

Financial Sustainability

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Outline

- **Financial Sustainability and Resource Planning – What Does it Mean?**
- **Background**
- **Issues With Alternative Resource Options**
- **How Others Are Dealing With Issues**

What Does It Mean?

- **Financial Sustainability Means:**
 - There are no financial or regulatory barriers to implementing resource options that are in the best interests of customers
 - The utility is financially sound and can efficiently meet its public service obligations

Examples

- **Utility creditworthiness allows it to enter into long-term PPAs and conduct commodity hedging without onerous collateral, margining or prepayment provisions**
- **Full and efficient access to capital markets to fund necessary infrastructure expansion**
- **Clarity (agreement) on relevant policy choices that minimize cost recovery risk**

Current Economic Drivers

- **Robust customer growth**
 - Increases/accelerates need for new infrastructure to meet customer energy needs
- **Increased cost for all commodities**
 - Increases/accelerates the cost of new infrastructure
- **Increased exposure to natural gas**
 - Increases the unit cost of energy and its volatility

Policy Initiative Drivers

- **RES Rules**

- Requires acquisition from renewable energy sources to meet a defined % of customer' energy consumption by a certain future date

- **Energy Efficiency programs**

- Implementation of programs that reduce the amount of energy consumption

- **Environmental improvements**

- Additional investment in control technologies required by environmental regulations

- **Competitive generation market**

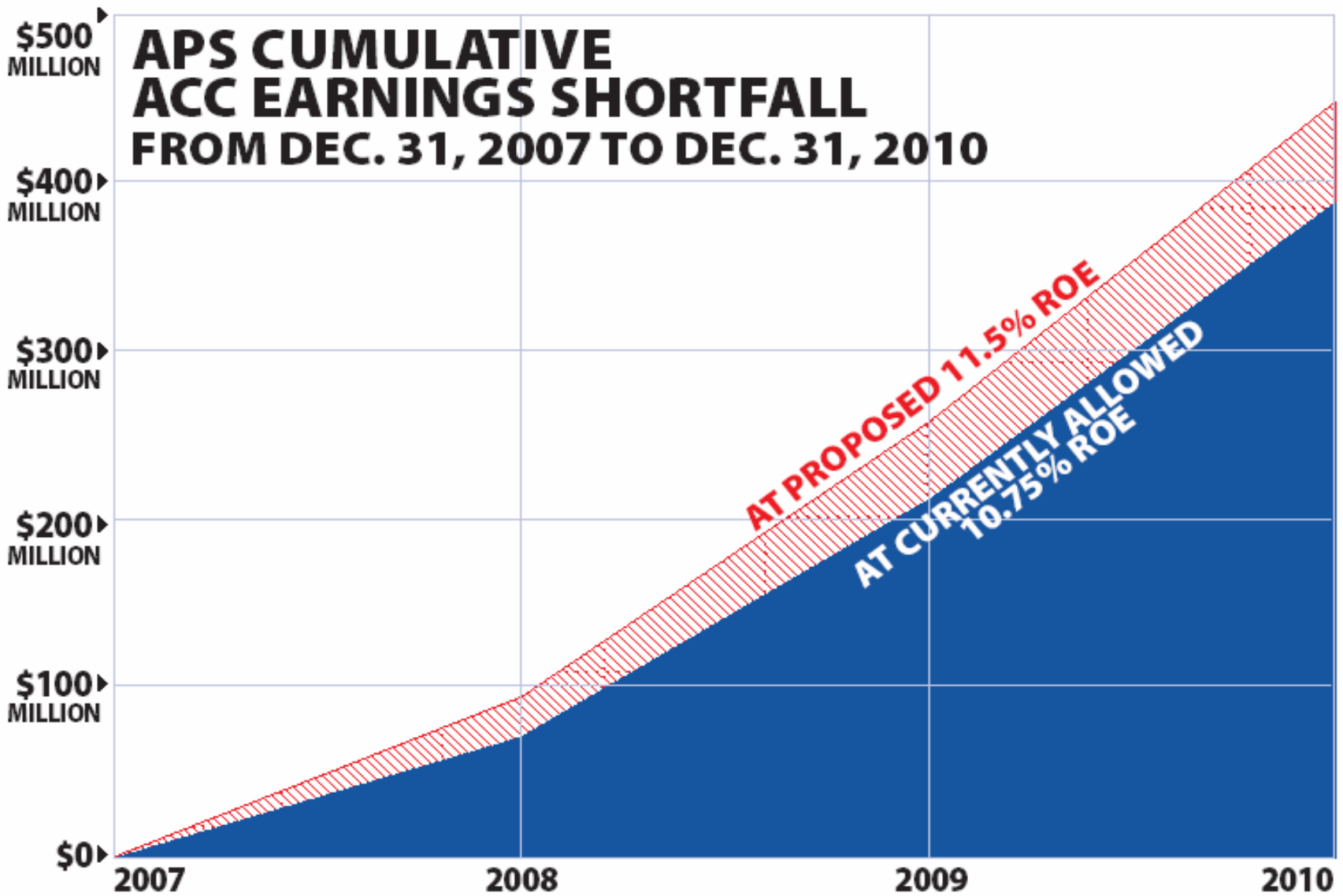
- Benefits of increased competition but must also recognize impact on utility credit metrics due to long-term PPAs

