

# **ERCOT**

## **Cost Comparison Study (CCS)**

### **Board Meeting**

**ERCOT**  
**March 15, 2005**

# Agenda

- Study Overview
- Overall Findings
- Sample Comparisons
  - ❖ Revenue Requirement
  - ❖ Outstanding Long-term Debt
  - ❖ Budgeted Capital Expenditures
  - ❖ Governance Structures



# Purpose

- Prepare and provide ERCOT with a ISO Cost Comparison Study that documents:
  - ❖ What are ERCOT's costs
  - ❖ How ERCOT compares with the other ISOs
  - ❖ Reasons for Cost differences
    - Cost Drivers
    - ISO Characteristics

# Approach / Methodology

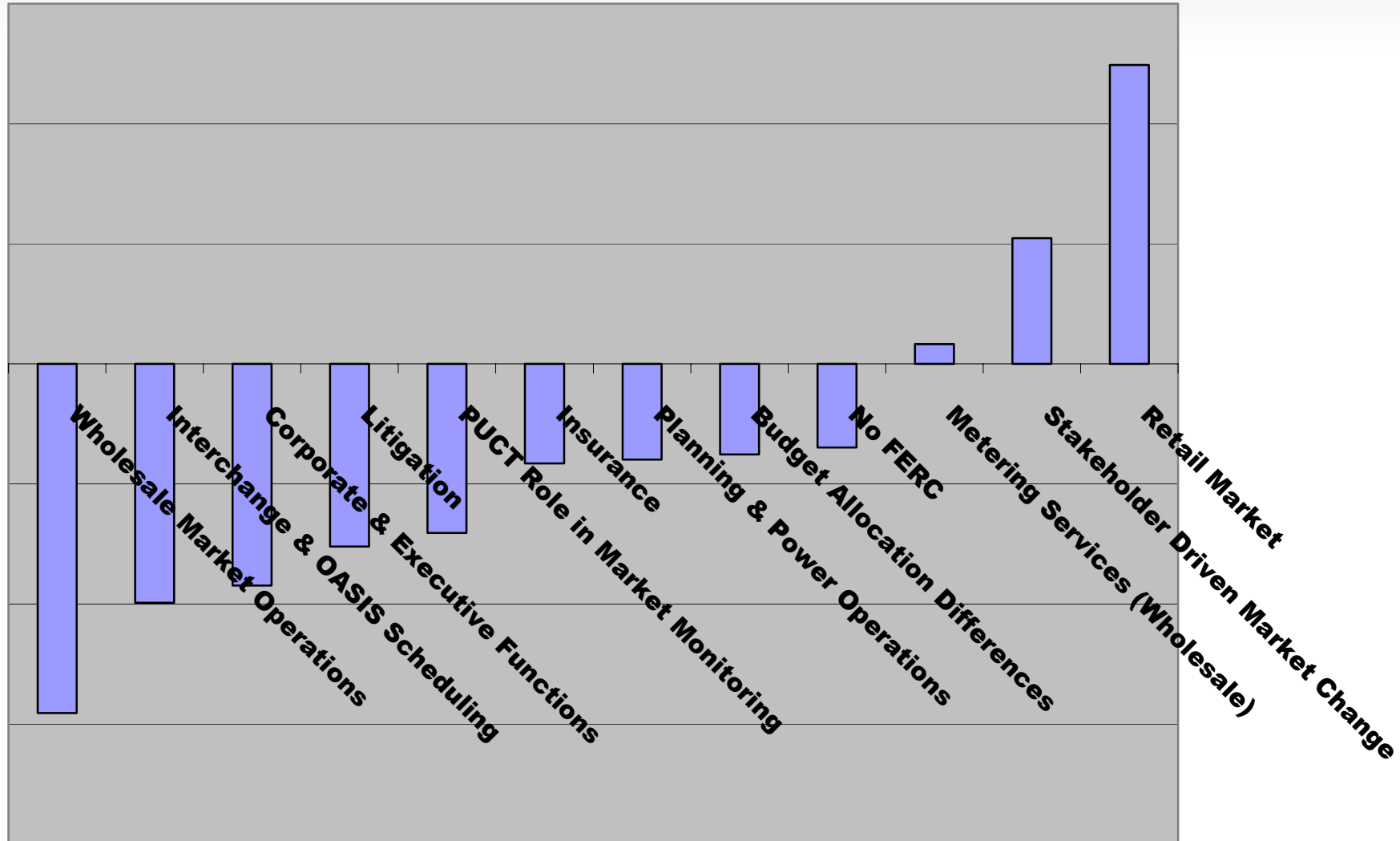
- Compile information regarding costs and activities
- Analyze compiled information considering:
  - ❖ Available Quantitative Cost Data
  - ❖ Functional Differences
  - ❖ Geographic Scope
  - ❖ ISO Characteristics
- Prepare findings and document observations
  - ❖ Identify common metrics to normalize results
  - ❖ Identify drivers that impact costs



