

Informal Discussions  
**Proposed 2009 Rate Adjustments**  
**Pick-Sloan Missouri River Basin Program**  
**And**  
**Loveland Area Projects**

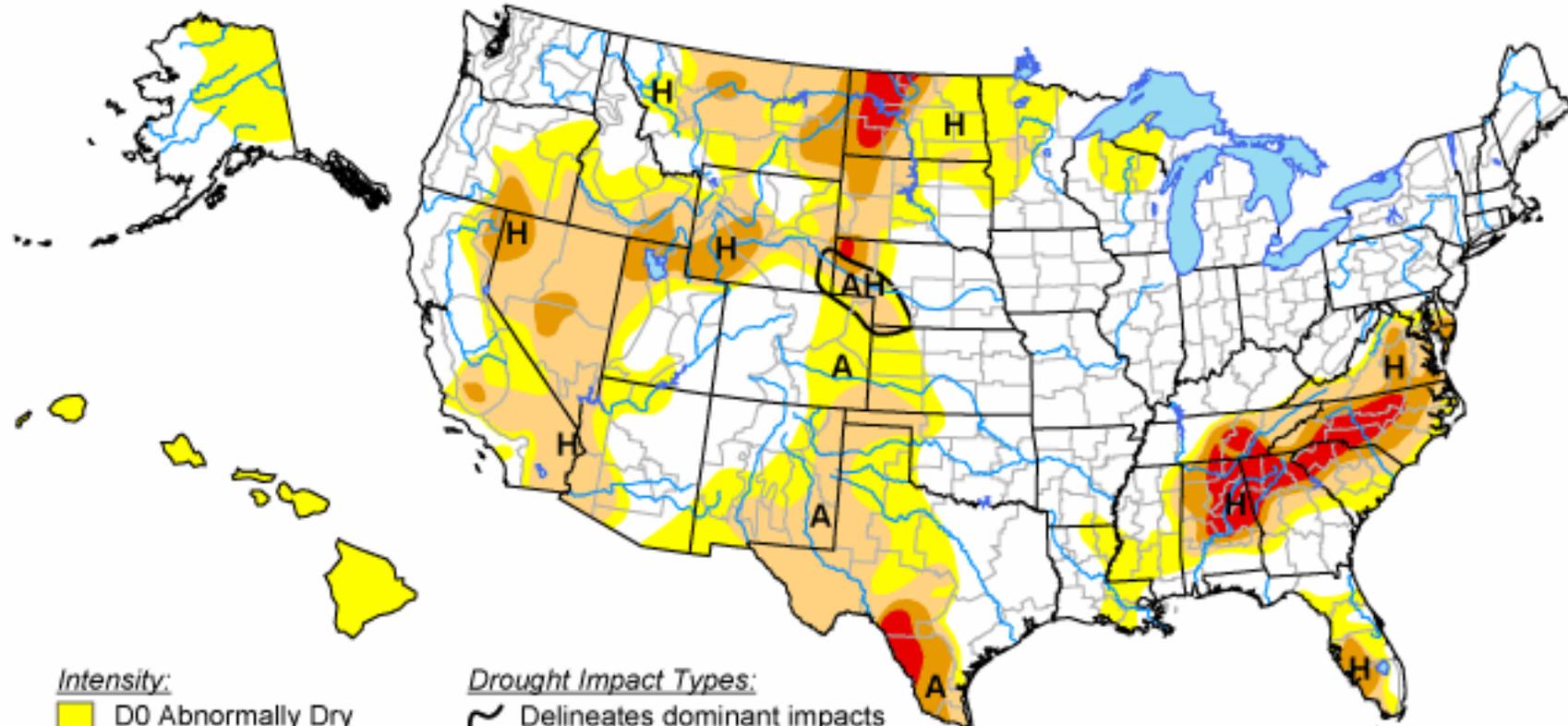
Jody Sundsted  
Linda Cady-Hoffman  
Sheila Cook

April 2008

- Drought Conditions
- Purchase Power (PP)
- Timing
- Drought Adder Cap
- Repayment
- Final FY 2007 Pick-Sloan PRS
- Final FY 2007 Fry-Ark PRS
- Rate Adjustment Proposals
- Proposed Schedule

# U.S. Drought Monitor

April 1, 2008  
Valid 8 a.m. EDT



## Intensity:

-  D0 Abnormally Dry
-  D1 Drought - Moderate
-  D2 Drought - Severe
-  D3 Drought - Extreme
-  D4 Drought - Exceptional

## Drought Impact Types:

-  Delineates dominant impacts
- A = Agricultural (crops, pastures, grasslands)
- H = Hydrological (water)

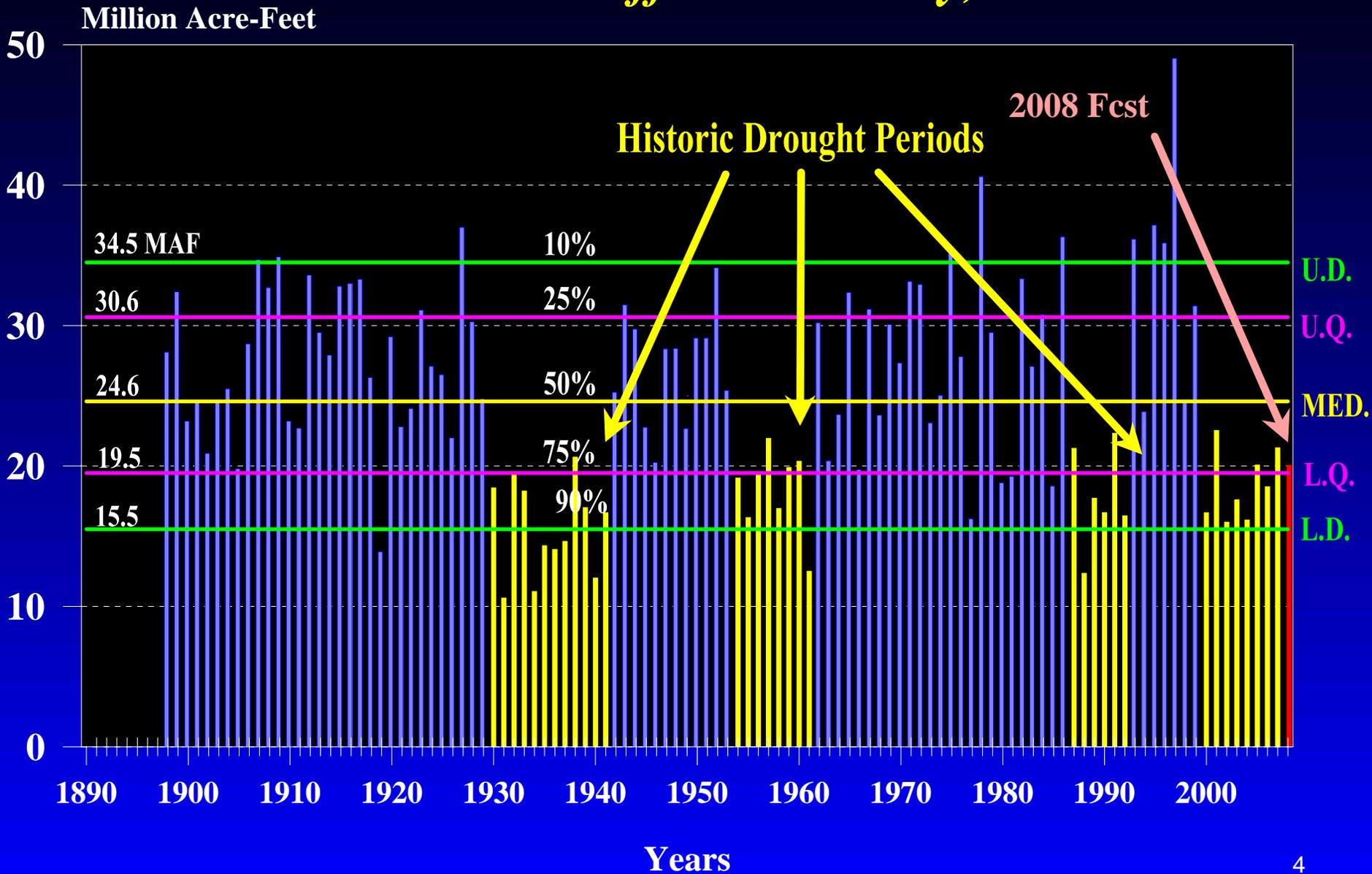
*The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.*

<http://drought.unl.edu/dm>



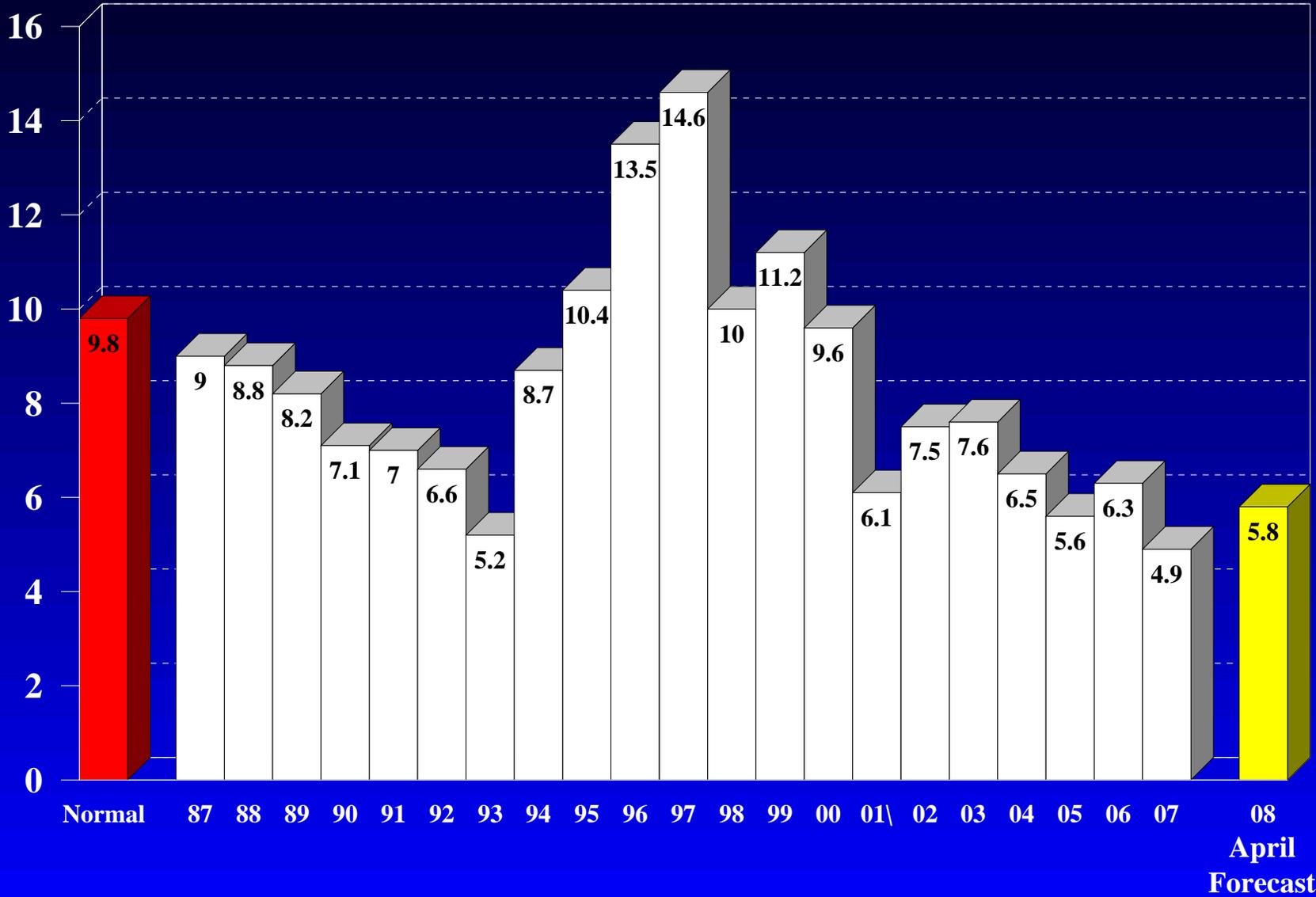
**Released Thursday, April 3, 2008**  
**Author: Rich Tinker, Climate Prediction Center, NOAA**

