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# TECHNICAL REPORTING AND MONITORING

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Regulation for Practitioners

*Building Capacity through Participation*

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# Need for Reported Information

- Regulatory Fee Computation
- Review of Appropriateness of Tariff / Prices
- Benchmarking
- Monitoring Compliance with License Agreement
- Quality of Service Monitoring / Identification of Problem Areas
- Transparency of Operating and Financial Information
  - To Regulator, Investors, Customers and even Provider itself
- Other?



# How is Information Used?

## ■ Regulator

- Allows for comparisons that can show trends (good or bad trends)
- Provides information in a manner that is most useful to regulators
- Information necessary for setting tariffs and monitoring quality

## ■ Investor

- Transparency helps show health or problems of company
- Can show the quality of management and what is being done with funds (money spent on investment not management bonuses)

## ■ Management of Provider

- Provides internal consistency
- Consistent measurement of profit and losses
- Useful when looking for fraud or internal control problems

## ■ Customers / Public

- Instills confidence that prices are appropriate
- Assists in educating on cost and operations of provider



# Key Decisions

- How much information?
  - Too little or too much?
- Should different companies have different reporting requirements?
  - Vary by size?
  - Vary by activity?
- How often and when should information be provided?
  - Annual Reporting?
  - Only when certain activities occur?
  - Only when a regulator has a defined need?
- Is data provided in a form that allows comparisons?
  - Year-to-Year?
  - Among Providers?



# Key Decisions (Continued)

- How often should the reporting requirements be reviewed and updated?
- Who will have access to the information?
  - Confidentiality Concerns?
- Is data collection coordinated with other governmental authorities?
  - Example: Taxing Authorities
- What is the penalty for not providing the requested data?



# Consistent Accounting Format

- Standardized Manner of Accounting for Financial Data (Investments, Revenues, Costs)
  - Allows for comparability among providers and from year-to-year
  - Common system to record the accounting data on the books and records of the provider
  - Not meant to replace or duplicate the standardized mandates and directives of the national accounting board or the International Accounting Standards Board
  - Best if do not make frequent changes so can maintain consistency

Uniform System of Accounts



# Uniform System of Accounts

- All Accounts Have a Number...