## Overall Findings

- ERCOT's overall costs budgeted for 2004 are about \$90M (not including capital expenditures and debt service) and are lower than the average among the ISOs examined.
- ERCOT's costs are lower than average in most cost categories.
- ERCOT's costs are higher than average associated with ERCOT's unique roles as operator of retail markets and wholesale metering services.
- ERCOT's costs are higher than average associated with market evolution where the ERCOT stakeholder process apparently drives somewhat higher costs.

# ERCOT General Costs Relative to Average



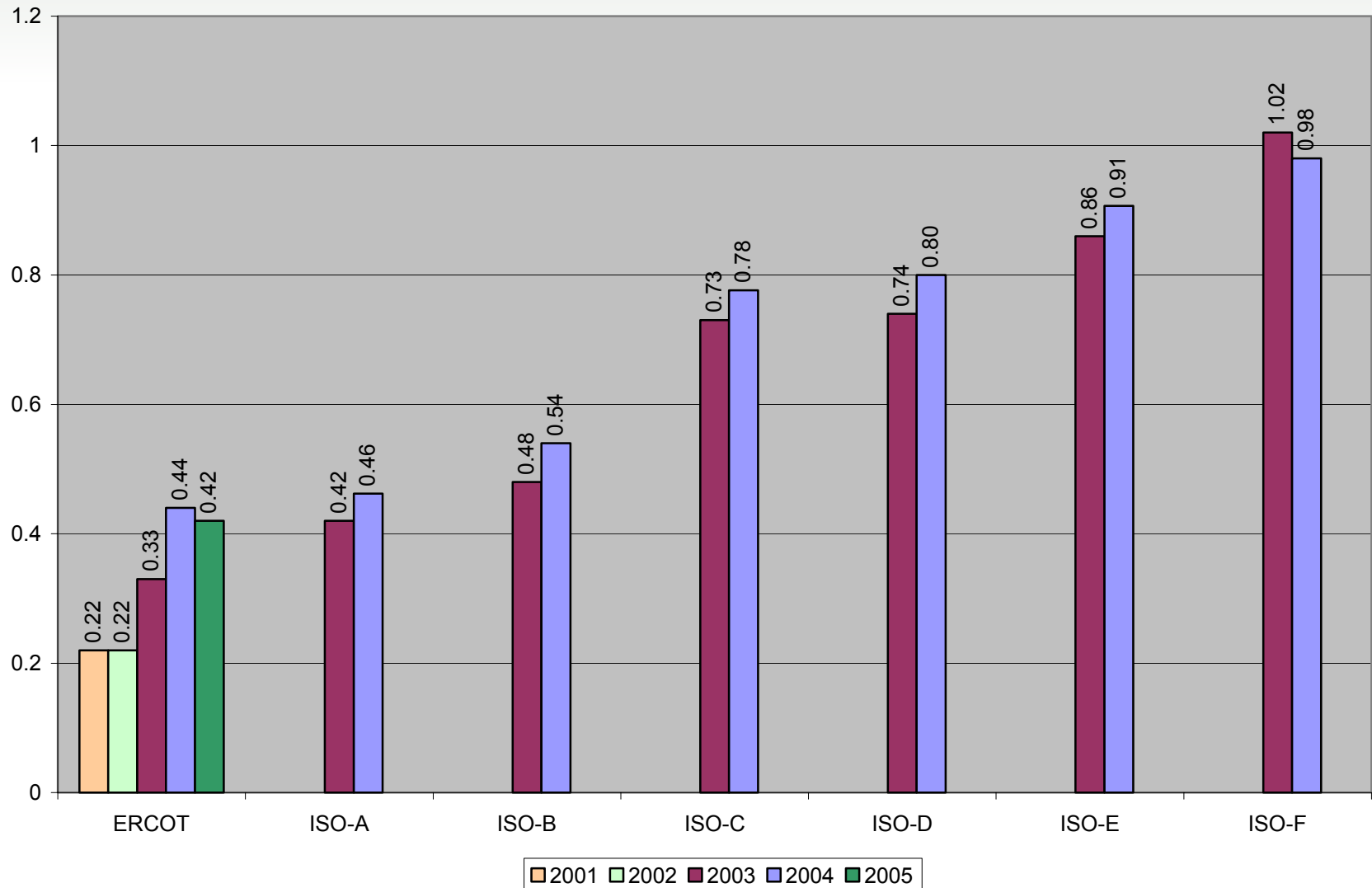


# Sample Comparisons

- Revenue Requirement
- Outstanding Long-term Debt
- Budgeted Capital Expenditures
- Governance Structures

# Revenue Requirement per annual Volume (MWh)

Grid Charge (\$/MWh)



