

WESTERN AREA POWER ADMINISTRATION

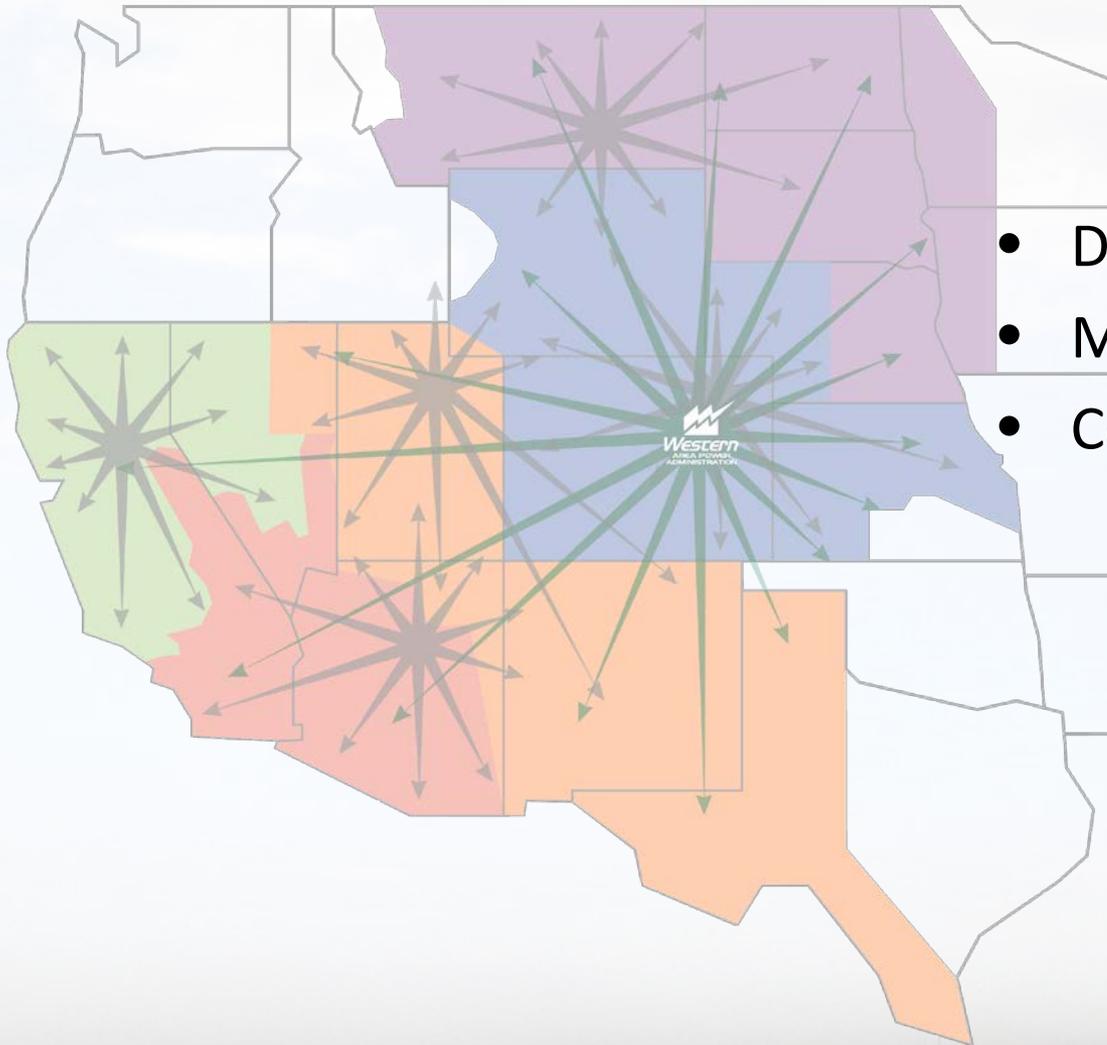
# East River Energize Forum

**Mark A. Gabriel**  
**Administrator & CEO**

February 4, 2016



# Balancing Broad System



- Distributed organization
- Multiple systems
- Competing demands

# Western's Three Lines of Business



**Federal Hydropower**

**Transmission System & Service**

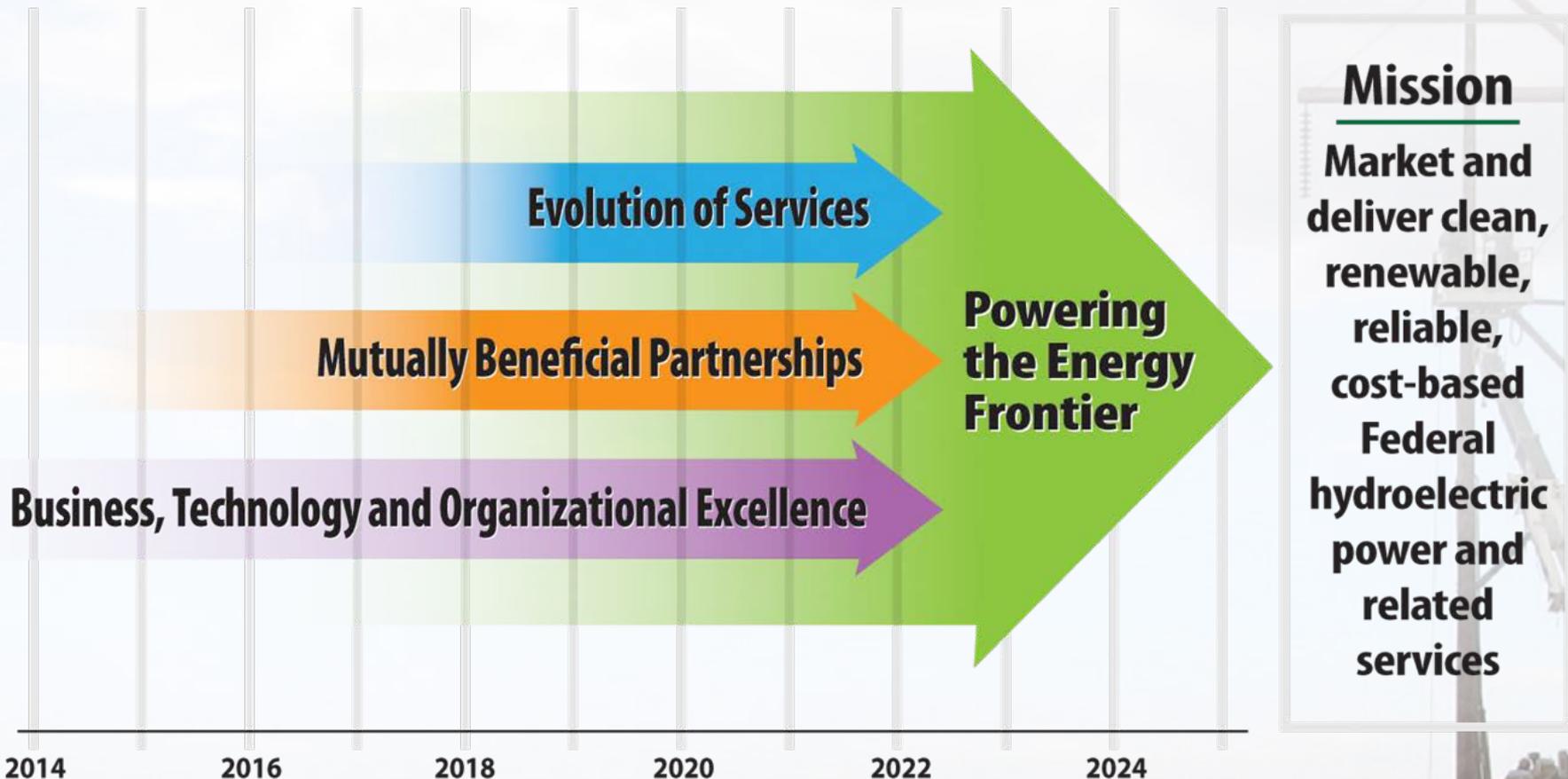
**Transmission Infrastructure Program**

- Markets 10,505 MW of power from 56 dams
- Buy and sell power to provide firm electric service

