



Western
Area Power
Administration

Proposed 2018 Rate Process

Informational Webinar

April 18, 2017

Pick-Sloan Missouri River Basin
Program--Eastern Division
&
Loveland Area Projects



Greetings

Jody Sundsted

Vice President of Power Marketing for UGP



Introductions

Linda Cady-Hoffman
UGP Rates Manager

Sheila Cook
RMR Rates Manager



Agenda

- Rate Process
- Charge Components
- PRS Information
 - Pick-Sloan
 - Fry-Ark
- Regional Rate Proposals
 - LAP
 - Pick-Sloan—ED
 - Sale of Surplus Products
- Schedule
- Q&A



Rate Process

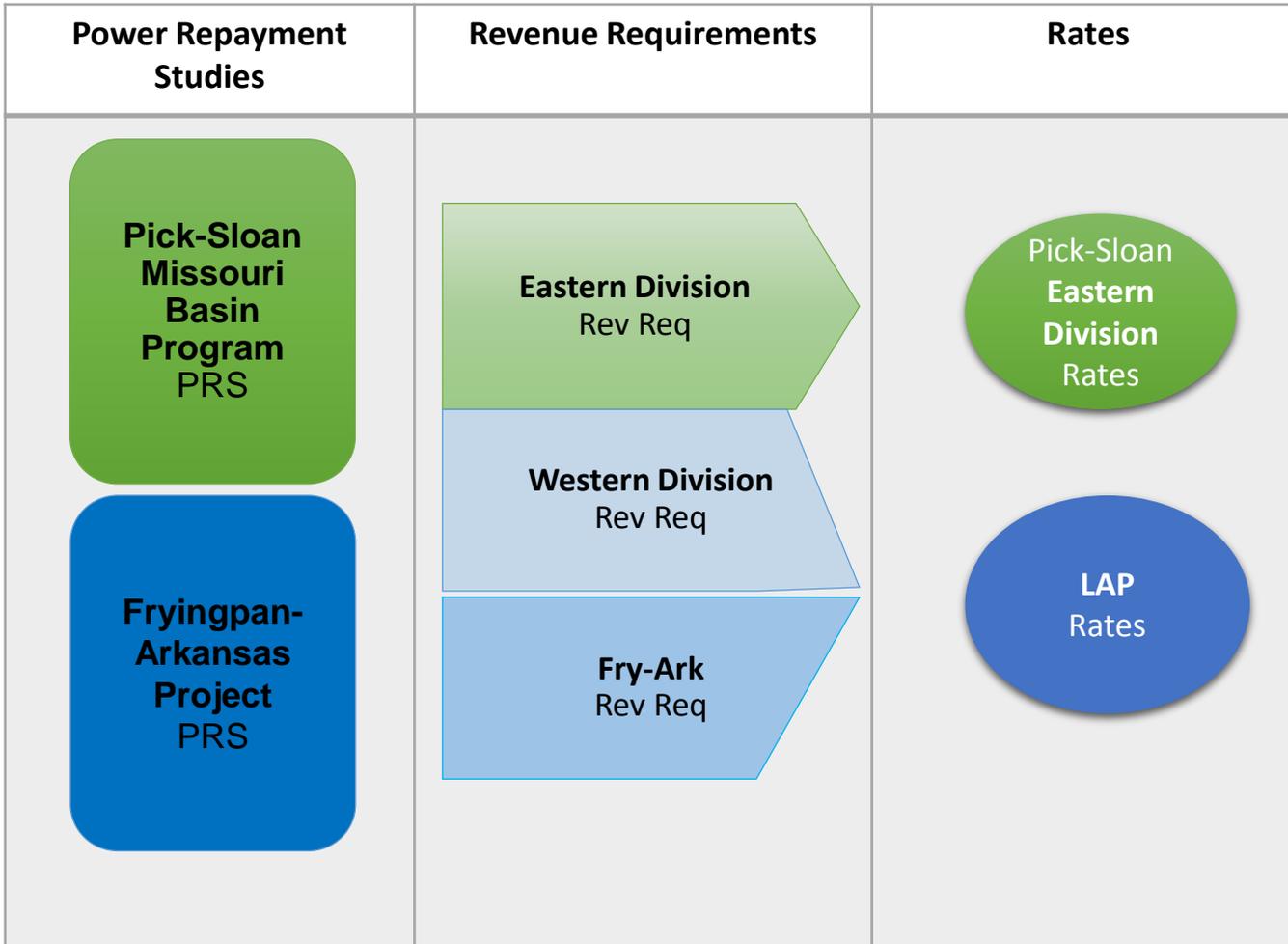
- Adjusting the P-S Components
 - Reducing the Drought Adder component to zero in calendar year 2018
 - Increase to the Base component
- Adjusting the Fry-Ark Component
 - Decrease to the Base component
- P-S--ED 5% Voltage Discount
- Sale of Surplus Products



