



Western
Area Power
Administration

Pre-payment Funding Meeting

Annual Customer Meeting

Fiscal Year 2018

October 5, 2017

Desert Southwest Region

Phoenix, AZ



AGENDA

1. Welcome
2. Previous Action Items
3. Review Pre-payment Projects
4. Pre-payment Financial Overview
5. Customer Pre-payment Vote
6. Next Steps



WELCOME



ACTION ITEMS



ACTION ITEMS

Please reference page 5 of the Pre-payment handout booklet for detailed responses to action items captured in the August 22nd, 2017 10-Year Plan Meeting



REVIEW PRE-PAYMENT PROJECTS



FY 17 COMPLETED PROJECTS

PROJECT NAME	POWER SYSTEMS
Facility Ratings Mitigation Year 2	Parker Davis



FY 17 COMPLETED PROJECTS

Facility Ratings Mitigation Year 2

Reference page 10 in 10-Year Plan Handout Book

- Mitigated 79 deficiencies across four different line segments
 - Gavilan Peak – Prescott
 - Prescott – Round Valley
 - Round Valley – Peacock
 - Black Mesa – Topock (CAP)



Facility Ratings Mitigation Year 2

- Completed March, 2017
- Approved for pre-payments in FY14



FY 17 ACTIVE PRE-PAYMENT PROJECTS

PROJECT NAME	POWER SYSTEM
Parker-Headgate Rock & Parker-Bouse Rebuild	Parker-Davis
Mesa Substation Remediation	Parker-Davis
Gila-Knob 161kV Rebuild	Parker-Davis
Gila Substation 161kV Rebuild	Parker-Davis
Tucson Substation Rebuild	Parker-Davis
Crossman Peak Microwave Facility	Parker-Davis
Liberty Series Capacitor Bank Replacement	Intertie



Pre-payment Funding Status

Project	Current Project Budget*	Prepayment Execution**	Appropriated Execution**	Remaining Budget
Parker-Headgate Rock & Parker-Bouse Rebuild	\$ 17,954,000	\$ 529,648	\$ 718,906	\$ 16,705,446
Mesa Substation Remediation	\$ 3,535,000	\$ 622,861	\$ 1,379,481	\$ 1,532,658
Gila-Knob 161-kV Double Circuit Upgrade	\$ 4,704,200	\$ 1,686,698	\$ 1,976,042	\$ 1,041,460
Gila Substation 161-kV Rebuild	\$ 18,994,500	\$ 3,332,621	\$ 1,882,739	\$ 13,779,140
Tucson Substation Rebuild	\$ 9,002,167	\$ 6,733,367	\$ 2,044,813	\$ 223,987
Crossman Peak Microwave Facility	\$ 4,525,000	\$ 942,456	\$ -	\$ 3,582,544
Liberty Series Capacitor Bank	\$ 10,372,000	\$ 373,249	\$ 3,776,524	\$ 6,222,227
Total	\$ 69,086,867	\$ 14,220,900	\$ 11,778,505	\$ 43,087,462



*Total Project Budget is Initial Budget + Adjustments

FY 18 PROPOSED PRE-PAYMENT PROJECTS

- **Gila-Wellton Mohawk I-8 Crossing**
- **Coolidge-Valley Farms 115-kV Rebuild**