- 17,000 miles of transmission lines
- Operate 4 balancing areas
- 15-state operating region

- Independent \$3.25 B borrowing authority
- Projects must facilitate renewables
- Projects must have a nexus in Western's footprint

# Western's Focus – Roadmap 2024

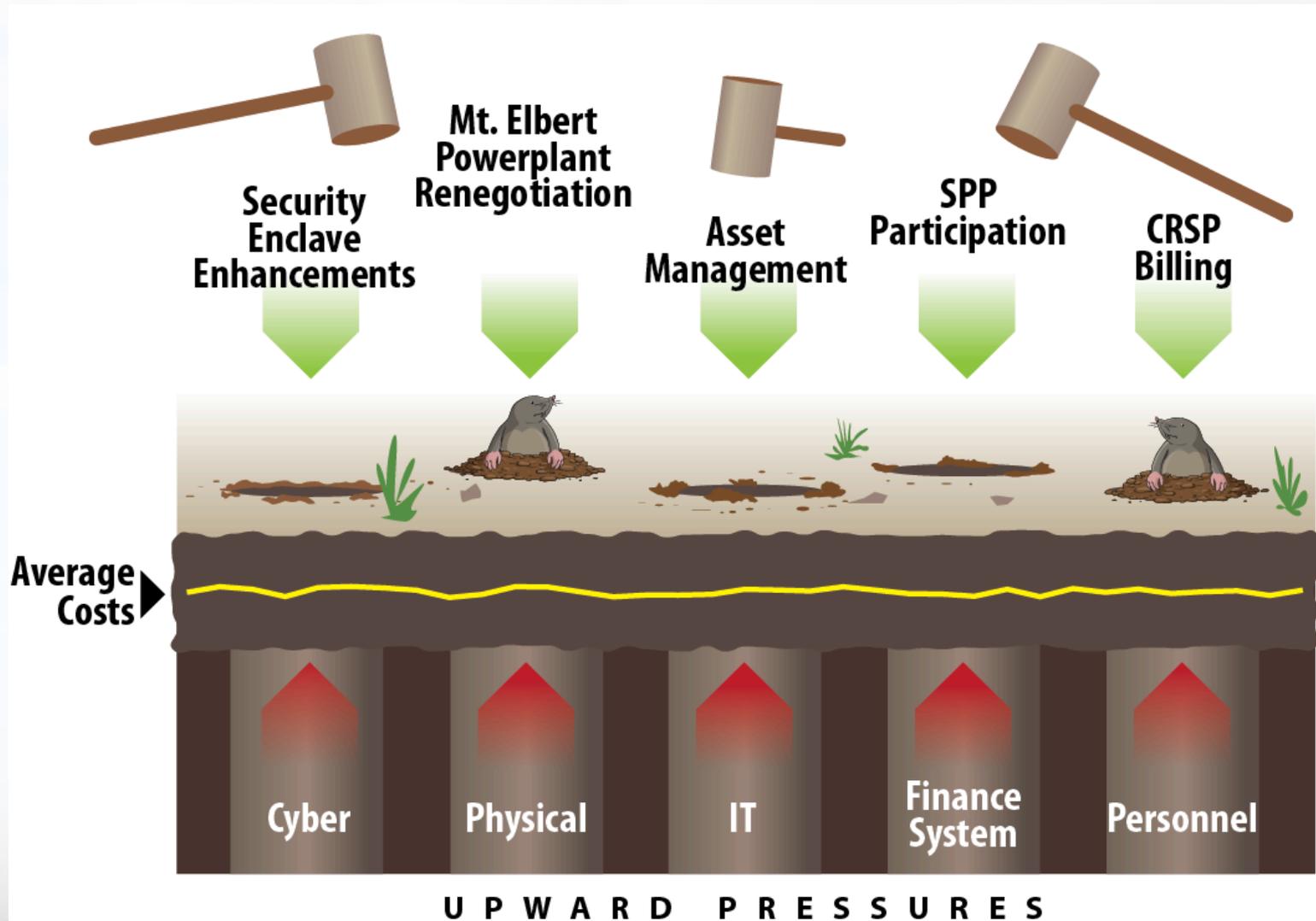


# Upper Great Plains



- Market power from eight powerplants
- 123 substations
- 7,875 miles of transmission
- 277 firm electric service customers and 42 irrigation/rural water customers
- 9,008,000 MWh of firm energy delivered

