

Ten-Year Plan Active Projects Update

Desert Southwest Region | Phoenix, Arizona

April 15, 2026

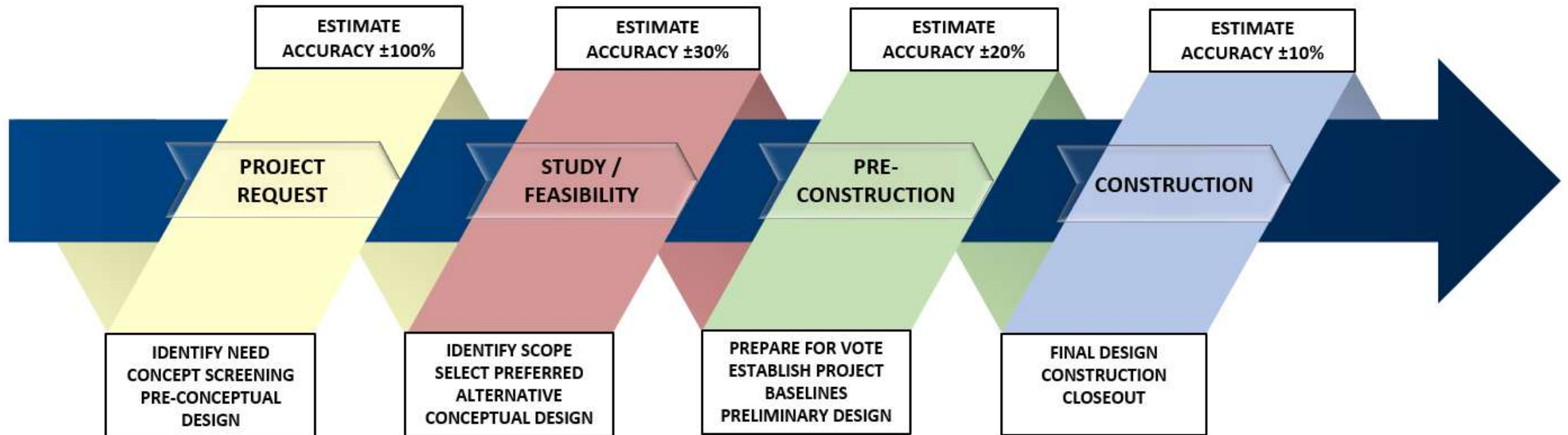


Agenda

- Project Life Cycle
- Active Projects
- Other Key Projects
- Prepayment MOU
- Annual Meeting Cycle



Project Life Cycle



2026 Project Life Cycle Updates

- No AOA studies performed this cycle
- DSW will continue to develop pre-construction projects and execute active construction projects through ongoing prioritization efforts
- DSW will evaluate new projects in the next Ten-Year Plan cycle



Capital Program Challenges

- Electric utility industry has been enduring higher costs over the last several years
- These rising costs are driven by aging infrastructure, grid updates, and supply chain constraints
- This has impacted approved project budgets and schedules, and resulted in the need for additional funding
- DSW will provide details during a supplemental meeting in June before the Q2 Ten-Year Plan Meeting



Active Projects Update



Active Project Financials

PROJECT NAME	APPROVED BUDGET	TOTAL REMAINING*	APPROVED	IN-SERVICE DATE
Parker – Blythe 161kV #2 Rebuild, Phase 1	\$14,209,000	\$11,741,000	Q4 2020	Q2 2029
Parker – Blythe 161kV #2 Rebuild, Phase 2	\$13,876,000	\$13,417,000	Q4 2020	Q2 2030
Parker – Blythe 161kV #2 Rebuild, Phase 3	\$13,876,000	\$13,876,000	Q4 2020	Q3 2031
Gila Substation 69kV Rebuild	\$17,900,000	\$13,640,000	Q4 2021	Q2 2030
Gila – Knob 161kV Remaining Rebuild	\$32,322,000	\$31,283,000	Q4 2022	Q2 2029
Oracle – Tucson 115kV Rebuild	\$11,130,000	\$10,415,000	Q4 2023	Q2 2028
Crossman Peak Microwave Facility	\$4,525,000	\$1,213,000	Q4 2017	Q3 2026
Liberty Station Service Replacements	\$3,366,000	\$730,000	Q4 2023	Q3 2026
Coolidge Station Service Replacements	\$3,673,000	\$3,673,000	Q4 2023	Q3 2029
Wood Pole Replacement Program FY26-28	\$15,000,000	\$12,735,000	Q4 2023	N/A
Bouse Upgrade	\$79,436,000	\$64,510,000	Q4 2022	Q1 2030

Notes:

- All dates in this presentation are reported in calendar year quarters
- * All financials through January 2026, rounded to nearest thousand