# *Missouri River Mainstem Annual Runoff at Sioux City, Iowa*

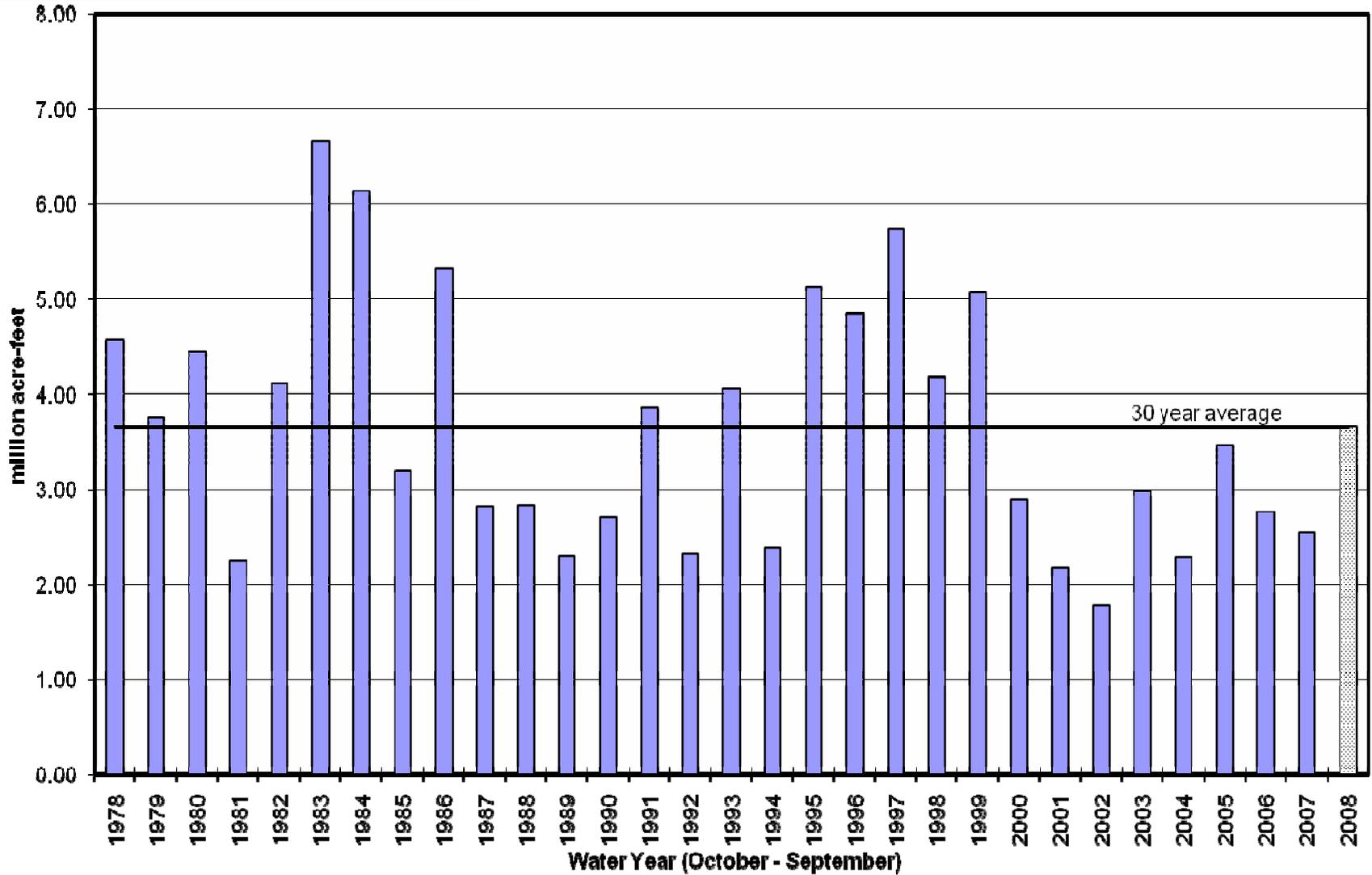


# Mainstem System Generation

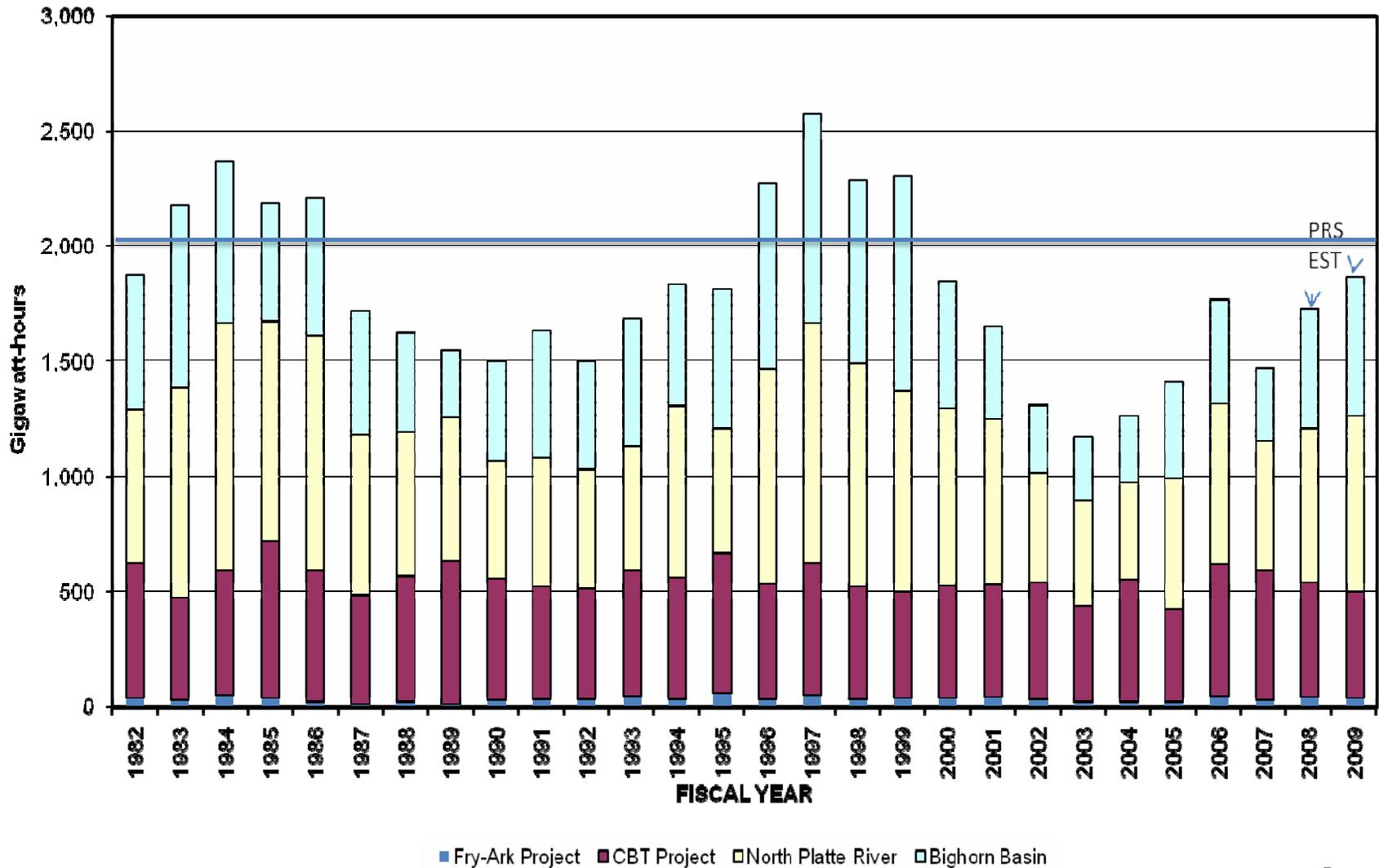
Million Megawatt Hours