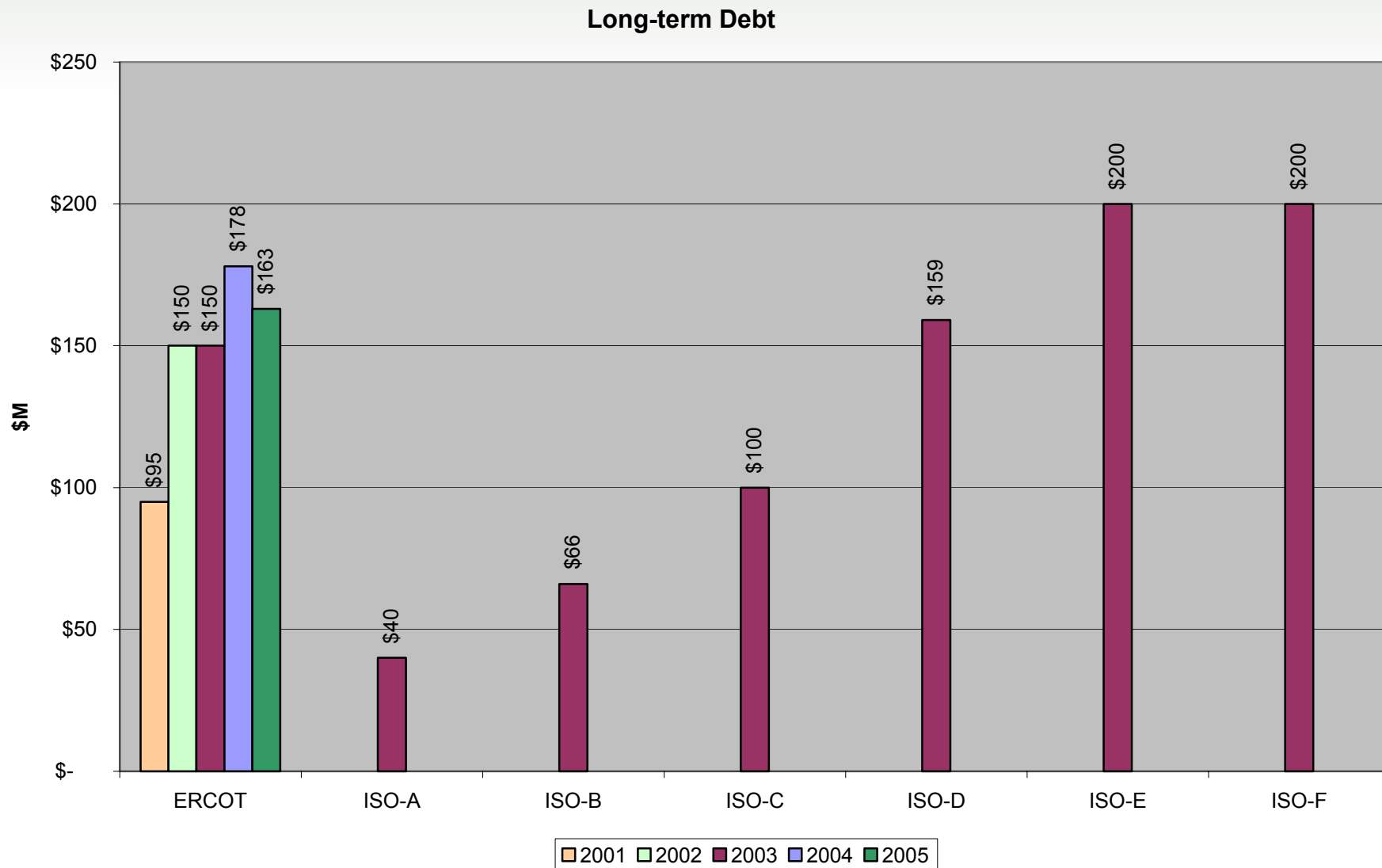




# Revenue Requirement

- Each ISO defines their "Revenue Requirement" differently, and have different long term cost recovery mechanisms.
- Most of the tariff revenue requirement is collected on a MWh basis for all of the ISOs, and except for a couple of ISOs, most of this is collected from Load (users).
- Among ISOs with the separate Capacity markets, there is broad comparability in the way the ISO tariffs group costs into service categories.
- Most of the ISOs collect the greatest portion of their revenue requirement under the Scheduling category, but among ISOs that have unbundled, significant portions are collected under Energy Administration.

