DSW Projects

Accomplishments in FY15

• Glen Canyon Stage 09
  – Install new 230/69KV 50 MVA transformer, two 230Kv breakers and one 69KV breaker and associated equipment.
  – Transformer Energized June, 2015
  – Cost to date: $4,875,585 (estimated $6.1 million)
  – Project in Close out
Accomplishments in FY15

• Pinnacle Peak Substation (PPK)
  – Replace disconnect 2193
  – In-service date: May 2015
  – Total Cost: $98,347 (estimated $82,000)
  – Project in Close out
Integrated Vegetation Management

• September 3, 2014 – Contract Awarded
  – Phillips and Jordan

• Five Task Orders Issued
  – 83 Miles of Right of Way Cleared
  – Total Cost $2,096,158 (estimated $2.8 million)

• Mexican Spotted Owl Habitats
  – Surveys Completed, Trees being Removed
Flagstaff - Pinnacle Peak
Before Clearing Began
Structure 118/1 looking North
Cleared Area looking into Vegetation
Integrated Vegetation Management
Next Steps

- Two Task Orders Issued, Tonto National Forest
- Corridor Management Plan
  - Estimated to begin on November, 2015
    - Last Forty Miles and $1.5 million estimated
    - Harder Terrain (hand clearing)
- Contract for Substation is in procurement
- Agreement with APS
  - Estimated to begin January 2016 - Share 18 Substation (3 are with CRSP)
- Southwest Ground Control
  - Estimated completion November 2015
- Begin Maintenance Phase
  - Herbicide and Road Access
Projects in FY16

• Pinnacle Peak KU1A Gasket Replacement
  – Estimated Procurement contract award Dec. 2015
  – Estimated work completed March 2016
  – Minimal Reduction Flagstaff to Pinnacle Peak
  – Estimated Cost $160,000

• Pinnacle Peak 230kV Disconnect Replacements Bays 23 & 33
  – Switches purchased FY14
  – FY16 Assemble switches
  – FY17 Install switches (Outage Coordination)
  – Estimated Cost $460,000
Projects in FY16

- Pinnacle Peak Replace FX Capacitor Maintenance Breakers Switches
  - Design Completed August 2015
  - Single Pole Motor Operated
  - FY16 Purchase two for Pinnacle Peak and two for Flagstaff
  - Estimated Cost $1.0 million
Projects in FY16

• Facility Rating Mitigation Year 3 – PPK- RGS
  – Repair all deficiencies identified in Year 3 LiDAR survey
  – SRP re-conductor study of 2 conductors
  – Risk: De-rate line
  – NERC Issue - Steel Pole estimated FY16 replace
    • Estimated Cost: $500,000 (cost will be split with Parker Davis)

• Study the Glen Canyon to Shiprock four 60 MVAR Shunt Reactors
Projects in FY16

• Glen Canyon Substation Access
  – Description: Repave road between yards and repair site drainage
  – Final design completion scheduled May 2016
  – Risk: No access to the substation after heavy rain
  – Est. in-service date: January 2017
  – Original Estimate $125,000 FY15
  – Scope Changed to include Erosion issue, needs culverts and proper Drainage
  – Estimated Cost $363,000

• Physical Security Enhancement Program
  – Install cameras at Parker Davis, Flagstaff, Pinnacle Peak
  – Estimated Cost $1.3 million
Projects in FY16

• Pinnacle Peak Relay Replacement
  – Scheduled to be completed in FY16
  – Estimated Cost $322,700

• Glen Canyon Remedial Action Scheme
  – Design & Dual Comm. Path schemes completed
  – Western Study per NERC completed
  – Install and Commission Path A - Feb. 27, 2016
  – Install and Commission Path B – April 30, 2016
  – Estimated Cost $400,000
Projects in FY16

- Communication Building Replacement
  - Mingus Mountain
  - Analyzing to repurpose existing ED5 shelter owned by DSW. Estimated cost savings of $250,000
  - Specification into Procurement April 2016
  - Construction Completion December 2016
  - Estimated Cost $400,000

- Microwave System Upgrade (Preston Mesa – Jacks Peak – Glen Canyon)
  - DSW negotiated use of tower space at Jack’s Peak
    - Very Large cost savings
  - Estimated Cost $50,000
APS (Jacks Peak) Site
Proposed Projects FY17

• Fiber Optic Installation Program (FY17–FY25)
  – (Full Path, 22 Miles) Pinnacle Peak to Prescott
  – Conceptual Estimate $880,000 per FY
• Relay Replacement Program (FY17-FY25)
  – Glen Canyon
  – Conceptual Estimate $300,000 per FY
• Communication Digital Monitoring Equipment Upgrades (FY17-FY25)
  – Glen Canyon / Pinnacle Peak
  – Conceptual Estimate $200,000 per FY
• Meter Program (FY17-25)
  – Conceptual Estimate $100,000 per FY
• RTU Replacement Program (FY17-FY25)
  – Pinnacle Peak
  – Conceptual Estimate $85,000 per FY
Questions for DSW Office