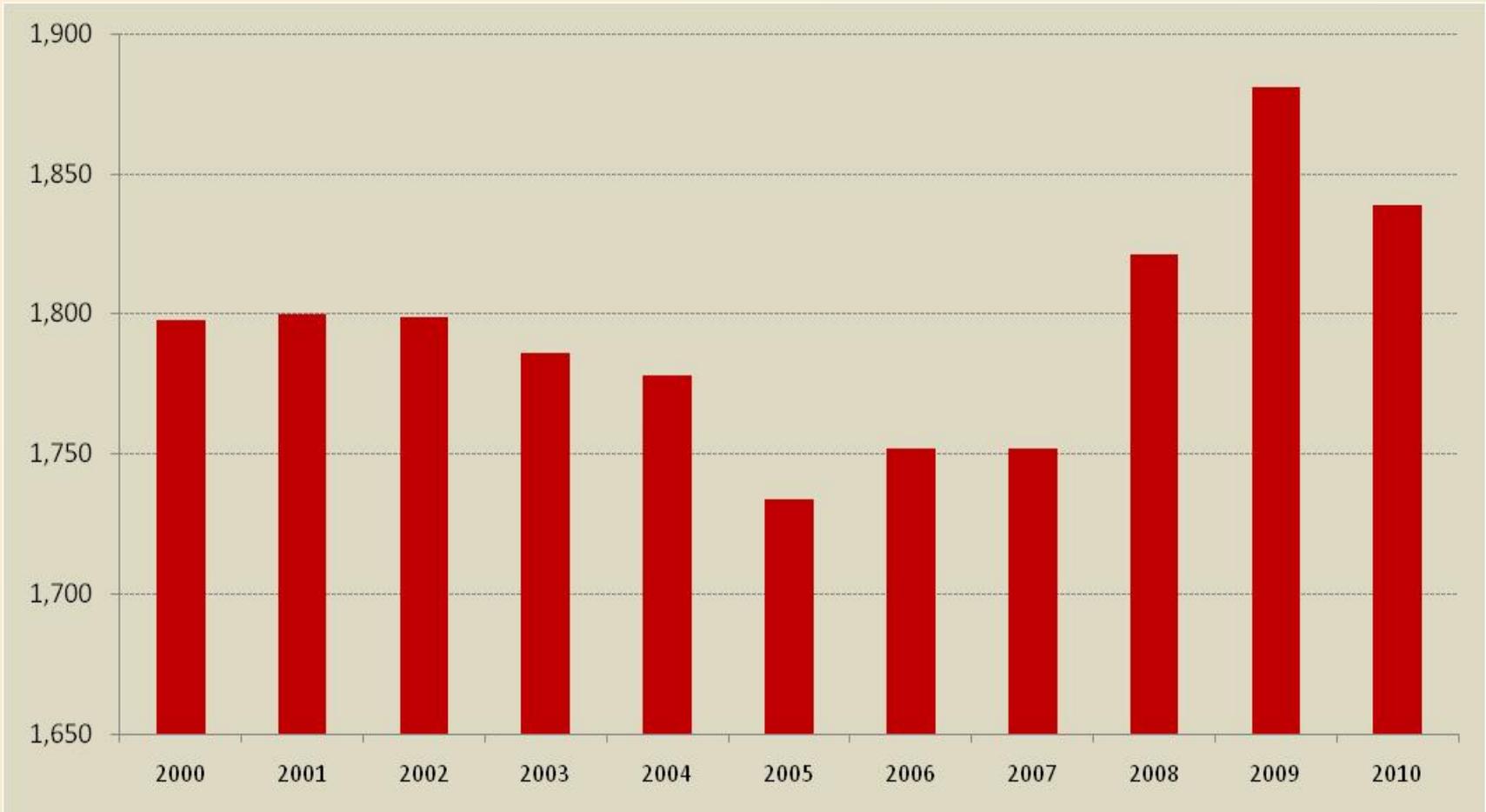
Total Expenditures



Administrative Costs

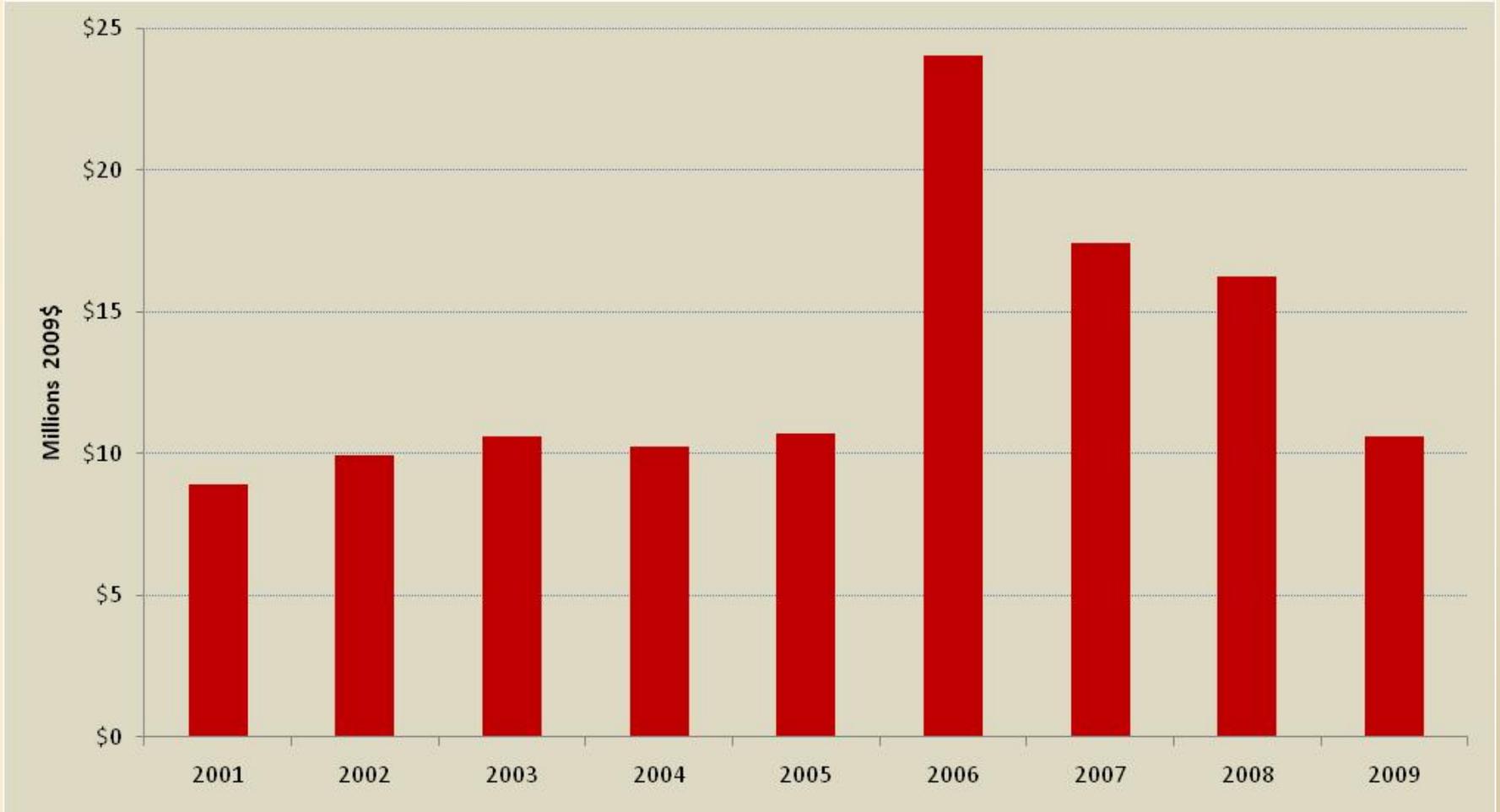


Authorized FTE