Responses to Drivers

- **Power Supply Adjustor (PSA)**
 - Addresses volatility and exposure to natural gas and the use of long-term PPA's
 - Stabilized earnings
 - Matched cash-flow with costs
 - Adopted a 90/10 sharing mechanism
- **RES Recovery Mechanism**
 - Matched cash-flow for new renewable program costs (customer incentives) and above-market renewable energy costs
- **DSM Adjustor**
 - Recovery of program costs and allowed limited incentive
 - Did not allow recovery of unrecovered fixed costs
- **EIS (Environmental Improvement Surcharge)**
 - Allowed limited collection as "CIAC" from customers for environmental projects
- **Modified Schedule 3**
 - New source of capital (CIAC) to pay for normal customer extension infrastructure

APS' Financial Results

- **Earnings below authorized rate**
- **Cash-flow from operations less than capital expenditures:**
 - Need to access capital markets to finance capital expenditures
- **BBB- debt rating at risk**
- **Common stock selling at/near book value**
- **Increase in “imputed debt”**



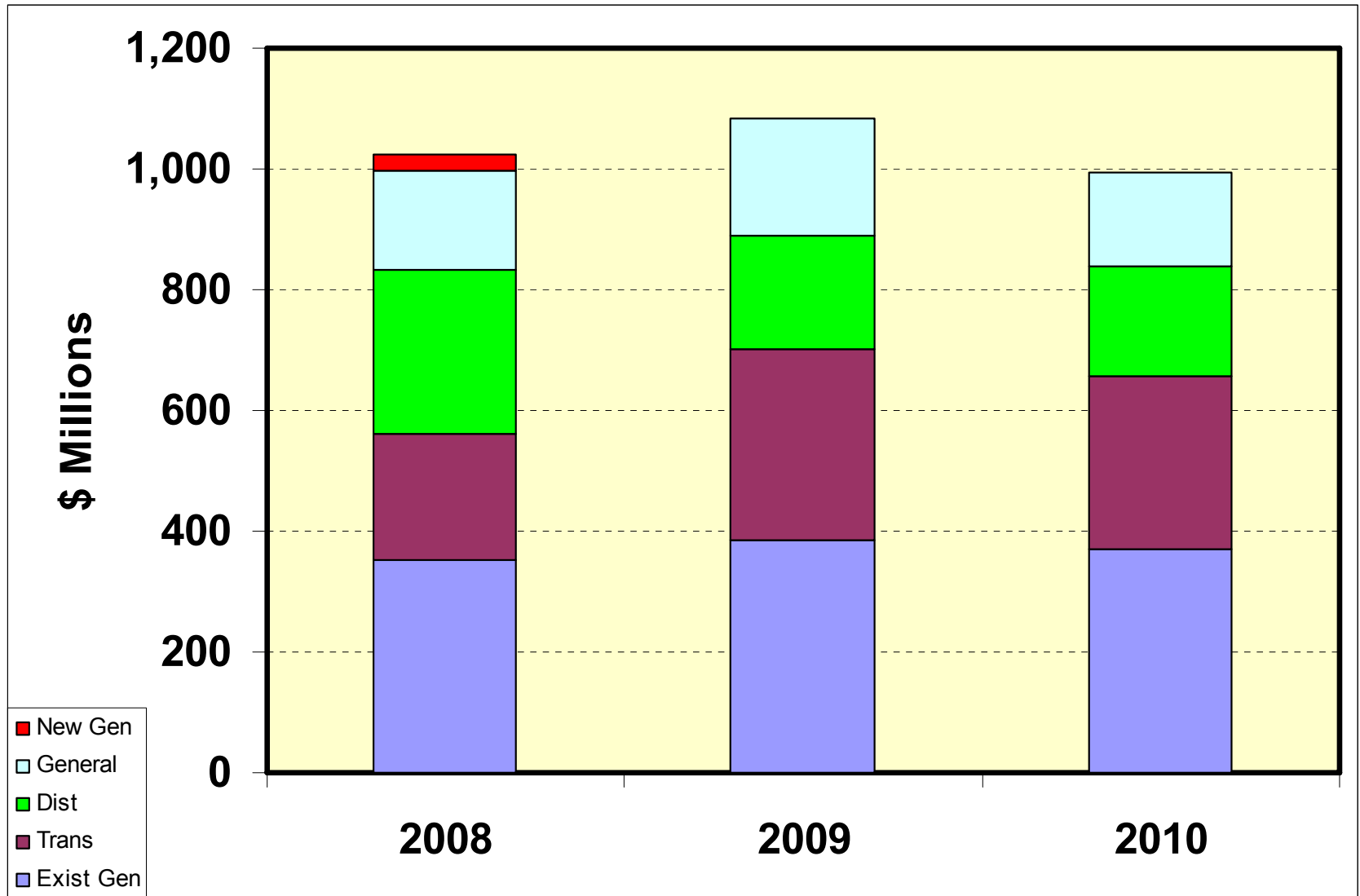
- From Mr. Brandt's testimony in current APS rate case (dated May 30, 2008)

