



# Energy Delivery and Sales

# Agenda

- **Western U.S. power market issues**
- **Power marketing and trading**
  - **Hedging**
  - **Marketing and trading**
- **APS regulated delivery**

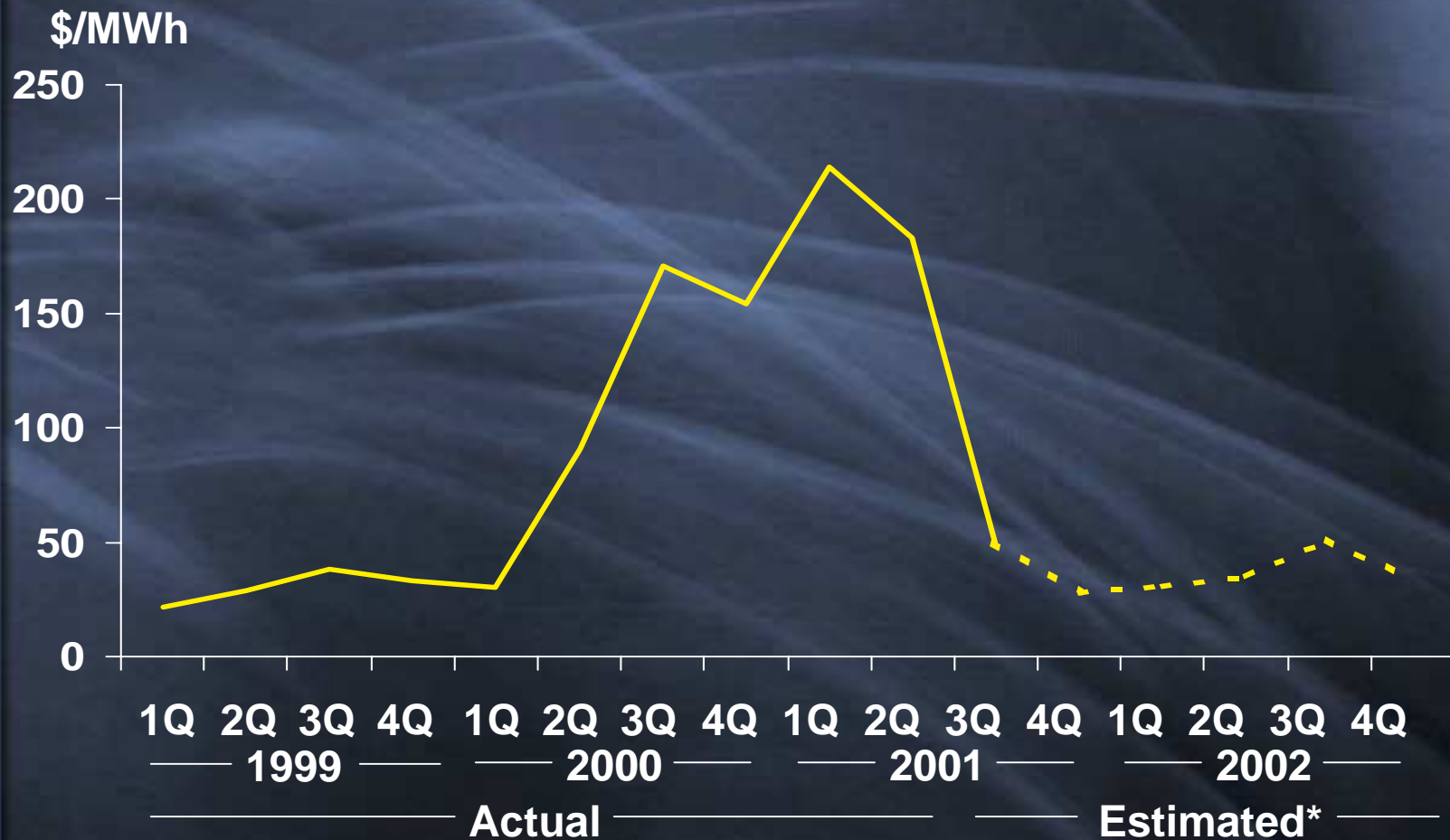


# Western U.S. Power Market Issues

# FERC Activity

- Wholesale electricity price caps
- California refunds
- Northwest refunds

# Effect of FERC Electricity Price Caps Palo Verde On-Peak Prices (Quarterly Averages)

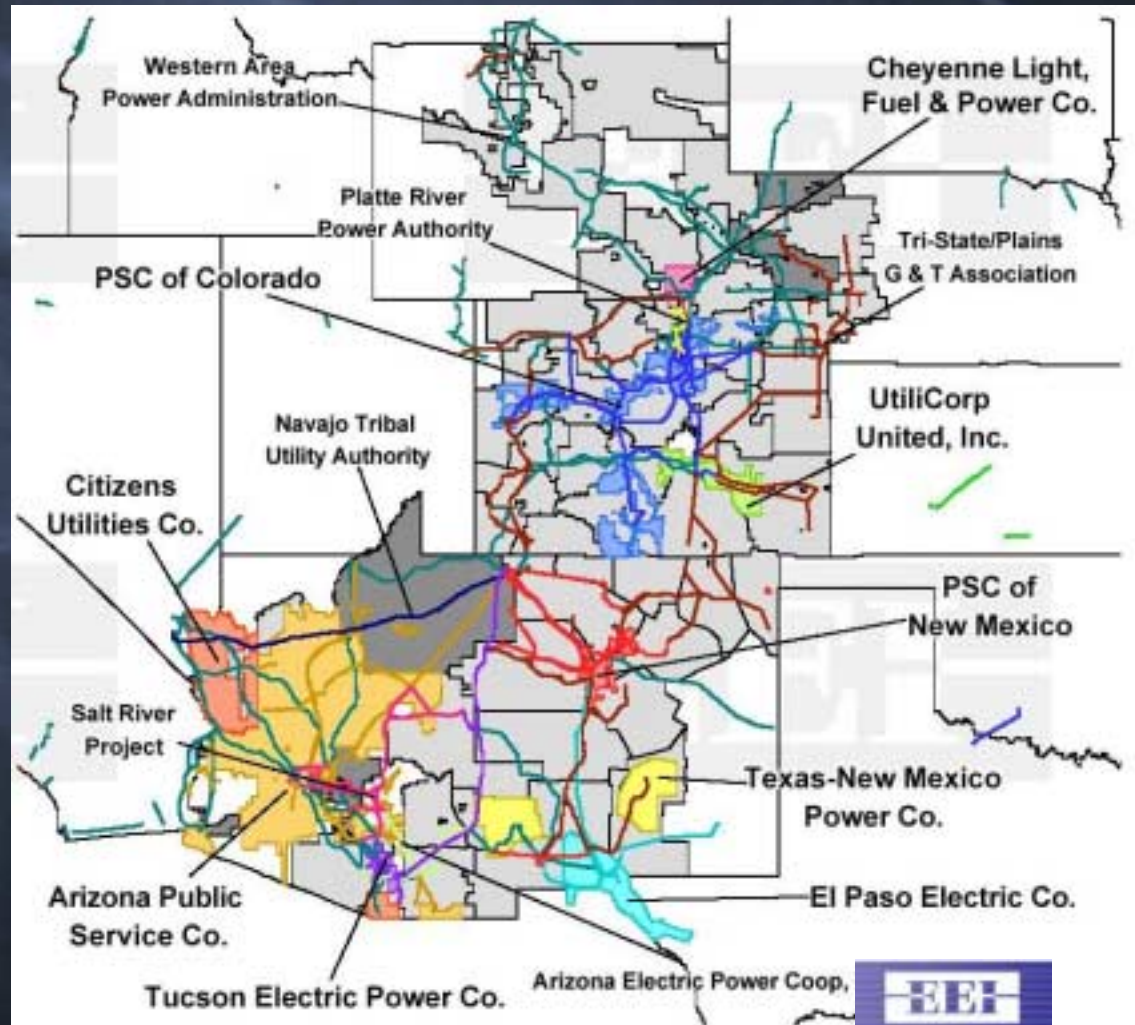


\* Based on forward prices as of 10/10/01

# Regional Transmission Organizations (RTO)

- **FERC actions**
- **Western perspectives**
- **Arizona Corporation  
Commission perspective**
- **APS a leader**

# West Connect RTO





# Pinnacle West Power Marketing & Trading



```
graph TD; A["Pinnacle West Power Marketing & Trading"] --- B("Hedging Electricity and Gas Needs"); A --- C("Wholesale Sales and Trading");
```