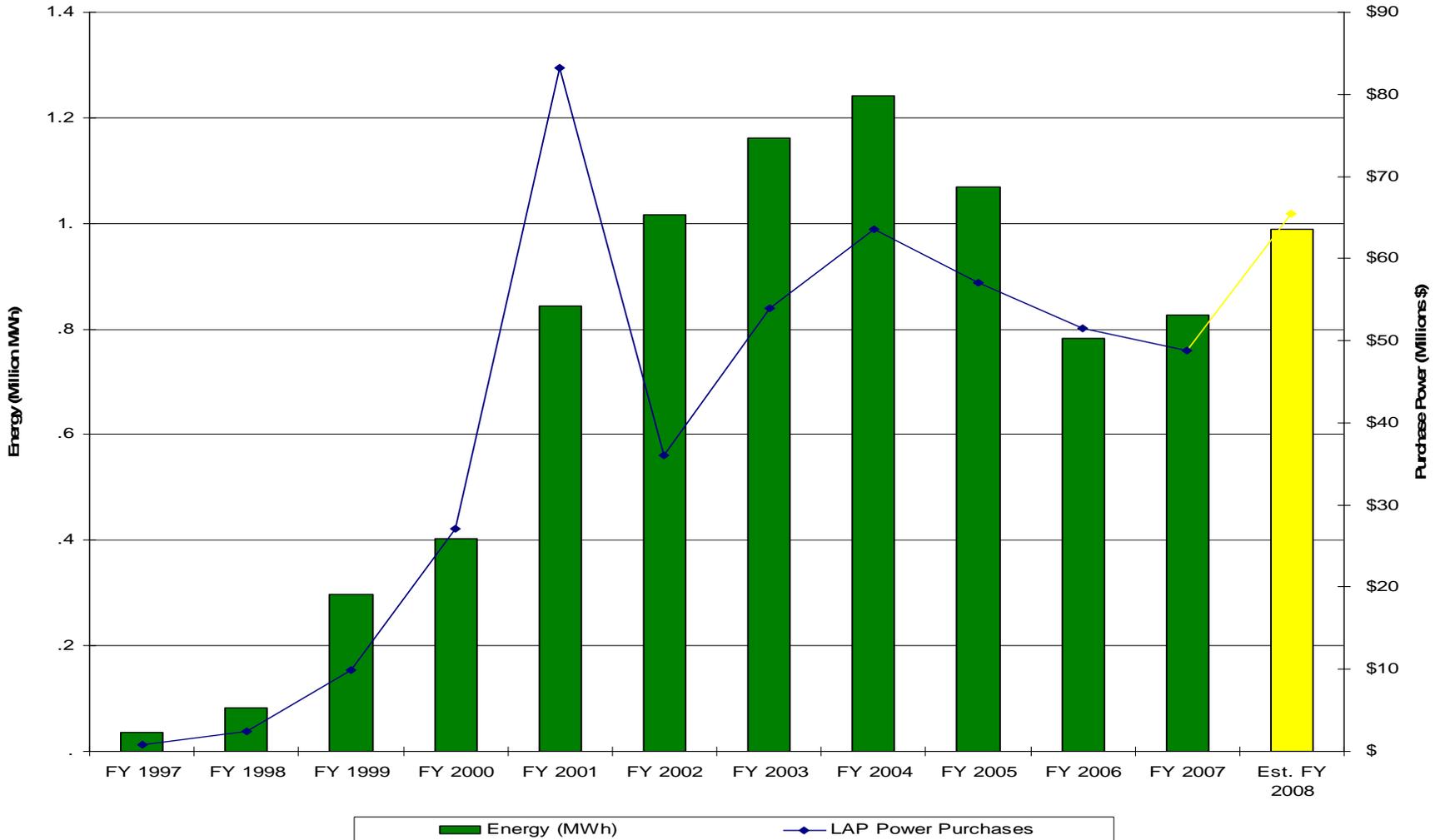


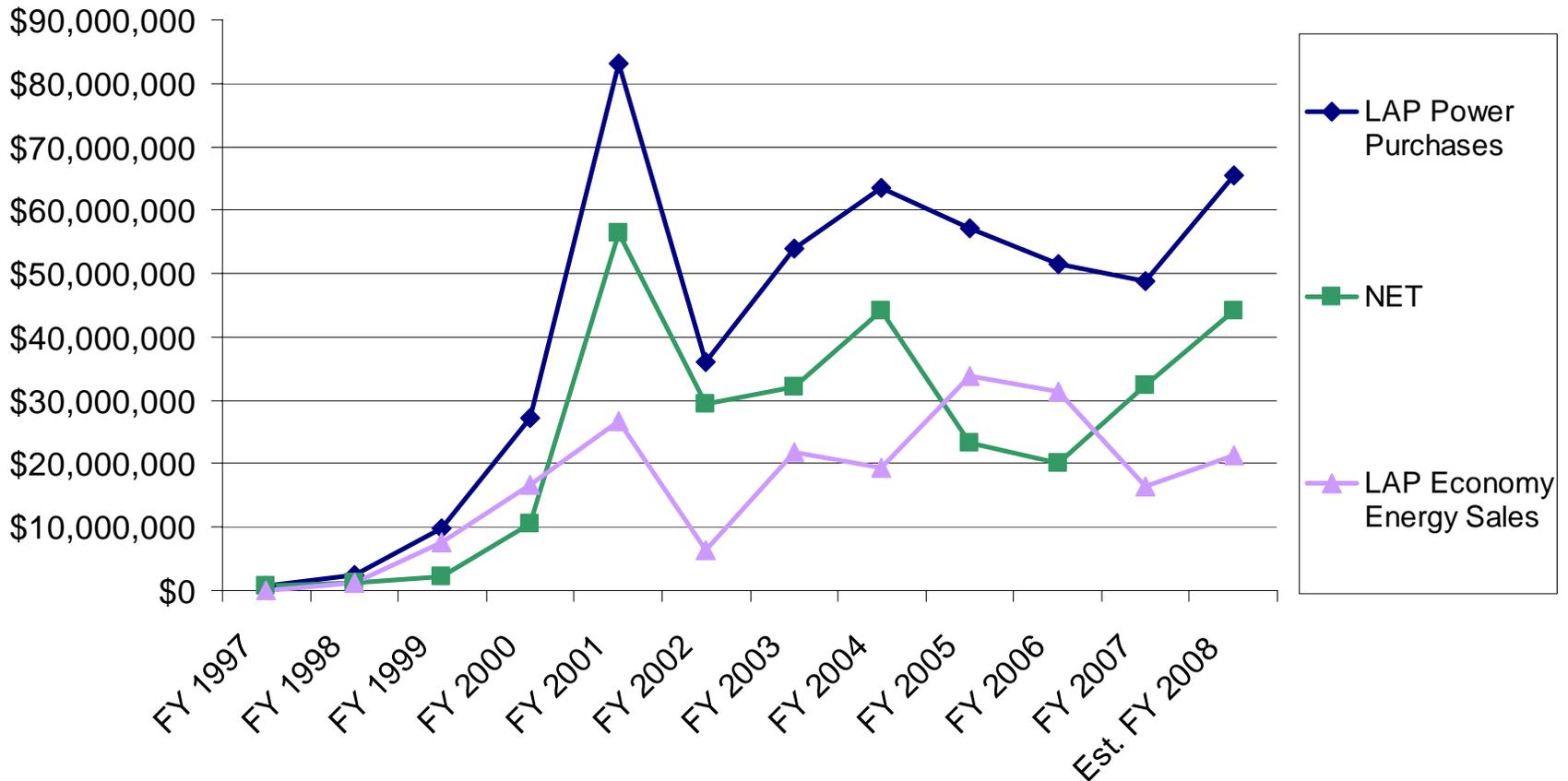
## ANNUAL LAP RESERVOIR INFLOW with projected FY08



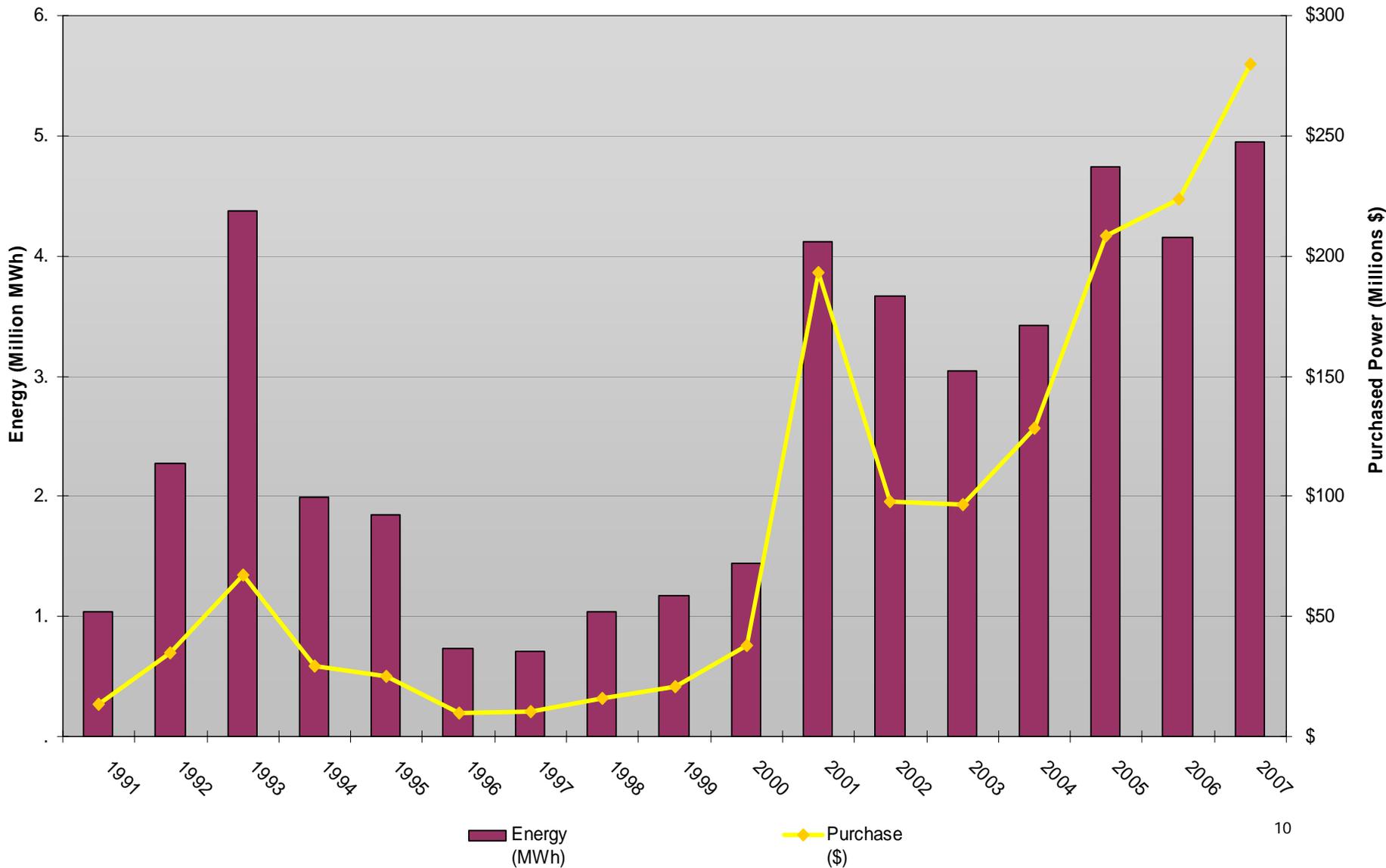
## LAP GROSS GENERATION AT PLANT with projected FYs08-09



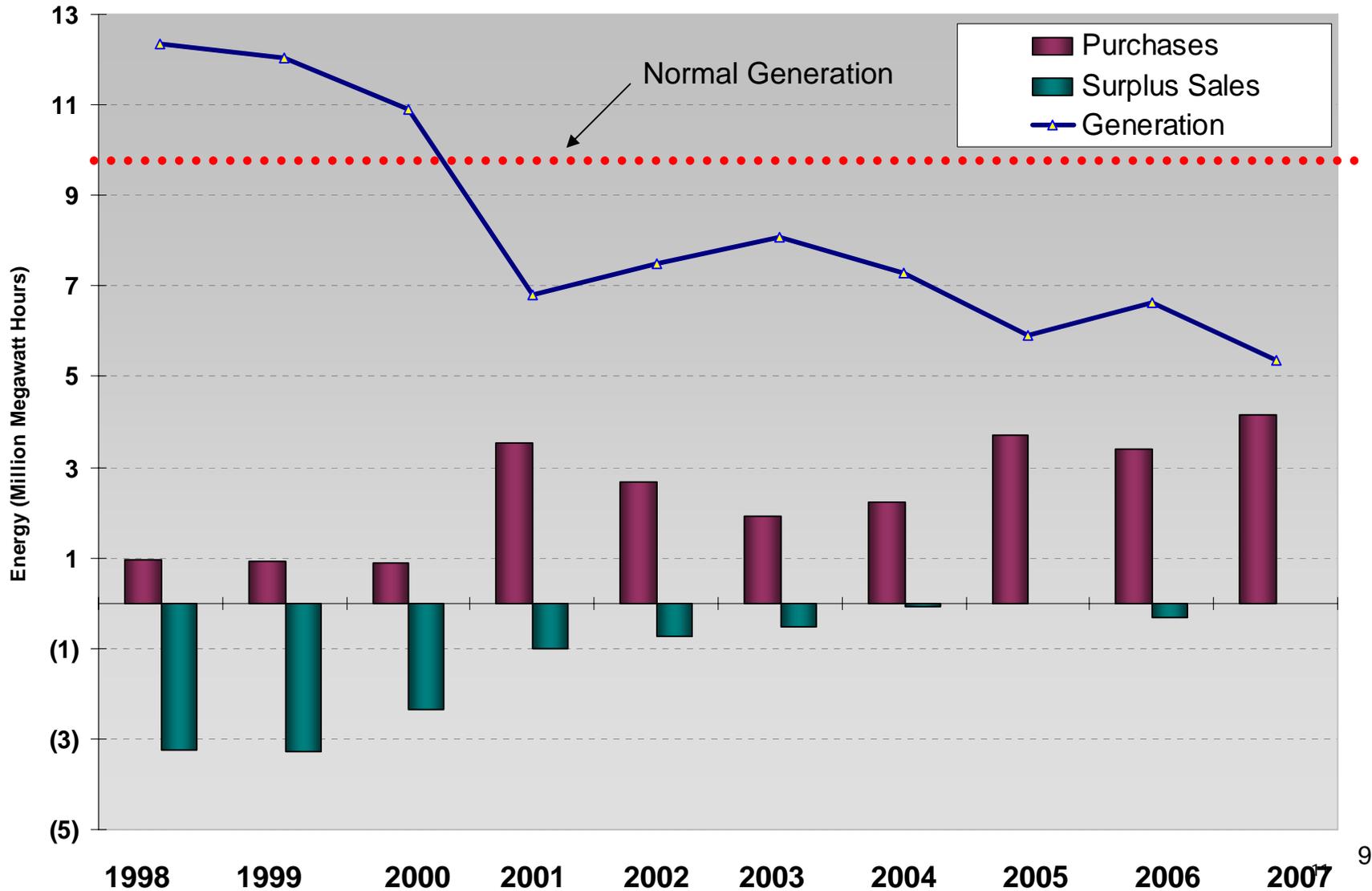




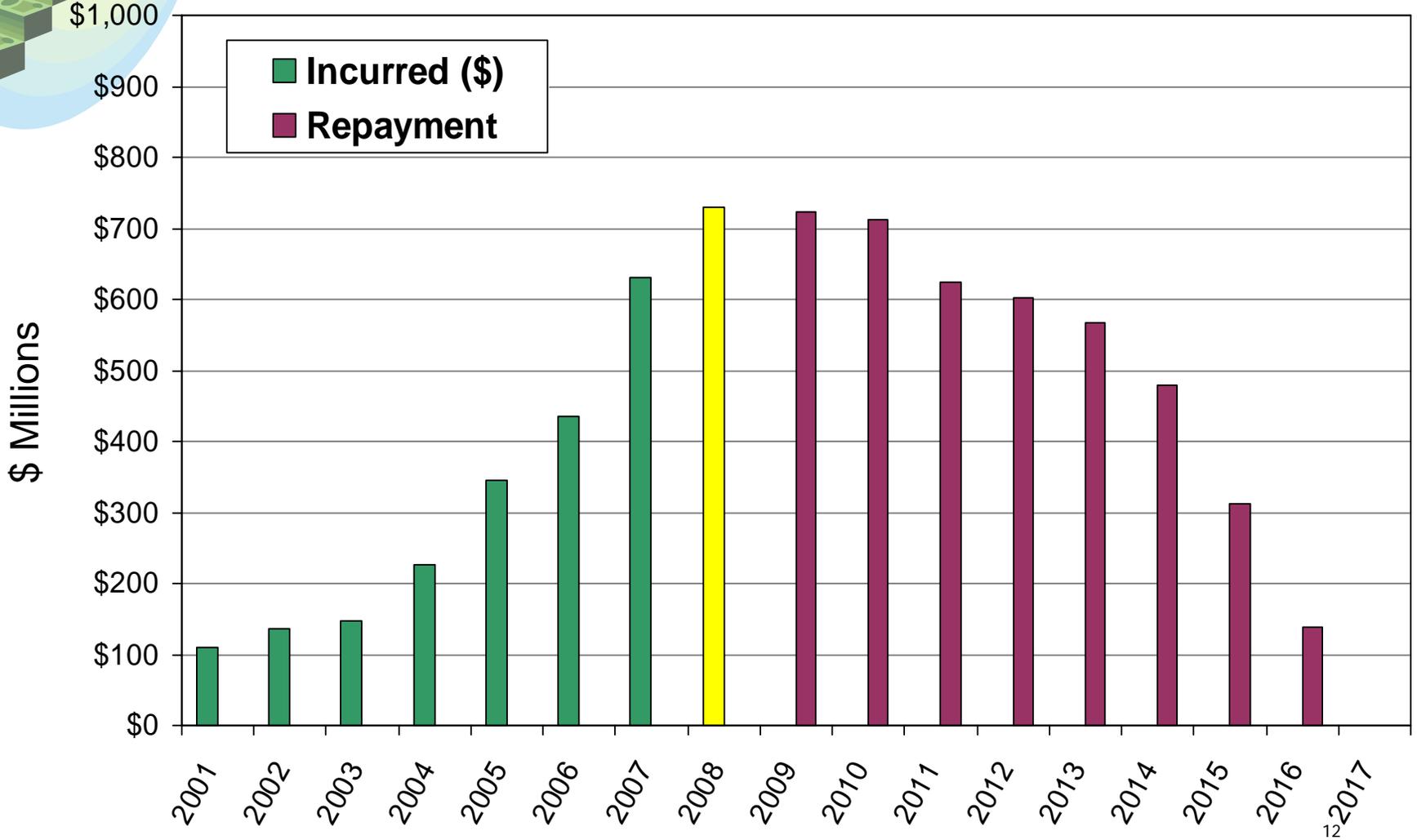
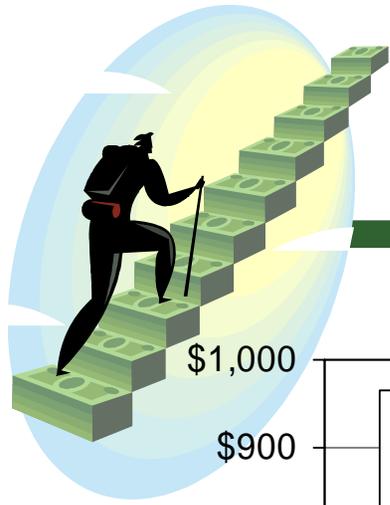
# P-SMBP- Firming Purchases (Energy and Expense)



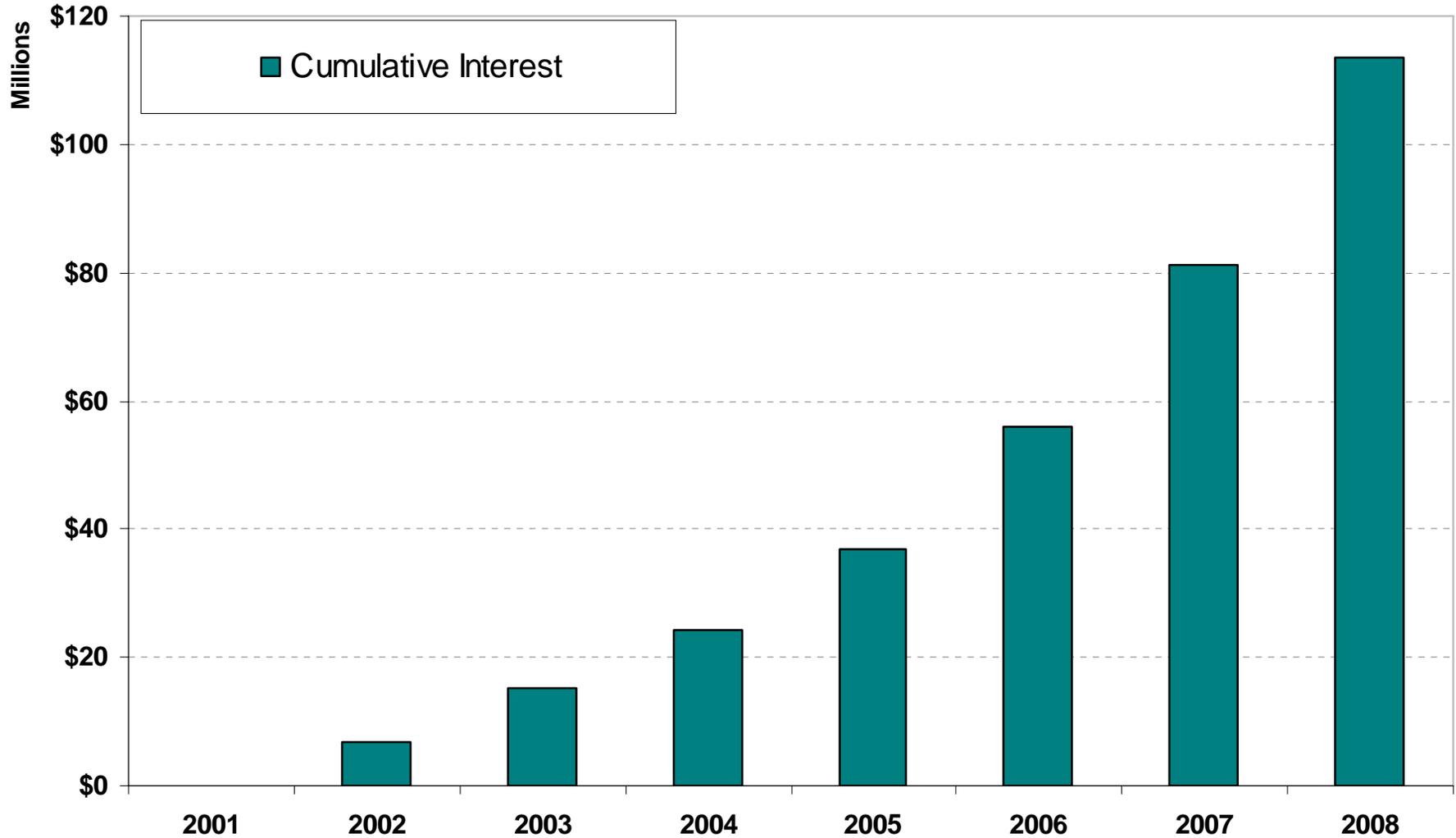
# P-SMBP--Eastern Division Firming Energy