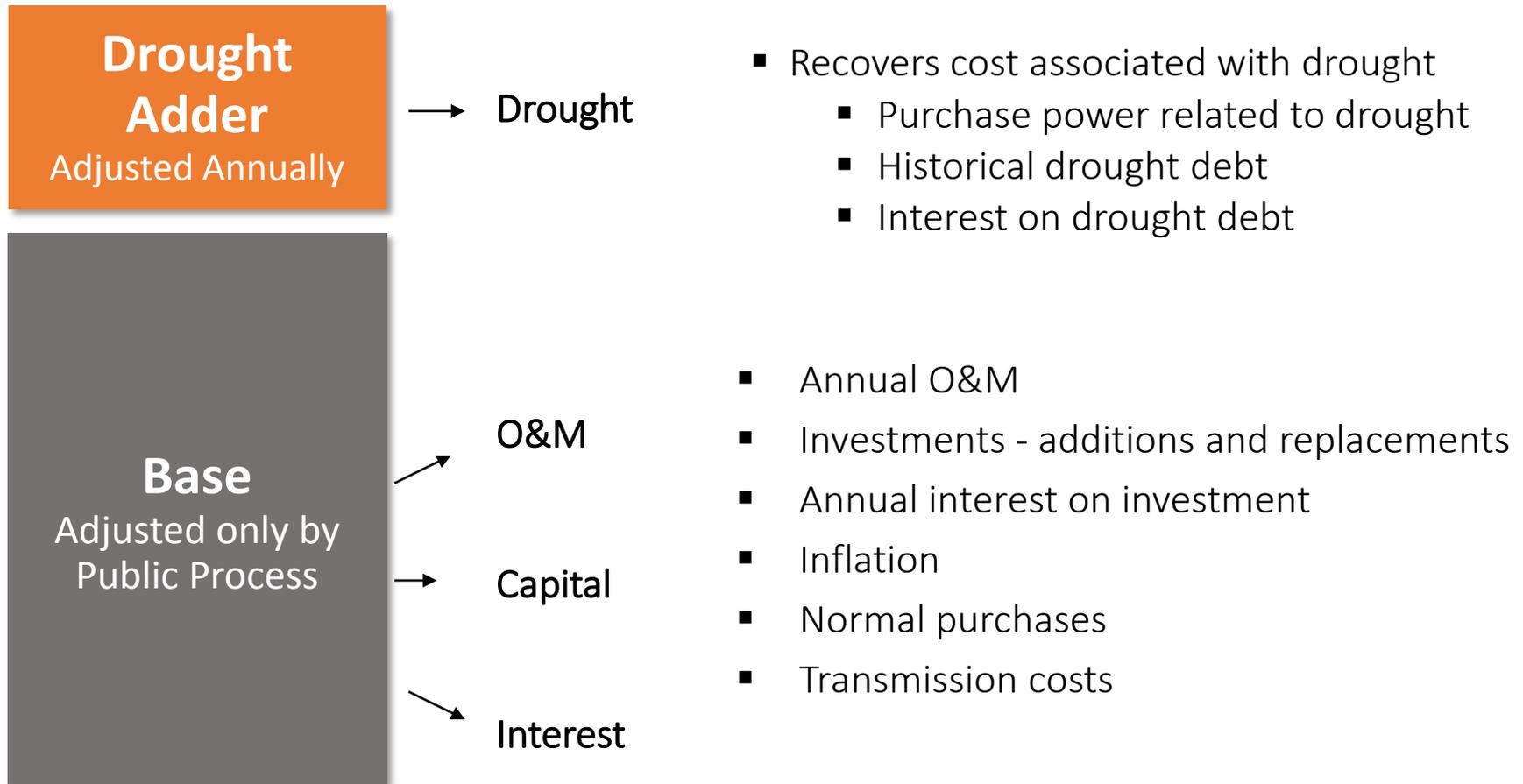
Rate Components



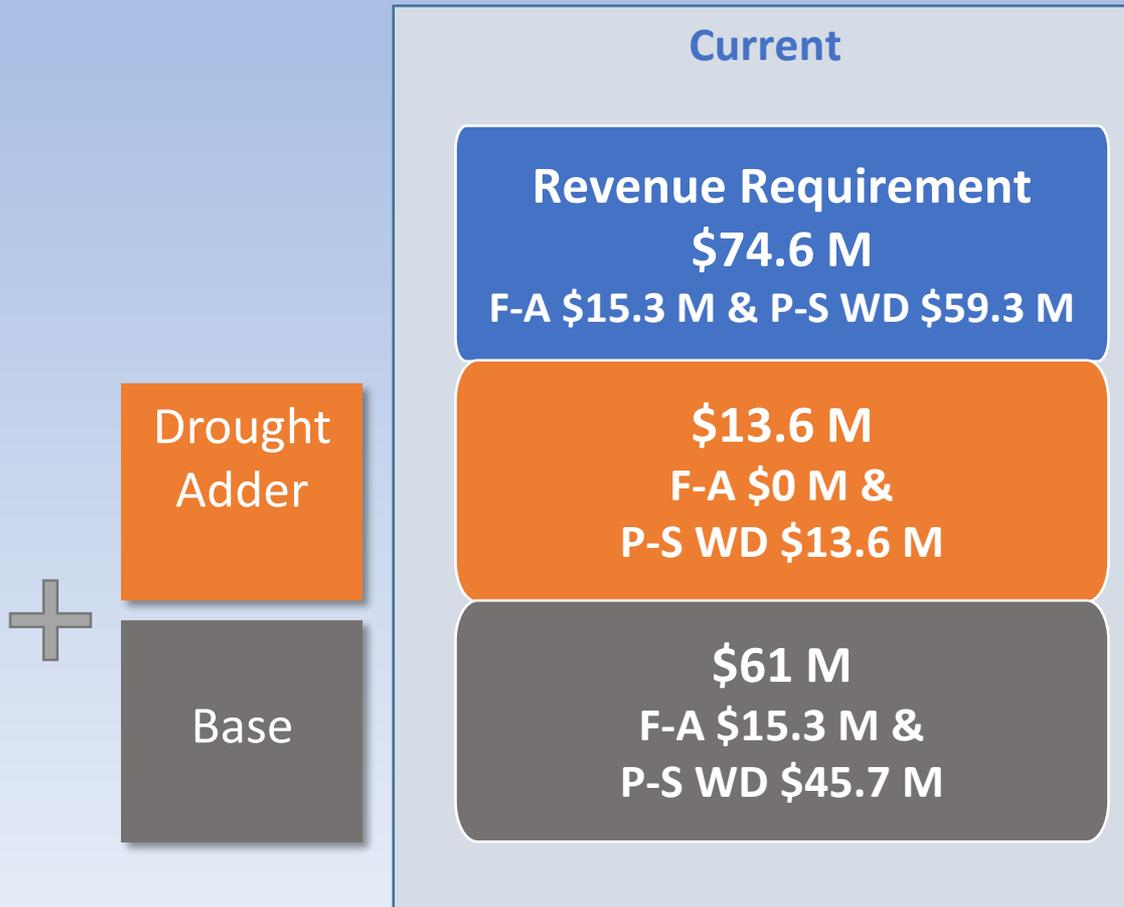
Rate Structures



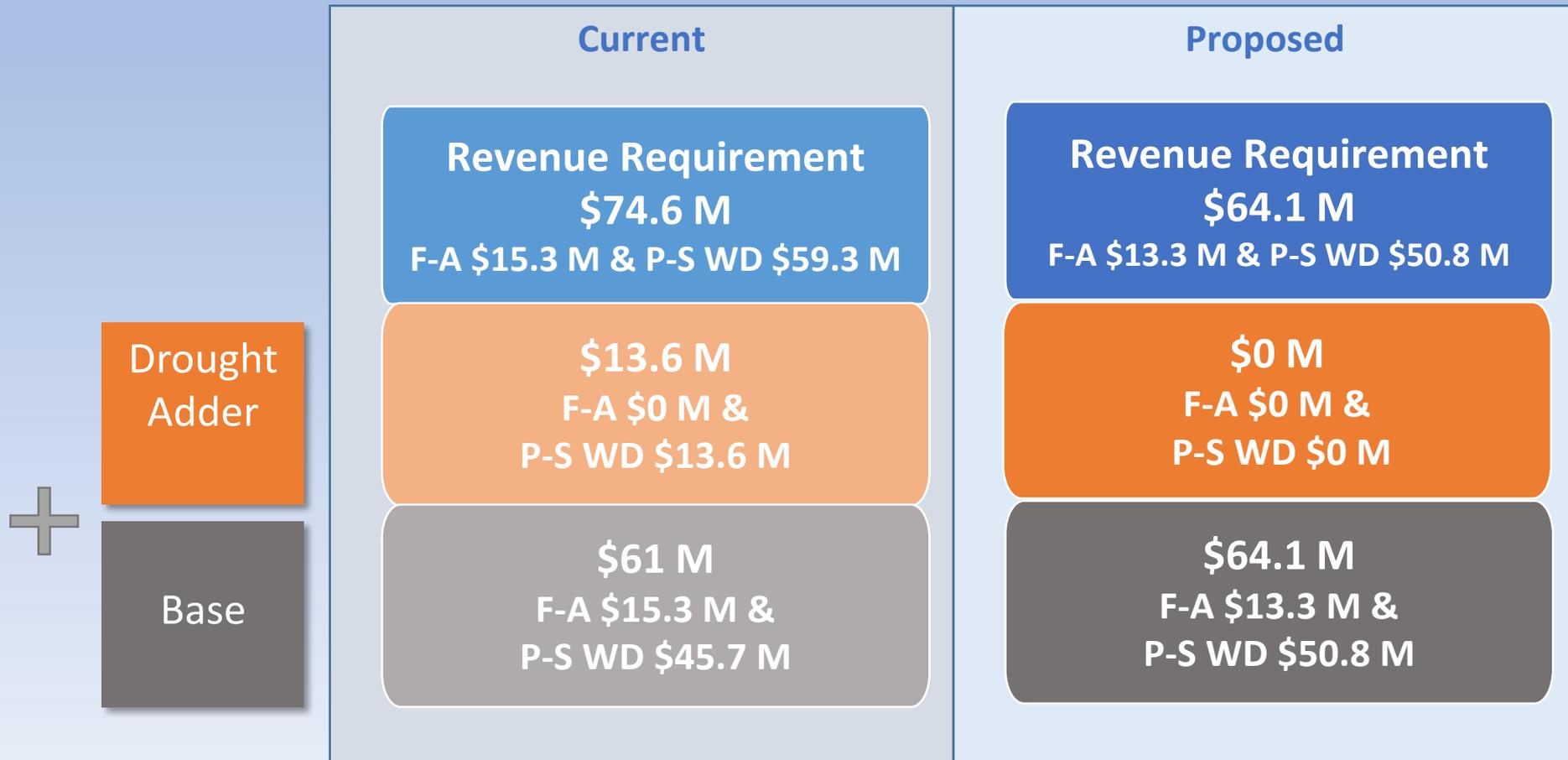
Overview of Component Costs



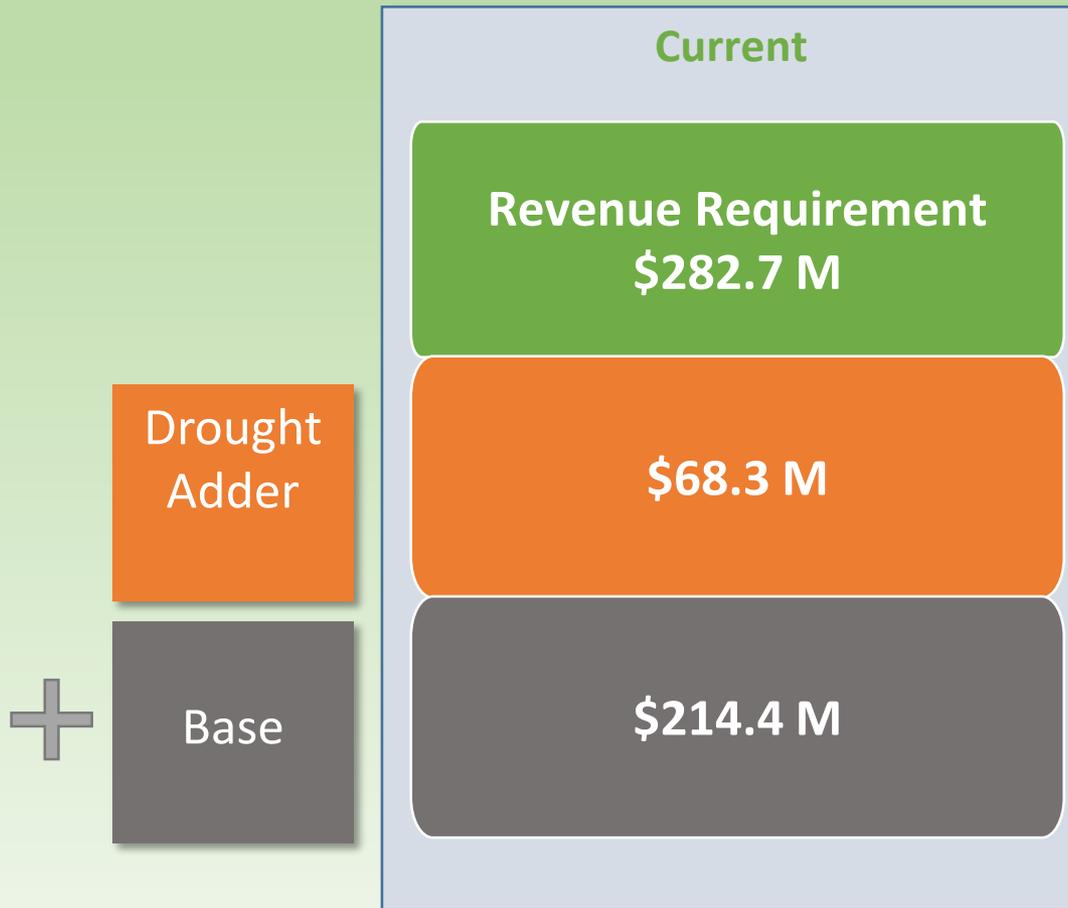
LAP Current Charge Components



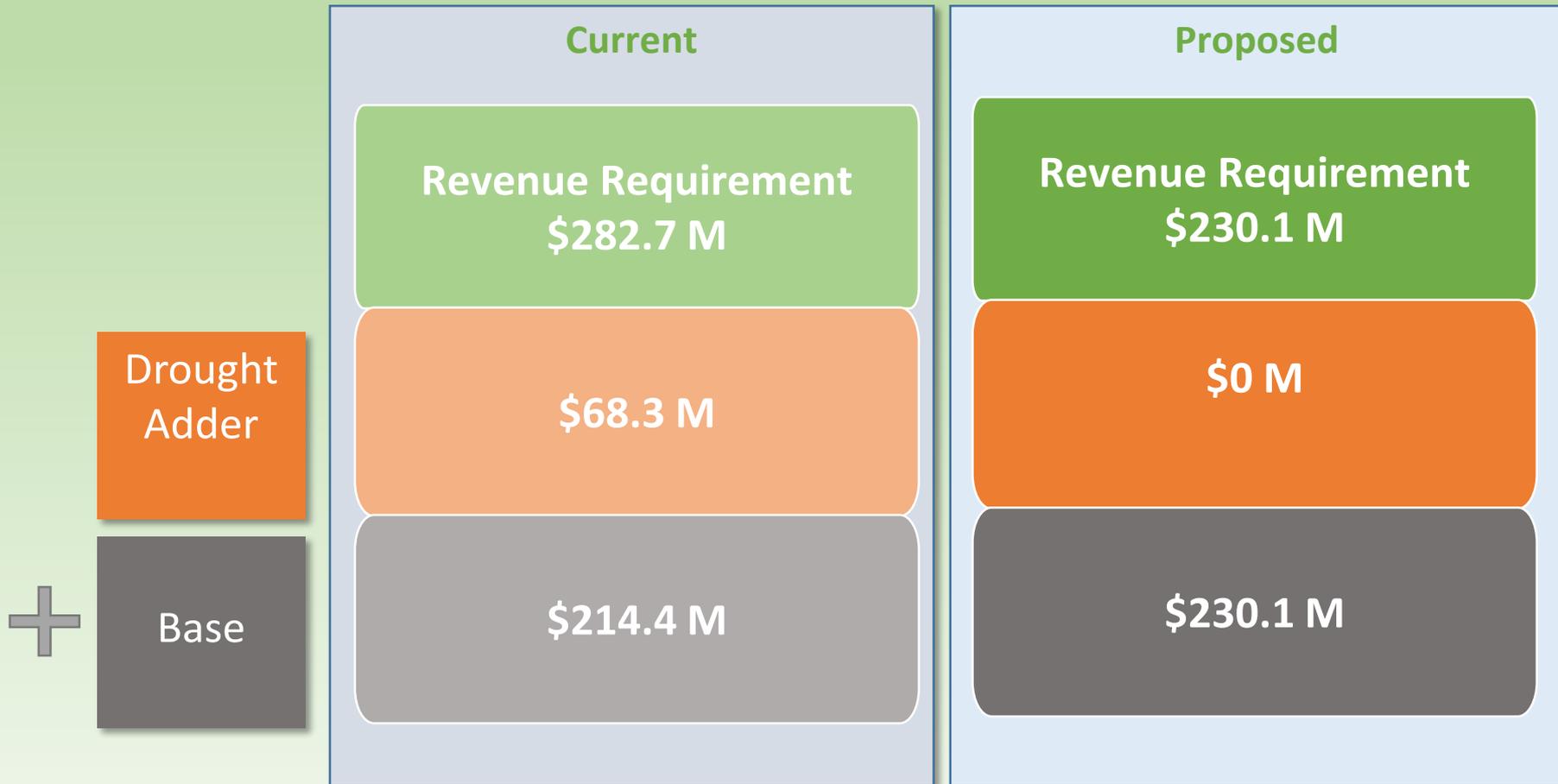
LAP Proposed Charge Components



P-SMBP--ED Current Charge Components



P-SMBP--ED Proposed Charge Components