Current Financials

APS 2007 Statistics

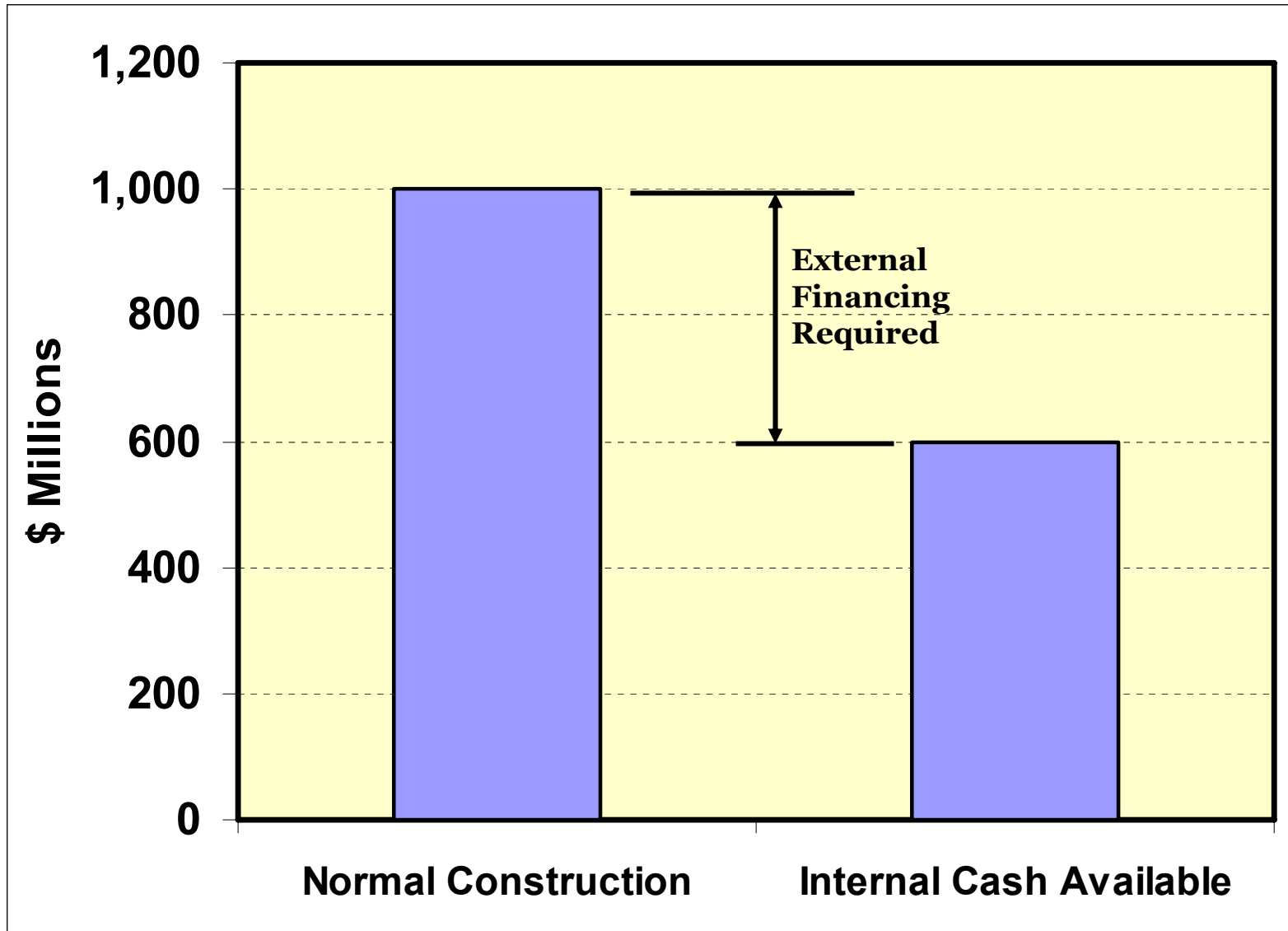
– Total Net Plant	\$8.4 Billion
– Total Capitalization	\$6.6 Billion
– Debt/Equity Ratio	48/52
– Total Revenue	\$2.9 Billion
– Earnings	\$284 Million
– ROE	8.5%
– Capital Expenditures	\$882 Million
– Cash from Ops. Available	\$596 Million
– Debt Ratings	BBB-

Projected Capital Expenditures



- Source is Attachment DEB-3 from Mr. Brandt's testimony in current rate case (dated June, 2008)

Funding “Normal” Construction (illustration)



New Generation Not Included in 2008-2010 Capital Expenditures*

- **Resource Planning Analysis Shows:**
 - Need for major new generation and related transmission infrastructure
 - Competitive generation markets for new resources have evolved
 - Sizable cost associated with all technologies and all methods of acquisition
 - Environmental issues with carbon-based fuels (GHG)
 - Long development / construction periods for base load resources
 - Major uncertainties (cost escalation, material and labor availability)

* Small amount included for completion of Yucca CT 5&6 project and major long-term PPA signed for 2010 capacity need

What Are The Issues?