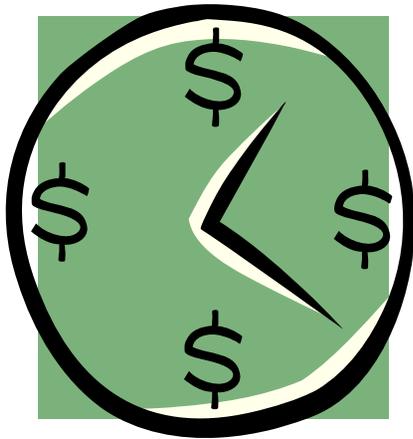


# P-SMBP Drought Deficit



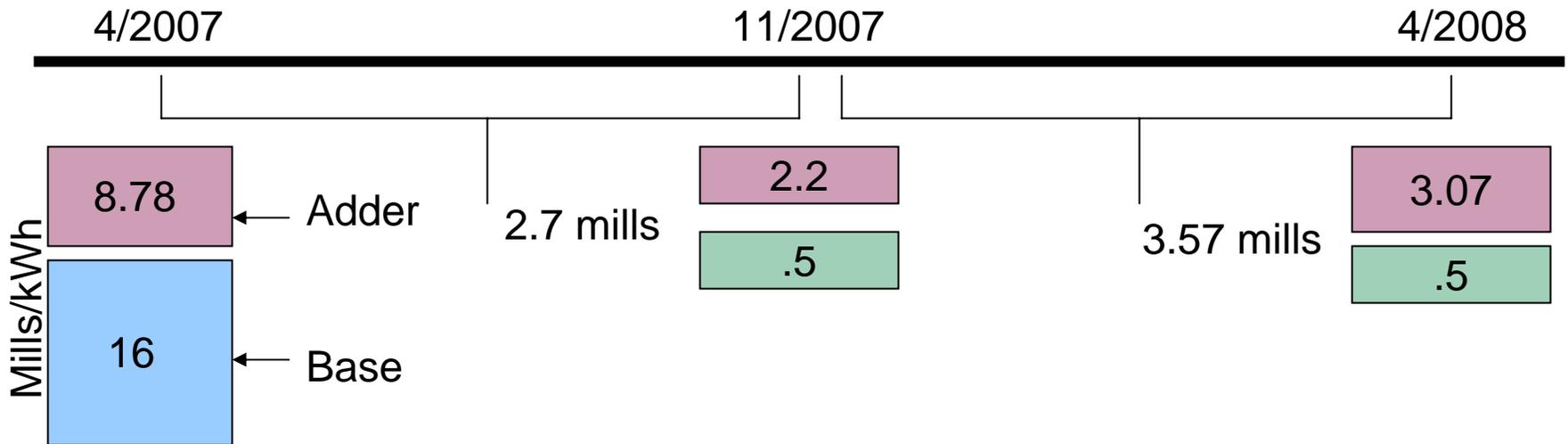
# Cumulative Interest Deficit





## Rate

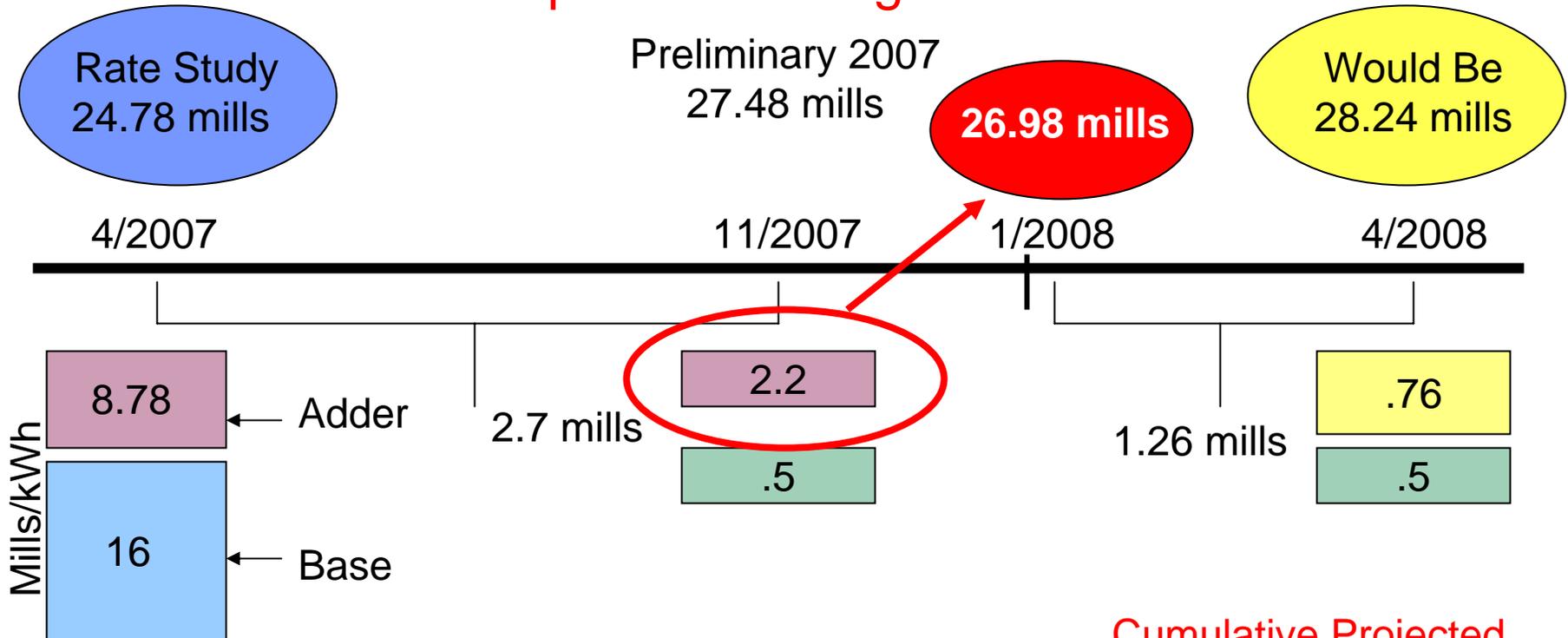
- **Base Rate**
  - Normal Rate Process Timing
  
- **Drought Adder**
  - Accelerate



Cumulative Projected Deficit  
\$572 FY 2007

Projected FY 2008  
Cumulative Deficit  
\$730 M

- Capture timing delay 1<sup>st</sup> of the year
- No cap on the drought adder

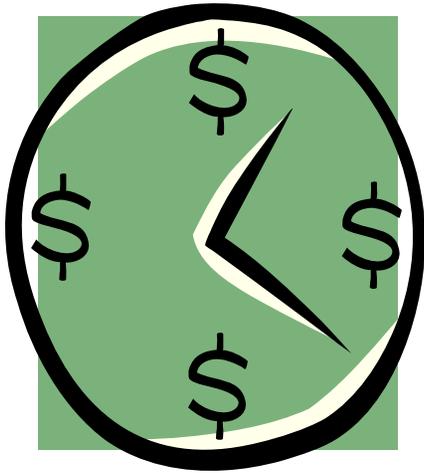


Cumulative Projected Deficit  
\$572 FY 2007

Cumulative Projected Deficit \$706 M FY 2008

Interest over 10 years reduced \$13 M

# Benefits of Accelerating Adder



- Less New Drought Deficit
- Interest Expense on Deficit is Lower
- Better Deficit Management
- Prompt Drought Payments

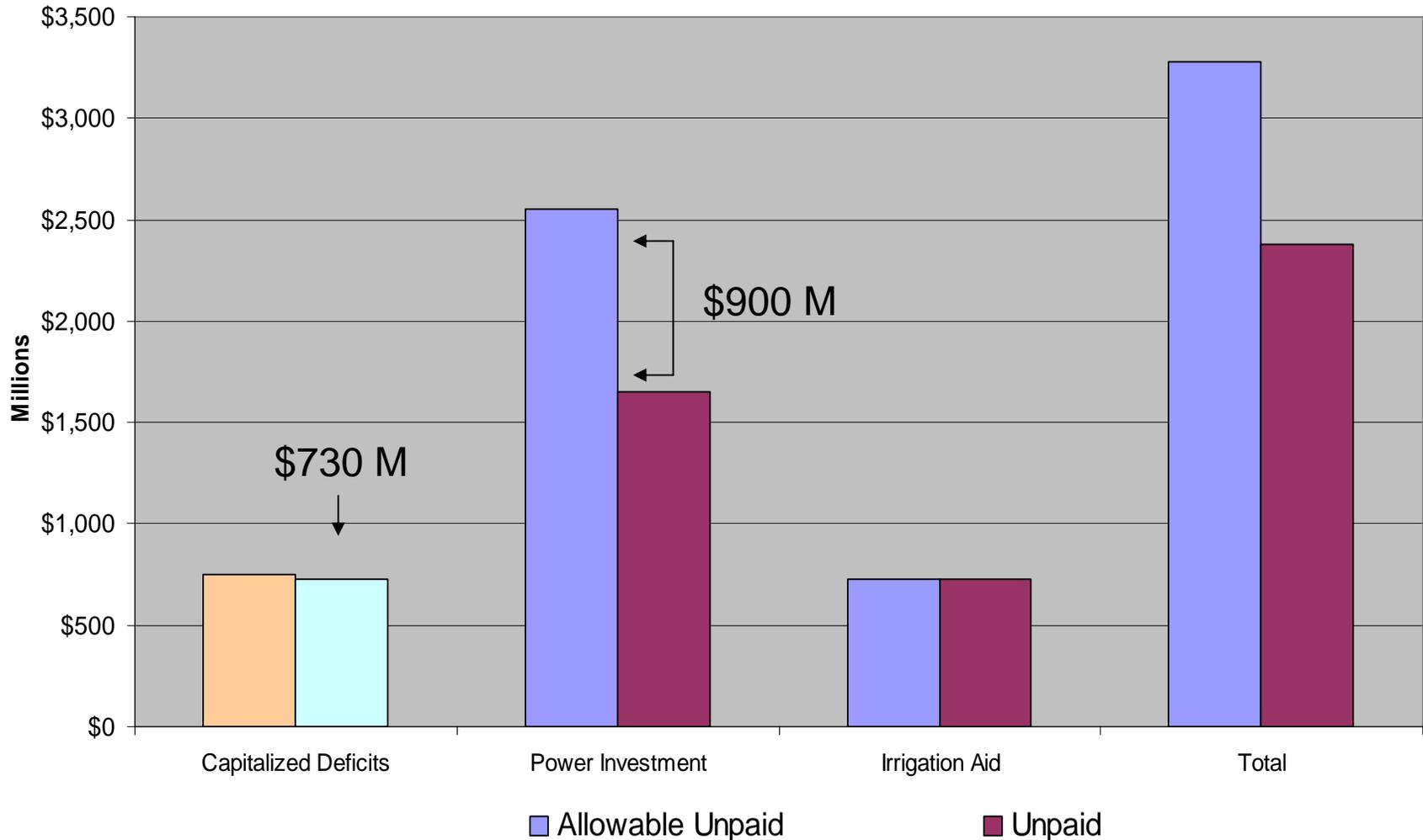
## Flood Control Act of 1944

“Power is to be sold at the “lowest possible rates to consumers consistent with sound business principles.”