Updates

Tony Gagajewski
Project Management Supervisor



Parker – Blythe 161kV #2 Rebuild



Parker – Blythe 161kV #2 Rebuild

Description

- Replace degraded wood structures along the 64-mile transmission line between Parker and Blythe substations to increase reliability and remediate phase-to-ground clearance violations

Updates

- Phases 1 and 2 design is at 95%, potential to combine construction contract
- Final environmental assessment (all phases) drafted by WAPA and sent to BLM in April
- Both agencies will issue final NEPA decision
- Phase 3 construction expected to take place from Q1 2029 to Q3 2031



PHASE 1 MILESTONES	STATUS	DATE
Design	Completed	Q4 2022
Contract Solicitation	Projected	Q2 2027
Construction Begins	Projected	Q3 2027
Construction Ends	Projected	Q2 2029
Closeout	Projected	Q1 2030

PHASE 2 MILESTONES	STATUS	DATE
Design	Completed	Q4 2024
Contract Solicitation	Projected	Q1 2028
Construction Begins	Projected	Q2 2028
Construction Ends	Projected	Q2 2030
Closeout	Projected	Q1 2031

Parker – Blythe 161kV #2 Rebuild



PREPAYMENT FUNDING	BUDGET				
	APPROVED	ADJUSTMENTS	TOTAL	EXECUTION	REMAINING
Phase 1	\$14,209,000	\$ 0	\$14,209,000	\$2,468,000	\$11,741,000
Phase 2	\$13,876,000	\$ 0	\$13,876,000	\$459,000	\$13,417,000
Phase 3	\$13,876,000	\$ 0	\$13,876,000	\$0	\$13,876,000
TOTAL	\$41,961,000	\$0	\$41,961,000	\$2,927,000	\$39,034,000

Note: Approved budget amount insufficient, anticipate ~65% increase



Gila Substation 69kV Rebuild



Gila Substation 69kV Rebuild

Description

- Rebuild the 69kV switchyard in a breaker-and-a-half configuration and construct a new 69kV yard in the footprint of the decommissioned 161kV yard

Updates

- Environmental categorical exclusion complete
- Design at 95% with only transmission line design updates remaining
- Breakers delivered in February 2026 and relays received in May 2025
- Transformer procurement package ready; delivery is the critical path with a 3-year lead time expected

MILESTONES	STATUS	DATE
Design	Projected	Q2 2027
Contract Solicitation	Projected	Q1 2028
Construction Begins	Projected	Q3 2028
Construction Ends	Projected	Q2 2030
Closeout	Projected	Q4 2030



Gila Substation 69kV Rebuild



	BUDGET				
FUNDING TYPE	APPROVED	ADJUSTMENTS	TOTAL	EXECUTION	REMAINING
Prepayment	\$17,900,000	\$ (1,737,000)	\$16,163,000	\$2,523,000	\$13,640,000
Appropriations	\$0	\$1,737,000	\$1,737,000	\$1,737,000	\$0
TOTAL	\$17,900,000	\$0	\$17,900,000	\$4,260,000	\$13,640,000

Note: Approved budget amount insufficient, anticipate ~60% increase



Gila – Knob 161kV Remaining Rebuild



Gila – Knob 161kV Remaining Rebuild

Description

- Remove wood poles between Gila and North Gila (5 miles) and install 1272 ACSS conductor and two bundled 795 ACSR conductors on steel monopoles
- Remove wood poles between North Gila and Knob (15 miles) and install 954 ACSR on light-duty steel H-frames

Updates

- Environmental categorical exclusion is complete
- LiDAR and geotechnical surveys have been completed
- Design work expected to restart in April 2026
- The light-duty steel installation may precede the steel monopoles to accommodate for manufacturer lead time

MILESTONES	STATUS	DATE
Design	Projected	Q4 2026
Contract Solicitation	Projected	Q1 2027
Construction Begins	Projected	Q4 2027
Construction Ends	Projected	Q2 2029
Closeout	Projected	Q4 2029



Gila – Knob 161kV Remaining Rebuild



FUNDING TYPE	BUDGET				
	APPROVED	ADJUSTMENTS	TOTAL	EXECUTION	REMAINING
Prepayment	\$32,322,000	\$ (513,000)	\$31,809,000	\$526,000	\$31,283,000
Appropriations		\$513,000	\$513,000	\$513,000	\$0
TOTAL	\$32,322,000	\$0	\$32,322,000	\$1,039,000	\$31,283,000



Oracle – Tucson 115kV Rebuild



Oracle – Tucson 115kV Rebuild

Description

- Replace approximately 75 wood structures in-kind and all associated hardware
- Install approximately 15 miles of 954 ACSR conductor
- Install 25 miles of 48-count overhead optical ground wire and overhead ground wire

Updates

- LiDAR survey and initial modeling complete
- Cultural survey is complete
- System outage constraints may delay construction start
- Design will be outsourced to A-E firm

MILESTONES	STATUS	DATE
Design	Projected	Q3 2026
Contract Solicitation	Projected	Q2 2027
Construction Begins	Projected	Q4 2027
Construction Ends	Projected	Q2 2028
Closeout	Projected	Q4 2028



Oracle – Tucson 115kV Rebuild



FUNDING TYPE	BUDGET				
	APPROVED	ADJUSTMENTS	TOTAL	EXECUTION	REMAINING
Prepayment	\$11,130,000	(\$209,000)	\$10,921,000	\$506,000	\$10,415,000
Appropriations	\$0	\$209,000	\$209,000	\$209,000	\$0
TOTAL	\$11,130,000	\$0	\$11,130,000	\$715,000	\$10,415,000

Note: Approved budget amount insufficient, anticipate ~30% increase



Crossman Peak Microwave Project



Crossman Peak Microwave Project

Description

- Project originally scoped to include a new communication facility on Crossman Peak to meet requirements for increased microwave bandwidth. However, a distribution line required to power the new facility made the project cost prohibitive. Since then, radio technology improvements have eliminated the need for a new facility.

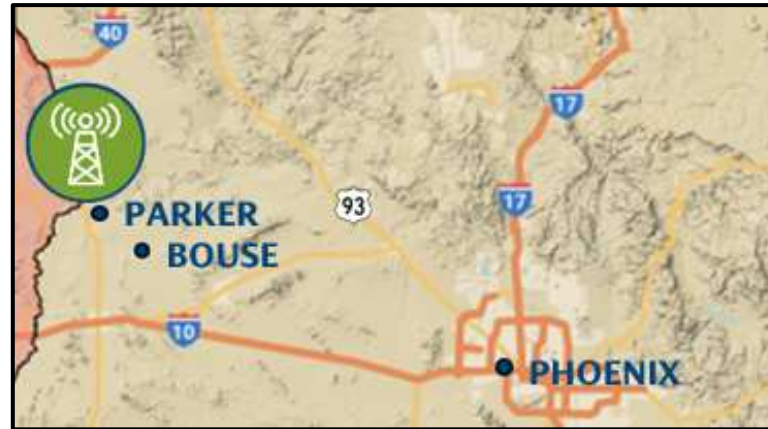
Updates

- Nokia radios to be installed at Christmas Tree Pass and Metal Mountain to resolve bandwidth constraints
- Design has been completed and WAPA's contractor expected to start work by this summer

MILESTONES	STATUS	DATE
Design	Completed	Q4 2025
Contract Solicitation	Completed	Q1 2026
Construction Begins	Projected	Q2 2026
Construction Ends	Projected	Q3 2026
Closeout	Projected	Q4 2026



