

---

# *DSW Access to Capital Meeting*

April 24, 2013



# Agenda

- Welcome and Logistics Young
- Administrator's Vision and Context Gabriel
- Western-Wide Access to Capital Update Kimberling
- DSW Region Access to Capital Moe
- DSW Capital Plan/Asset Management Hillis
- DSW Project Funding Sources & Uses Redhair
- Partnerships & Joint Ownership Bremer
- Lunch Break
- Questions & Discussion Young

# *Western's Administrator*

---



**Mark Gabriel**



# *Vision for Western*

---

- What we value
- Where we are headed
- Our challenges
- Top priorities

# *Context for Access to Capital*

---

- Energy industry in general
- Power Marketing Administrations
- Federal landscape: policy, process, budget
- Meeting **our** needs: All Customers & Western

# *Purpose of Access to Capital*

---

- Develop a sustainable funding strategy that:
  - Funds system needs identified in 5- and 10-Yr Plans
  - Funds emergency infrastructure needs
  - Ensures reliable power and transmission delivery
  - Maintains and upgrades transmission infrastructure
  - Ensures compliance with safety and security standards
  - Maintains excellent NERC compliance record
  - Maintains lowest rates possible
  - Enables operations in event of reduced appropriations

# *Access to Capital Update*



**Linda Kimberling**  
**Chief Financial Officer**



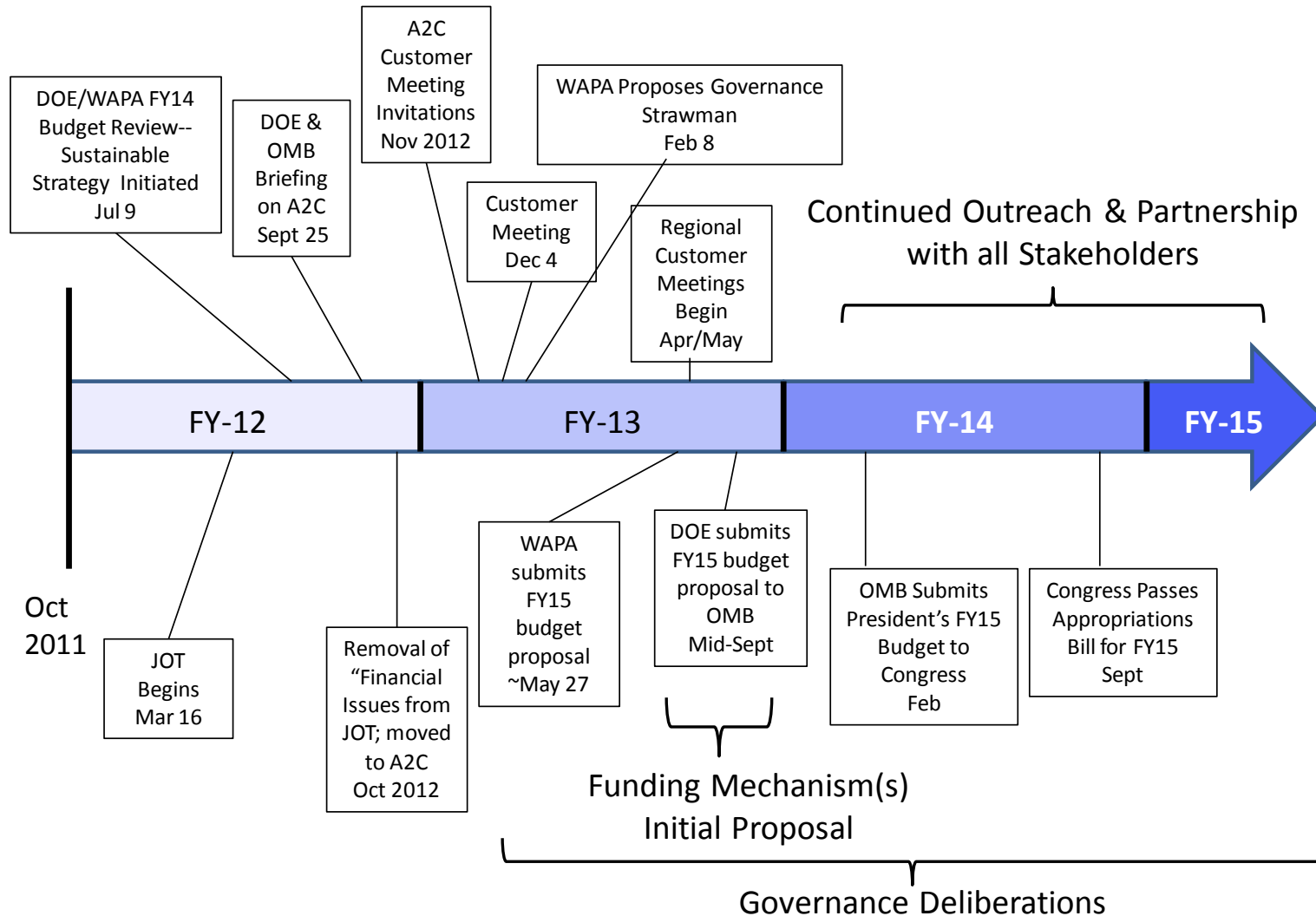
# *Access to Capital Timeline*

---

- Began in July 2012 for FY-15 budget consideration
- Many stakeholders involved
- Proposing a funding mechanism is one line item in the budget
- Governance process decisions are long-term, and ongoing
- Opportunities to refine along the way



# Access to Capital Timeline



# *Recap of New Funding Options*

---

- Recapturing Receipts for Capital Expenditures
- Borrowing Authority – U.S. Treasury
- Borrowing Authority – Federal Finance Bank
- Borrowing Authority – Third-Party Capital Markets
- Public Enterprise Fund
- Capital Leasing Authority

# *Evaluating the Funding Options*

---

- **Guiding Principles**
  - Beneficiary pays
  - Transparency
  - Economic efficiency
  - Support of customers, DOE & OMB
- **Criteria**
  - Life cycle cost
  - Funding certainty
  - Funding sufficiency
  - Achievability

# *Evaluating the Funding Options*

---

- **Process**
  - Core-analytical team convened
    - Identified objective criteria & weighting strategies
    - Consulted with Executive Steering Committee
  - Subteams: subject matter experts conducted analysis
    - 1 team for each criterion -- evaluated all options
    - Results to core-analytical team for consolidation
    - Final results to Project Manager for due diligence check
    - Validated results to Executive Sponsor & Administrator

# Results of Funding Options Evaluation

Multi-Criteria Decision Analysis							
Criteria	Metric	Recapture of Receipts for Capital Expenditures	Borrowing Authority US Treasury	Borrowing Authority Federal Finance Bank	Borrowing Authority Third-Party Capital Markets	Public Enterprise Fund	Capital Leasing Authority
Funding Certainty	Timely Funds Received	Insignificant	Insignificant	Moderate	Extreme	Insignificant	Extreme
	Reduced External Authority	Yes	Yes	No	No	Yes	No
	Reduced Continuing Resolution Impact	Yes	Yes	Yes	Yes	Yes	Yes
	Exempt from Sequestration	Yes	Yes	Yes	Yes	Yes	Yes
Funding Sufficiency		Minor	Insignificant	Insignificant	Insignificant	Minor	Insignificant
Life Cycle Costs	Up-Front	Minor	Major	Major	Extreme	Minor	Extreme
	Annual On-Going Costs	Insignificant	Minor	Minor	Extreme	Insignificant	Extreme
	Interest Rates	Insignificant	Insignificant	Moderate	Extreme	Insignificant	Major
MERIT SCORE (Lower is positive for Option)		18.8	14	36.2	53.2	18.8	51.2
ACHIEVABILITY SCORE		Major	Extreme	Extreme	Extreme	Major	Extreme
<b>TOTAL SCORE</b>		<b>98.8</b>	<b>114</b>	<b>136.2</b>	<b>153.2</b>	<b>98.8</b>	<b>151.2</b>

# Next Steps

- Regional customer meetings: seeking regional ideas
  - Expand existing mechanisms within regions
  - Roll up to a *Western-Wide* sustainable solution
- FY-15 Budget Cycle (May timeline)
  - No decision yet; many stakeholder needs to consider
  - Deliberations and examination of options continue
  - Discussions with DOE & OMB continue
  - Refining appropriations language is a possibility

# Questions

---

???

---

# *DSW Region Access To Capital*

Darrick Moe, DSW Regional Manager





# *Building Parker Davis Project*

---

- Parker Davis Project (PDP) construction started in the late 1930s and some of the transmission lines along the Colorado River were in place in the early 1940s
- By the early 1950s, the bulk of today's PDP transmission line infrastructure was in place
- Much of the today's PDP transmission system consists of the originally installed lines
- Transmission lines in the Colorado River and South of Phoenix areas are mostly wood pole structures well past their expected service life

# *DSW Ten-Year Plan (TYP)*

---

- The DSW TYP is our design for ensuring reliable energy deliveries and transmission service
- Based on meetings with PDP and Intertie customers, we have proposed about \$40 million per year funding over next ten years in the TYP
- \$40 million a year balances rate impacts with addressing infrastructure life
- This level of spending is not sufficient to replace all infrastructure past its expected service life in that time

# *Short Funding For \$40M TYP*

- Appropriations and Customer Pre-payments are the only two funding sources available today
- DSW has been getting about half the total Western Construction funding or about \$10 million each year
- Customer Pre-payments for Construction currently provide about \$15 - \$20 million each year.
- \$40M - \$10M - \$20M leaves at least a \$10 million gap each year today and will be greater as appropriations decrease
- We see this as a clear and present challenge, and want to work together to find solutions

# *Our Access to Capital Goals*

---

- Sustainable funding strategy that:
  - Funds system needs identified in 10-Yr Plan
  - Funds emergency infrastructure needs; not covered by Emergency Fund
  - Ensures reliable power and transmission delivery
  - Maintains and upgrades transmission infrastructure
  - Ensures compliance with safety and security standards
  - Maintains excellent NERC compliance record
  - Maintains lowest rates possible
  - Enables continued operations in event of reduced appropriations

---

# *DSW Capital Plan & Asset Management*

Rick Hillis, DSW Maintenance Manager



# Goal Per Year

---

- December 2013 Ten Year Plan ~ \$ 40 M per year
- Balance of:
  - Prioritization
    - Reliability
    - Compliance
    - Planning
    - Economic
  - Resources
  - Rate Impact

# *Is \$ 40 M per year Enough?*

---

- TYP presently has 54 Potential Projects that have been Priority Ranked totaling \$ 746 M
- ~ 40 Projects remain to Develop & Rank
- \$ 40 M per year equals ~ 20 years to complete
- Delay Impacts:
  - Increasing Maintenance Costs
  - Most Equipment beyond Service Life
  - Increasing Reliability Risk

