A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
113802	W-73.19	Add

2. Date: October 1, 2009
Revised:

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Potomac WFP Outdoor Substation No. 2 Replacement

5.Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Bi-County

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '09	(10) Estimate FY '10	(11) Total 6 Years	(12) Year 1 FY '11	(13) Year 2 FY '12	(14) Year 3 FY '13	(15) Year 4 FY '14	(16) Year 5 FY '15	(17) Year 6 FY '16	(18) Beyond 6 Years
Planning, Design & Supervision	900			900	115	400	155	115	115		
Land											
Site Improvements & Utilities											
Construction	6,000			6,000			3,000	2,000	1,000		
Other	1,034			1,034	17	60	473	317	167		
Total	7,934			7,934	132	460	3,628	2,432	1,282		

C. Funding Schedule (000's)

WSSC Bonds	7,934			7,934	132	460	3,628	2,432	1,282		

D. Description & Justification

DESCRIPTION

This project provides for the planning, design, and construction, required to replace the Outdoor Substation No. 2 (OSS-2) at the Potomac Water Filtration Plant. OSS-2 is over 30 years old and contains 5kV switchgear that houses air magnetic breakers which are obsolete.

JUSTIFICATION

Plans & Studies

Energy Performance Project, Phase ID, Energy Systems Group (ESG). Raw Water Pump Testing performed on April 18, 2009 and subsequent site visits and meetings at Potomac from April – June 2009 by ESG, Whitman Requardt & Assoc., and Shah Assoc. (sub-consultants to ESG).

Specific Data

Phase ID - Energy Performance Project was awarded to Energy Systems Group in March 2009. Phase I included engineering, and planning of equipment and operations upgrades to develop an 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 is to replace 5 kV 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 corroded, which can pose safety risks to the plant 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.

Cost Change

Not applicable.

STATUS Planning

OTHER

The project scope was developed for the FY 2011 CIP and has a total project cost of $7,934,000. Expenditure and schedule projections 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.

NOTE This project supports 100% System Improvement.

E. Annual Operating Budget Impact (000's)

			FY of Impact
Program Costs	Staff	....	....
	Other	....	....
Facility Costs	Maintenance	....	....
	Debt Service	692	 16
Total Costs		692	 16
Impact on Water or Sewer Rate		1¢	 16

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 11
Date First Approved	FY 11
Initial Cost Estimate	7,934
Cost Estimate Last FY	
Present Cost Estimate	7,934
Approved Request, Last FY	
Total Expenditures & Encumbrances	
Approval Request FY 11	132
Supplemental Approval Request Current FY (10)	

G. Status Information

Land Status:	Public/Agency owned land
% Project Completion:	P-0%
Est. Completion Date:	FY 2015

H. Map

Map Reference Code: