# 2025 Power Marketing Initiative (PMI) Proposal

## Western Area Power Administration Rocky Mountain Region

**Loveland Area Projects** 

November 29-30, 2011

## Agenda

- Overview of Western Area Power Administration
- Post-1989 Loveland Area Projects (LAP) Marketing
   Plan
- Energy Planning and Management Program
- Development of the 2025 PMI Proposal
- 2025 PMI Proposal
- 2025 PMI Comment Period & Proposal Information
- Questions

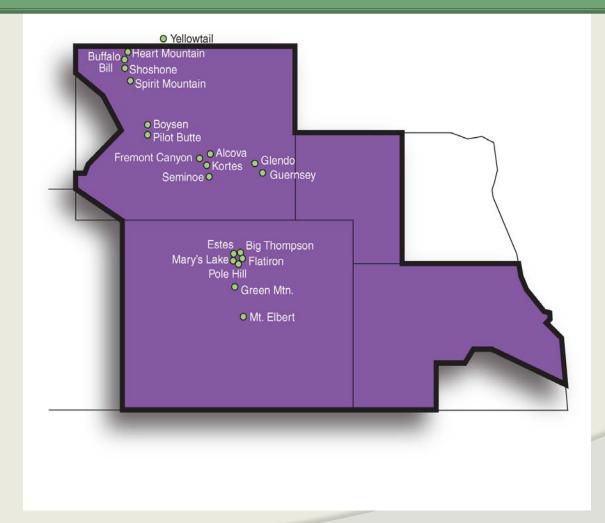
# Overview of Western Area Power Administration (Western)

- One of four power marketing administrations within the Department of Energy
- Mission: Market and deliver reliable, renewable, cost-based Federal hydroelectric power and related services within a 15-state region of the central and western U.S.
- Vision: Provide premier power marketing and transmission services

Rocky Mountain Region (RMR) is one of five regional offices



## Rocky Mountain Region Loveland Area Projects Power Plants





# Post-1989 LAP Marketing Plan (Marketing Plan)

- Extended long-term commitments to existing customers and allocated power to 57 new customers through September 30, 2004
- Established Conservation and Renewable Energy (C&RE) Program
- Marketed capacity and energy based on Bureau of Reclamation (Reclamation) hydrology study
- Extended marketing area



# Energy Planning and Management Program (EPAMP)

#### Implemented in 1995

- Part 1 Integrated Resource Planning (IRP)
  - Replaced C&RE Program
- Part 2 Power Marketing Initiative (PMI)
  - Amended the Marketing Plan



### EPAMP - Part 2 PMI (continued)

#### LAP

- Extended and amended the Marketing Plan through September 30, 2024
  - Made commitments to existing customers
- Established periodic resource pools
  - Acquires new customers through resource pools
- Waived utility status requirement for Native American Tribes



# Development of the 2025 PMI Proposal

- 2011 Reclamation Hydrology Study
  - 2025 estimate of capacity and energy
  - Update of 1982 study for LAP Marketing Plan
- Customer input July and August 2011 informal meetings
- Consultation with Native American Tribal customers



## 2025 PMI Proposal

- Amends Marketing Plan Principles for:
  - Contract Term
  - Resource Pools
- Extends Marketing Plan Principles for:
  - Marketable Resource
  - Hydrology/River Operations Withdrawal Provision
  - Marketing Area
  - Mt. Elbert Pumped-Storage Power Plant



#### Contract Term

- Firm electric service (FES) contract term should strike a balance between
  - Customers' need for stability in resource planning
  - Western's mission requirements and its need for flexibility (achieved through resource pools and withdrawal provisions)
- Pick-Sloan Missouri Basin Program (PSMBP)-Eastern Division 30-year contract term in their 2021 PMI

2025 PMI Proposal: 30 year contract term (through September 30, 2054)



#### Resource Pools

- Flood Control Act of 1944 widespread use
- Marketing Plan 57 new customers
- EPAMP new customers were added through resource pools
  - Initial resource pool in 2004 4% of marketable resource
  - Two additional resource pools in 2009 and 2014 of up to 1% of the marketable resource
  - New customers received between a minimum of 100kW and a maximum of 5MW



#### Resource Pools

#### 2025 PMI Proposal:

- Resource pools for new preference entities every 10 years
- Up to 1 percent of the marketable resource
- First one effective at the beginning of the contract term October 1, 2024; subsequent pools effective on October 1, 2034 and on October 1, 2044



#### Marketable Resource

#### Power plants

- LAP resources include 19 PSMBP-Western Division hydroelectric power plants and Mt. Elbert Power Plant, all of which are owned and operated by the Bureau of Reclamation
- Yellowtail Power Plant two of four units are marketed as LAP resources and two are marketed as PSMBP-Eastern Division resources
- 830 MW of combined LAP installed capacity



#### Marketable Resource

#### Current Marketing Plan

- Developed in early 1980's based on Reclamation's longterm hydrology and reservoir operations modeling
- Contracts expire September 30, 2024
- Western allocated average monthly energy and monthly capacity available 90% of the time



#### Marketable Resource

#### Current Marketing Plan

- Customers may schedule their monthly energy allocation between minimum and maximum levels in any hour
- Maximum hourly schedule is a customer's monthly capacity
- Minimum hourly schedule is based on Reclamation's minimum reservoir release requirements and Western's off-peak regulation requirements
- Western may, with five years prior notice, adjust allocations based on changes in hydrology or river operations



#### Marketable Resource

2011 Reclamation Hydrology Study

- Updated Marketing Plan long-term hydrology study and reservoir modeling
- Used 70 years of stream flow data as input to reservoir operation models configured for expected 2025 conditions
- Energy and capacity calculated at same risk levels
- Results indicate:
  - 7% less energy than in original study
  - Shift of LAP generation from winter months into spring and fall months



Marketable Resource

2025 PMI Proposal: No change

Continue contract rates of delivery in effect at the end of the current contract period (September 30, 2024)

Reduced by up to 1 percent for the initial resource pool effective October 1, 2024



Hydrology & River Operations Withdrawal Provision

2025 PMI Proposal: No Change

Western reserves the right to adjust the contract rate of delivery on five years advance written notice in response to changes in hydrology and river operations

Adjustments would occur after an appropriate public process

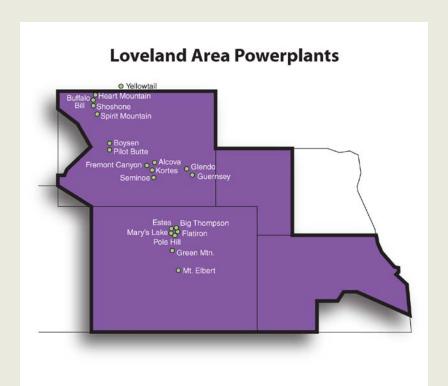


#### LAP Marketing Area

- Combined marketing area for Fryingpan-Arkansas (Fry-Ark) Project and PSMBP-Western Division
- Colorado and Wyoming east of the Continental Divide, western Nebraska, and part of Kansas
- Marketing area includes territory beyond what is served by Federal transmission or existing wheeling contracts



#### LAP Marketing Area



The marketing area of LAP includes the portion of the State of Wyoming east of the Continental Divide, the portion of the State of Colorado east of the Continental Divide, Mountain Parks Electric, Inc.'s service territory in Colorado west of the Continental Divide, the portion of the State of Nebraska west of the 101st Meridian, the portion of the State of Kansas located in the Missouri River Basin and the portion of the State of Kansas west of the eastern border of the counties intersected by the 100<sup>th</sup> Meridian.



LAP Marketing Area

2025 PMI Proposal: No change Continue current LAP marketing area



#### Mt. Elbert Pumped-Storage Power Plant

- Only power plant built as part of the Fry-Ark Project
- Includes two 100 MW units
- Both units became commercially available in 1984
- Pumped-storage power plant uses reversible pump/turbines to generate on-peak energy and pumps water to the upper reservoir in off-peak hours
- Integrated with the PSMBP-Western Division in 1989, creating LAP



Mt. Elbert Pumped-Storage Power Plant in the Current Marketing Plan:

- Only "flow through" generation is included in LAP energy allocations
- Full 200 MW capacity included in LAP capacity allocations
- Off-peak energy must be returned to Western commensurate with any on-peak energy taken