# *DSW Infrastructure Service Life*

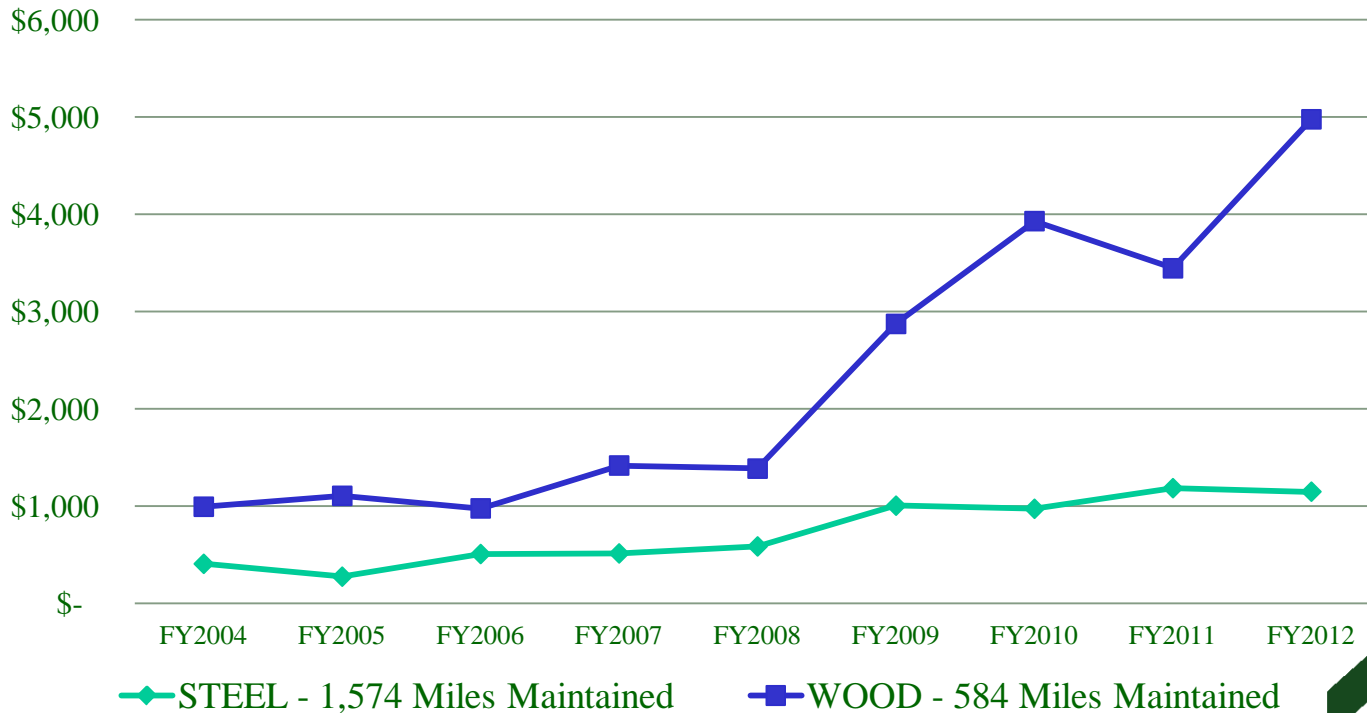
---

- **Wood Poles** – Sixty-one (61) percent past service life
  - 20 more years, **Eighty-eight (88) percent** past service life
- **Transformers** – Eight (8) percent past service life
  - 20 more years, **Forty-Six (46) percent** past service life
- **Breakers** – Nine (9) percent past service life
  - 20 more years, **Twenty-five (25) percent** past service life