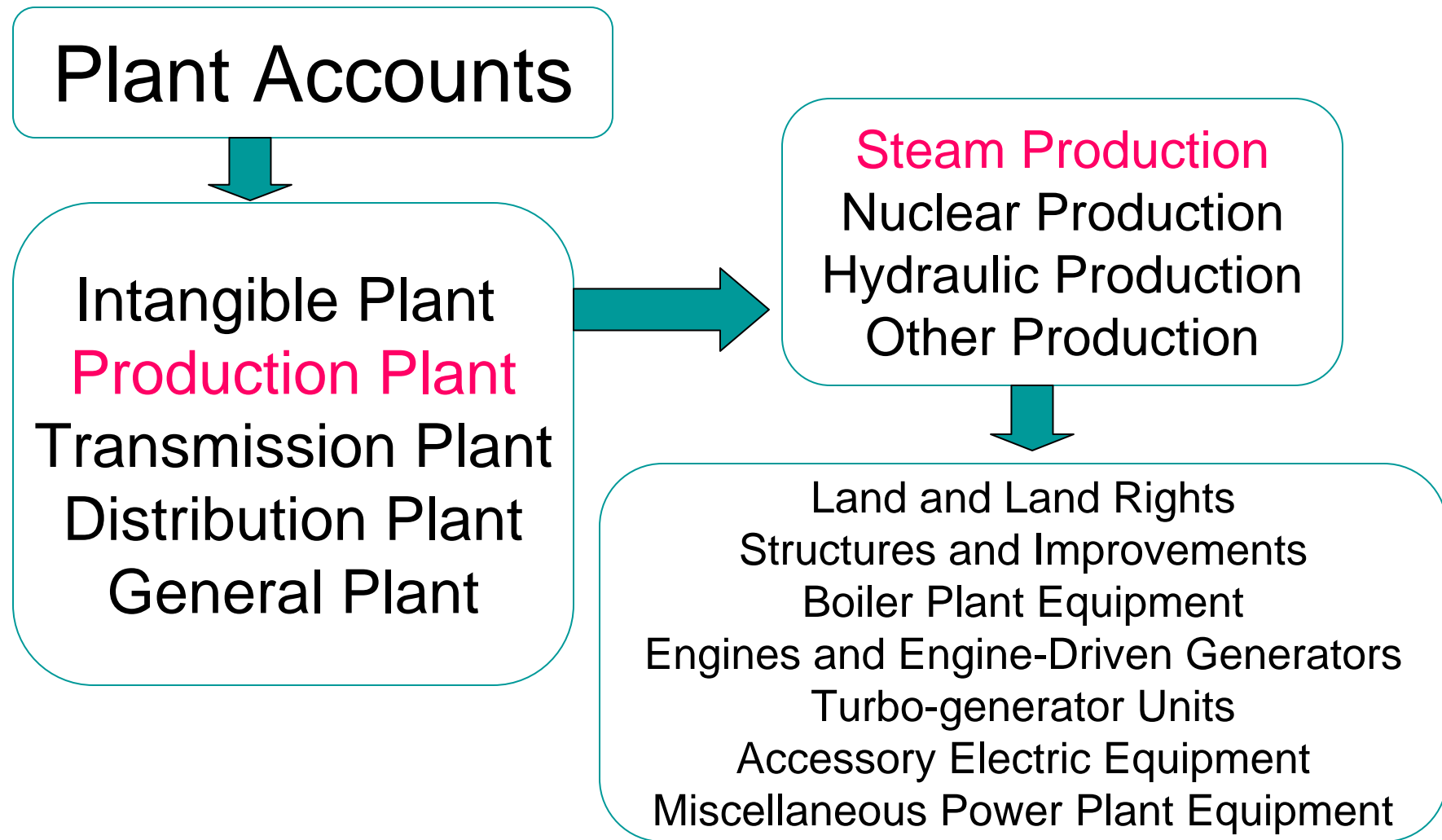
## ...And the Numbers Mean Something

# Electric Provider Example

- |      |  |
|------|--|
| 100s | Assets and Other Debits  |
| 200s | Liabilities and Credits  |
| 300s | Plant  |
| 400s | Operating Income   |
| 500s | Operating and Maintenance Expenses                                 |
| 900s | Customer Accounting, Sales, Administrative<br>and General Expenses |