# Rate Pressures Outside Western



# Business Excellence



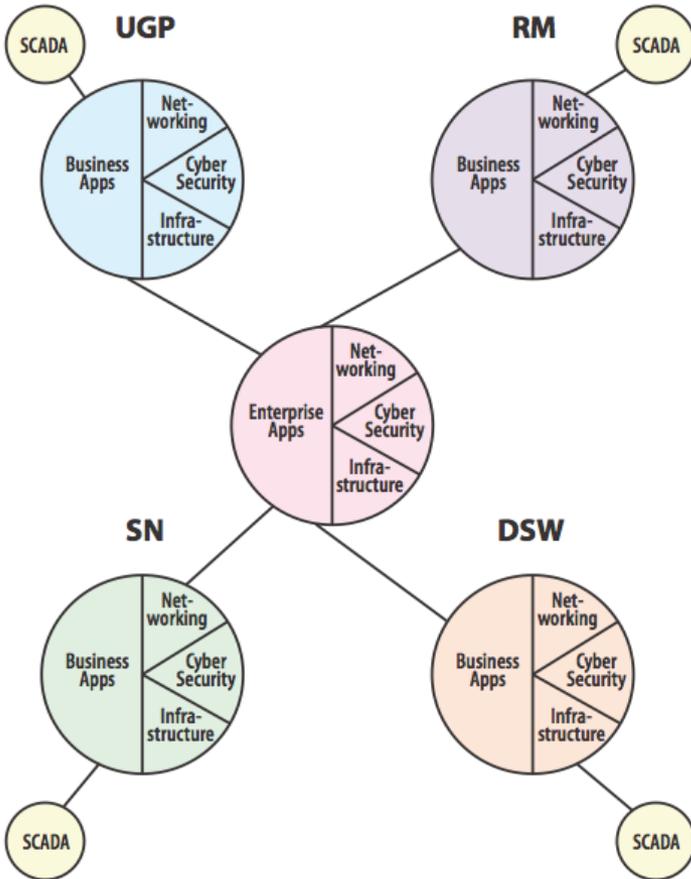
- Compelled to do more
  - Cost Controls
  - Evolving industry = increasing demands
- Rethinking processes for efficacy
- Broad base to support \$4B assets
- *GAO Audit*: Committed to Congress to finalize and implement unobligated balances strategy
- Customer partnership critical piece

# Cost Containment

2015 Completions	2016 Targets
Budget Formulation	Federal Register Notice
IT Access	UGP Heavy Equipment Scheduling
Finance System Planning	HQ Invoice Processing
Information Technology	Recruitment Incentives
Accounts Receivable Renewals	Revised 10 Year Capital Investment Plan Prioritization
<b><i>Total cost avoidance for FY15: \$6.9M</i></b>	<i>TBD</i>