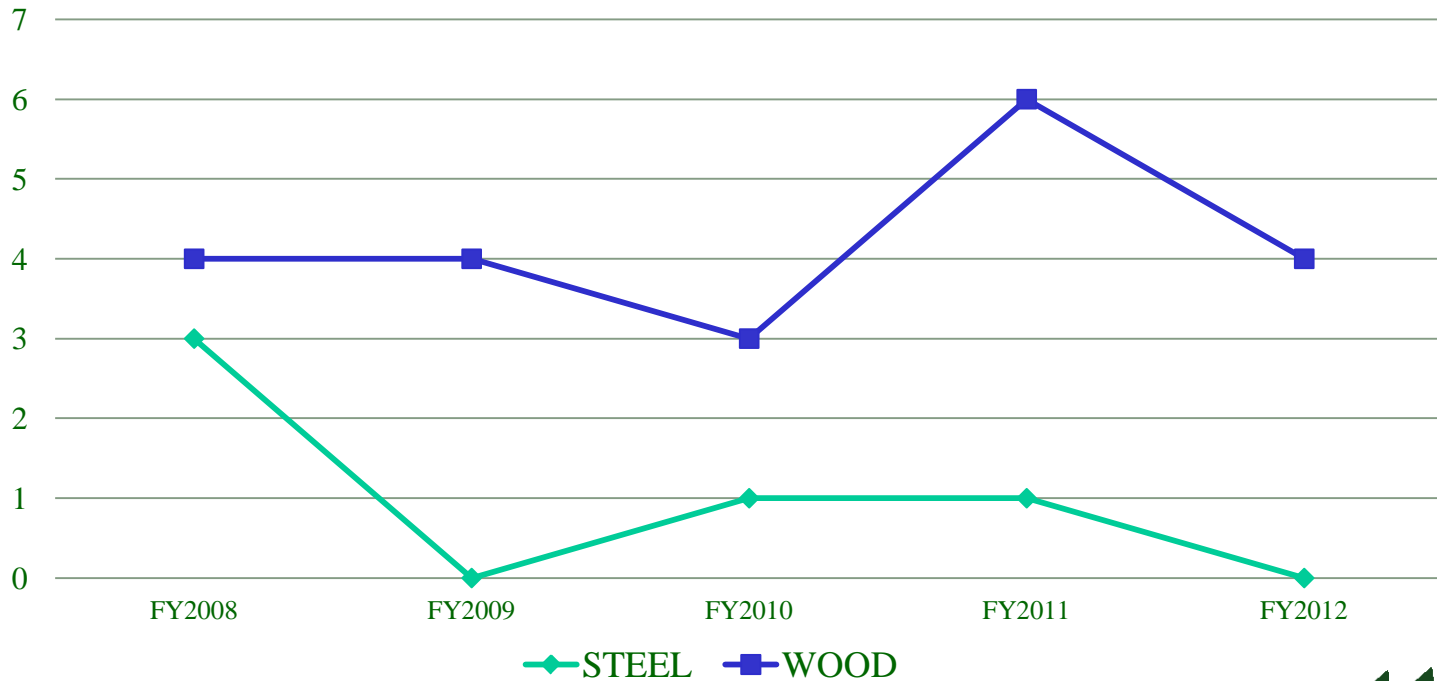
# Transmission Line - Cost Increases

## Cost per Mile vs. FY - PD & IN



# Transmission Line Equipment Failures Resulting in Outages

## Number of Outages vs. FY - PD & IN



# *FY13 Funding Shortfall*

## **Construction Funding Analysis Parker Davis and Intertie**

Budget Request	\$ 50,508,995
Appropriations (est.)	\$ 16,565,254
- PD (Labor)	\$ 5,565,254
- NPD (Non Labor)	\$ 11,000,000
Pre-payment Approvals	\$ 24,154,000
Shortfall	<u><b>\$ 9,789,741</b></u>

# *DSW TYP FY13 Highlights*

---

- Davis Switchyard 230 kV Rebuild
- Davis-Kingman Tap 69 kV T-Line Rebuild
- Liberty Substation 345/230 kV Transformer Replacement
- Mead Substation 345/230 kV Transformer
- Coolidge 230/69 kV Transformer & Bay Addition
- Bouse 161 kV Substation Rebuild
- Pinnacle Peak-Rogers T-Line ROW Resolution
- Parker-Headgate Rock-Bouse T-Line Rebuild

# *Impact of Delayed Projects*

- Mead 345/230 kV Transformer Replacement
  - Placed into service in 1965
  - Path used to market more than 600 megawatts in the region
  - Two million customers could be affected by higher priced energy
  - Primary “Black Start” path for the Hoover Hydro Generation Facility and Palo Verde Nuclear Plant
  - Loss of path could have a major impact to the “Western Grid”
  - Timeframe to Design, Order and Install a Transformer of this size is 36 months

# *Impact of Delayed Projects*

---

- **Gila Substation Rebuild**
  - Originally constructed in 1949 to serve irrigation and water pumping requirements
  - Serves the Yuma Mesa Pumping plant which supplies water to 58,200 acres of crops
  - Annual value for the crops grown in Yuma County exceeds \$1,000,000,000
  - Supplies Yuma and their main water treatment plant which provides potable water to 200,000 people
  - Current configuration requires a system outage anytime work is performed on the major components in the substation

# *Determining the Condition*

---

- Wood Pole Transmission Lines
  - Helicopter & Ground Patrols
  - Inspection & Treatment Program
  - Rehabilitation/Replacement of Structures that have been Emergency, Red-Tagged
  - New
    - T-Line Database & Inspection Tool
    - AMPIP Consequences & Health Index/Failure Rate
    - Rate of Decay Sampling

---

# *DSW Project Funding Sources & Uses*

Ethel Redhair, DSW Financial Manager





# *Overview of Alternative Financing for the Desert Southwest Region*

- Three major Alternative Financing arrangements are established within existing authorities impacting funding for Parker-Davis and Intertie projects
  - **Pre-payments** - Parker-Davis & Intertie projects long-term firm transmission
  - **Advance of Funds (AOF)** – Parker-Davis Project generation advances for BOR and DSW
  - **Firm Electric Services (FES) Advanced Funding** – Parker-Davis generation advances for DSW only

**Note:** AOF and FES funding not available for DSW construction

# *Alternative Financing*

## *Pre-payments – Parker Davis & Intertie*

- Congressional Funding Authority (CFA), Section 9(c) provides DSW the authority for long-term firm transmission customers to pay for service one month in advance, resulting in customer “pre-payments”
- Promulgated through Parker Davis and Intertie Rate Orders
- Customer involvement
- Actual O&M and RRADs (retirements, replacements & additions) are recorded against pre-payment receipts