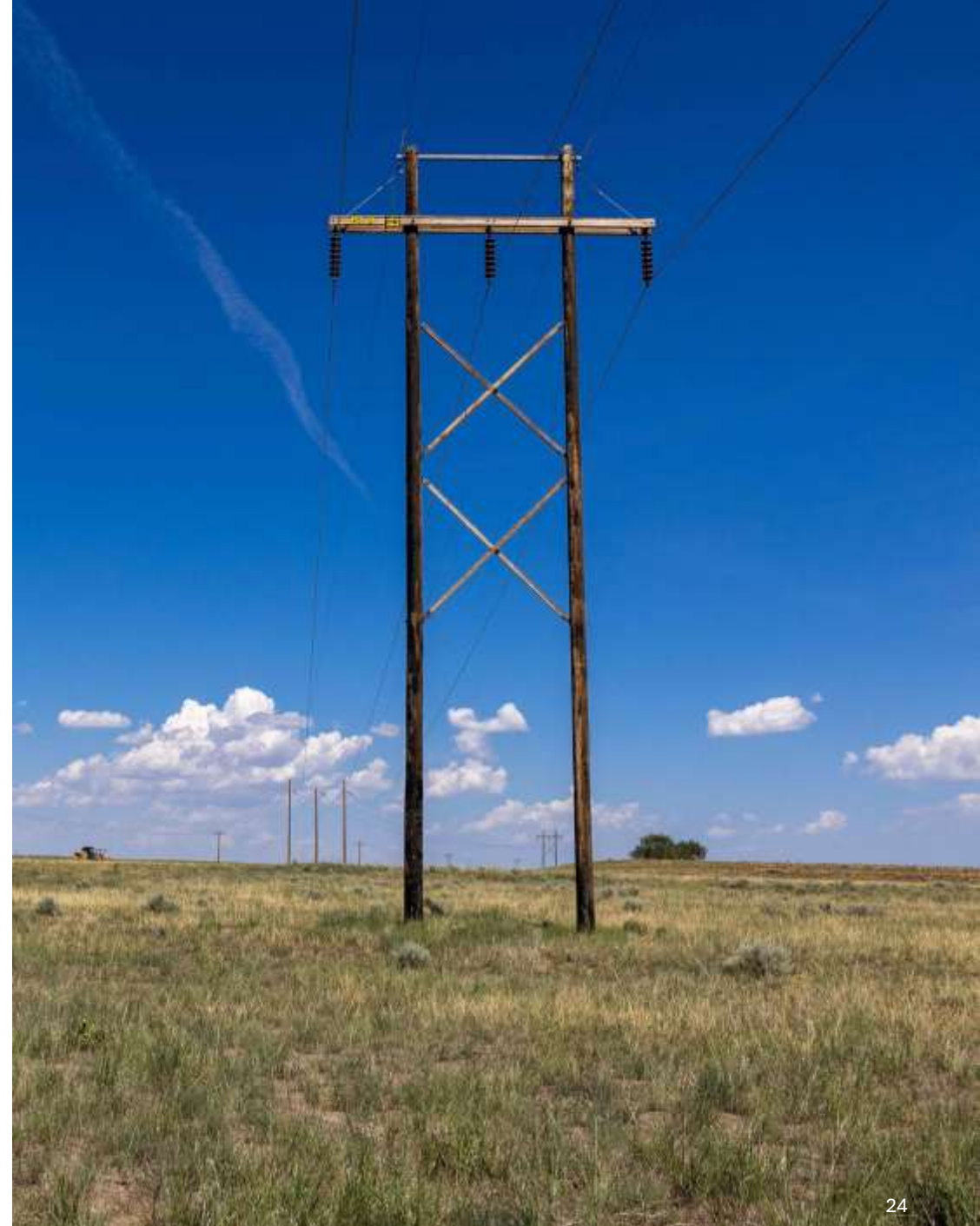
Crossman Peak Microwave Project



FUNDING TYPE	BUDGET				
	APPROVED	ADJUSTMENTS	TOTAL	EXECUTION	REMAINING
Prepayment	\$4,525,000	\$ (0)	\$4,525,000	\$3,312,000	\$1,213,000



Questions or Comments?



Updates

Abel Betancourt
Transmission and Substation Maintenance Manager



Liberty Station Service Replacements



Liberty Station Service Replacements

Description

- Install station service replacements including new foundations, automatic transfer switch, pad-mounted transformers, and other associated electrical equipment

Updates

- Final wiring and cable procurement is underway with lead time of 12 weeks
- Construction is expected to be complete by fall 2026

MILESTONES	STATUS	DATE
Design	Completed	Q4 2023
Construction Begins	Completed	Q1 2024
Construction Ends	Projected	Q3 2026
Closeout	Projected	Q2 2027



Liberty Station Service Replacements



FUNDING TYPE	BUDGET				
	APPROVED	ADJUSTMENTS	TOTAL	EXECUTION	REMAINING
Prepayment	\$1,390,000	\$0	\$1,390,000	\$660,000	\$730,000
Appropriations	\$1,976,000	(\$123,000)	\$1,853,000	\$1,853,000	\$0
TOTAL	\$3,366,000	\$0	\$3,243,000	\$2,513,000	\$730,000



Coolidge Station Service Replacements



Coolidge Station Service Replacements

Description

- Install station service replacements including new foundations, automatic transfer switch, pad-mounted transformers, and other associated electrical equipment

Updates

- Project delayed due to resource constraints
- Project to kick off this fall

MILESTONES	STATUS	DATE
Design	Projected	Q2 2027
Construction Begins	Projected	Q2 2028
Construction Ends	Projected	Q4 2029
Closeout	Projected	Q2 2030



Coolidge Station Service Replacements



FUNDING TYPE	BUDGET				
	APPROVED	ADJUSTMENTS	TOTAL	EXECUTION	REMAINING
Prepayment	\$3,673,000	\$ (0)	\$3,673,000	\$0	\$3,673,000



Wood Pole Replacement Program



Wood Pole Replacement Program

Description

- Replace degraded wood pole infrastructure to increase reliability and remediate phase-to-ground clearance violations

Updates

- Replaced seven miles of structures and cleared right-of-way on the Valley Farms-Oracle 115kV transmission line
- Approximately 15 miles of remaining structures slated for replacement