Note: Changes are exaggerated by vertical scale

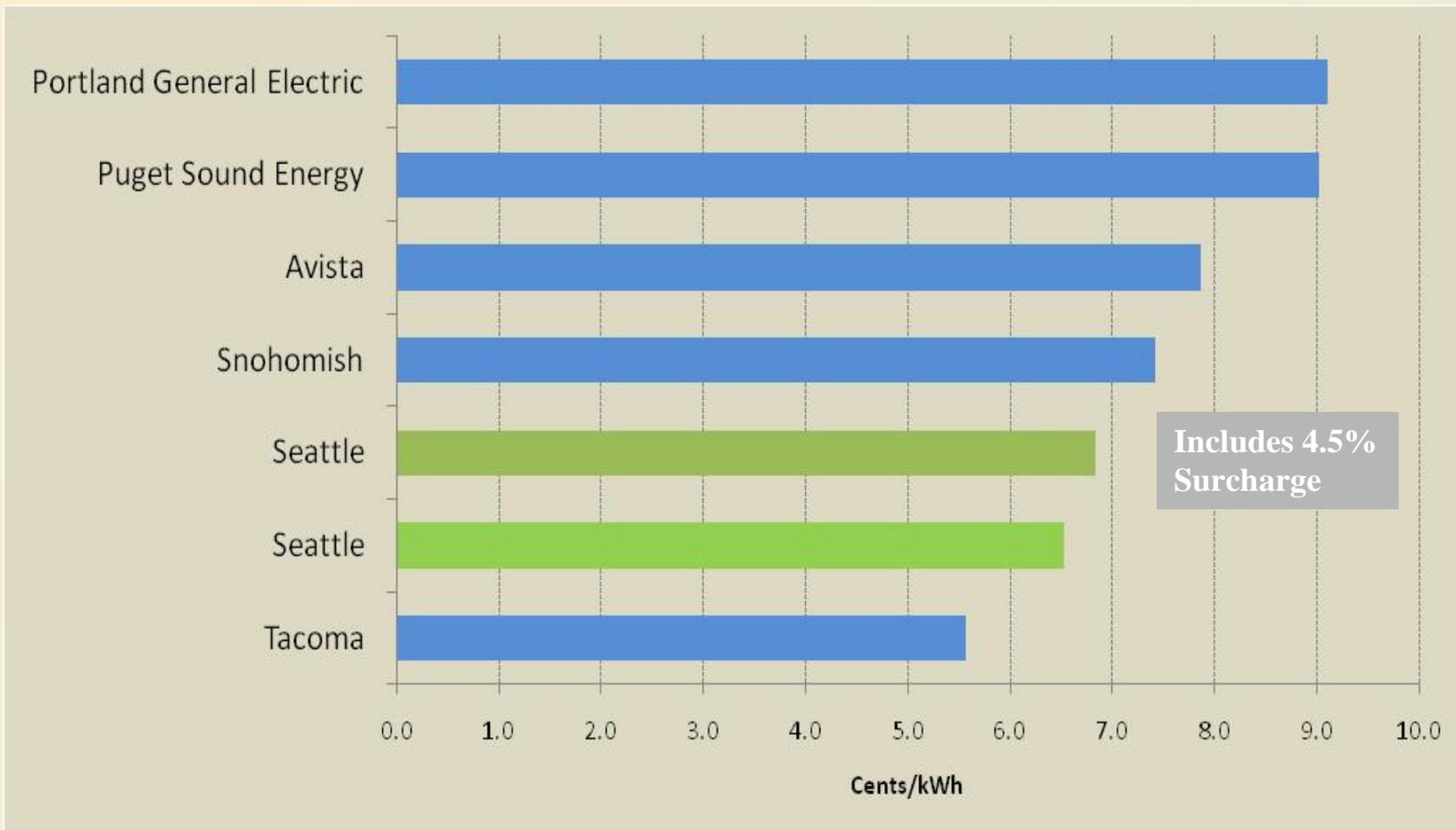
T&D Overtime Costs



Benchmarks

Rate Comparison

Cents/kilowatt-hour



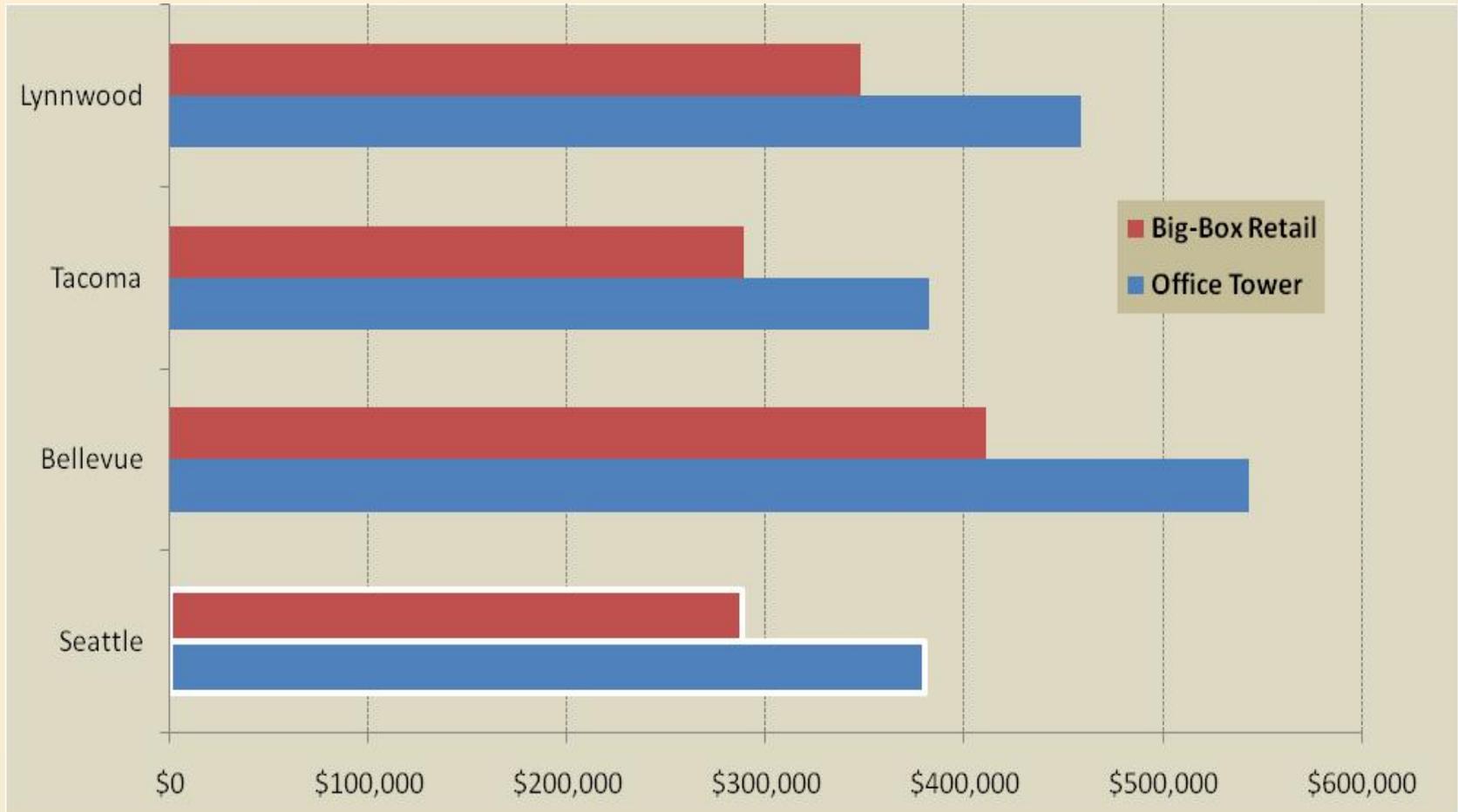