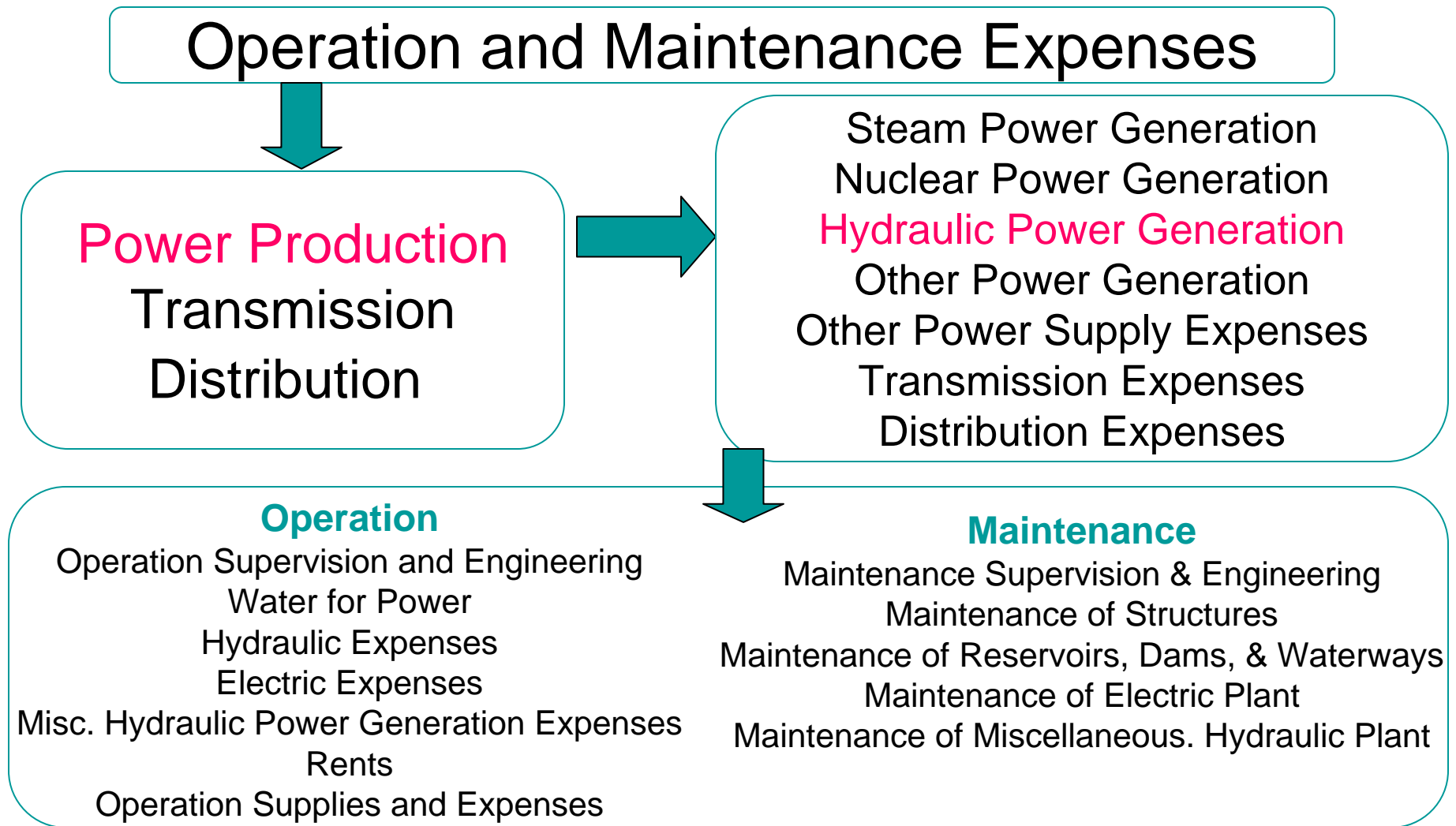
## 600s, 700s, 800s reserved for Natural Gas and Oil Pipeline Operations