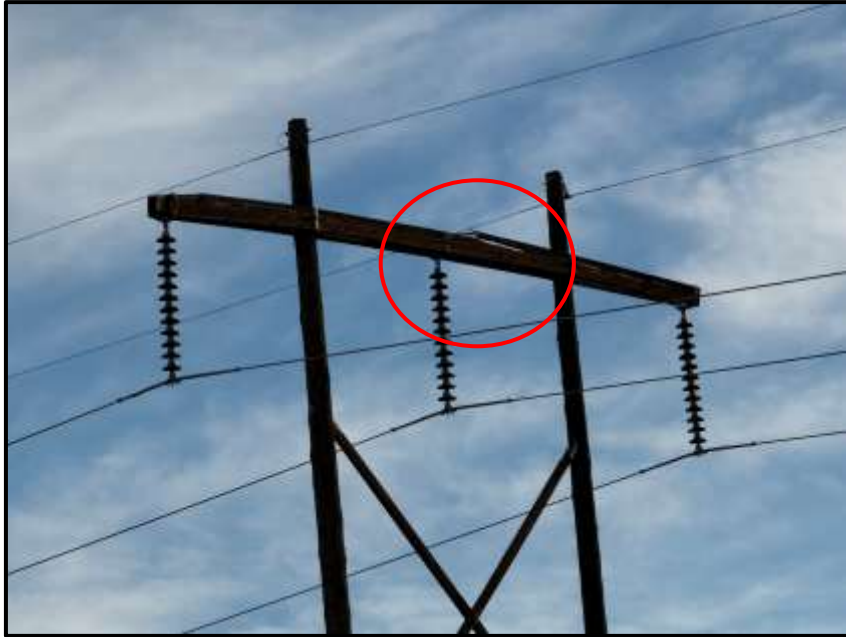
Wood Pole Replacement Program

Updates

- Inspections of Blythe-Knob 161kV transmission line identified numerous structures across a 10-mile section at risk of imminent failure
- 16 structures were replaced and extensive right-of-way clearing was performed
- Plan to return this fall to replace remaining structures. Extensive rock drilling will be required.