Bill Comparison

Large Biotech



Bill Comparison

Box-store/Office Tower



Bill Comparison

Medium Industrial



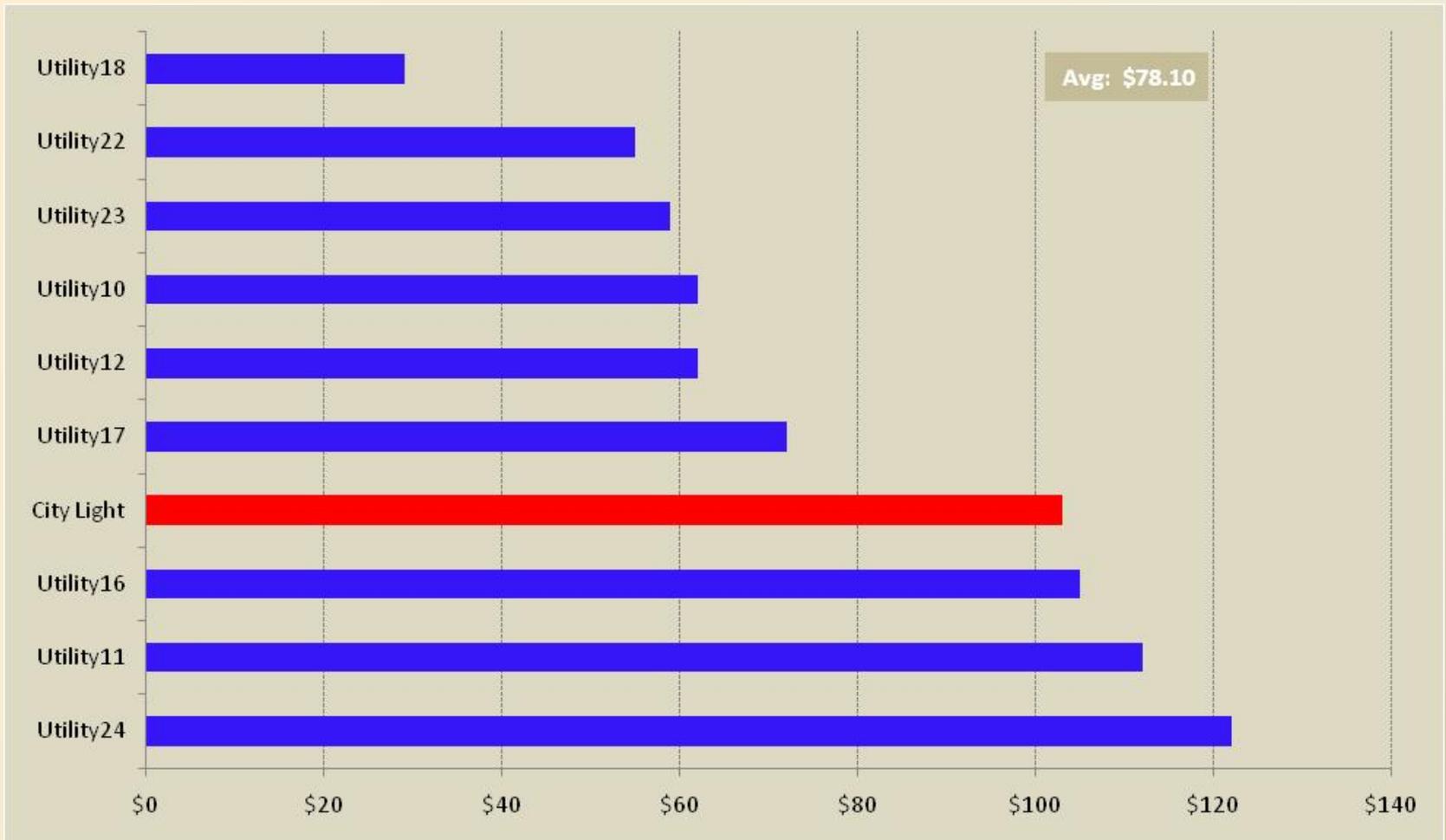