- **Size of Commitments and Creditworthiness:**
 - Renewable and conventional PPAs require long-term commitment from utility
 - Baseload resources require substantial capital over a prolonged development period
 - Construction financing can add 30-50% to the costs of a new baseload resource
 - Timing of project completion and recovery in rates
- **Time From Commitment Until In-Service (Uncertainty, Prudence):**
 - Uncertainty surrounding many planning variables leads to:
 - Need to develop resource options
 - Potential for project cancellation
 - Alignment of policy with resource choices at time of commitment
 - Hedging transactions reduce uncertainty; they do not guarantee lower cost

For Example

- **Estimated capital expenditures for the “nuclear scenario”:**
 - 2010–2019 total \$6.3 Billion (avg. over \$600 million per year)
 - Includes 4000 MW new generation additions plus related transmission
 - Compares to current total capitalization of \$6.6 Billion
- **These expenditures would have to be financed in addition to other needs:**
 - “Normal” infrastructure additions
 - Other resources acquired either under long-term PPAs or at market
 - Commodity hedging

Financial Sustainability Issues

- **Example Resource Alternatives:**
 - Energy Efficiency Programs
 - Market Transactions:
 - Either Long-Term PPAs or Commodity Hedges
 - Baseload Construction

Energy Efficiency Programs

- **Issues impacting financial sustainability:**
 - Reduced energy sales results in unrecovered fixed costs
 - Timing of program cost recovery
 - Incentive

Energy Efficiency Programs

- **Colorado May 23, 2008 Order Provides:**
 - Approved enhanced DSM program for PSCo:
 - Reduce peak demand approx. 900 MW by 2020
 - Reduce 2009-2020 energy consumption by 3,669 GWH
 - Cost up to \$1.8 Billion
 - Cost recovery on a prospective basis through adjustor mechanism
 - “Disincentive Offset” if 80% of energy savings achieved
 - \$3.2 million per year to offset revenue losses
 - Performance incentive of up to 12% of program benefits:
 - 0.2% for each 1% above 80% of goal up to 130%,
 - And 0.1% for each additional 1% up to 150% of goal

Energy Efficiency Programs

- **Nevada Approach to EE:**
 - EE projects and budgets approved in IRP
 - EE given priority treatment for internal resources
 - EE can be used to meet $\frac{1}{4}$ of RPS
 - RPS target of 12% in 2010; 20% in 2015
 - Approved EE costs capitalized as regulatory asset
 - Includes monthly carry charge of $\frac{1}{12}$ authorized return
 - Regulatory asset included in each general rate case
 - Three year amortization
 - Incentive provides 5% adder to equity portion of authorized return (currently increases weighted return from 9.06% to 11.43%)

Energy Efficiency Programs

- **APS proposal (in current rate filing):**
 - Recovery of program costs on a prospective basis through annual adjustor mechanism
 - Recovery of actual reduced fixed cost recovery from programs
 - Performance incentives up to 10% of program benefits without cap

Market Transactions (PPA or Hedging)

- **Issues impacting financial sustainability:**
 - Long-Term PPA Commitments:
 - Increase debt equivalents used by rating agencies (i.e., imputed debt)
 - “Regulatory approval” clauses may impact project availability or feasibility
 - Timing uncertainty in an inflationary environment
 - Subject to swings in valuation (win or lose perceptions)
 - Hedging Transactions:
 - Increased transaction costs based on credit rating
 - Subject to swings in valuation (win or lose perceptions)
 - Cost and availability of liquidity to support collateral/margining
 - Renewable Resources:
 - Above “avoided cost” energy without guarantee of future recovery
 - Amounts in excess of RES requirements
 - Long-term commitments subject to swings in valuation

Renewable PPAs

- **APS current support for financial sustainability:**
 - RES surcharge covers distributed program costs and above avoided costs of energy for non-distributed renewable resources
 - Surcharge is reviewed annually
 - Surcharge is prospective (forward looking)

Conventional PPAs

- **APS current support for financial sustainability:**
 - PPA capacity and energy charges allowed in prospective PSA calculation
 - Capacity charges (for long-term PPA) not subject to 90/10 sharing requirement

Commodity Hedge Transactions

- **Issues Impacting Financial Sustainability:**
 - Change in creditworthiness or market movements can trigger collateral postings
 - Working capital requirements
 - Hedging, by design, locks in the future cost level at time hedge is executed:
 - Risk of 20/20 hindsight review of results