2025 PMI Proposal: No change

Continue current Mt. Elbert marketing features

## 2025 PMI Proposal

#### Summary

- ✓ Contract Term: 30-year contract term
- ✓ Resource Pools: Resource pools only for new preference customers for up to 1 percent of marketable resource under contract at the time, at the beginning of the contract term and again every 10 years (i.e., October 1, 2024, 2034, and 2044)
- Marketable Resource: No change
- Hydrology/River Operations Withdrawal: No change
- Marketing Area: No change
- Mt. Elbert Pumped-Storage: No change



#### 2025 PMI Comment Period

- FRN published; comment period began
   October 17, 2011
- Public information and comment meetings
  - November 29, 2011, Loveland, CO
  - November 30, 2011, Topeka, KS
- Comments due by 4:00 p.m. MST, Monday,
   January 30, 2012
- Publish responses to comments and final decision
   FRN ~ Spring 2012



## 2025 PMI Proposal Information https://www.wapa.gov/rm/PMcontractRM/2025%20PMI/default.html

Western	WESTERN AREA POWER ADMINISTRATION An agency of the U.S. Department of Energy Rocky Mountain Region									
	_		ower Marketing	Transmission	Jobs EP	TC	Energy Services			
	orp. Services	Regions	Doing Busines		Industry Li		Federal Register Notices			
		_	-		,		You are here: Western   m   Plicontrac	#RM   2025%20PH   2	125 Power Marketing Initiative	
RM Home	2025 Po	wer Market	ing Initiative						Renewable Energy	
About RM	The Love	aland Area Pi	rojects (LAP) Fin	m Electric Servic	e (FES) cont	ract	s expire September 30, 2024.	Western Area	Certificates RFP (pdf)	
Contact RM	Power Ar	Power Administration's (Western) Rocky Mountain Region (RMR) is responsible for developing and administering the								
Customers		LAP FES contracts and is in the process of developing a plan for marketing and allocating LAP hydroelectric power after the FES contracts expire. We call this plan our 2025 Power Marketing Initiative (2025 PMI), which will be effective October 1, 2024 (Federal fiscal year 2025).  **Merchart Service**  **Merchart Service**  **Bates and**  **Rates and**								
Environment										
News in RM	1818	Western RMR is hosting formal customer meetings at two different locations to discuss the 2025 PMI. The 2025 PMI presentation will be the same at the two meetings; the two locations are intended to allow our customers scheduling and travel flexibility.								
OASIS										
Operations & Maintenance	schedulir									
Planning & Projects	2025 PM	2025 PMI Formal Comment Forums (tentative):								
Power Marketing & Contracts in RM	Tuesday	, November	29, 2011	9:00 a.m. MST						
Contractual Services				Embassy Suites Hotel, Spa and Conference Center						
Resource Allocations				4705 Clydesdale Parkway						
Rates		Loveland, CO 80538								
Science Bowl		Telephone Number: (970)593-6200								
	Wednes	Wednesday, November 30, 2011 1:00 p.m. CST								
					Capitol Plaza Hotel					
		1717 SW Topeka Boulevard Topeka, KS 66612								
		Telephone Number: (785)431-7200								
	before the at (970) If you ha mail giers	So that we may have an estimate of attendance, if possible, we ask that you let us know at least two days before the meetings who will be attending from your organization. Please provide that information to Jennie Beck at (970) 461-7221, e-mail <a href="mailto:beck@wapa.gov">beck@wapa.gov</a> .  If you have any questions or require additional information, please contact Mr. John Gierard at (970) 461-7445, e-mail <a href="mailto:gierard@wapa.gov">gierard@wapa.gov</a> ; Ms. Melanie Reed at (970) 461-7229, e-mail <a href="mailto:mreed@wapa.gov">mreed@wapa.gov</a> ; or Mr. David Neumayer								



#### Provide written comments to:

Mr. Bradley S. Warren
Manager - Rocky Mountain Region
Western Area Power Administration
5555 East Crossroads Blvd
Loveland, CO 80538-8986

Fax: (970) 461-7204

Email: 2025PMI@wapa.gov



## QUESTIONS