# *Pre-payments*

## *Parker Davis and Intertie Receipts*

---

- **Parker Davis**

2011 - \$27 million

2012 - \$22.8 million

2013 - \$29.6 million

- **Intertie**

2011 - \$22.2 million

2012 - \$22.3 million

2013 - \$20.8 million

**Note:** These funds are used for O&M and RRADs expenses first, with remaining balances available for Alternative Financing for construction

# 2012 Execution & 2013-15 Budget

## Parker-Davis

	2012 Execution	2013 Budget	2014 Budget	2015 Workplan
O&M	29,459,102	32,364,295	32,739,349	34,642,394
RRADs	6,810,751	7,250,000	6,899,000	7,250,000
Construction	23,283,759	29,228,995	32,064,720	30,779,693
Purchase Power	5,579,247	9,500,000	10,000,000	10,000,000

**Note:** 2012 Execution includes obligations and expenses

# 2012 Execution & 2013-15 Budget Intertie

	2012 Execution	2013 Budget	2014 Budget	2015 Workplan
O&M	6,968,096	7,213,234	8,233,601	8,879,232
RRADs	1,031,178	1,975,000	2,430,000	2,080,000
Construction	41,112	21,280,000	19,345,120	13,937,314
Purchase Power	3,701,290	5,000,000	5,600,000	4,000,000

**Note:** 2012 Execution includes obligations and expenses

# 2012 Execution & 2013 Budget

## Other Power Systems

		2012	2013	Funding Sources
		Execution	Budget	
<b>Boulder Canyon</b> (GGBC)	O&M	4,339,857	4,773,261	Reimbursable Contract
	RRADs	1,126,084	325,000	with the BOR
<b>Central Arizona</b> (GGCA)	O&M	3,929,758	3,868,581	Reimbursable Contract
	RRADs	295,312	20,005,000	with the BOR
<b>Colorado River Storage Project</b> (GGCR)	O&M	9,610,111	9,718,779	CRSP Revolving Fund
	RRADs	4,150,114	3,390,000	CRSP Revolving Fund
<b>Salinity</b> (GGCS)	O&M	646,095	512,613	Appropriations
<b>Levee</b> (GGCL)	O&M	345,861	329,916	Appropriations
	RRADs	-	2,300,000	Appropriations

**Note:** Funds for these power systems are separate from other funds and are not interchangeable with other fund types

# *Trust & Reimbursable Projects*

---

- Each project is funded by the requesting entity in its entirety
- Includes O&M, construction, studies, purchase power, etc.
- Trust projects for a wide variety of non-federal customers
- Various reimbursable projects for federal customers
- Funds for these projects are separate from other funds and are not interchangeable with other fund types

---

# *Partnerships & Joint Ownership*

John Bremer, General Counsel





# *Partnerships & Joint Ownership*

---

- Goal today is a dialog and obtaining feedback
- Western has engaged in joint or shared partnership in the past
- Western will continue to explore joint partnerships when mutually beneficial
- Western's funding mechanisms are the lowest cost source
- Costs normally remain in the rate even if funded or financed by a third party

# Partnerships & Joint Ownership Considerations

---

- **General** -- Facility development subject to Reclamation Law and Federal "Property" Law. Each proposal evaluated on a case-by-case basis.
- **Joint Ownership** -- Western may not jointly own (as tenants in common) property with another entity. Western can participate in projects with others, but property must be solely owned by either Western or the other entity.
- **Nature of Property** -- Distinguish between real property and personal property. Western's personal property generally not placed on real property of another entity.

# Partnerships & Joint Ownership Considerations

---

- **Facilities in Western Substations, Taps, and Switchyards:** Any equipment that becomes integral part of Western-owned facilities is typically owned by Western. Necessary to protect the integrity of the Federal transmission system.
- **Transformer Replacement:** Transformers may be replaced if it avoids construction of duplicate facilities and Western retains/gains capacity rights in the new transformer.

# *Questions & Discussion*

---

*Open Dialog and Discussion*

*Next Steps*