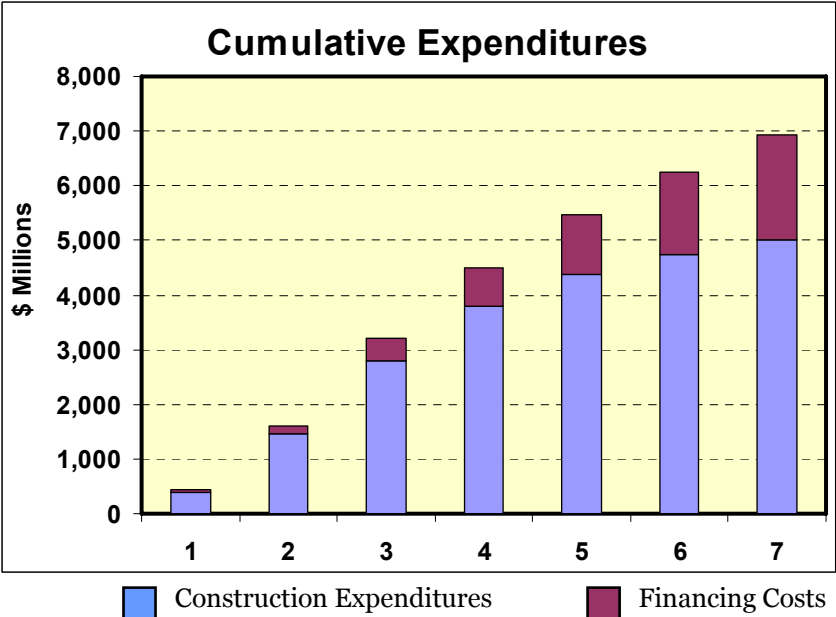
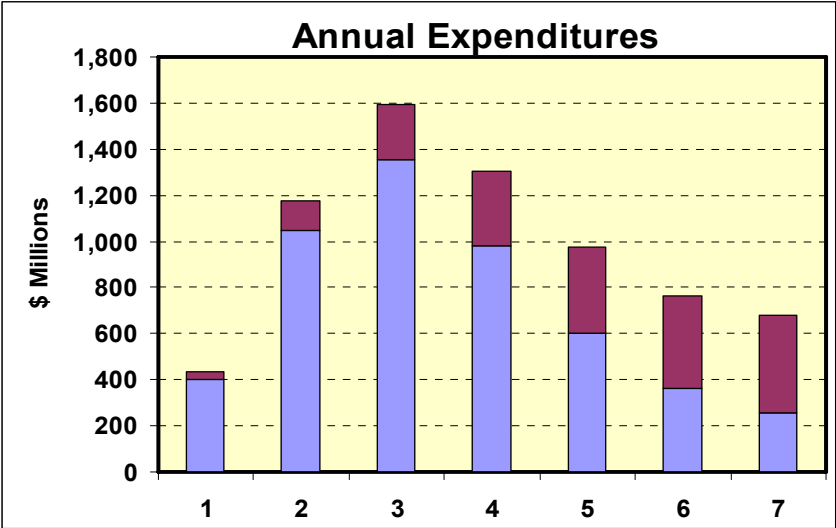
Baseload Construction Project

- **Issues impacting financial sustainability:**
 - Long and large construction project
 - Construction without adequate assurance of recovery creates too much risk to attract required financing
 - Pre-construction study costs that must be charged to current expense under GAAP
 - Ability to “lock-in” construction-related costs
 - Potential for changing conditions could result in cancellation of the project after substantial expenditures have been made
 - Completion of construction without synchronization with rates
 - Cost recovery policies to mitigate large “stair-step” increases in rates

Baseload Construction Project Example

Annual expenditures for financing costs exceed construction expenditures late in the construction process

Financing costs add 38% to the total project cost



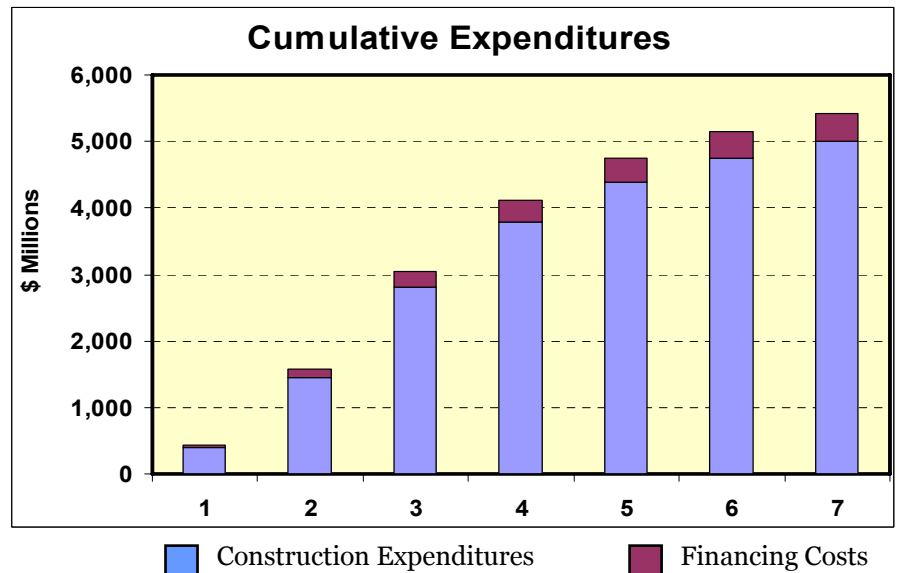
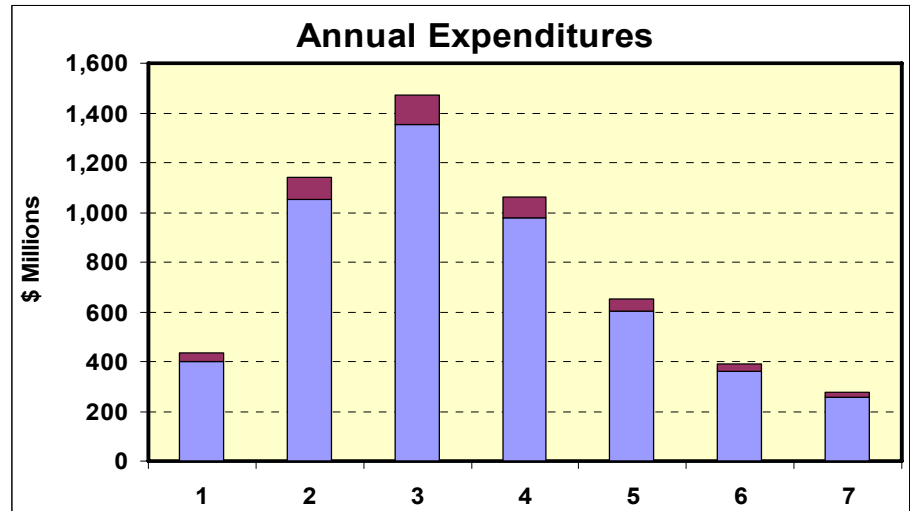
* Illustration is based upon theoretical \$5B construction project