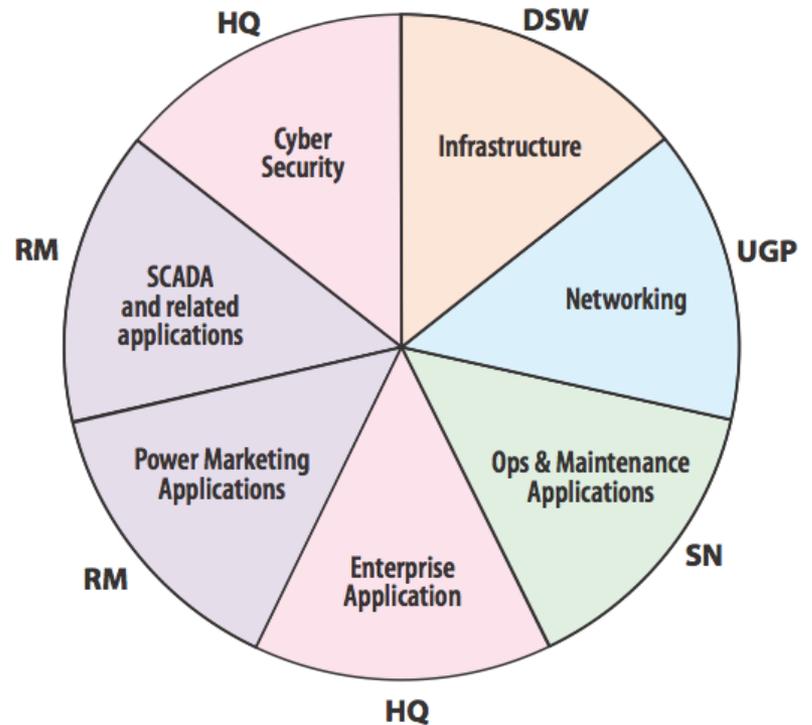
# IT Improvements

**IT 5 years ago**

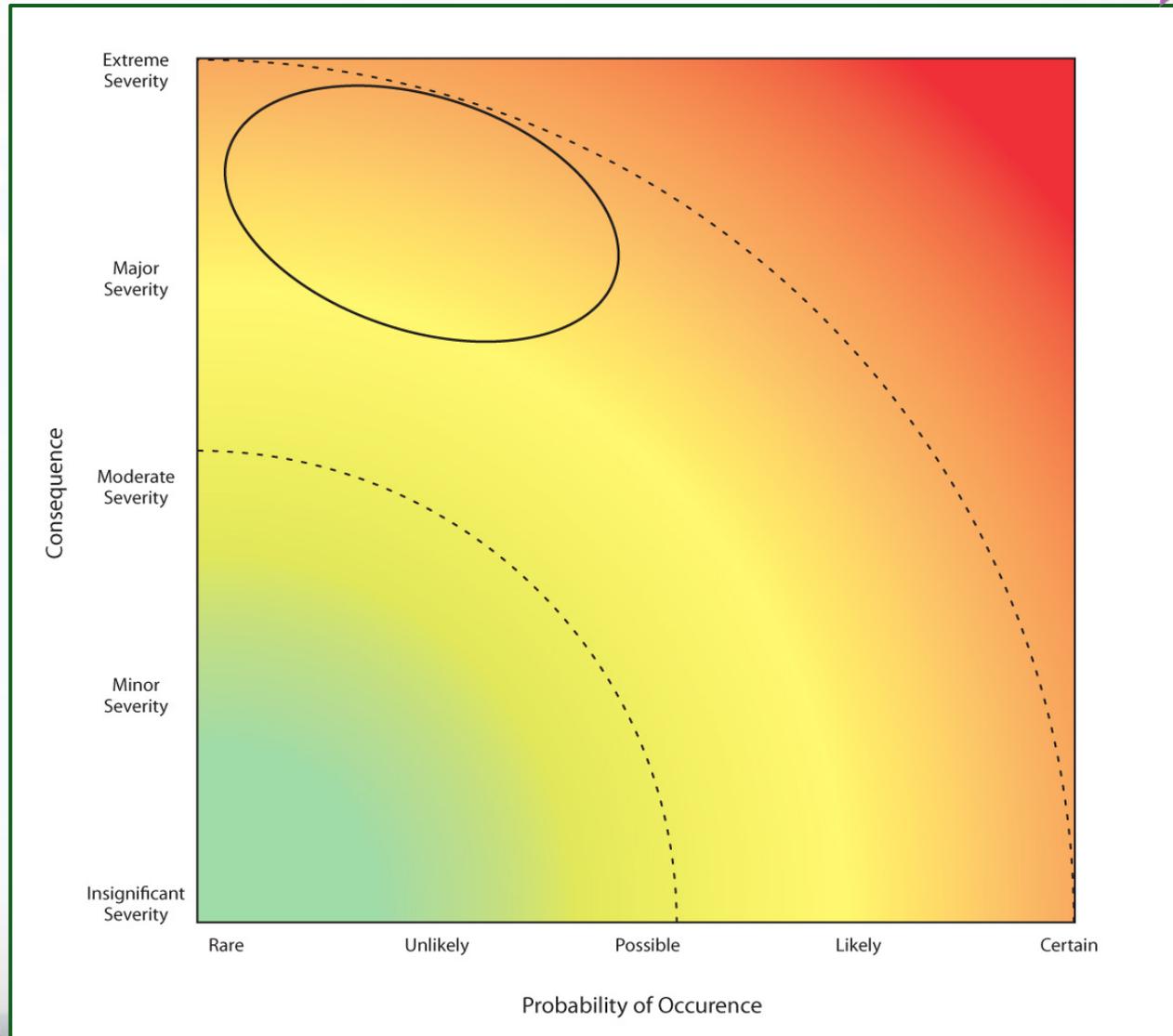


**IT Today**

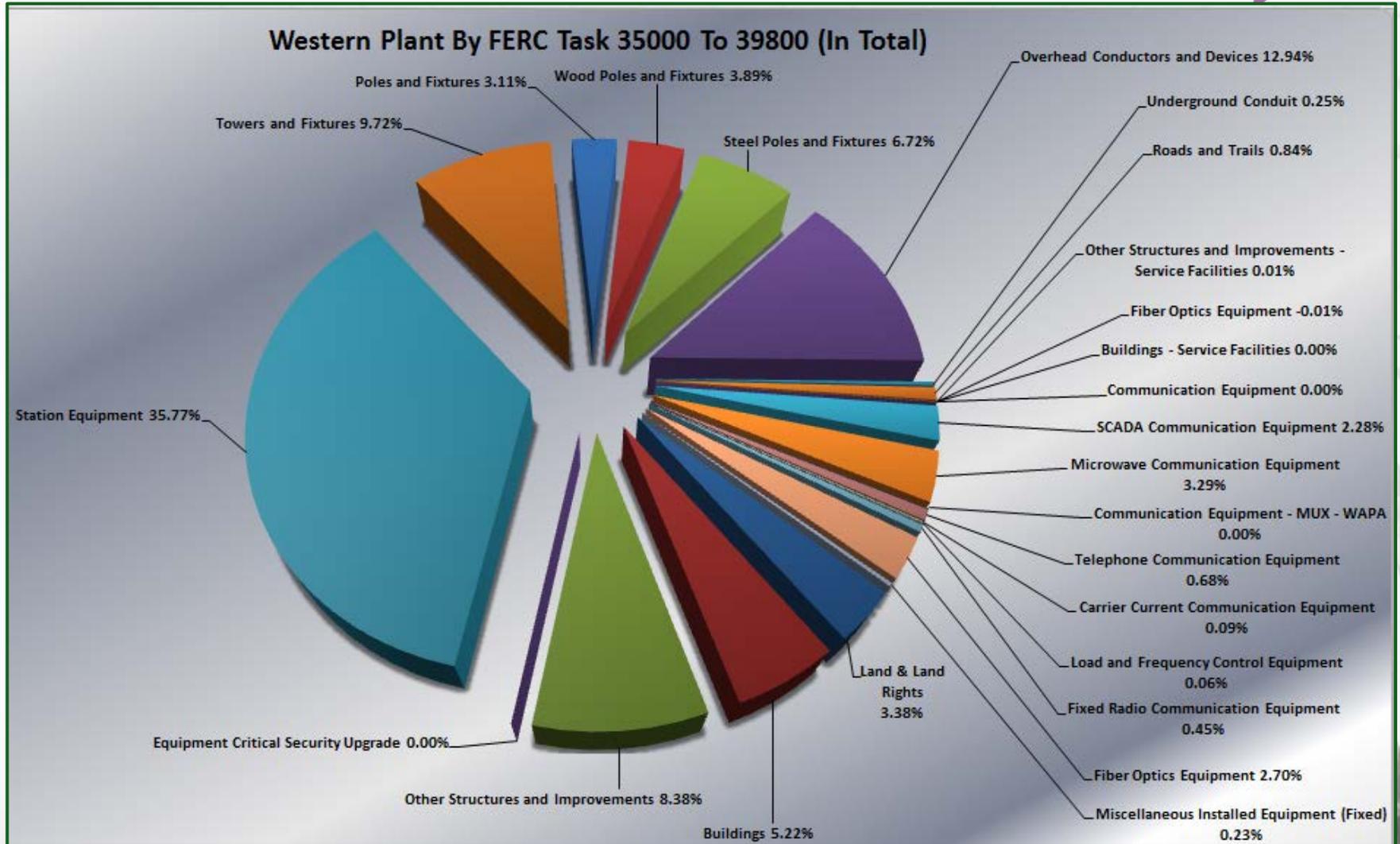
Western wide



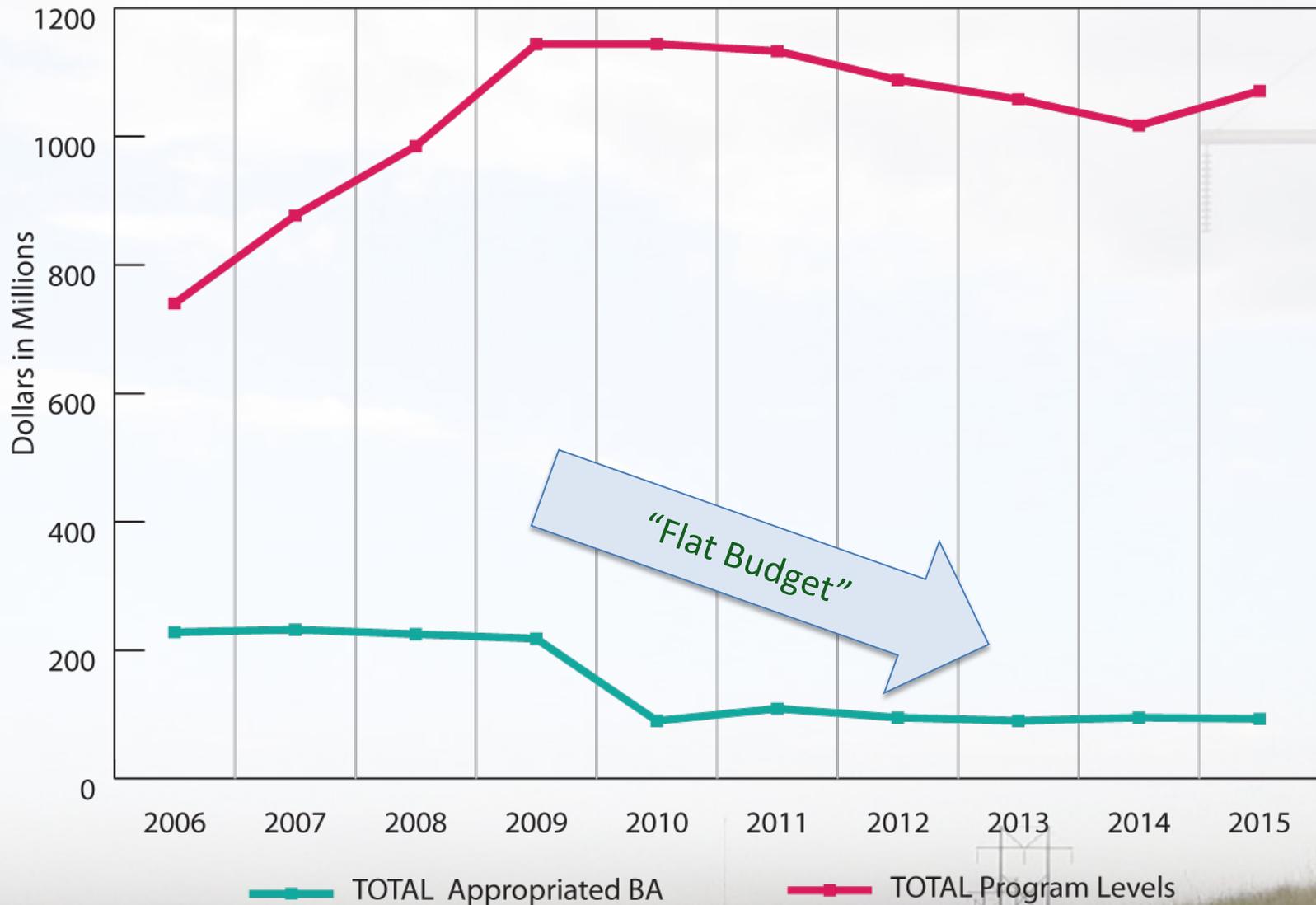
# Risk Matrix



# Asset Management

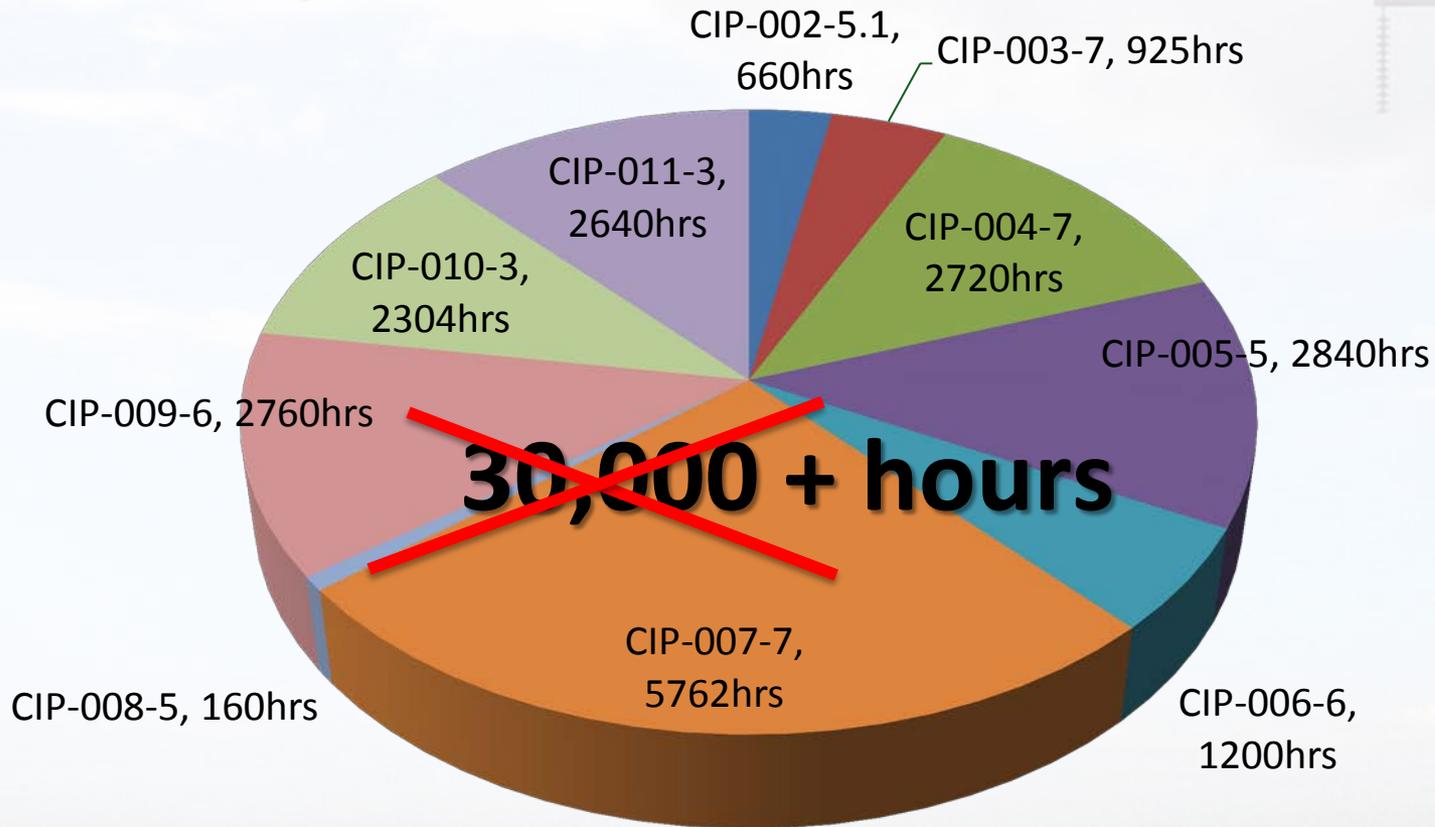


# Budget Appropriations Over Time



# NERC CIP Version 5

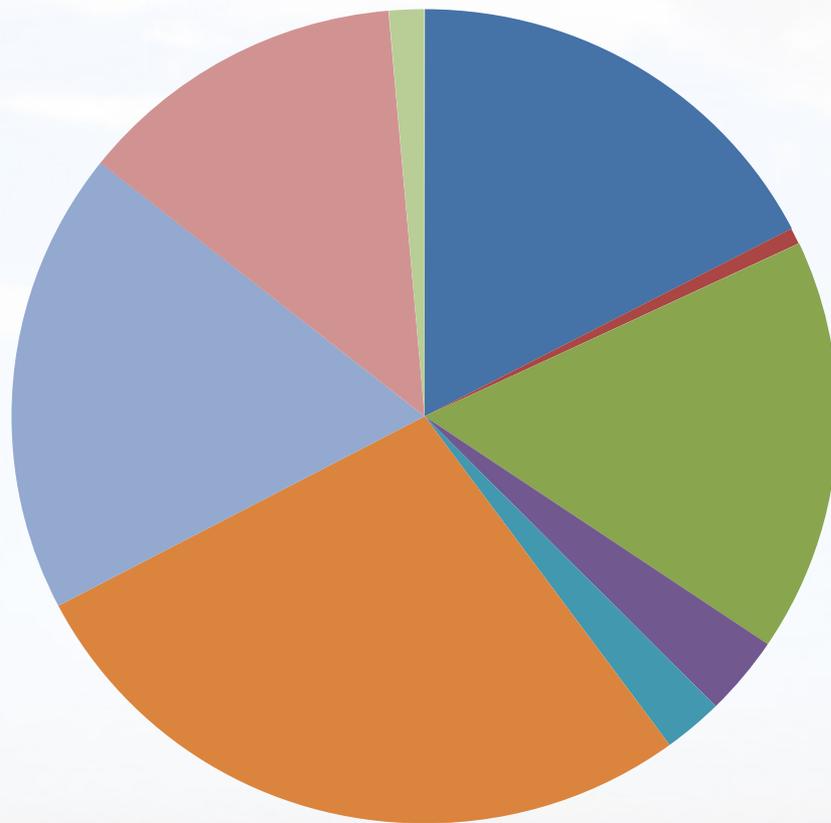