Wood Pole Replacement Program



Split cross-arm



Severe pole rot visible after removal



Broken x-brace



Wood Pole Replacement Program



Deteriorated and washed-out culvert



Culvert replacement on mile 20



Wood Pole Replacement Program



Sitework equipment on BLY-KNB right-of-way



Mojave Desert Tortoise



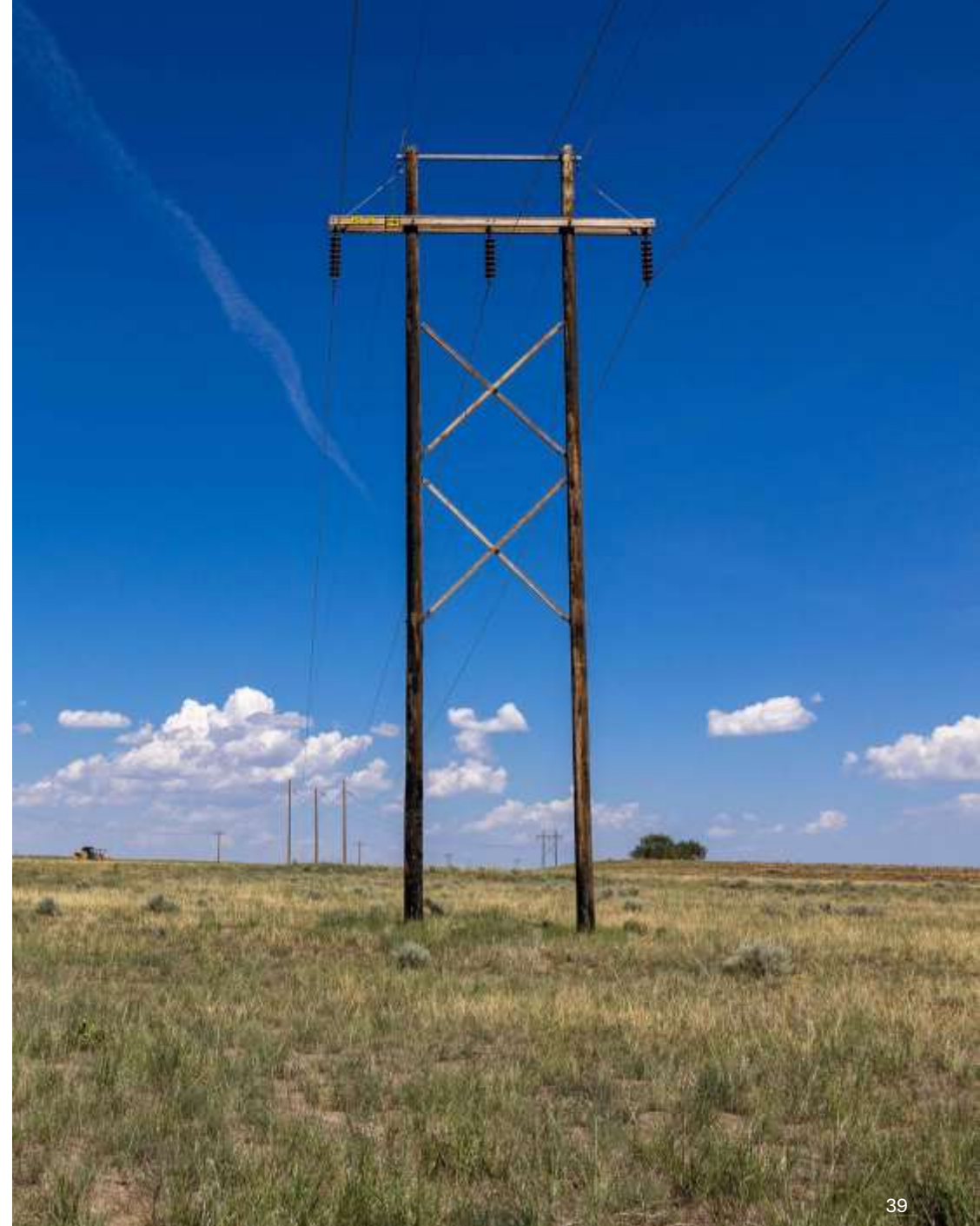
Wood Pole Replacement Program



FY26-28	BUDGET				
FUNDING TYPE	APPROVED	ADJUSTMENTS	TOTAL	EXECUTION	REMAINING
Prepayment	\$15,000,000	\$ 0	\$15,000,000	\$2,265,000	\$12,735,000



Questions or Comments?



Updates

Cole Shinaman
Program Manager (on contract to WAPA)



Bouse Upgrade



Bouse Upgrade

Description

- Build a new 230kV transmission line from the Bouse Substation to the Parker-Liberty No. 2, expand Bouse Substation, connect Parker-Headgate Rock 161kV via a jumper, and remove unneeded portions of Parker-Headgate Rock and Parker-Bouse 161kV transmission lines

Updates

- Delivery of two 230/161kV power transformers is the critical path
- Design for the substation expansion and 230kV transmission line is complete
- Relays and circuit breakers have been ordered and delivered

MILESTONES	STATUS	DATE
Design	Projected	Q1 2027
Contract Solicitation	Projected	Q1 2027
Construction Begins	Projected	Q2 2028
Construction Ends	Projected	Q1 2030
Closeout	Projected	Q4 2030



