Potomac WFP Outdoor Substation No. 2 Replacement

(P113802)

Category	WSSC	Date Last Modified	08/16/17
SubCategory	Water Bi-County	Administering Agency	W.S.S.C.
Planning Area	Bi-County	Status	Planning Stage

EXPENDITURE SCHEDULE ($000s)

Cost Elements	Total	Thru FY17	Est FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
Planning, Design and Supervision	4,405	4,027	377	1	1	-	-	-	-	-	-
Construction	10,593	10,423	150	20	20	-	-	-	-	-	-
Other	54	-	53	1	1	-	-	-	-	-	-
TOTAL EXPENDITURES	15,052	14,450	580	22	22	-	-	-	-	-	-

FUNDING SCHEDULE ($000s)

Funding Source	Total	Thru FY17	Est FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
WSSC Bonds	15,052	14,450	580	22	22	-	-	-	-	-	-
TOTAL FUNDING SOURCES	15,052	14,450	580	22	22	-	-	-	-	-	-

APPROPRIATION AND EXPENDITURE DATA ($000s)

Appropriation FY 19 Request	22	Year First Appropriation	FY11
Appropriation FY 20 Request	-	Last FY's Cost Estimate	14,850
Cumulative Appropriation	15,704		
Expenditure / Encumbrances	-		
Unencumbered Balance	15,704		

Project Justification

Energy Performance Project, Phase ID Energy Systems Group (ESG). A Raw Water Pump Testing performed on April 18, 2009 and subsequent site visits and meetings at Potomac from April they-space June 2009 by ESG, Whitman Requardt & Assoc., and Shah Assoc. (sub-consultants to ESG). Phase ID - Energy Performance Project was awarded to Energy Systems Group in March 2009. Phase 1 included engineering, and planning of equipment and operations upgrades to develop energy efficient and guaranteed savings program to upgrade/replace pumps at the Potomac Raw Water Pumping Stations (RWPS) #1 and #2, and upgrade Main Zone pump #3. Subsequent tests and inspections of OSS-2 serving RWPS #1 and #2 resulted in the development of a report that indicated that OSS-2 was in poor condition, unsafe and that WSSC should move in an expeditious manner to replace the switchgear in its entirety. Industry practice to replace 5kV switchgear between 25 and 30 years old, when in an environment where chemicals are in the air. The old breakers in OSS-2 have misalignment problems, and the switchgear housing is corrupted which can pose safety risks to the plan of electrical and mechanical maintenance staff as well as the operators. Also, the electromechanical relays are obsolete and the manufacturer is no longer in business which makes it difficult, costly and requires

long lead times to obtain replacement parts.

Other

The project scope was developed for the FY 2011 CIP and has a total project cost of $7,934.00. Expenditure and schedule projection shown in Block B above are Order of Magnitude estimates and are expected to change as the project moves into design.

Coordination

WSSC Projects A-103.00, Energy Performance Program and W-73.16, Potomac WFP improvements. This project supports 100% System Improvements.