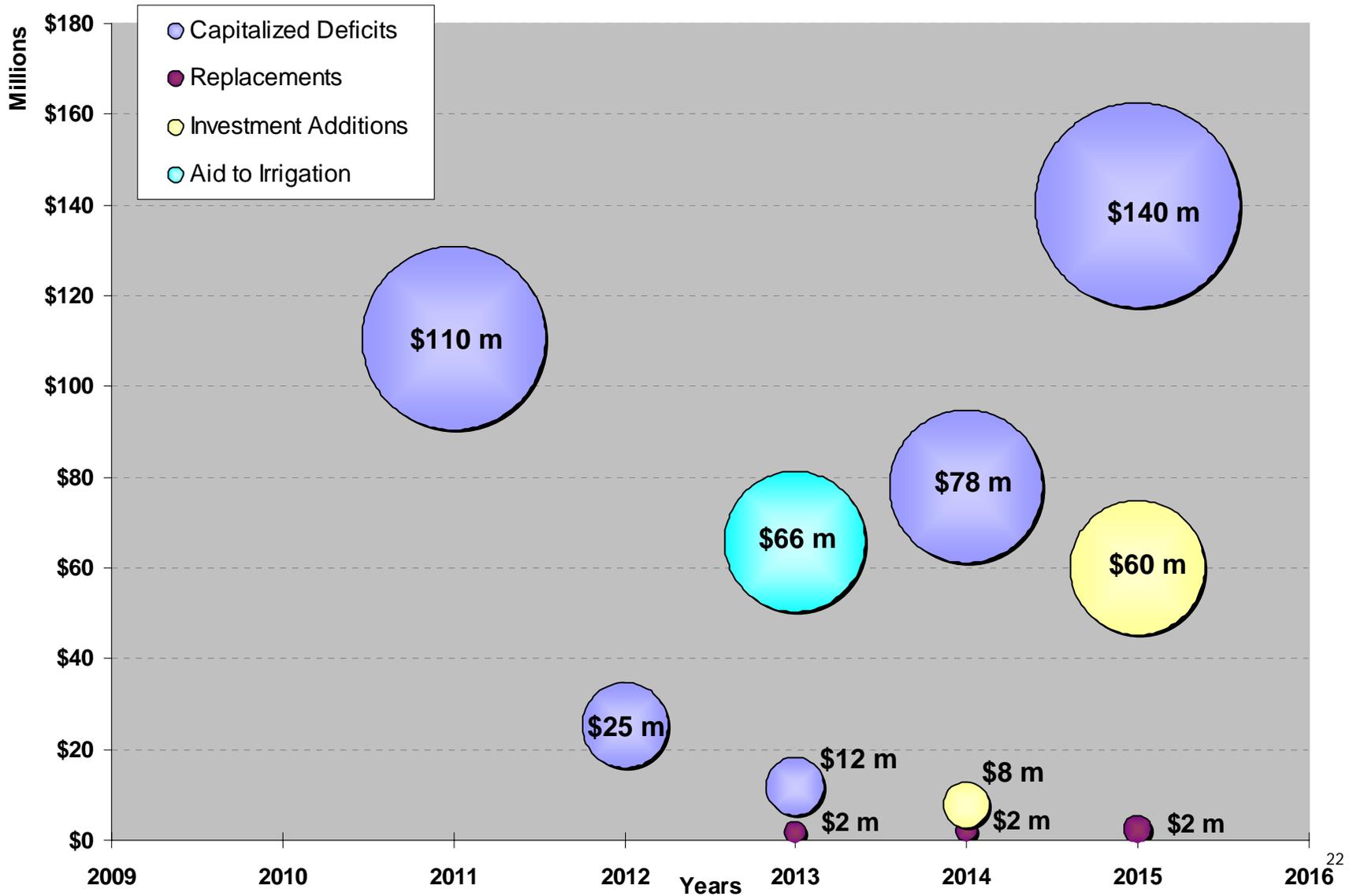
- Annual Costs
- Capital Costs
  - Required principal payments
  - Deficits
  - Highest interest-bearing investment (discretionary principal payments)
- Balloon payment methodology
  - Payments on capital costs are due at the end of their repayment period

- In order to solve for the *lowest rate* in the future, the PRS applies discretionary dollars to investments between year of rate solution and the pinch point.
  - The difference between the Allowable Unpaid and the Unpaid is “Paid Ahead”.
- Paying ahead allows for *rate stability, within the balloon payment methodology of the PRS.*

# Projected 2008 Investments and Deficits



# Required Payments



# Western's Rate Proposals Pick-Sloan & Fry-Ark

- Rate Solved at 28.35 mills/kWh
- Current Cumulative Deficit at \$632 M
- Projecting additional 2008 deficit of \$98 M
- Purchase Power is driving the rate 1<sup>st</sup> year out in the study (FY2009)
- Un-audited data
- Includes November 2007 Water projections (Corps and BOR)

- Solved with a Revenue Requirement of \$14.6 million (\$230k or 1.6% increase)
- Includes BOR and Western 2009 work plans
- Includes most probable generation projection as of February 2008
- No deficits
- 2034 pinch-point

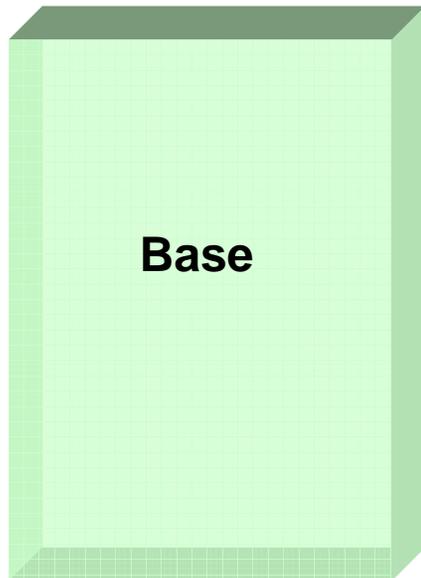
# Pick-Sloan and Fry-Ark Rate Components

# Overview of Rate Components



→ **Drought \$**

- Recovers \$ Associated with the Drought
  - Purchase Power related to drought
  - Interest on Drought Debt
  - Historical Drought Debt



↗ **O&M \$**

→ **Capital \$**

↘ **Interest \$**

- Annual O&M
- Investments - Additions and Replacements
- Annual Interest on Investment
- Inflation
- Normal Purchases
- Transmission Costs



**Drought Adder**

**Adjusted Annually by Formula  
or by Public Process**



**Base Rate**

**Adjusted only by Public  
Process**

# Base Component Methodology

Compare new PRS Base to previous years Base

Base meets costs

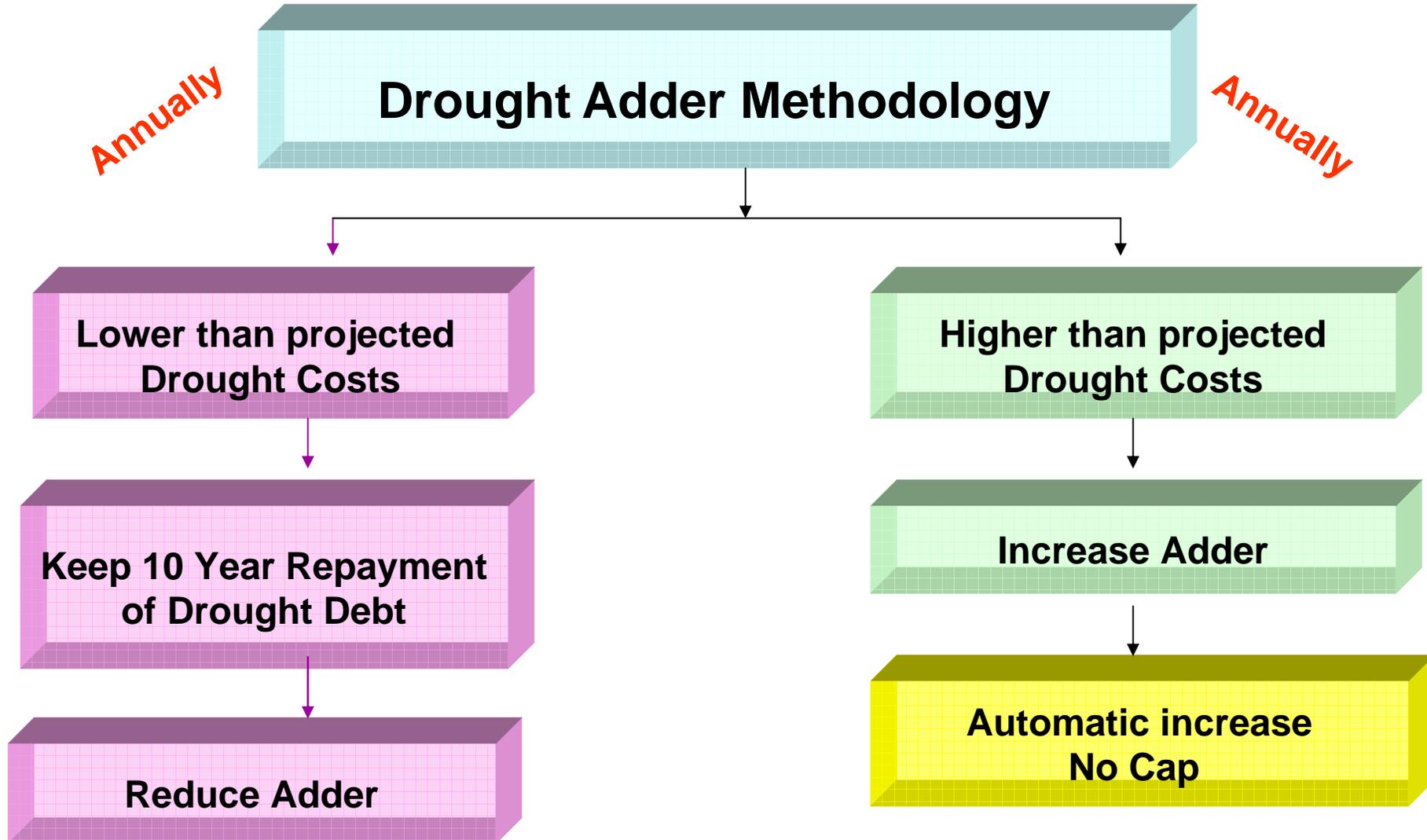
No change to the Base

Base does not meet costs

Initiate public process

Implement new Base

- 2007 Final PRSs showed need to adjust the Base Rates
  - Corps, BOR and Western 2009 work plans
  - Impact is steady with inflation of 3%
- April 2010 work plans were rolled out
  - Pick-Sloan impact estimated under 1 mill/kWh
  - Fry-Ark impact estimated slight decrease
- Propose 2<sup>nd</sup> step on the Base Rates