PRS Information

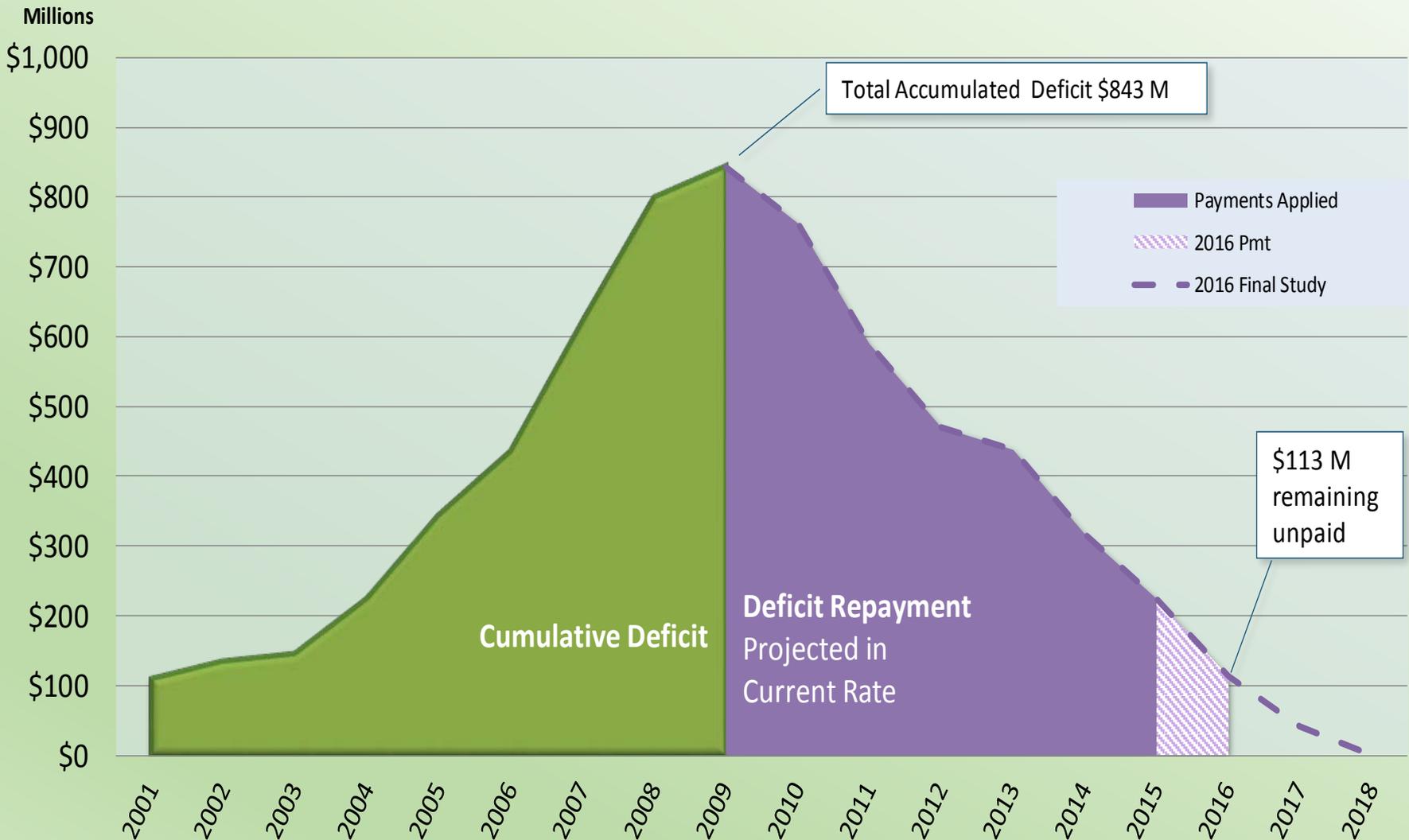


P-SMBP 2016 PRS

- 2016 deficit payment is \$110 M
 - Pays off the 2017 unpaid deficit balance
 - Balance applied towards 2018 remaining deficit balance
- \$113 M unpaid on the drought after 2016
- 2016 \$54 M required payments
 - Mostly in 2.5% to repay USACE investments
- 2020 is the PRS pinch point
- Study solves at 24.29 mills/kwh
 - Drought debt paid off in 2018



P-SMBP 2016 Deficit Repayment



Why the Drought/Base Changes

- Drought Adder is going to zero
 - Projected to make the last payment on the \$843 M accumulated drought by 2018
 - Paid ahead on the drought costs, final payment isn't required until 2019
- Base increasing
 - New 5-year cost evaluation period
 - New investments/replacements
 - New O&M expenses
 - Inflationary costs