Bill Comparison

Small Manufacturing



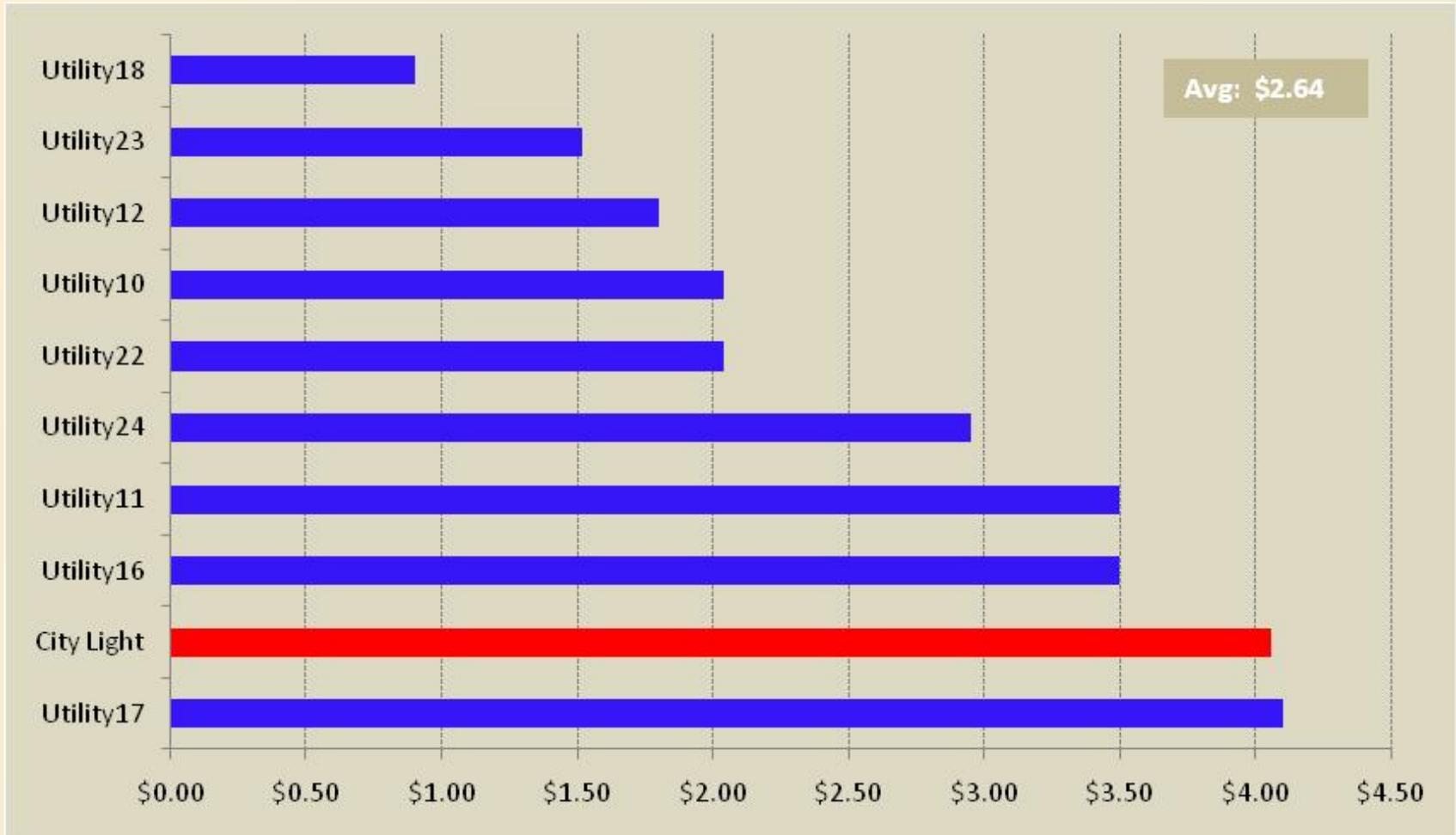
T&D System

Expense Per Customer



T&D System

Expense Per MWh of Load



Challenges

Challenges

➤ **T&D Issues**

- **Aging Distribution Infrastructure**
- **External Drivers: Utility Relocations & Regional Transmission Issues**
- **System Enhancement**