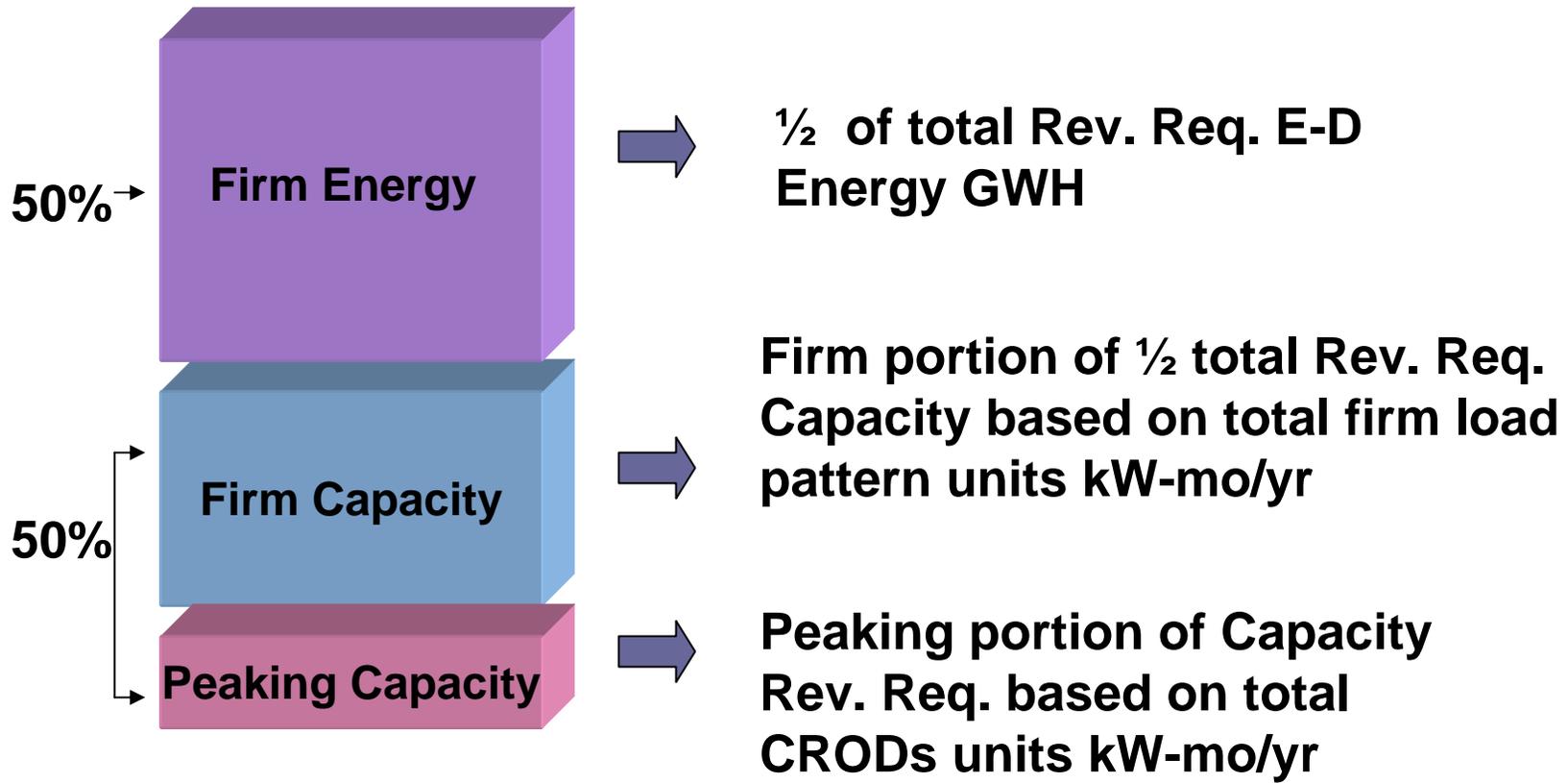
# Drought Adder Modifications

- Preliminary PRS (Final PPW late Summer)
- No Cap on Drought Adder
- Send customers notice of change (October ?)
- Rate adjusted annually with January billing period

# Pick-Sloan E-D Rate Design

- Firm capacity based on Metered Capacity Billing Units of 17,876 MW-mo/year
- 8,742 GWH of Firm Energy
- 356 MW of Peaking capacity recovered in the 50/50 capacity and energy split
- Peaking capacity based on CROD billing units of 4,272 MW-mo/year

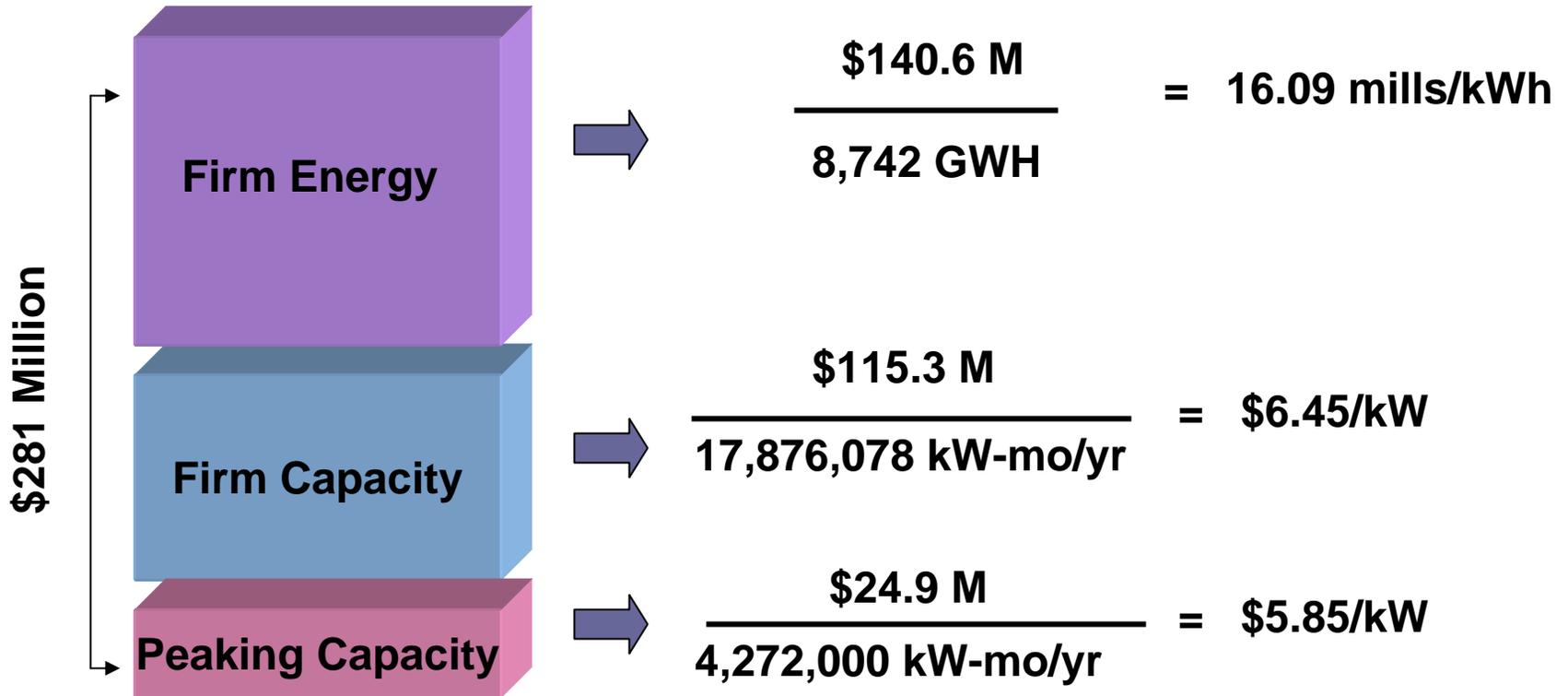
## 50/50 Capacity/Energy Split



Eastern Division rate is 50/50 design where 50% of the revenue is recovered from the capacity rate and 50% is recovered from the energy rate:

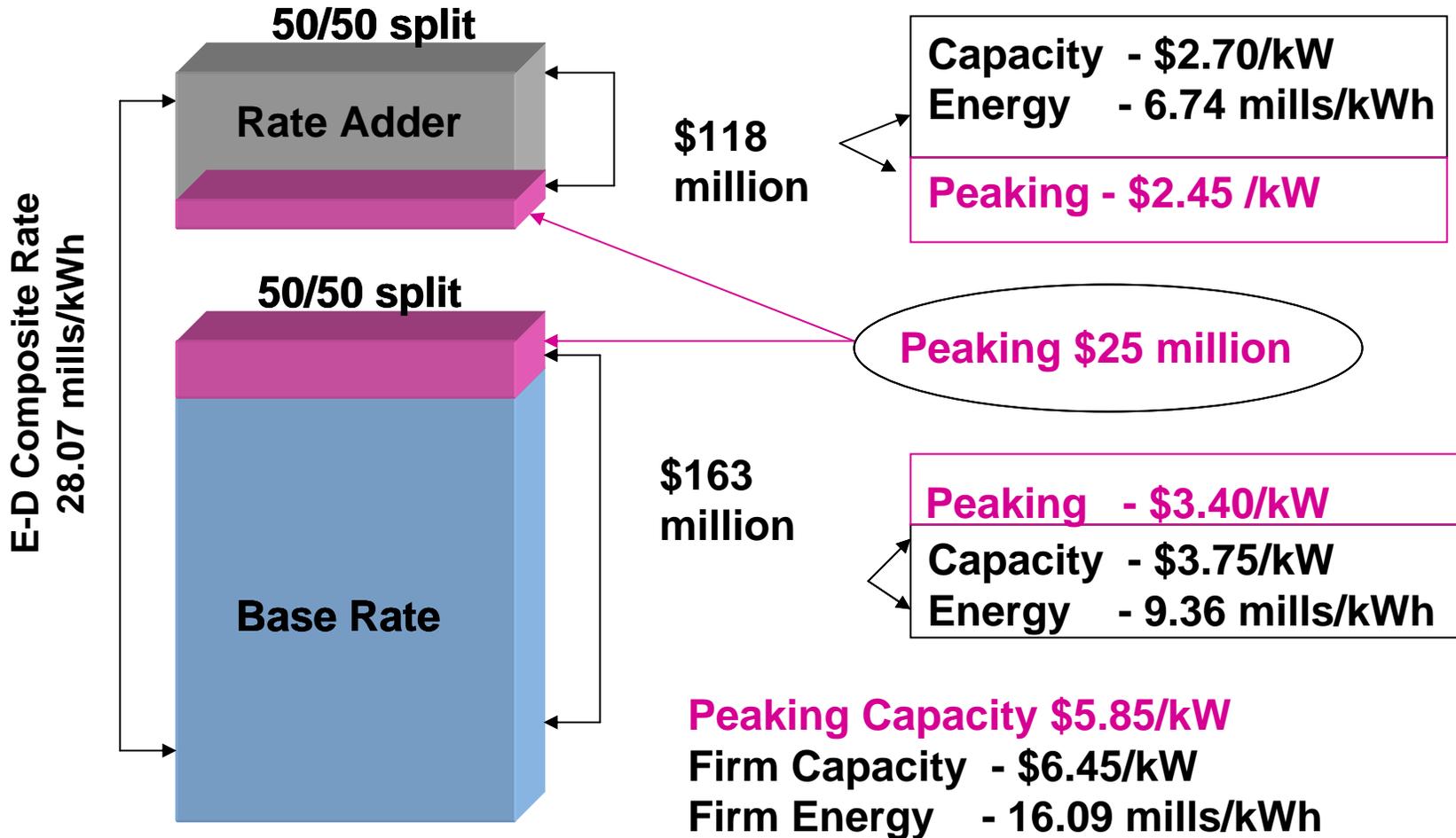
Firm Power Rev Req.	\$ 245.3 Million
Peaking Revenue	\$24.9 Million
5% Discount	<u>\$10.6 Million</u>
Gross Revenue	\$ 280.8 Million