## Now 40,000 + hours of effort



Transition Effort Hours by Standard

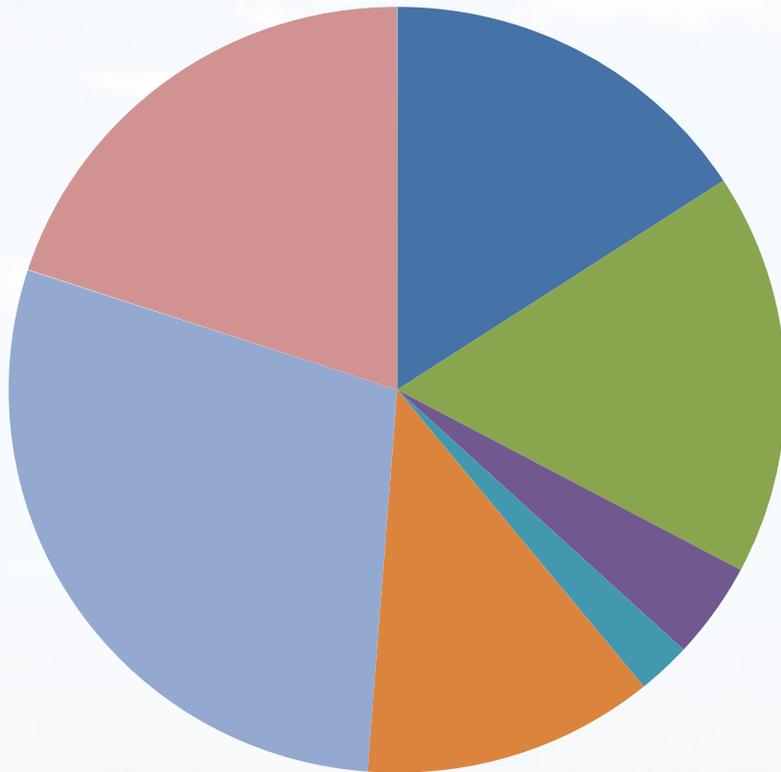
# Western Total Projections, FY16

## \$1.4B



- Generating Agencies O&M
- Visitor Center
- WAPA O&M (excluding Overheads)
- HQ Overheads
- Region Overheads
- Purchase Power and Wheeling
- Principal
- Interest
- Other