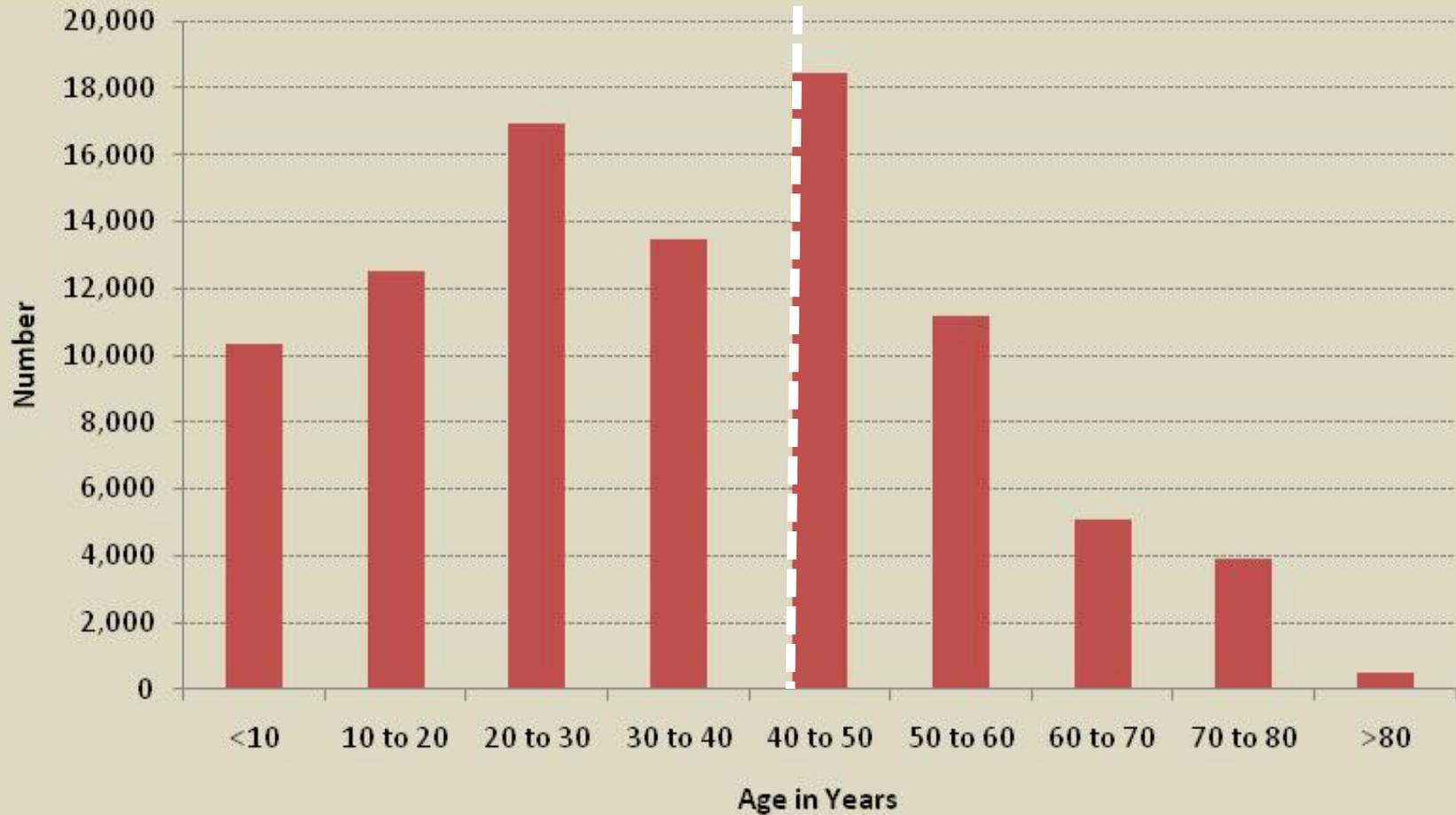
➤ **Generation Issues**

- **Resource Acquisition Costs**
- **Boundary Relicensing Cost**

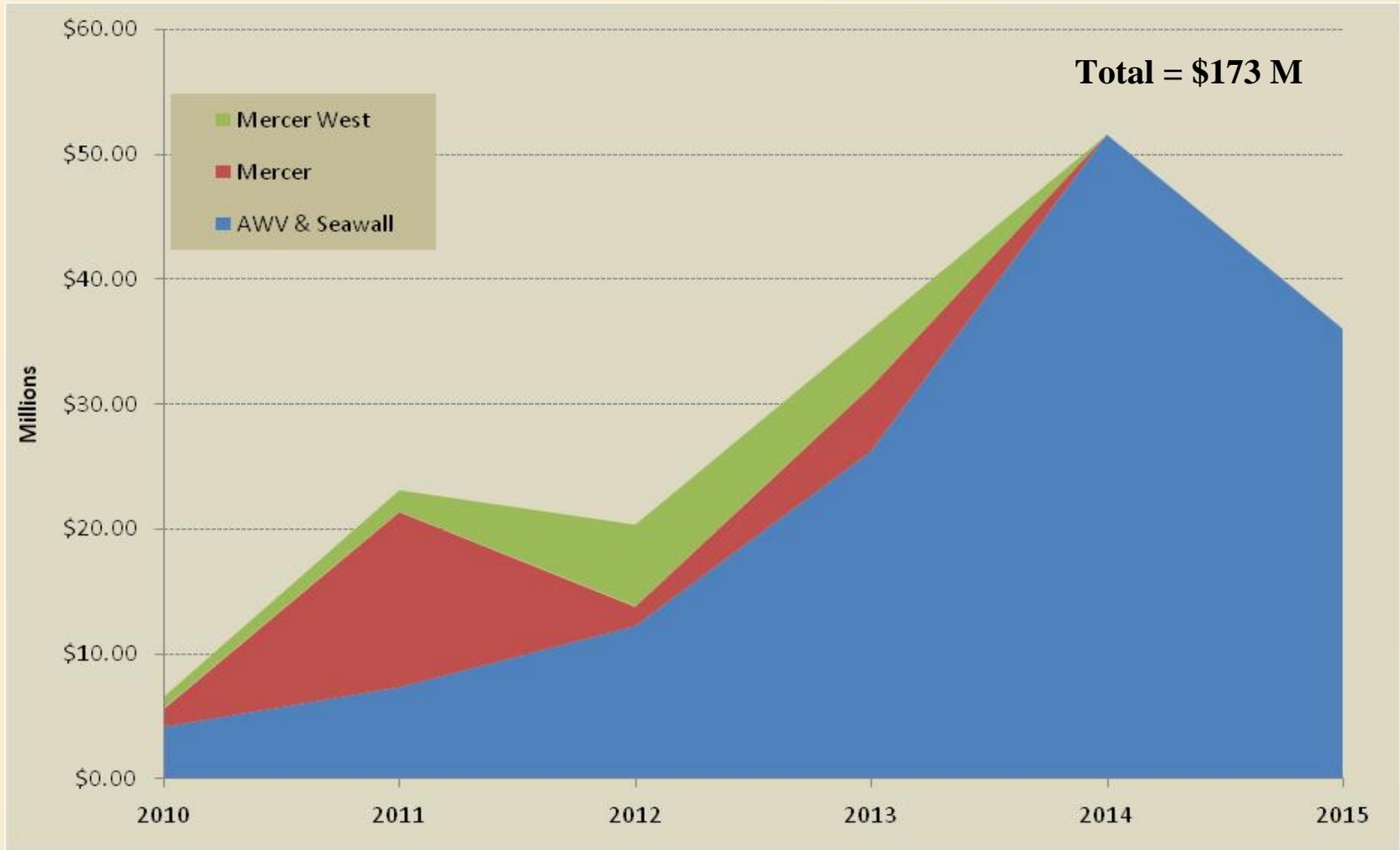
➤ **Utility Wide: Aging workforce**

Aging Infrastructure

Poles, For Example



External Cost Drivers



System Enhancements

- **System Automation (SCADA)**
- **Smart Meters**
 - **400,000+ Meters; ~ 40% over 30 years old**
 - **Replacement cost > \$100 million**
- **Smart Grid**

Challenges

➤ T&D Issues

- Aging Distribution Infrastructure
- External Drivers: Utility Relocations & Regional Transmission Issues
- System Enhancement