# Uniform System of Accounts Example





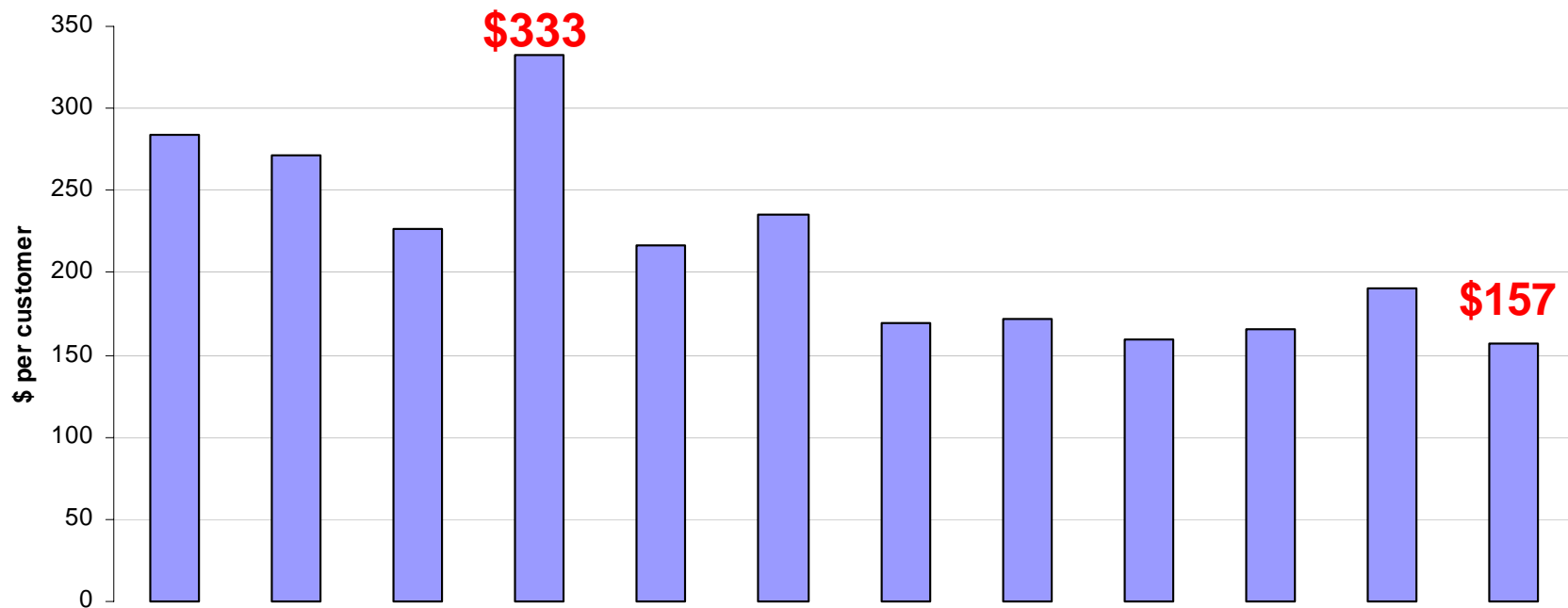
# Another Uniform System of Accounts Example



# Consistent Accounting Data Example

Comparative Data allows for Identification of Trends and Problems

## Administrative and General Cost per Customer



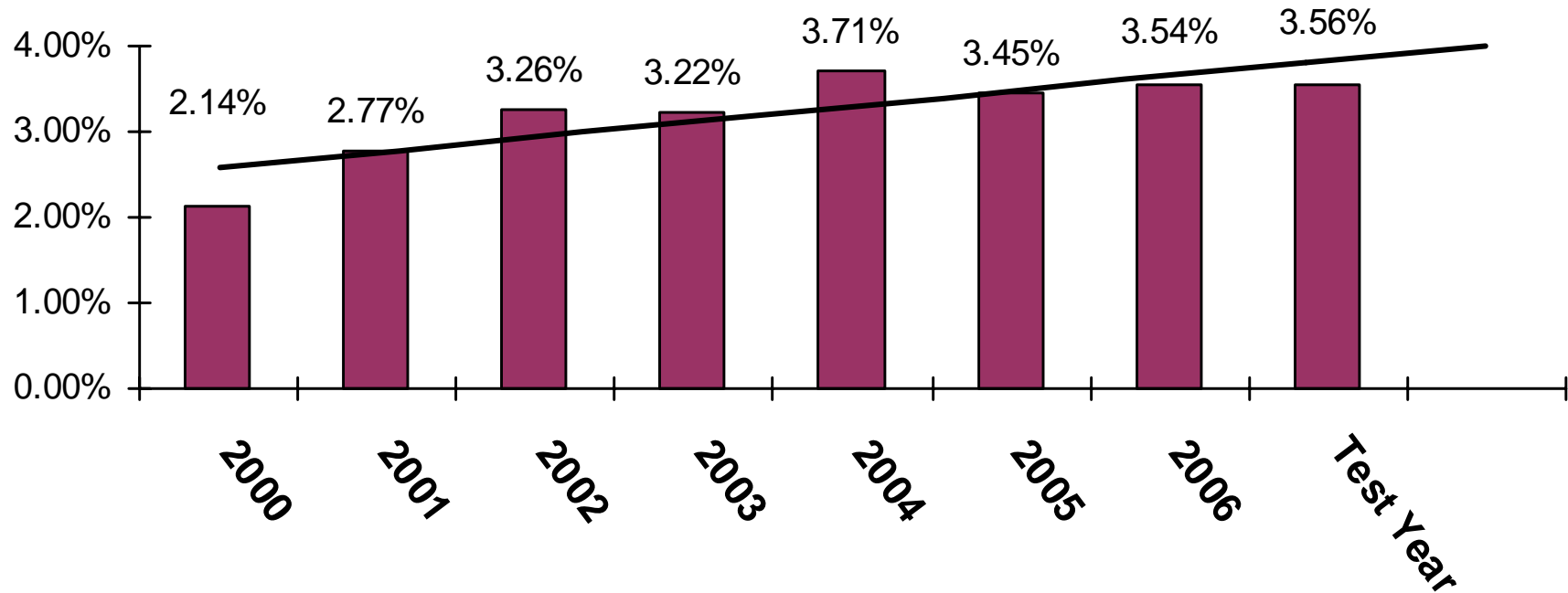
Data taken from series of pricing cases and compliance filings  
from a single provider over a 10 year period