# Pick-Sloan FY16 \$562M Total



- Generating Agencies O&M
- Visitor Center
- WAPA O&M (excluding Overheads)
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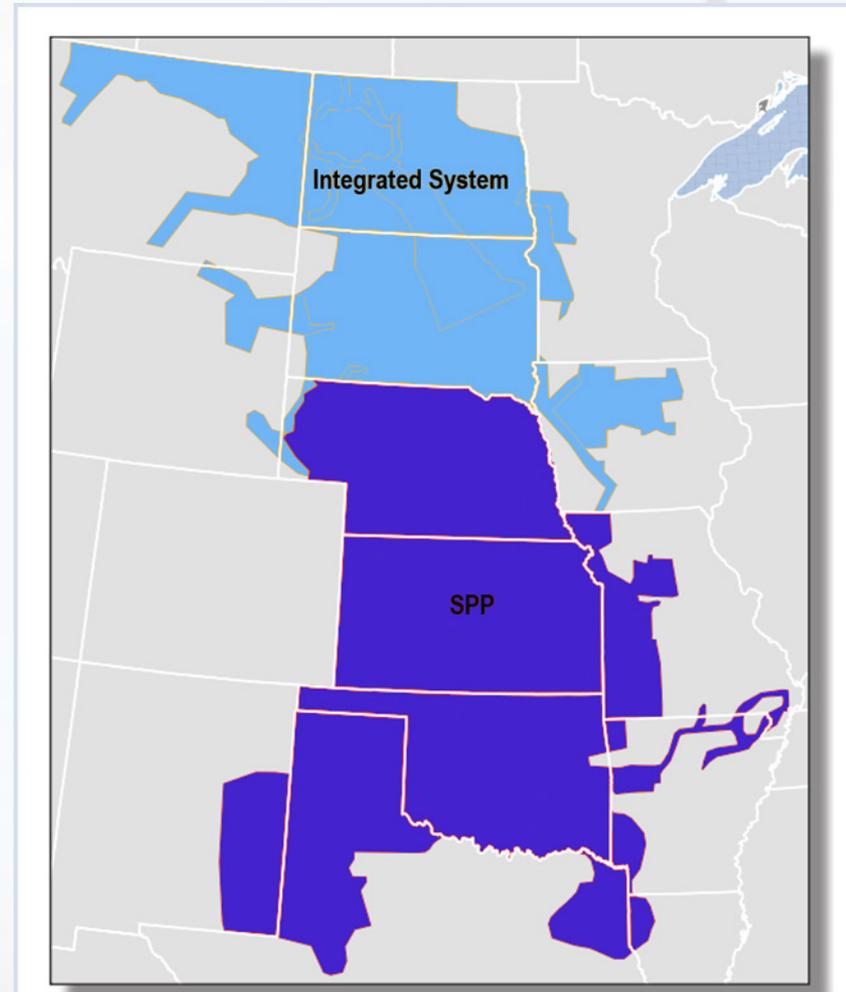
# Westernwide Accomplishments

- Joined SPP RTO
- Wind PEIS
- Fall Protection
- TIP: ED5-PVH and Southline
- Boulder Canyon Remarketing
- 133 Structure Replacements



# Move to SPP

- Moved Integrated System into SPP
  - Co-own IS with Basin Electric Power Cooperative and Heartland Consumers Power District
  - Adds 2500 MW of hydro from Western
- First PMA to move into RTO
- SPP provides greater flexibility
  - Creates more options for buying and selling
  - Reduces constraints in delivering power
  - Helps keep costs low for customers