**Pinnacle West  
Power Marketing & Trading**

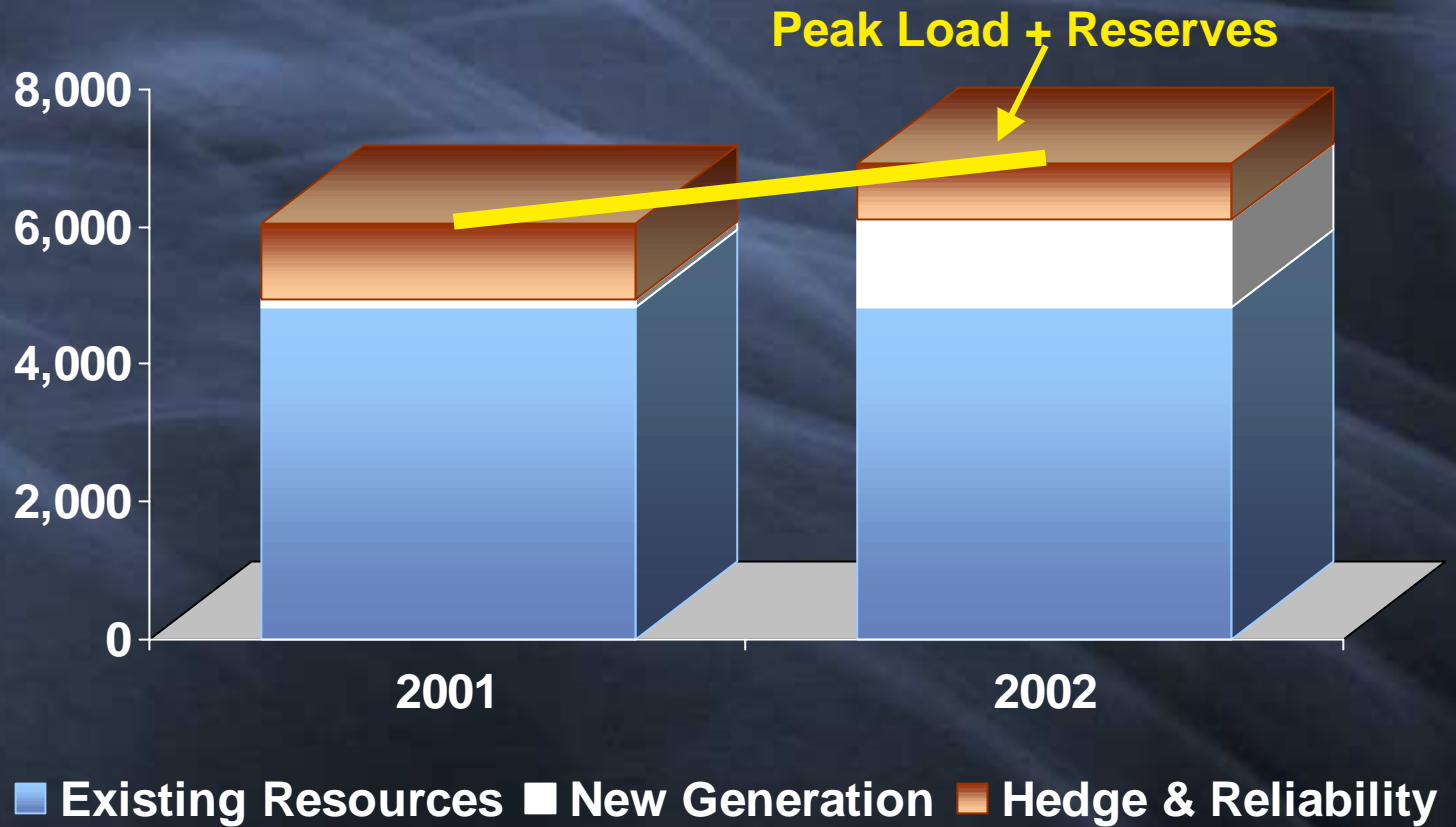
**Hedging Electricity  
and Gas Needs**

**Wholesale Sales  
and Trading**

# Hedging Techniques

- **Electricity**
  - **Forward Contracts**
  - **Options**
  - **Basis Swaps**
- **Natural Gas**
  - **NYMEX Futures Contracts**
  - **Basis Swaps**
  - **Swing Options**