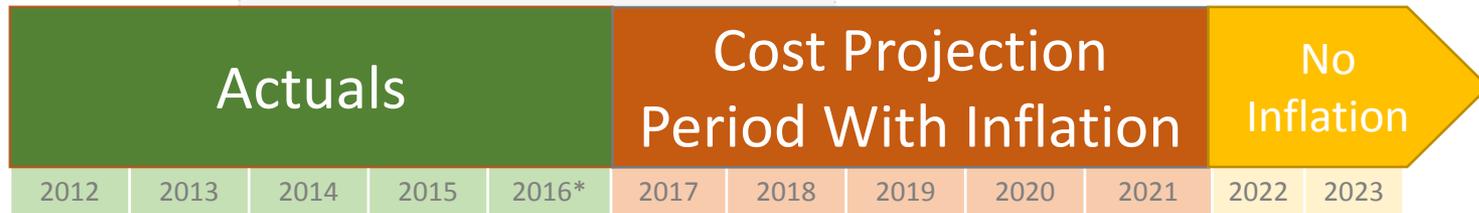


PRS 5-yr Projection Window

2015 Rate Setting PRS



2018 Rate Setting PRS



*Based on unaudited financials, with true up done the following year

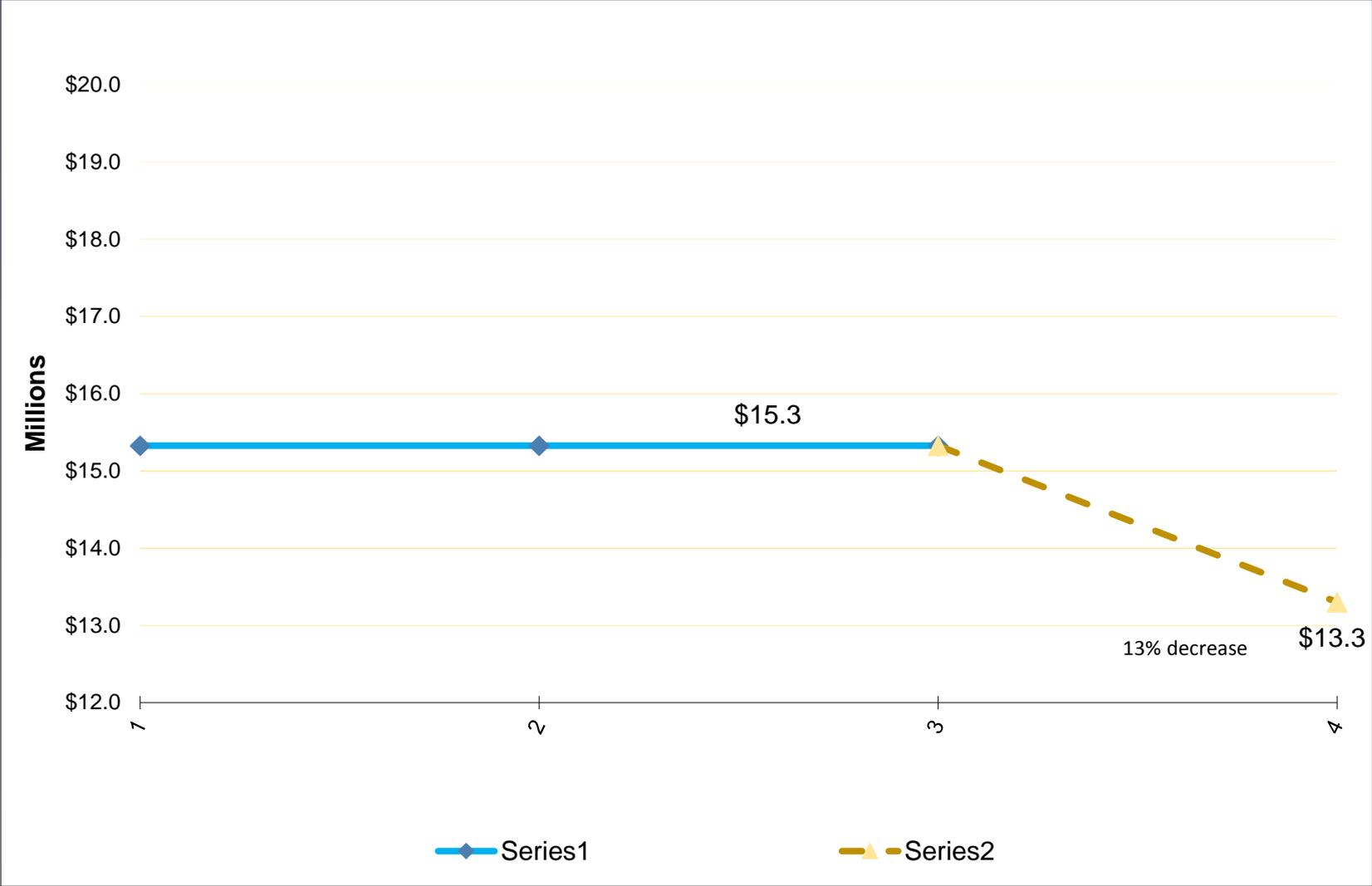


Fry-Ark FY 2016 PRS

- Uses FY18 Work Plans
 - Updated Mt. Elbert Rehabilitation Cost Projections
 - Study includes ~\$22.7M
- No outstanding deficits
- 2034 continues to be the pinch point in the PRS
- FY17 Coupon Rate used for future projections is 4.429%
- Study solves with a Revenue Requirement of \$13.3M
 - ~13% lower than the approved \$15.3M