# Outstanding Long-term Debt



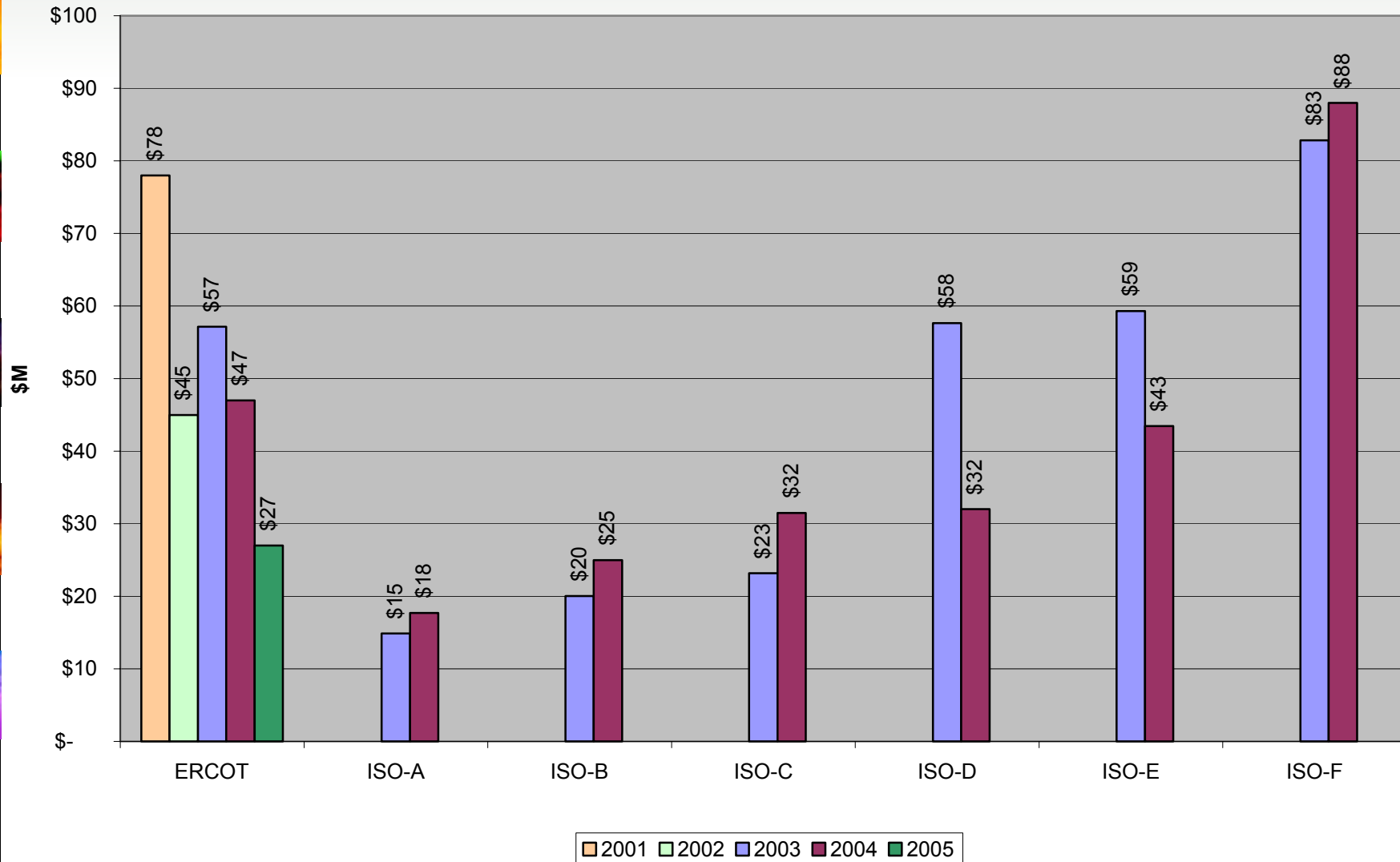


# Outstanding Long-term Debt

- Long term debt is the only significant source of financing for ISOs.
- Most of the Long Term Debt issued by the ISOs, was originally incurred to fund startup and pre-operating costs, and to repay members of predecessor power pools.
- More mature ISO's are not using Long Term Debt to support Working Capital.
- ISOs establishing new markets may be using Long Term Debt to support Working Capital.
- The ISOs have been able to issue Long Term Debt on reasonable commercial terms.

# Budgeted Capital Expenditures

Capital Expenditures





# Budgeted Capital Expenditures

- Budgets over time are very much a factor of where the different ISO's are in terms of implementing major new market systems and the development timeframe for each project.
- Some ISO's do not have comparable single large projects underway; while others are nearing completion of major project to re-do the market and operations systems.
- ERCOT's capital budget seem higher than the average due:
  - ❖ By the volume of ongoing market improvements that is a stakeholder driven process.
  - ❖ Deregulated Retail market responsibilities and Wholesale metering services.