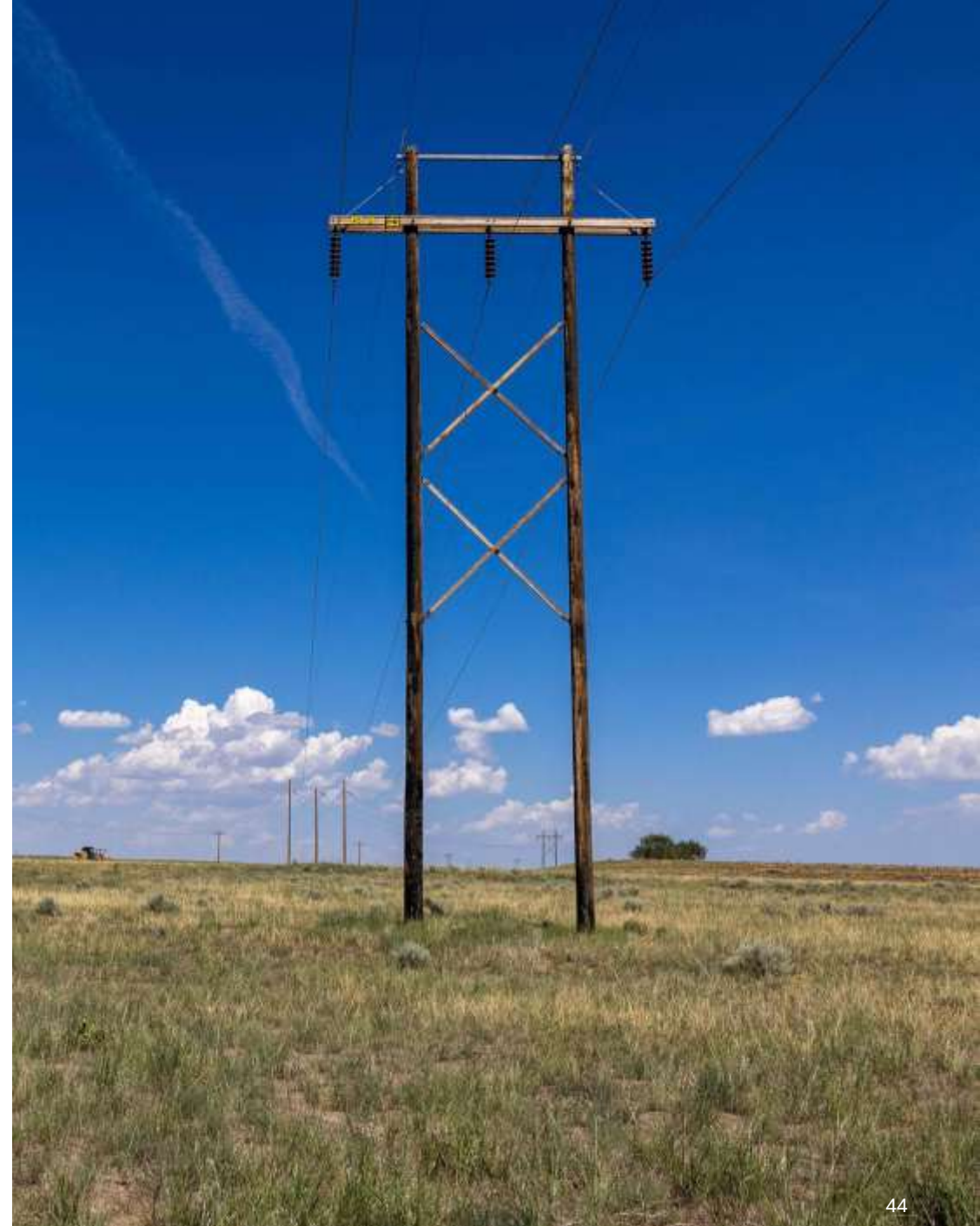
Bouse Upgrade



FUNDING TYPE	BUDGET				
	APPROVED	ADJUSTMENTS	TOTAL	EXECUTION	REMAINING
Prepayment	\$79,436,000	\$ (1,305,000)	\$78,131,000	\$13,621,000	\$64,517,000
Appropriations	\$0	\$1,305,000	\$1,305,000	\$1,305,000	\$0
TOTAL	\$79,436,000	\$0	\$79,436,000	\$14,926,000	\$64,517,000



Questions or Comments?



Other Key Projects

Cole Shinaman
Program Manager (on contract to WAPA)



Vail – Tortolita 230kV Transmission Line



Vail – Tortolita 230kV Transmission Line

Description

- Joint project with Tucson Electric Power (TEP) to rebuild a 115kV single circuit transmission line with 230kV double circuit, steel monopoles, and optical overhead ground wire between Saguaro/Tortolita Substations to Nogales/Vail Substation

Updates

- Steel pole deliveries through April 2026
- Land acquisitions underway for reroutes through Tumamoc Hill and area south of Tucson Airport
- Planning and preparation for upcoming segments
 - Lands: notifications, access, encroachments, permit support
 - Environmental: cultural, biological, vegetation
 - Outage coordination

SEGMENT	MILES	SCHEDULE
Marana to Rattlesnake	8	Completed – Q2 2025
Tortolita to Marana	12	Completed – Q1 2026
Rattlesnake to Tucson	16	In Progress/Projected – Q4 2026
Tucson to Del Bac	10	Projected – Q1 2027
Del Bac to Vail	13	Projected – Q4 2027