Fry-Ark Revenue Requirement



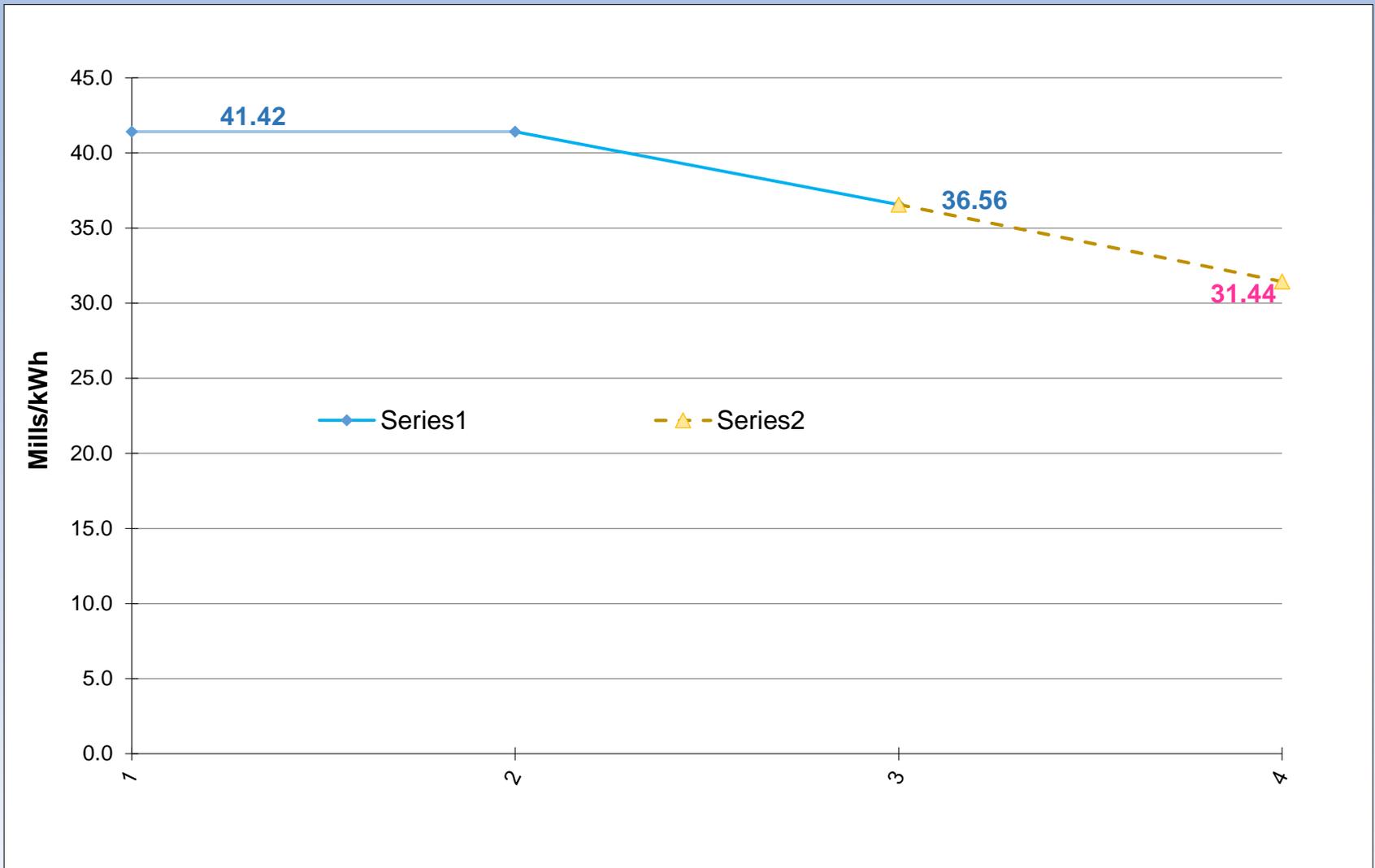
Regional Rate Proposals



LAP Rate Proposal



LAP Composite Rate



Why the Changes for Fry-Ark

- Base decreasing
 - New 5-year cost evaluation period
 - New Operations and Maintenance Expenses
 - New Investments/Replacements
 - Inflationary Costs

2015 Rate Setting PRS



2018 Rate Setting PRS



Why the Changes for Fry-Ark (cont.)

- Changes between 2013 and 2034 (pinch point) when compared to 2015 Rate-Setting PRS
 - O&M Expenses – Decrease avg ~\$0.3M/yr
 - Ancillary Services Revenues – Increase avg ~\$1.1M/yr
 - Regulation and VAR
 - AVG NET REVENUE INCREASE - ~\$1.4M/yr – offsets Revenue Requirement



LAP Summary of Revenue Requirements

Firm Electric Service	Current Rates Effective January 1, 2017	Proposed Rates Effective January 1, 2018	Percent Change
LAP Rev Req	\$74.6M	\$64.1M	-14%
Fry-Ark Rev Req	\$15.3M	\$13.3M	-13%
PS-WD Rev Req	\$59.3M	\$50.8M	-14%



LAP Proposed Rates Summary

Firm Electric Service	Current Rates Effective January 1, 2017	Proposed Rates Effective January 1, 2018	Percent Change
LAP Rev Req	\$74.6M	\$64.1M	-14%
Composite Rate	36.56 mills/kWh	31.44 mills/kWh	-14%
Firm Energy	18.28 mills/kWh	15.72 mills/kWh	-14%
Firm Capacity	\$4.79/kW-mo	\$4.12/kW-mo	-14%



LAP

Proposed Charge Components

**\$64.9 Million Revenue Requirement
(Fry-Ark \$14.1 M & P-S WD \$50.8 M)**

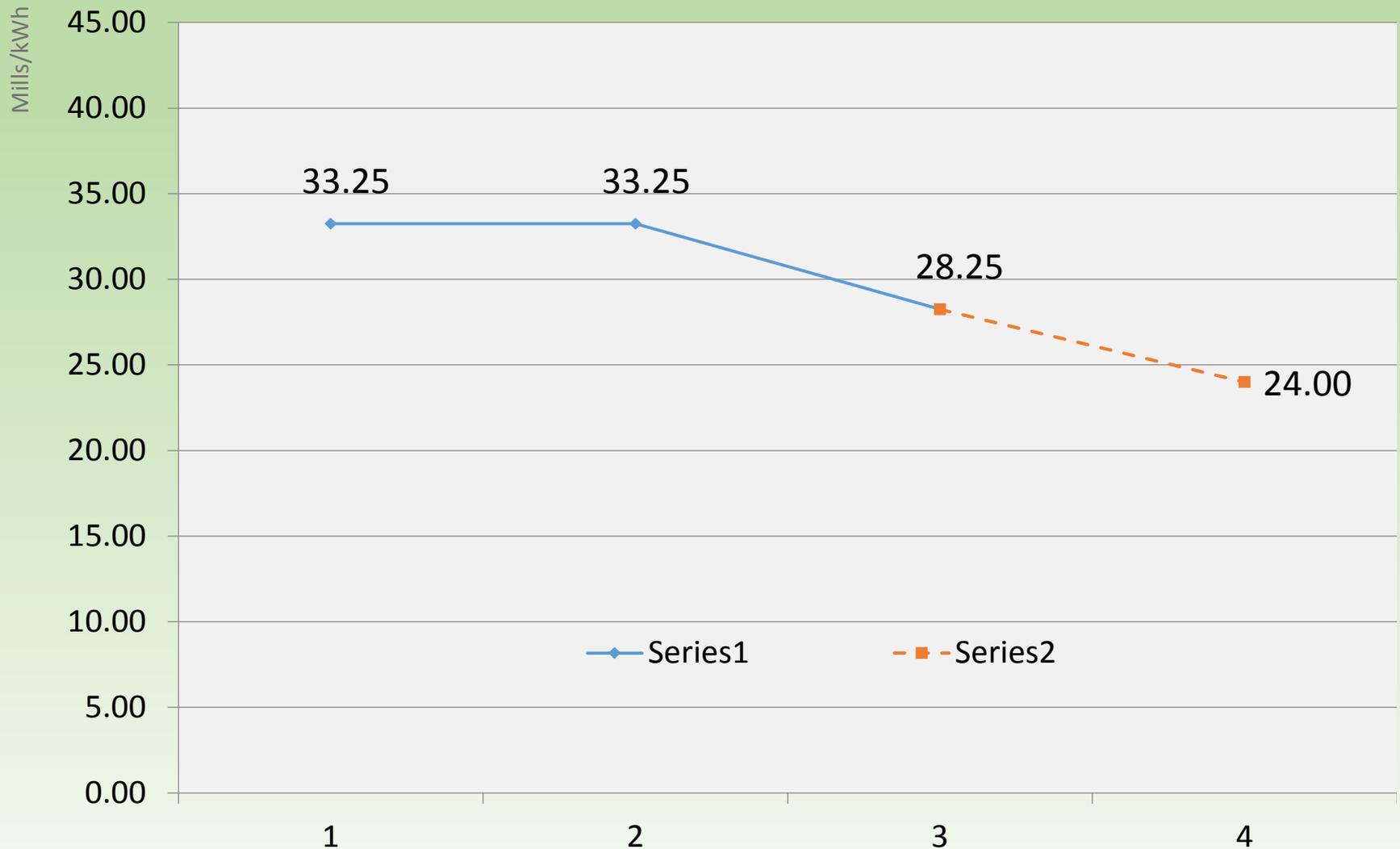
	Base	Drought Adder	Total Charges
Firm Capacity	\$4.12/kW-mo	\$0.00/kW-mo	\$4.12/kW-mo
Firm Energy	15.72 mills/kWh	0.00 mills/kWh	15.72 mills/kWh