# Benchmarking Example

Consistent Data Allows for More Benchmarking

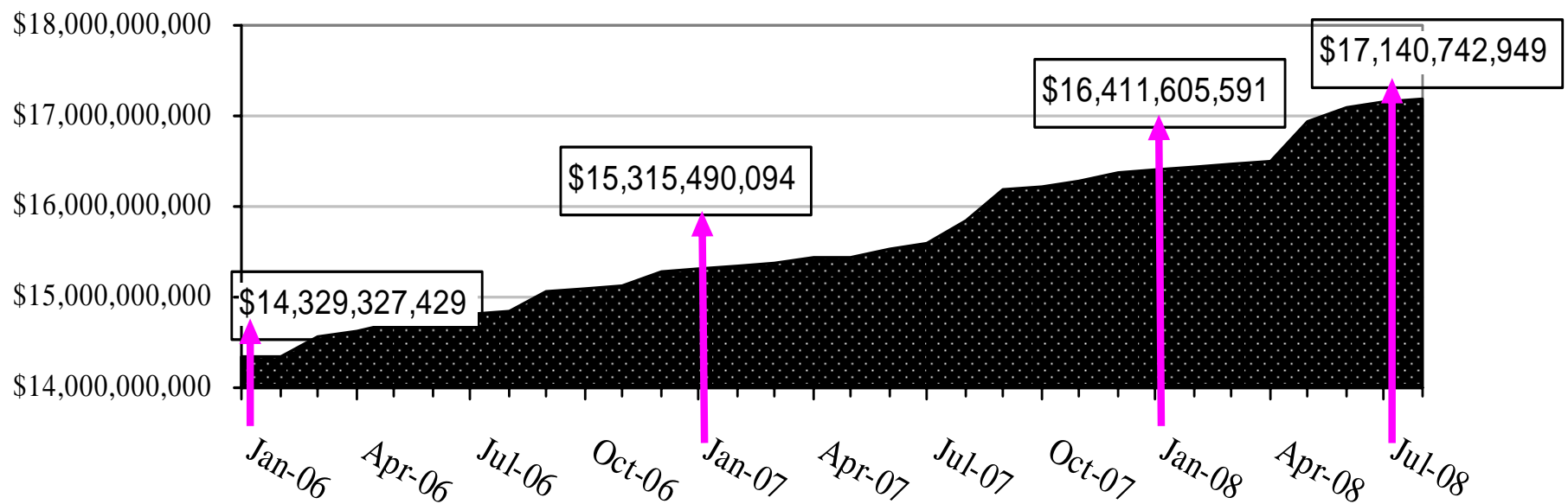
**Annual Maintenance Expense as % of Net Plant**



# Time Series Analysis Example

Trend Analysis Allows for Review of Promises versus Actions

**Total Company Electric Plant in Service  
(Undepreciated)**



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# Annual Report from Provider to Regulator