# Governance Structures

## ■ Board Composition

- ❖ Independent and unaffiliated based members
- ❖ Market participant based members

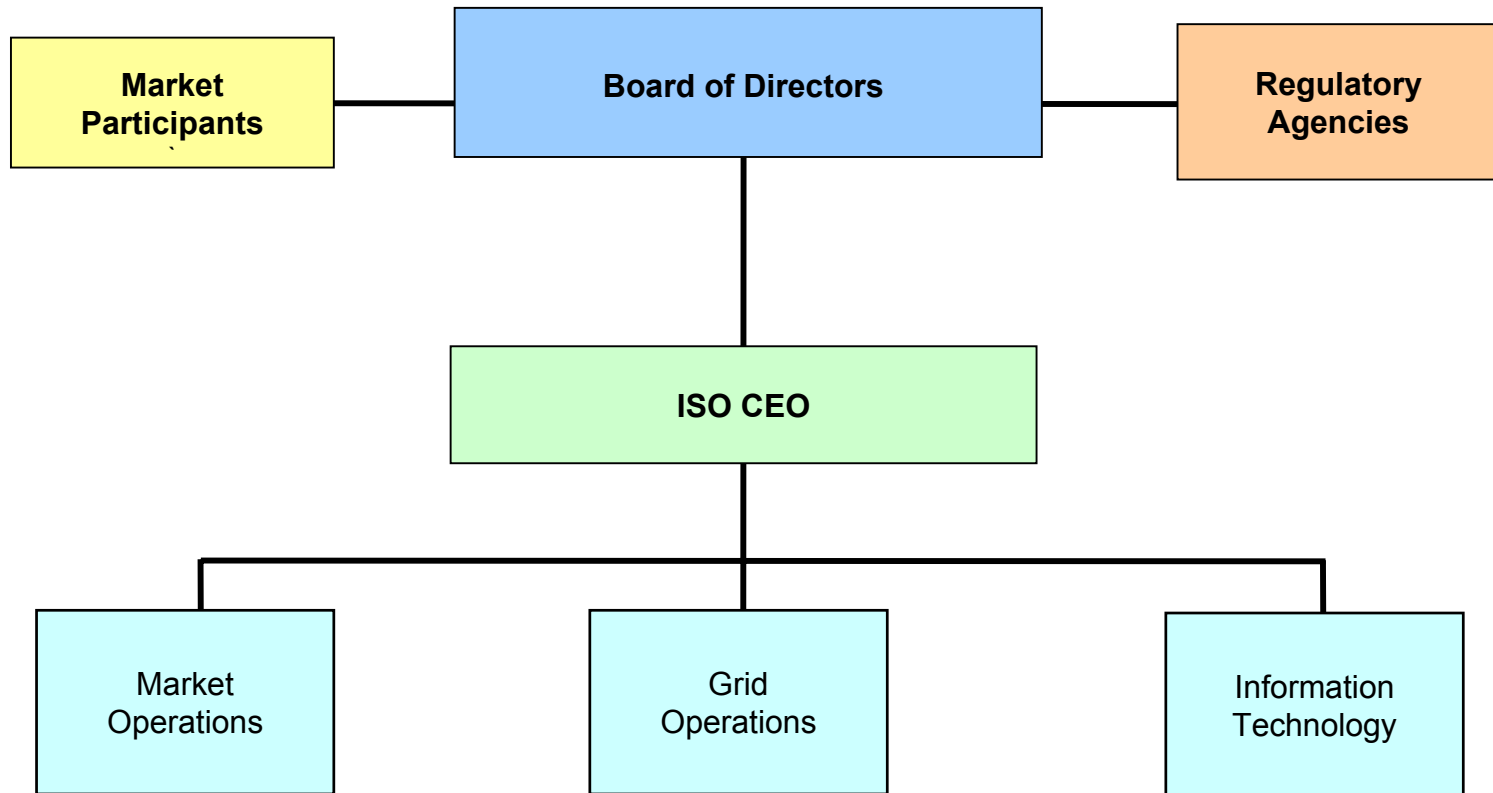
## ■ Board Appointment

- ❖ Elected by committee
- ❖ Members elect Board of Directors
- ❖ Appointed by government agency
- ❖ Self-renewing Board