P-SMBP--ED Rate Proposal



P-SMBP—ED Composite Rate



P-SMBP--ED Revenue Components

Firm Power Service	Current P-SMBP—ED Composite Rate 28.25 Mills/KWh	Proposed P-SMBP—ED Composite Rate 24.00 Mills/KWh	Change
Firm Power	\$247.0 Million	\$209.8 Million	-15%
Firm Peaking Power	\$25.0 Million	\$20.3 Million	-19%
5 % Voltage Discount	\$10.7 Million	\$7.3 Million Propose to Remove	-100%
Total Firm Revenue Req.	\$ 282.7 Million	\$ 230.1 Million	-19%



P-SMBP—ED Proposed Rates Summary

Firm Power Service	Current Rates Effective January 1, 2017	Proposed Rates Effective January 1, 2018	% Change
P-SMBP-ED Revenue Requirement	\$282.7 million	\$230.1 million*	-19%
P-SMBP-ED Composite Rate	28.25 mills/kWh	24.00 mills/kWh	-15%
Firm Capacity	\$6.50 kW-month	\$5.25 kW-month	-19%
Firm Energy	16.18 mills/kWh	13.27 mills/kWh	-18%
Firm Peaking Capacity	\$5.85 kW-month	\$4.75 kW-month	-19%
Firm Peaking Energy ^{1/}	16.18 mills/kWh	13.27 mills/kWh	-18%

^{1/} Firm peaking energy is normally returned. This will be assessed in the event firm peaking energy is not returned.

* Without the Voltage Discount



P-SMBP--ED

Proposed Charge Components*

\$230.1 Million Revenue Requirement

	Base	Drought	Totals
Firm Capacity	\$5.25/kW-mo	\$0.00/kW-mo	\$5.25/kW-mo
Firm Energy	13.27 mills/kWh	0.00 mills/kWh	13.27 mills/kWh
Firm Peaking Demand ^{1/}	\$4.75/kW-mo	\$0.00/kW-mo	\$4.75/kW-mo

^{1/} Firm Peaking Energy is normally returned. In the event Firm Peaking Energy is not returned, the Firm Energy Rate will apply.

* Without Voltage Discount



5% Voltage Discount Discussion



What is the 5% Voltage Discount?

- Historically, the 5% voltage discount was allowed for customers taking deliveries at transmission voltage who provided facilities that resulted in cost savings to the government
- This proposal will eliminate the 5% voltage discount offset that is added to the annual revenue requirement for dollars lost due to providing the voltage discount



P-SMBP—ED 5% Voltage Discount and Rate Design

Revenue Requirement	2018 Past Rate Design
Firm Power	\$209.8 M
Peaking Firm Power	20.3 M
5% Voltage Discount	7.3 M
Gross Rev Requirement	\$237.4 M
Firm Power Composite Rate	$\$209.8 \text{ M} / 8742 \text{ GWh} = 24.00 \text{ M/kWh}$
Effective Composite Rate	$(\$209.8 \text{ M} + \$7.3 \text{ M}) / 8742 = 24.83 \text{ m/kWh}$



P-SMBP—ED 5% Voltage Discount and Proposed 2018 Revenue Requirements

Revenue Requirement	2018 Past Rate Design	2018 Rate Design with No 5% Voltage Discount
Firm Power	\$209.8 M	\$209.8 M
Peaking Firm Power	20.3 M	20.3 M
5% Voltage Discount	7.3 M	0 M
Gross Rev Requirement	\$237.4 M	 \$230.1 M
	$\$209.8 \text{ M} / 8742 \text{ GWh} = 24.00 \text{ M/kWh}$	
Effective Composite Rate	$(\$209.8 \text{ M} + \$7.3 \text{ M}) / 8742 = 24.83 \text{ m/kWh}$	$\$209.8 \text{ M} / 8742 \text{ GWh} = 24.00 \text{ m/kWh}$



5 % Voltage Discount Comparison 2017 rates to 2018 proposed rates

	 Sample Bill 2017 Rates with 5% Discount	
Base Demand	341 Kw x \$4.90 kW=	\$1,670.90
Drought Demand	<u>341 Kw x \$1.60 kW=</u>	\$545.60
	\$6.50kW	\$2,216.50
Base Energy	130,000 kWh x 12.33 m/kWh=	\$1,602.90
Drought Energy	130,000 kWh x <u>3.85 m/kWh =</u>	\$500.50
	16.18 m/kWh	\$4,319.90
Demand & Energy Total		\$4,319.90
Less 5% Voltage Discount		(\$216.00)
Total Charge		\$4,103.91

	 Sample Bill 2018 Rates No 5% Voltage Discount	
	341Kw x \$5.25 kW=	\$1,790.25
	341 Kw x \$0 kW=	\$0
		\$1,790.25
	130,000 kWh x 13.27 m/kWh=	\$1,725.10
	130,000 kWh x 0 m/kWh =	\$0
		\$3,515.35
		\$3,515.35
	No Voltage Discount	0
		\$3,515.35



5 % Voltage Discount Comparison

2017 rates to 2018 with Voltage Discount

	 Sample Bill 2017 Rates with 5% Discount	
Base Demand	341 Kw x \$4.90 kW=	\$1,670.90
Drought Demand	<u>341 Kw x \$1.60 kW=</u>	\$545.60
	\$6.50kW	\$2,216.50
Base Energy	130,000 kWh x 12.33 m/kWh=	\$1,602.90
Drought Energy	130,000 kWh x <u>3.85 m/kWh =</u>	\$500.50
	16.18 m/kWh	\$4,319.90
Demand & Energy Total		\$4,319.90
Less 5% Voltage Discount		(\$216.00)
Total Charge		\$4,103.91

	 Sample Bill 2018 Rates with 5% Voltage Discount	
	341 Kw x \$5.50 kW=	\$1,875.50
	341 Kw x \$0 kW=	\$0
		\$1,875.50
	130,000 kWh x 13.60 m/kWh=	\$1,768.00
	130,000 kWh x 0 m/kWh =	\$0
		\$3,643.50
		\$3,643.50
		(\$182.18)
		\$3,461.32



WAPA-UGP Is Proposing to Discontinue the 5% Voltage Discount

- Consistent application of the discount is difficult
 - New customers
 - Determination of “sufficient savings” to justify discount
 - Staff time
- Existing PODs can sufficiently deliver our firm power & energy
 - 5% Voltage Discount must be evaluated for application at new PODs.
- For many customers, WAPA-UGP provides a small portion of the total power supply
 - The 5% discount impedes ability to simplify power billing for customers having multiple PODs.
- Requires complex power billing software
 - Discontinuing the 5% Voltage Discount would provide savings in future software.
 - No other WAPA project has a Voltage Discount.