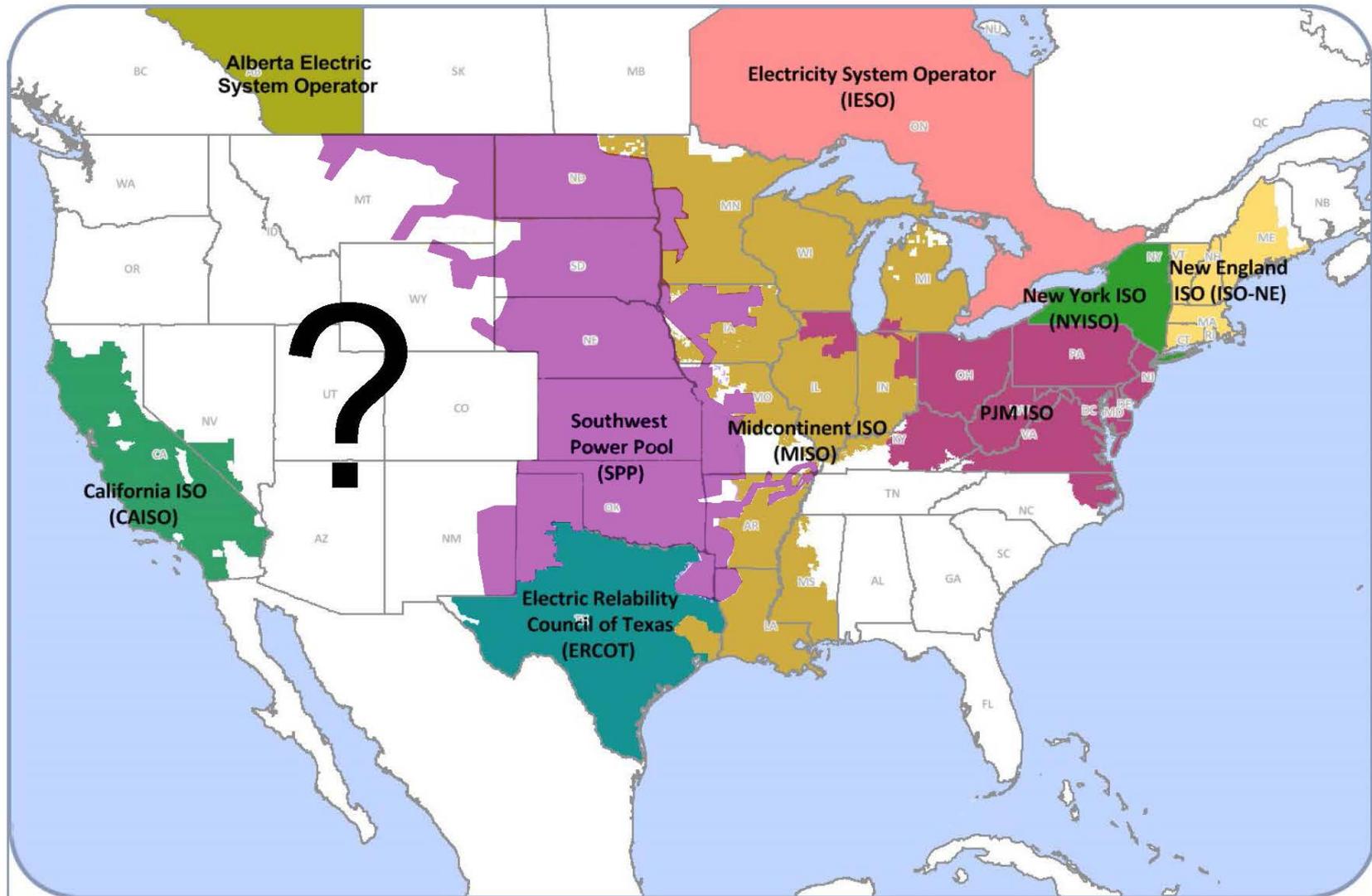
Source: SPP

# 2021 Power Marketing Initiative

- Customer Updates:

- Tribes: all 25 Tribal FES contracts have been offered – six executed
  - 19 Tribal contracts offered > one year ago
  - No bill crediting contracts offered to date
- 15 Great River Energy cooperative members' contracts
- Remaining customer contracts: ten under development
- Near term focus is on addressing Western and Customer membership in SPP
- Interconnection Agreements now coordinated with/through SPP
- IAs signed by customers, but not executed by Western before 10/1/2015, will be re-offered to customers to include a new required SPP signature block and acknowledgement language. Those IAs include:
  - City of Lakota, ND, City of Flandreau, SD, City of Pierre, SD

# Changing Markets



# Energy Imbalance Markets

## Warren Buffett's PacifiCorp considers joining California ISO

By [Gavin Bade](#) | April 14, 2015  print

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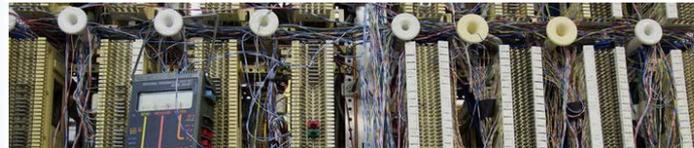
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## California's power grid operator, PacifiCorp win OK for Western market



## Arizona Public Service to Participate in Energy Imbalance Market

*APS Sees Economic Benefits to Customers by Participating in Flexible Market*

## For Western States Transmission, Will There Be Strength in Unity?

INDUSTRY NEWS > ENERGY

## Folsom agency that manages California power may get a big boost from Portland

Apr 15, 2015, 5:32am PDT

# Committed to Transparency

- Lowest possible rates consistent with sound business principles
- Critical to focus on the big issues we are all facing
- Need customer support to meet your changing needs
- Participation in meetings is critical—as is your engagement in the customer survey process

# 2016 Targets and Goals

Measure	Example
<i>Power, Transmission and Related Services</i>	Conduct Customer Survey, measure feedback, establish baseline
<i>Partnership and Innovation</i>	Identify and implement continuous process improvement opportunities for cost savings
<i>Energy Infrastructure</i>	Improve reliable operations for Bulk Electric System through increased monitoring of standard requirements
<i>Safety and Security</i>	Establish metrics focused on reducing levels of physical security risk.
	OSHA Days Away: measure Westernwide rate of injuries leading to days away (e.g. of success DSW 5-yr record)
	Further improve cyber security responses

# Contact

Mark A. Gabriel

720-962-7705

[www.wapa.gov](http://www.wapa.gov)