Baseload Construction Project (With CWIP in Rates)

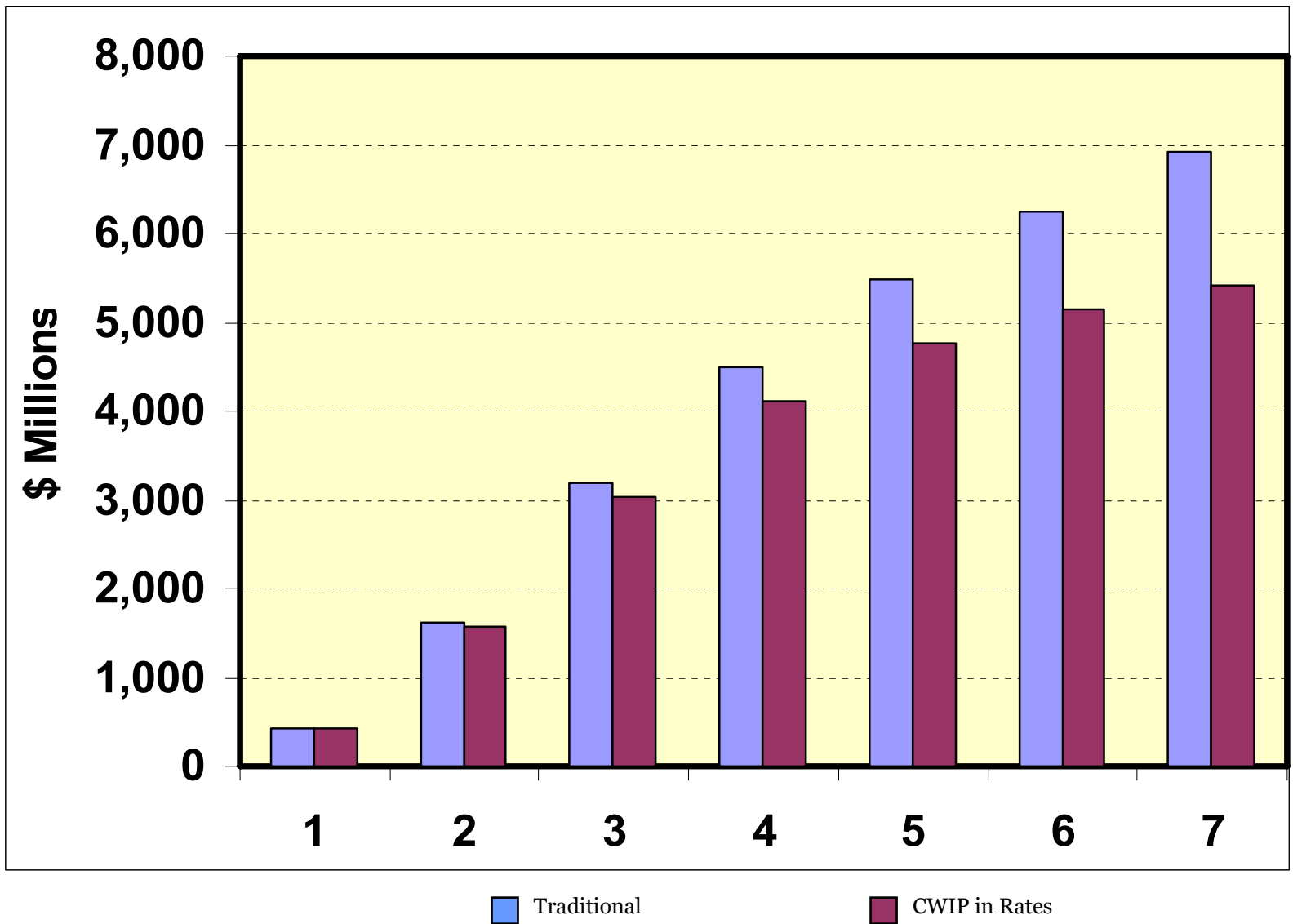
**Inclusion of CWIP in rates
avoids compounding of
finance costs**