Gila-Wellton Mohawk I-8 Crossing 161-kV Rebuild



Gila-Wellton Mohawk 161-kV I-8 Crossing

Description

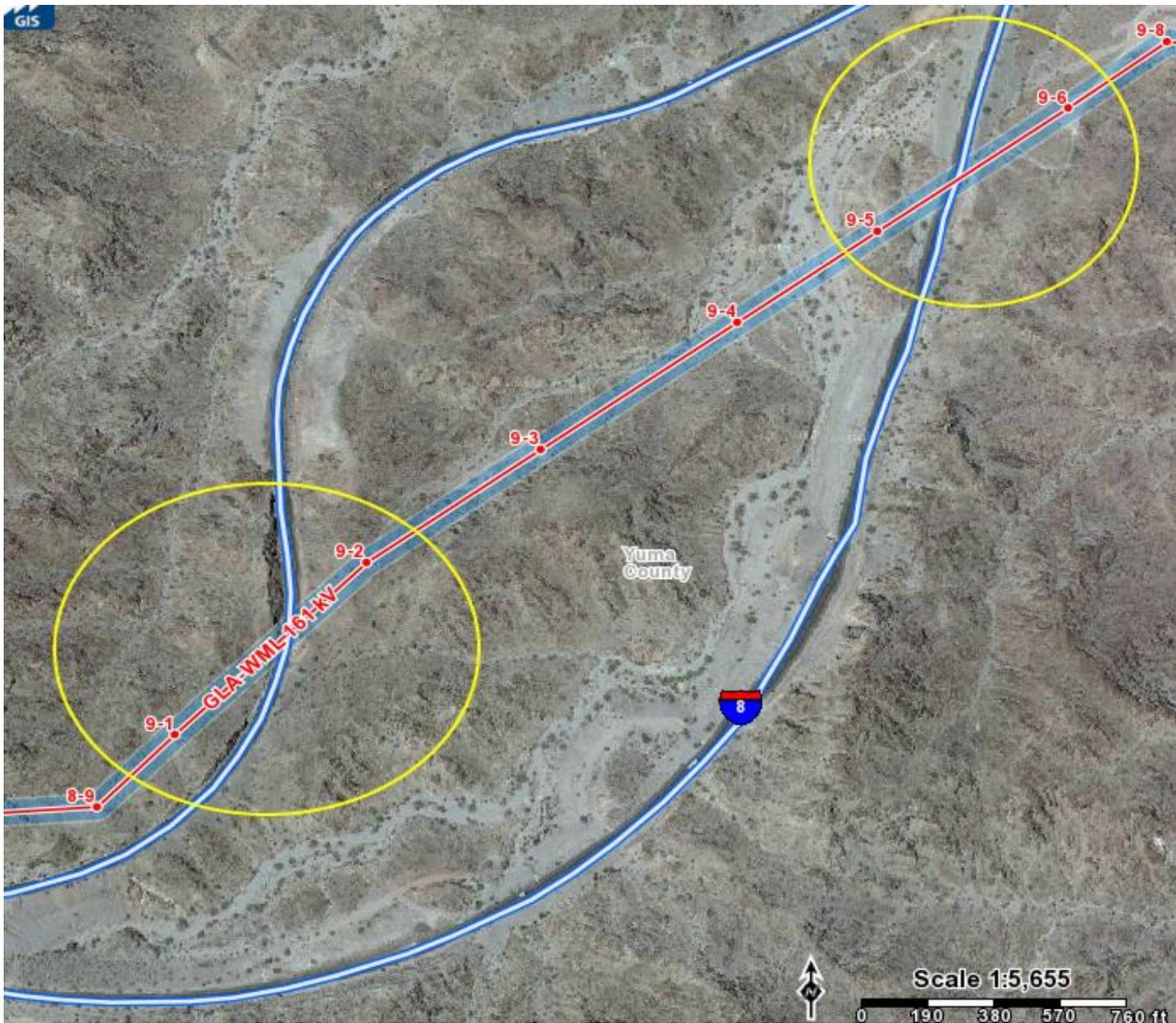
- *Reference page 25 in 10-Year Plan Handout Book*
- ~2.8 miles of single circuit transmission line
Constructed in 1956
- Includes OPGW from Gila-Wellton Mohawk substations
- Stretches through diverse, rugged mountainous terrain.
- Crosses Interstate-8 with isolated wood pole structures
- Majority of the Gila-Wellton Mohawk structures outside of this 2.8 mile stretch have already been replaced.



Gila-Wellton Mohawk 161-kV I-8 Crossing

VIEW FIELD VIDEO





Locations where Gila-Wellton Mohawk Transmission line crosses I-8

Gila-Wellton Mohawk 161-kV I-8 Crossing

- Appropriated Seed Funding approved in October 2016
- Design started February 2017
- Completed ~50% Design Package August 2017
- *Projected construction start October 2018*
- *Projected construction complete March 2019*



Gila-Wellton Mohawk 161-kV I-8 Crossing

Rebuild COL-VAF With Light Duty H-Frame Structures	
	TOTAL
Administrative	\$856,017
EVMS	\$0
Design	\$288,145
Environmental	\$87,376
Land & Land Rights	\$73,128
Government Furnished Equipment	\$504,760
Construction	\$4,857,612
Commissioning Activity	\$169,920
Subtotal	\$6,836,958
Contingency (10%)	\$683,696
Total Project Budget	\$7,520,654

- Administrative Cost Include:**
- **Federal and Contract Labor**
 - Project Management
 - Planning/Collection of Field Data
 - Procurement/Contracts
 - Budget/Finance/Accounting
 - Safety Inspections/Security



Gila-Wellton Mohawk 161-kV I-8 Crossing

PHASE I – ~50% DESIGN PACKAGE				
FUND TYPE	SEED FUNDING ALLOWANCE	SUPPLEMENTAL FUNDING	TOTAL	EXECUTIONS TO DATE
Pre-payment (PCN)	\$0	\$ 0	\$0	\$0
Appropriations	<u>\$500,000</u>	<u>\$ 0</u>	<u>\$500,000</u>	<u>\$220,143</u>
TOTAL	\$500,000	\$0	\$500,000	\$220,143

Executions to date include expenses, obligations, and commitments through 8/31/17

CONCEPTUAL PROJECT FUNDING PLAN		
PHASE	COST ESTIMATE	FUND TYPE
1- Initiation, Planning, & ~50% Design Package	\$220,143	Appropriations (WCF)
2- Full Design, Construction, & Closeout	\$7,300,511	Pre-payment (PCN)
TOTAL PROJECT BUDGET	\$7,520,654	Pre-payment (PCN)



Coolidge-Valley Farms 115-kV Rebuild



Coolidge-Valley Farms 115-kV Rebuild

Description

- *Reference page 28 in 10-Year Plan Handout Book*
- 6.1-mile segment of the Coolidge to Oracle 45-mile 115-kV transmission line.
- Originally constructed in 1943.
- Comprised of mostly wood H-frame structures, 4/0 copper conductor (rating = 89 MVA), and overhead ground wire.