# Enterprise Electric Hedge Strategy



# Pinnacle West Power Marketing Results In Changing Markets



\* Pretax revenue net of energy costs

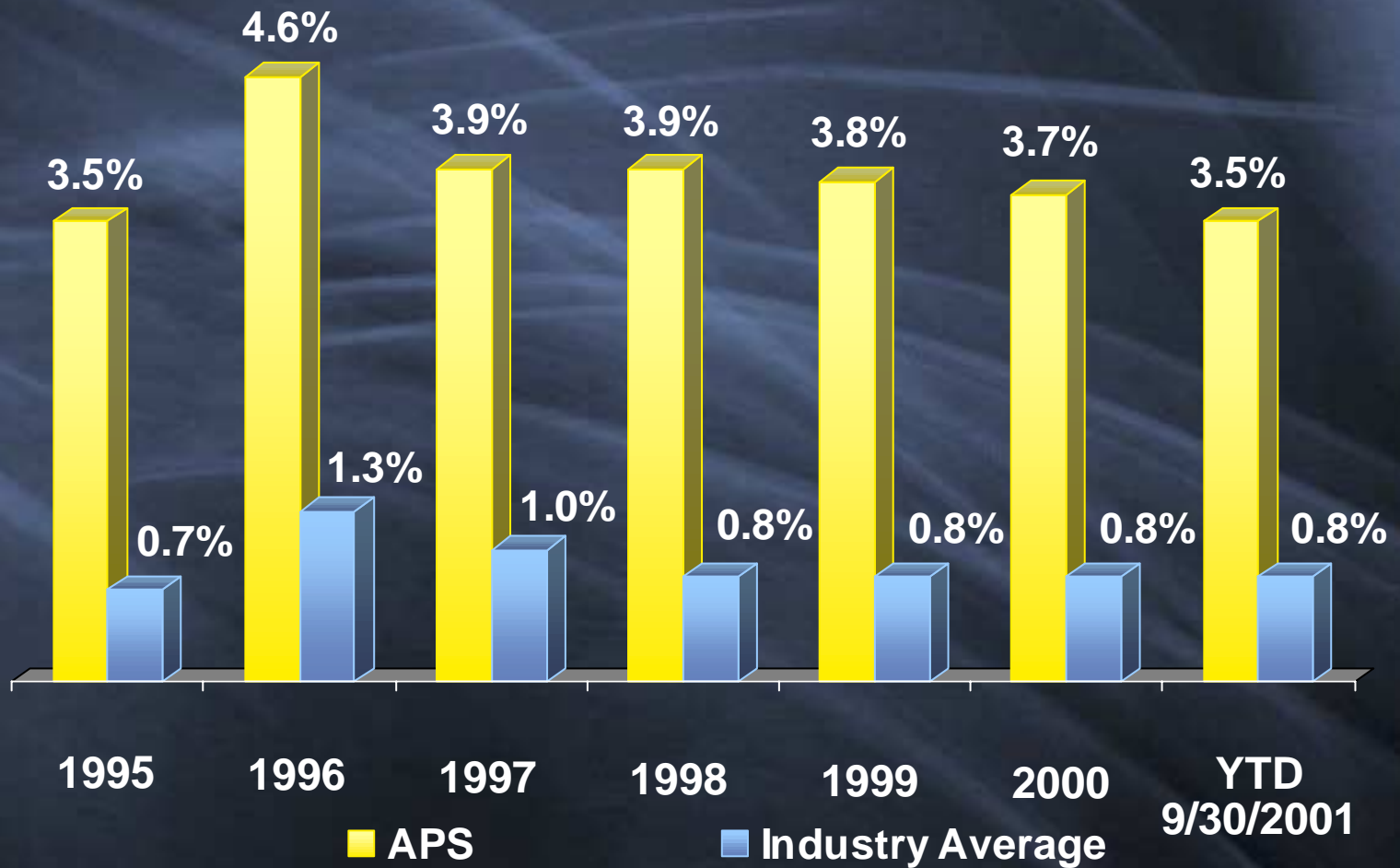


# Regulated Delivery

# APS Regulated Delivery Strategies

- **High-growth service territory**
- **Value to customers**
  - **Price competitiveness**
  - **Reliability**
  - **Excellent service**
- **Energy procurement risk management**
- **Unit cost reduction**
- **Regulatory relationships**

# Superior Customer Growth



# Arizona Regulatory Issues Update

- **2001 regulatory plan**
- **Court appeals status**
  - **Electric competition rules**
  - **1999 APS settlement**
- **2003 rate filing**

# Pinnacle West Market Opportunities Summary

- **Optimizing benefits of retail load**
- **Capturing wholesale market opportunities**
- **Managing procurement risks**