*Assumes previous year's CWIP balance included
in rates on 1/01 of the next year

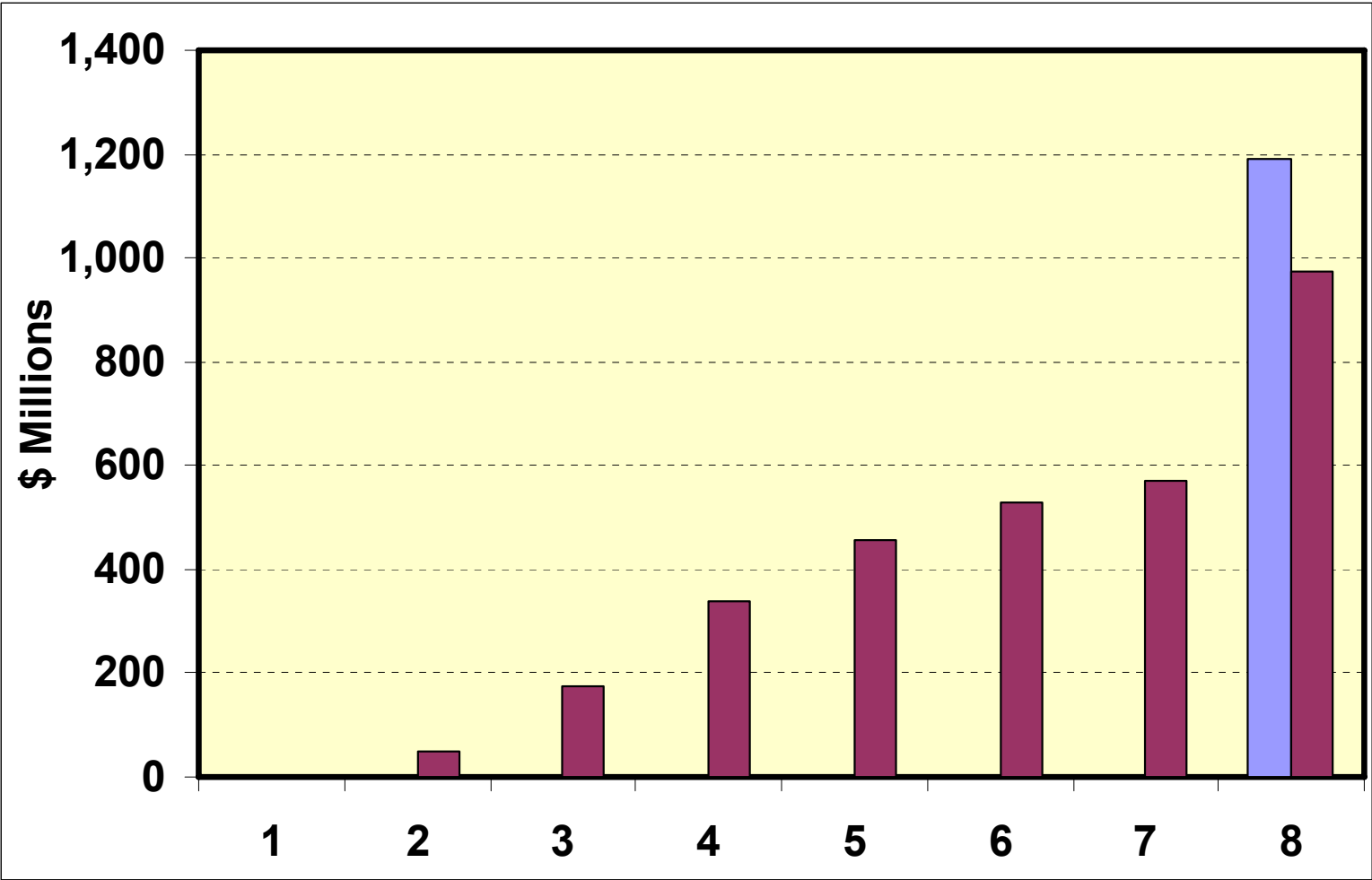
**Inclusion of CWIP in rates
lowers cumulative
financing costs to 8% of
total project costs**