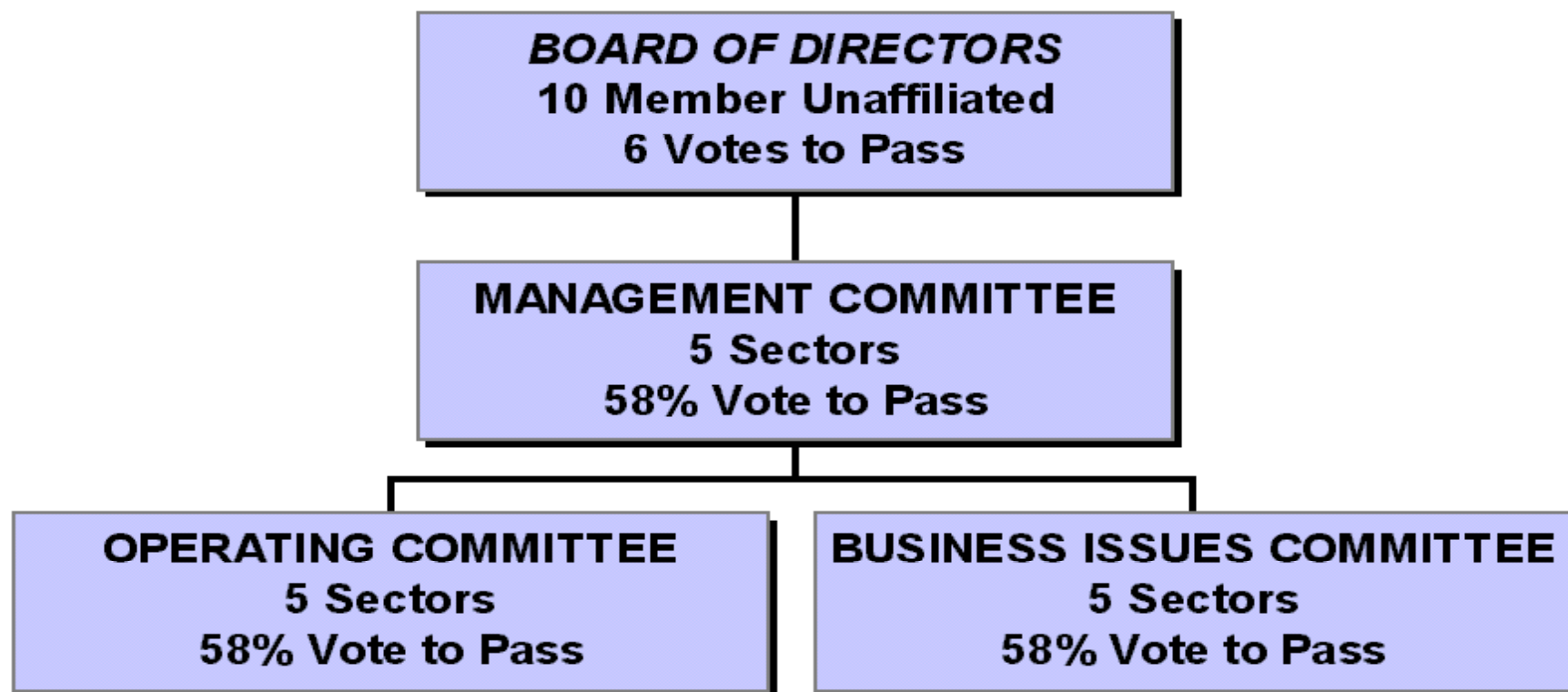
## ■ ISO Governance

- ❖ Heavy stakeholder influence
- ❖ Committee based influence
- ❖ No stakeholder influence