Sale of Surplus Products Rate Schedules



PS-ED Adding a Sale of Surplus Products Rate Schedule

- This is not a new business practice
 - Documenting the authority for short-term sales
- Rate schedule applies to marketing and is applicable to the sale of surplus products
 - Short-term energy only
- The surplus products are available after firm power and energy obligations are met.
- WAPA can make the product(s) available for sale providing entities enter into separate agreements with the marketing office which will specify the terms of the sale
- Term on the surplus energy product sale cannot exceed one year
- The charge for each product will be determined at the time of the sale based on market rates



LAP Sale of Surplus Products - L-M1

- Current LAP surplus energy & capacity products included:
 - Reserves
 - Regulation
 - Frequency Response
- Requirements
 - Separate agreement(s) with LAP Marketing
- Charge
 - Based on market rates (+) administrative costs
- Proposing the addition of “short-term *energy*” as a surplus product to existing Rate Schedule L-M1



Proposed Schedule



Public Process Schedule

- June – Publish 2 FRNs
 - FRN for P-SMBP—ED and an FRN for LAP
 - Begins 90 day comment period
- Public Information & Comment Forums
 - July 26, 2017 Denver, CO vicinity
 - July 27, 2017 Sioux Falls, SD
- Publish Final FRNs- Fall 2017
- New Rate Schedules in place
 - January 1, 2018



Drought Adder Schedule for 2017

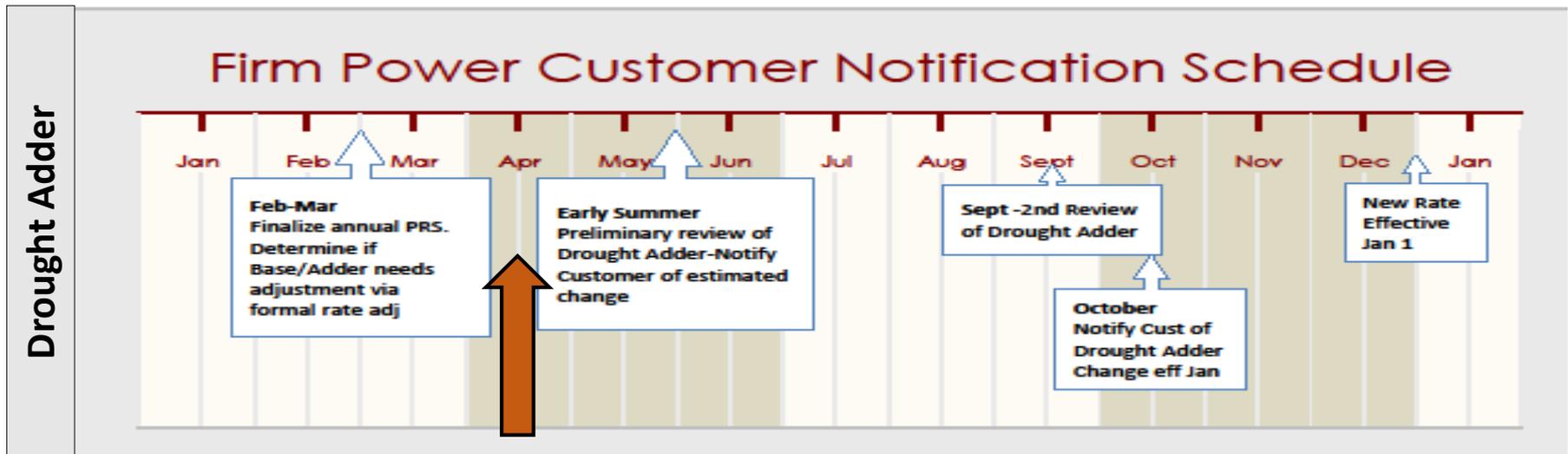
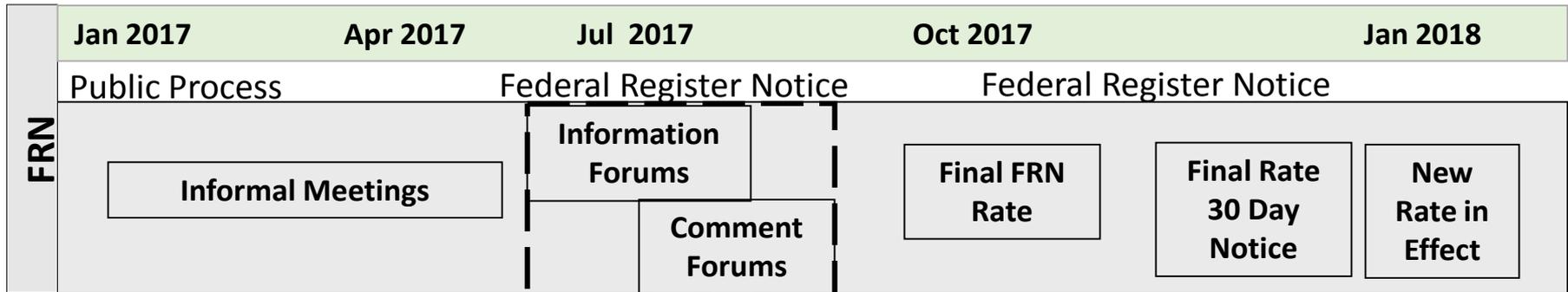
- Finalize annual Power Repayment Study (Feb-March)
 - Determine if Base rate and/or Drought Adder needs adjustment via formal rate adjustment
- Corp snowpack is final—new generation projections April 15th
- Perform preliminary review of Drought Adder early summer – notify customers of and estimated change to the rate
- Perform second review of Drought Adder in September
- Notify customers in October of Drought Adder change to be implemented January 2018



We are here



Draft Schedule for 2018 Rate Adjustment



More Information

P-SMBP--ED

Materials will be posted to
Website:

<https://www.wapa.gov/regions/UGP/rates/Pages/2018-firm-rate-adjustment.aspx>

Contact:

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UGP Rates Manager

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E-mail: cady@wapa.gov

LAP

Materials will be posted to
Website:

<https://www.wapa.gov/regions/RM/rates/Pages/2018-Rate-Adjustment---Firm-Power.aspx>

Contact:

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Questions