➤ Generation Issues

- Resource Acquisition Costs
- Boundary Relicensing Cost

➤ Utility Wide: Aging workforce

Boundary Dam License

- **Total Generating Capacity: 1,070 MW**
- **Produces around 27% of City Light's power**
- **Critical to Meeting Daily Load Peaks**
- **Relicense Expense Will Likely Double \$/MWh From the Plant**



Resource Acquisition

- **380,000 MWh of Renewable Energy or Credits by 2016**
- **\$/MWh Typically 3-4 Times City Light's Current Average Power Costs**
- **Will Add ~ 3% to Base Rates**

Challenges

➤ **T&D Issues**

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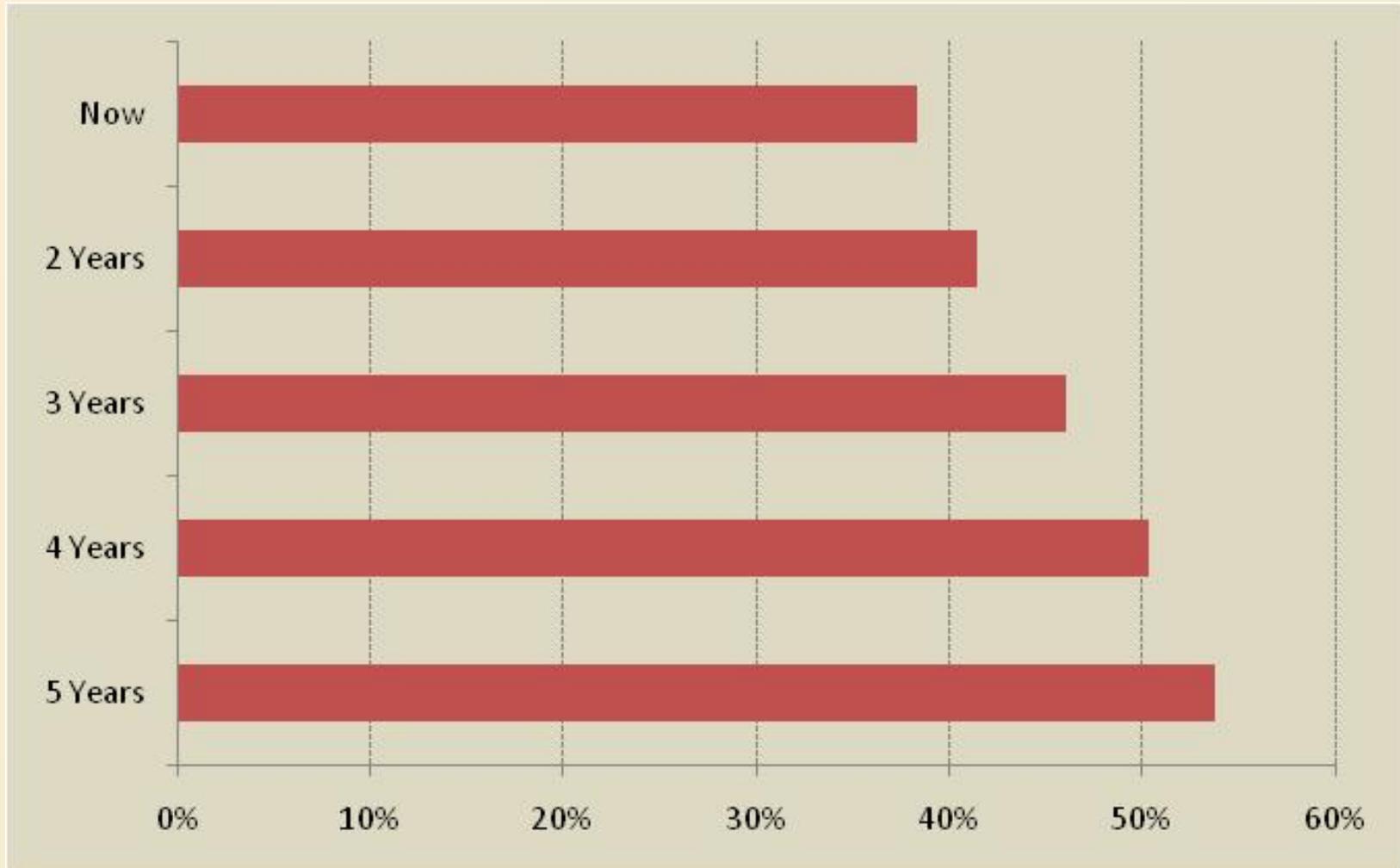
➤ **Generation Issues**

- **Resource Acquisition Costs**
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➤ **Utility Wide: Aging workforce**

Workforce

% of Workforce Eligible to Retire



Questions?