Total Capitalized Cost



Annual Cost to Customers



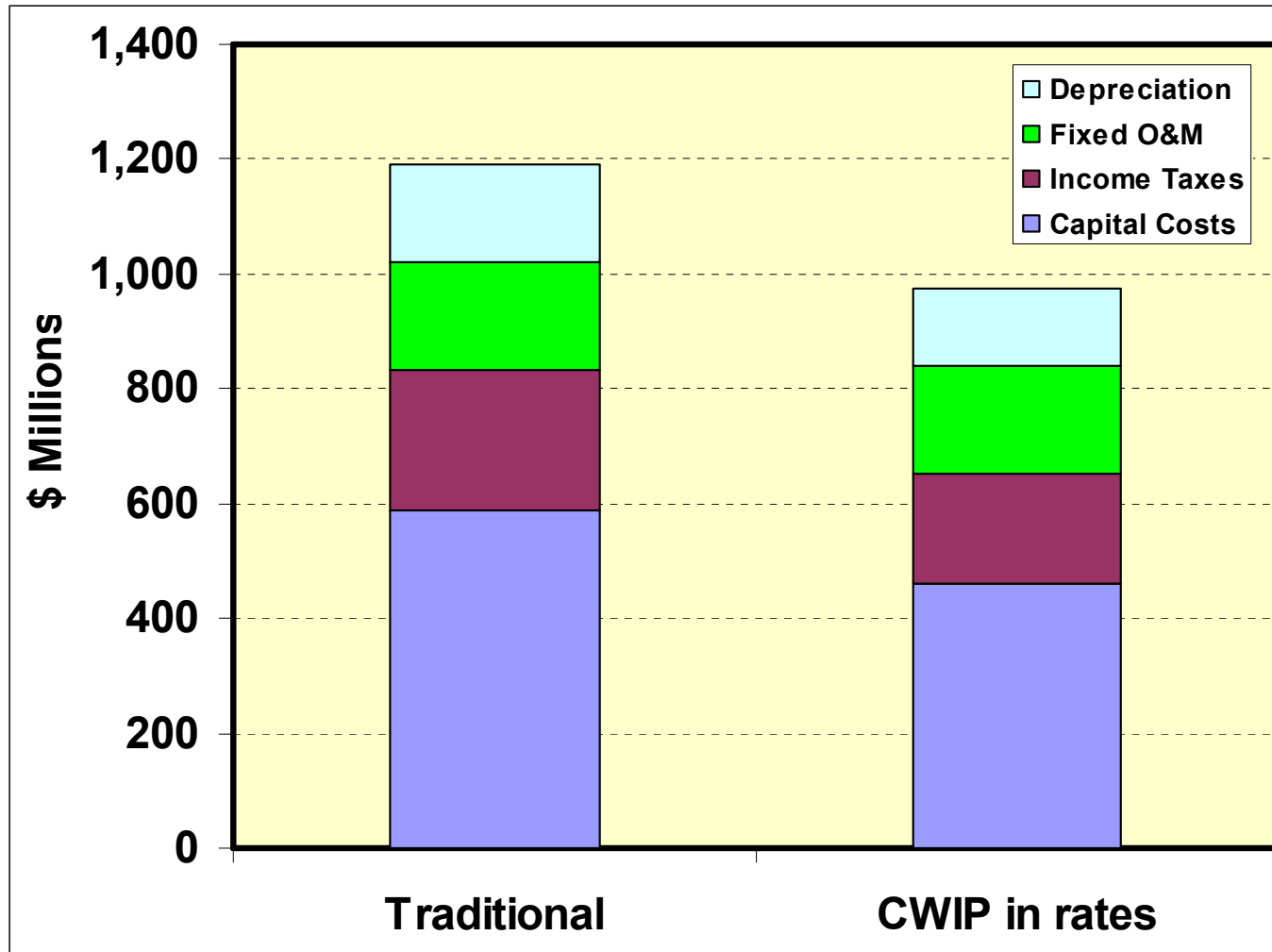
Traditional

CWIP in Rates

*Traditional assumes plant is reflected in rates at in-service date

*Comparison does not include fuel costs

First Year Cost of Service



*Excludes fuel costs which are identical between the 2 cases

Baseload Construction Project

- **South Carolina (BLRA Application):**
 - Utility files information with PUC to demonstrate prudence
 - Project Development Order = Establishes prudence of utility's decision to incur preconstruction costs
 - Preconstruction costs prudently incurred must be allowed recovery even if project cancelled
 - Base Load Review Order = Establishes that if plant is constructed in accordance with approved plan, the plant is to be considered used and useful and its capital costs prudent utility costs properly included in rates
 - Constitute a final and binding determination of prudence if constructed within the parameters of the approved plan and requires cost recovery even if plant abandoned during construction
 - PUC required to issue decision in 9 months
 - Application includes schedule of rate changes to cover financing costs during the construction period (CWIP in Rates)
 - Utility can file (seven months before scheduled commercial operation) for final revised rates to go into effect upon commercial operation of the plant
 - Additional Commission staffing and expert witness costs borne by filing utility

Base Load Review Act (BLRA) is a state law enacted in 2007 to add structure and consistency to the process utilities must follow when building nuclear power plants

Conclusion

- **Business as usual will not work:**
 - Conventional rate case prudence tests and rate relief does not give utilities adequate support to make significant generation (and related transmission) investments
- **Implementation of resource plan alternatives will require expanded support to ensure financial sustainability:**
 - To remove barriers to pursuing or maintaining resource options
 - To maintain APS' creditworthiness