## 50/50 Capacity/Energy Split



Note: Nickel rule for capacity rounding

## \$ 281 Million Revenue Requirement

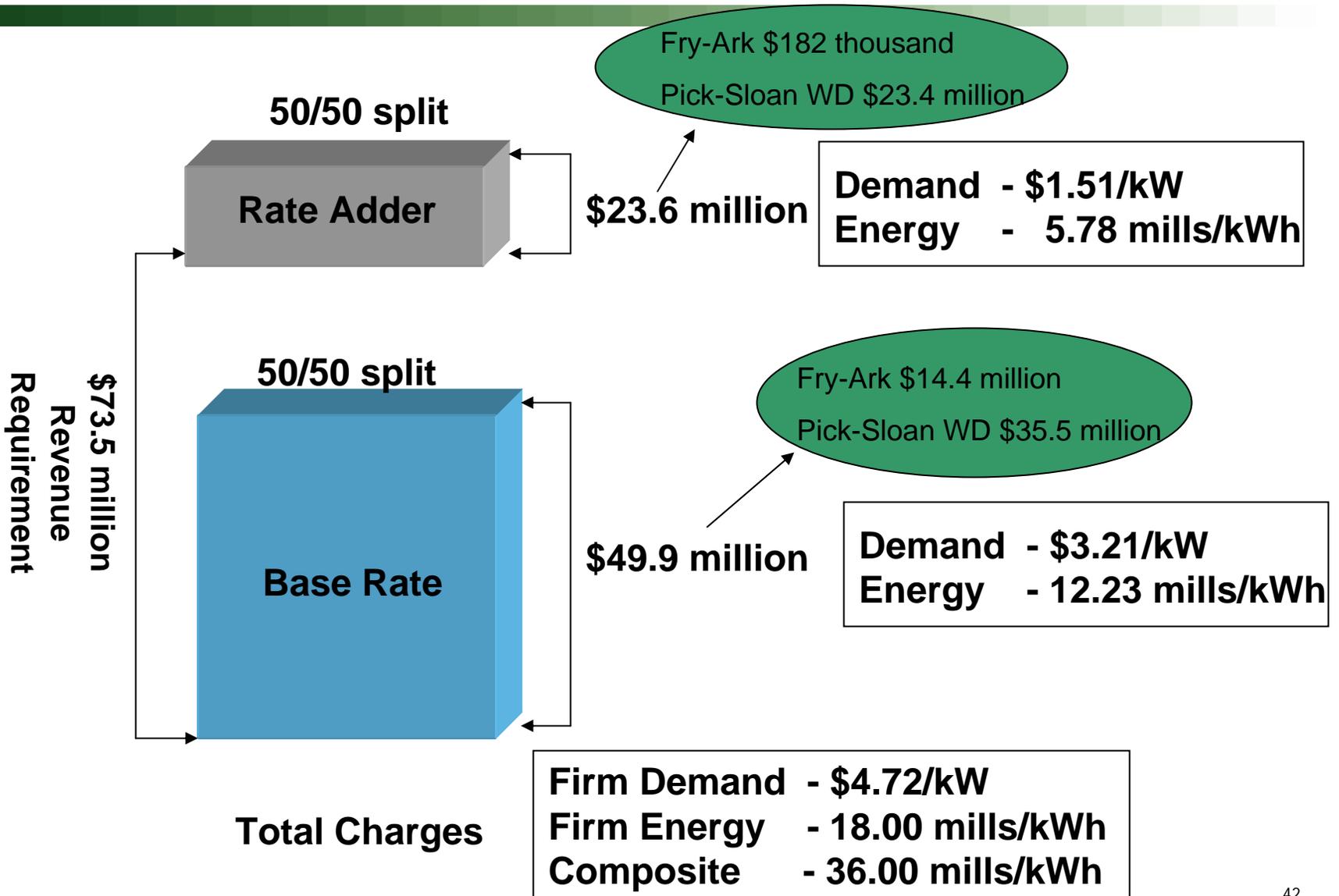


# Loveland Area Projects Rate Design

- Although operationally and contractually integrated, Fry-Ark and P-SMBP-WD retain separate financial status
- A Separate PRS is prepared annually for each project
  - Fry-Ark completed by Rocky Mountain Region
  - P-SMBP completed by Upper Great Plains Region with input from the Rocky Mountain Region
- Revenue requirements from both projects are combined to develop the LAP revenue requirement
- Rate is designed to return 50 percent of the revenue from the capacity component and 50 percent from the energy component
  - Capacity component is based on a monthly billing of the seasonal contract rate of delivery
  - Energy component is based on the annual contracted energy

Revenue requirements from both projects are combined to develop the LAP revenue requirement:

Fry-Ark	\$14.6 Million
Pick-Sloan	<u>\$58.9 Million</u>
Total LAP	\$73.5 Million



# Proposed Rate Adjustment

- Continue Base and Drought Adder components
- Possible 2 step on the Base to capture 2010 Work plans
- Accelerate Drought Adder
- Remove Cap on Drought Adder

- Setting a rate for 2009 without good expectation of what Purchases are going to be.
- Likely Purchase Power will exceed current projections for 2009
- How do we meet this continued cost increase?
  - Don't wait to adjust the Drought Adder
- Expect Drought Adder Formula to be utilized in January 2009 to keep shortage from escalating
- Notification of Drought Adder in Late Fall (October)



# Pick-Sloan 2009 Rate Adjustment

	<b>Composite Rate (mills/kWh)</b>	<b>Percent Increase</b>	<b>Pick-Sloan Firm Power Rev. Req. (millions)</b>	<b>Western Division Firm Rev Req. (millions)</b>	<b>Eastern Division Firm Rev Req. (millions)</b>	<b>Eastern Division Firm Plus Peaking. Rev. Req. (millions)</b>
<b>Current Rates January 2008</b>	<b>24.78</b>	<b>25%</b>	<b>\$265.9</b>	<b>\$51.8</b>	<b>\$214.1</b>	<b>\$235.9</b>
<b>Proposed Rates January 2009</b>	<b>28.35</b>	<b>14.4%</b>	<b>\$304.1</b>	<b>\$58.9</b>	<b>\$245.3</b>	<b>\$270.3</b>



# Eastern Division Proposed Rates

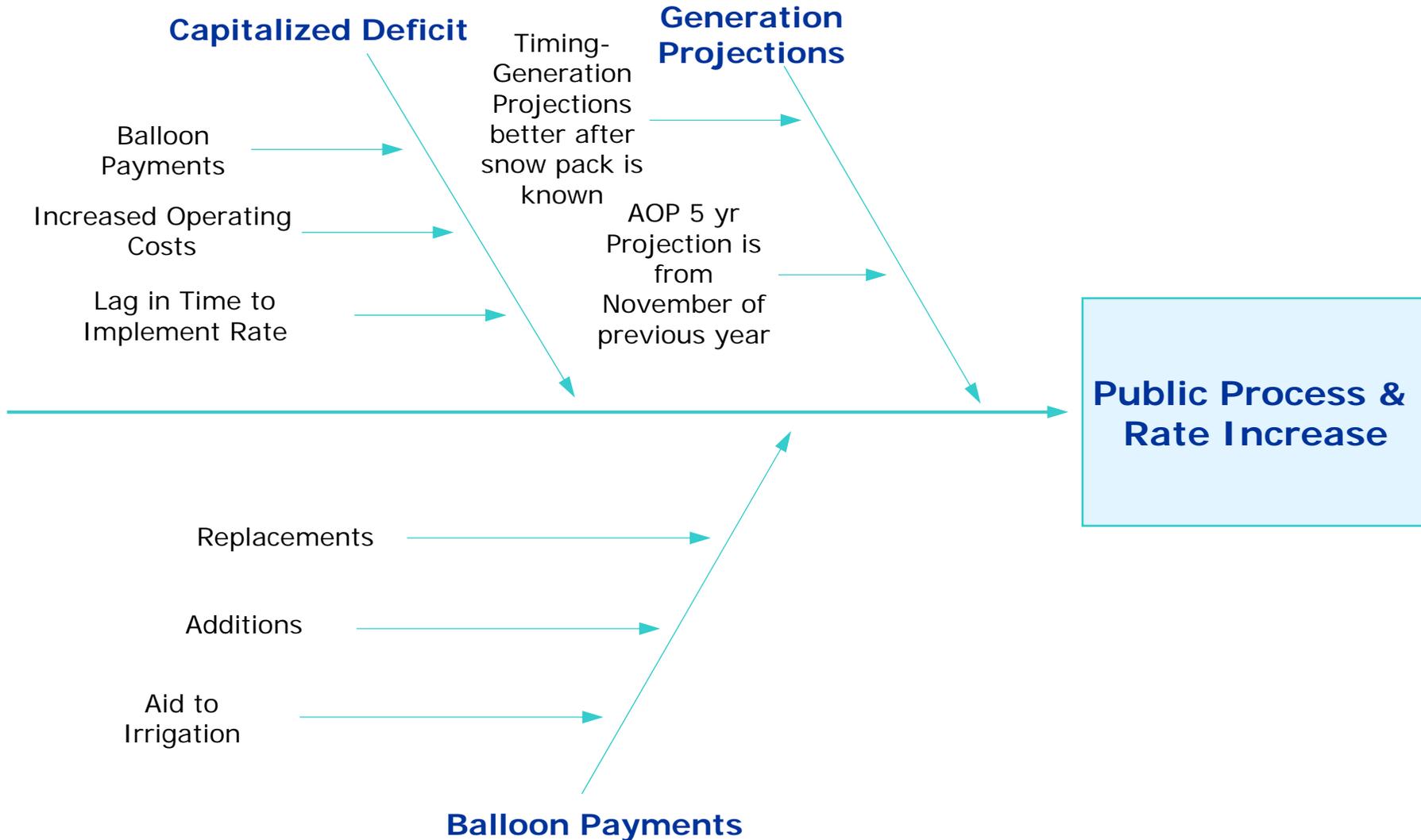
Firm Power Service	Current Rates Effective January 1, 2008	Proposed Rates Effective January 1, 2009
<b>E-D Firm plus Firm Peaking Rev. Req.</b>	\$235.9 million	\$270.3 million
<b>E-D Composite Rate</b>	24.49 mills/kWh	28.07 mills/kWh
<b>Firm Capacity</b>	\$5.65 kW-month	\$6.45kW-month
<b>Firm Energy</b>	13.99 mills/kWh	16.09 mills/kWh
<b>Firm Peaking Capacity</b>	\$5.10 kW-month	\$5.85 kW-month
<b>Firm Peaking Energy</b>	13.99 mills/kWh	16.09 mills/kWh



# LAP 2009 Rate Adjustment

	Composite Rate (mills/kWh)	Percent Increase	Effective Date	Fry-Ark Rev Req. (millions)	Western Division Rev Req. (millions)	LAP Firm Power Rev. Req. (millions)
<b>Current Rates (2<sup>nd</sup> Step)</b>	<b>32.42</b>	<b>19%</b>	<b>January 2008</b>	<b>\$14.3</b>	<b>\$51.8</b>	<b>\$66.1</b>
<b>Proposed Rates</b>	<b>36.00</b>	<b>11%</b>	<b>January 2009</b>	<b>\$14.6</b>	<b>\$58.9</b>	<b>\$73.5</b>

Firm Power Service	Current Rates Effective January 1, 2008	Proposed Rates Effective January 1, 2009
Fry-Ark Rev. Req.	\$14.3	\$14.6
Pick-Sloan W-D Rev. Req.	\$51.8	\$58.9
Composite Rate	32.42 mills/kWh	36.00 mills/kWh
Firm Energy	16.21 mills/kWh	18.00 mills/kWh
Firm Capacity	\$4.25/kW	\$4.72/kW



- Continue Base and Drought Adder components
- Possible 2 step on the Base to capture 2010 work plans
- Accelerate Drought Adder
- Remove Cap on Drought Adder

- Informal Meetings
  - April 29<sup>th</sup> Denver, CO
  - April 30<sup>th</sup> Sioux Falls, SD
- Public Process (90 Days)
- Federal Register Announcement
  - End of June 2008
  - Information Forums
    - July 29<sup>th</sup> Denver, CO
    - July 30<sup>th</sup> Sioux Falls, SD
  - Comment Forums
    - August 27<sup>rd</sup> Denver, CO
    - August 28<sup>th</sup> Sioux Falls, SD
- Close of Comment Period
  - End of September (90 Days after the FRN is Published)
- Implementation of New Rates
  - January 1, 2009



# LAP Rate Process Other Information

Materials will be posted on Website:

<http://www.wapa.gov/rm/ratesRM/2009>

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Western Area Power Administration

Rocky Mountain Region

PO Box 3700

Loveland, CO 80539



# Pick-Sloan E-D Rate Process Other Information

Materials will be posted on Website:

<http://www.wapa.gov/ugp/rates/2009firmrateadjust>

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# Discussion