Coolidge-Valley Farms 115-kV Rebuild

Project Justifications

- Likely to begin seeing potential overload issues with typical load and generation patterns starting in the summer of 2020.
- Improve reliability to continue meeting existing contractual obligations.

Additional Benefits

- 2 National Electric Safety Code (NESC) clearance violations have been identified and need to be corrected.
- Existing condition of access roads and rights-of-way is poor and limits access.
- Estimated 20% of existing wood poles have defects (moderate-serious defects)
- Additional communication requirements have been identified.



Coolidge-Valley Farms 115-kV Rebuild

Project Scope

- Upgrade conductor (180 – 230MVA)
- Upgrade all structures to light duty steel H-frame
- Maintain 115-kV standards with OPGW



Coolidge-Valley Farms 115-kV Rebuild

Casa Grande Ruins National Monument located near Coolidge Substation



Coolidge-Valley Farms 115-kV Rebuild

- Proposed project kickoff: November 2017
- Proposed Construction start: October 2018
- Proposed energization: Spring of 2020



Coolidge-Valley Farms 115-kV Rebuild

Preferred Alternative #3 Conceptual Estimate	
Rebuild COL-VAF With Light Duty H-Frame Structures	
	TOTAL
Administrative	\$1,190,328
EVMS	\$0
Design	\$167,199
Environmental	\$484,824
Land & Land Rights	\$125,466
Government Furnished Equipment	\$1,349,024
Construction	\$1,527,094
Commissioning Activity	\$98,021
Subtotal	\$4,941,956
Contingency (20%)	\$988,391
Total Project Budget	\$5,930,349

- Administrative Cost Include:**
- **Federal and Contract Labor**
 - Project Management
 - Planning/Collection of Field Data
 - Procurement/Contracts
 - Budget/Finance/Accounting
 - Safety Inspections/Security



FY18 PROPOSED PRE-PAYMENT PROJECTS

2018 PROPOSED PROJECT FUNDING PLAN				
PROJECT	PROJECT COST ESTIMATE	APPROPRIATED SEED FUNDS PRIOR YEAR(S)	APPROPRIATED SEED FUNDS FY2018	PRE-PAYMENT FUNDS REQUESTED FY2018
Gila-Wellton Mohawk I-8 Crossing Rebuild	\$7,520,654	*\$220,143	\$0	\$7,300,511
Coolidge-Valley Farms Rebuild	\$5,930,349	\$0	\$0	\$5,930,349
Kofa-Dome Tap Rebuild	\$5,360,022	\$0	*\$500,000	\$0
Dome Tap-Gila Rebuild	\$7,401,431	\$0	*\$500,000	\$0
TOTAL 2018 FUNDING REQUESTED			\$1,000,000	\$13,230,860

**Seed funding is an allowance only, not a budget or guarantee of total fund to be expended.*



Sources and Uses

FY	Action	Project Name	Sources	Uses
12	Reprogram	ED4-ED2 115-kV Rebuild	\$ 133,640	
13	Reprogram	Parker-Headgate Rock	\$ 384,730	
14	Reprogram	Gila-Knob 161-kV Double Circuit Upgrade	\$ 1,302,415	
14	Reprogram	Black Point-Mesa Transmission Line Reroute	\$ 17,688	
14/15	Reprogram	Facility Ratings Year 2	\$ 419,942	
14/16	Reprogram	Mesa Substation Remediation	\$ 1,379,481	
14	Reprogram	Gila Substation 161-kV Rebuild	\$ 111,826	
16	Reprogram	Liberty Series Capacitor Bank	\$ 3,776,524	
18	Proposed	Gila-Wellton Mohawk 161-kV I-8 Crossing		\$ 7,300,511
18	Proposed	Coolidge Valley Farms Rebuild		\$ 5,930,349
		New Prepayment Funding Needed	\$ 5,704,614	
		FY18 Prepayment	\$13,230,860	\$13,230,860



Pre-payment Voting Overview

Per the voting procedures in the Memorandum of Understanding:

- Each participant that has signed the MOU will have one vote
- The FY18 projects proposed are voted on as a package. In the event the package is voted down, a subsequent vote will take place on each individual project.
- Approval requires an affirmative vote of greater than fifty 50 percent of votes received by the close of the meeting (during the meeting, via e-mail, or by proxy)



TEN-YEAR PLAN NEXT STEPS

- Recap of New Action Items
- Customer proposed project request form available at: <https://www.wapa.gov/regions/DSW/Pages/10-year-capital-program.aspx>
- Questions, comments, and project request forms can be emailed to DSW_AOaproject@wapa.gov
- Next meeting(s):
 - DSW FY20 Work Plan Meeting tentatively scheduled for December, 2017
 - WAPA wide 10-Year Plan Presentation tentatively scheduled for December, 2017



THANK YOU