Vail – Tortolita 230kV Transmission Line



Conductor and Steel at Avra Valley Laydown Yard



Anchor Bolt Cage



Vail – Tortolita 230kV Transmission Line



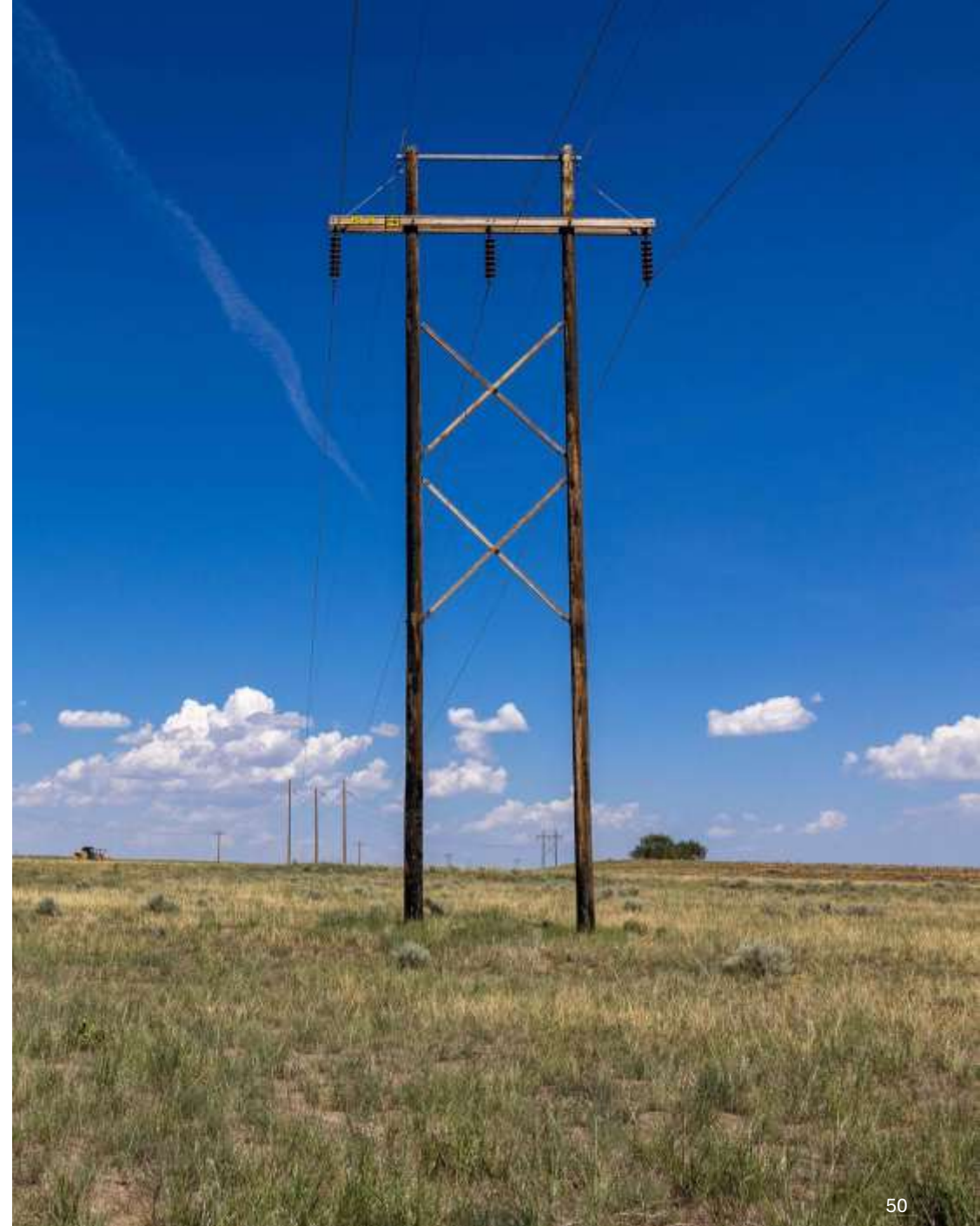
Steel monopole assembly



Steel monopole erection



Questions or Comments?



Prepayment MOU

John Paulsen
Power Marketing Manager



Moving Capital O&M to Sustainable Funding

- Shifting Capital O&M to prepayments was proposed and discussed at prior TYP meetings
- WAPA proposes to utilize prepayments under the JPA to fund DSW's Capital Program
- A modified Prepayment MOU will facilitate voting on DSW's Capital O&M
- DSW's Capital O&M will be sustainable and transparent



MOU Past

- Parker-Davis and Intertie long-term transmission customers were prepaying for their service
- WAPA was utilizing those prepayments to fund construction projects
- Customers requested a process to provide input on project prioritization
- MOU was implemented in 2010, establishing the voting process still used today



MOU Present

- Since the MOU was put in place:
 - Joint Planning Agreement signed in 2019
 - One Transmission Rate established in 2024
 - Capital O&M funding very limited for last several years
- These developments make changes to the MOU necessary
- Section 10 of the MOU:

MODIFICATIONS: Western is receptive to continuing to work with the Participants to make future improvements to this process. This MOU may be modified by mutual agreement of Western and the Participants. Approval of modifications shall be made by an affirmative vote of the Participants in accordance with Section 5 of this MOU and written agreement by Western.



MOU Modification (JPA)

- Refers to the JPA definition of terms whenever possible
- Highlights coordination with the TYP process and reflects the current meeting and information sharing schedule in the JPA



MOU Modification (OTR)

- Establishes OTR as DSW's pricing mechanism for long-term firm transmission service
- Replaces usage of Parker-Davis and Intertie in the MOU to reflect OTR prepayment applicability and customer eligibility



MOU Modification (Capital O&M)

- DSW's Capital Program is a new term in the MOU defined as the combination of:
 - Construction Projects
 - RRADs (Capital O&M)
 - JPA definitions of both Construction Projects and RRADs are then referenced
- “Construction project(s)” is replaced by “DSW's Capital Program” in the remainder of the modified MOU



MOU Future

- Materials available on DSW's [Capital Program website](#):
 - Existing MOU
 - Modified MOU
 - Redline MOU
- Request customer review and feedback
- Q2 TYP meeting will include a forum to discuss
- Q3 TYP meeting will include a vote on the modification



Annual Meeting Cycle



Active Projects Meeting

- Construction Projects
- Pre-Construction Projects
- AOA Study Alternatives

Prepayment Vote Meeting

- Prepayment Vote
- AOA Studies



Draft Ten-Year Plan Meeting

- Draft Ten-Year Plan
- Capital Operations and Maintenance Projects
- AOA Study Materials

Final Ten-Year Plan Meeting

- Ten-Year Plan
- AOA Preferred Alternatives
- Vote on MOU Modifications**



Contact WAPA

Ten-Year Plan

Todd Statler

Transmission Asset Planning Manager (acting)

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Prepayment MOU

John Paulsen

Power Marketing Manager

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