# Organization Structure – Participant Based

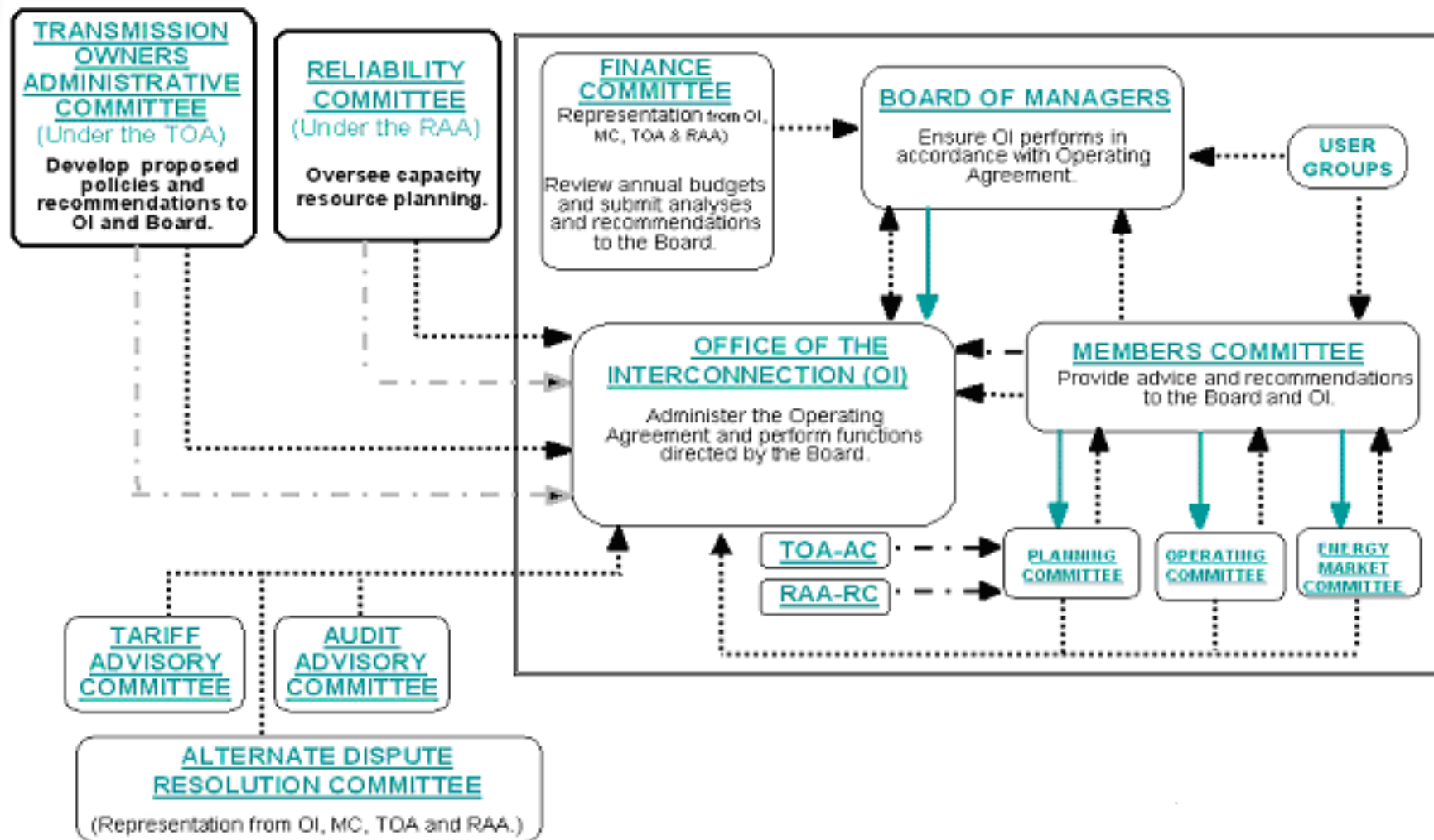


# Organization Structure – Committee Based





# Organization Structure – Corporation Based



Questions?