## ■ General Information

- ❑ Contact Names and Numbers (for Emergencies, for Complaints, for Regulation)
- ❑ Corporate Organizational Chart
- ❑ Service Areas and Penetration Levels in Each Area

## ■ Management and Employee Information

- ❑ List of Officers, Department Managers
- ❑ Number of Employees by Department
- ❑ Salary and Payroll Information



# Annual Report from Provider to Regulator

## (Continued)

- Financial Information
  - ❑ Detail on Borrowings, Equity
  - ❑ Detail on Plant, Property, and Equipment
  - ❑ Detail on Revenues
  - ❑ Detail on Expenses
  - ❑ Detail on Taxes
  - ❑ Other Financial Specifics
- Sworn Oath as to Accuracy of the Information being Provided
  - Signature of Officer or Responsible Management Person



# Annual Report from Provider to Regulator (Continued)

- **Service and Reliability Information**
  - ❑ Losses – Technical, Other
  - ❑ Description of Property
    - Number of Substations
    - Kilometers of Overhead Line versus Underground Line
  - ❑ Number and Types of Customers by Class
  - ❑ Number and Types of Customer Complaints
  - ❑ Customer Satisfaction Survey Results
  - ❑ Sources of Power
    - Peak Load and Usage Data
  - ❑ Location, Frequency and Duration of Service Outages
  - ❑ Forecast of Major Facilities Expected to be Installed in next few years (3-5 years)



# Annual Report from Provider to Regulator (Continued)

- Other Items for Possible Reporting\*
  - ❑ Accidents / Safety Reports
  - ❑ Construction Monitoring
  - ❑ Affiliate Transaction Reporting
  - ❑ Environmental Standards Compliance
  - ❑ Renewable Energy Standards Compliance

\* It may be important to monitor these matters on a more frequent time basis than annually.

For example, accidents are often reported within hours to the regulatory agency.





# More Monitoring Examples

## Testing of Distribution Meters

Number of distribution meters tested during year \_\_\_\_\_

Number of meters which tested more than 2% slow \_\_\_\_\_

Number of meters which tested more than 2% fast \_\_\_\_\_

Explain test schedules:

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# More Monitoring Examples (Continued)

## Service Outage Information Real-time, On-line Reporting

Incident Time	Company				
4/24/2009 11:30:00 AM	 Duke Energy Kentucky, Inc.	<b>Possible Cause:</b> Tree limb on the line. Possible defective reclosure at the substation updated 4/24/2009 9:19:26 PM	County	Customers Out	% County Out
			<b>Kenton</b>	1	.00
4/10/2009 1:00:00 PM	 Kentucky Utilities Company	<b>Possible Cause:</b> Possible Tornado touched down in Mannington, KY causing damage to KU facilities. <b>Comment:</b> Crofton & Mannington areas out affecting 882 customers since 1pm EDT this afternoon. All but 190 were restored as of 17:38pm this evening.	County	Customers Out	% County Out
			<b>Christian</b>	190	.70



# More Monitoring Examples (Continued)

## Transmission Lines Added Last Year (Information for Each New Line)

Terminal Location – From  
Terminal Location – To  
Percent Ownership  
Line Length (kilometers)  
Line Type (underground, overhead)  
Voltage Type (AD, DC)  
Voltage, Operating (kilovolts)  
Voltage, Design (kilovolts)

Conductor Size  
Conductor Material Type  
Conductor Configuration  
Circuits per Structure  
Pole/Tower Type  
Rated Capacity  
In-Service Date

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Land and Land Rights Costs  
Pole, tower, and Fixture Costs  
Conductor and Device Costs  
Construction and Other Costs



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# Discussion Questions

- What data would you like to see that is not being reported?
- What difficulties do you encounter because of the lack of accurate, accessible, consistent information?
- Is the data you are receiving accurate and complete?
- How would making the data more accessible to the public be helpful or harmful to the regulatory oversight process and the work you do?

