South Coast Conduit Riser Pipe Replacement – Air Vacuum Air Release Valve (AVAR) Structures (2014-C-62)

Project Ranking 97%

Total Estimated Cost: \$530,000



Background

The riser pipe is the functional connection between the SCC and air vacuum air release valves (AVARs) located in the system. The AVARs function to allow volumes of air to be exhausted from or admitted into the pipeline to protect the system from a loss of capacity and to prevent the pipe from collapsing in the event of a break in the pipe. The riser pipe sits directly on top of a man-hole cover and supports a gate valve that sits below the AVAR. Riser pipes exist at all 57 AVAR locations.

Need for Project

Twenty riser sections have been identified to be of questionable integrity because of varying degrees of corrosion and thus pose an operational risk. Replacement and/or relocation of the riser pipes affiliated with the air vacuum air release valves will ensure the functionality of this system component

Description

Replace manhole, riser pipes and the valves in the AVAR structures within designated locations in the system. The riser replacement and relocation project would be performed in several phases with consideration of operational impacts. For efficiency and to minimize cost, phases of this project will be performed concurrently with similar phases of the blow-off project. The project would require retention of engineering and contractor services. Project implementation will occur over time and during low water demand months to reduce the impact of system shutdown.

Regulatory Compliance

This is USBR Category 1 recommendation.

Budget & Schedule

Internal Staff Estimate

Fiscal Year	Cost
2015-16 (Phase I – Engineering)	\$ 60,000
2016-17 (Phase II – Construction)	\$ 70,000
2017-18 (Phase II – Construction)	\$100,000
2018-19 (Phase II – Construction)	\$100,000
2019-20 (Phase II – Construction)	\$100,000
2020-21 (Phase II – Construction)	\$100,000
Total	\$530,000