Memorandum from the Office of the Inspector General

April 16, 2010

William R. McCollum, Jr., LP 6A-C

FINAL REPORT – AUDIT 2009-12291-02 – REVIEW OF POSTPONED AND CANCELLED CAPITAL PROJECTS – POWER SYSTEM OPERATIONS

Attached is the final report on our review of Power System Operations' postponed and cancelled capital projects. This report is for information purposes only; therefore, no response is necessary.

Recipients of this report are responsible for safeguarding it to prevent publication or other improper disclosure. Because information contained in this report may be subject to public disclosure once the report is finalized, please advise us of any sensitive information in this report that you recommend be withheld.

If you have any questions or wish to discuss our findings, please contact Amy R. Rush, Senior Auditor, at (865) 633-7361 or Lisa H. Hammer, Director, Financial and Operational Audits, at (865) 633-7342. We appreciate the courtesy and cooperation received from your staff during the audit.

Robert E Martin

Robert E. Martin
Assistant Inspector General
(Audits and Inspections)
ET 3C-K

ARR:JP
Attachment
cc (Attachment):
Peyton T. Hairston, Jr., WT 7B-K
Robin B. Hayes, MR 3B-C
Tom D. Kilgore, WT 7B-K
Helen S. Layne, MR 3B-C
Robin E. Manning, MR 3H-C
Richard W. Moore, ET 4C-K
Emily J. Reynolds, OCP 1L-NST
Scott D. Self, MR 6D-C
Joyce L. Shaffer, WT 9B-K
Michael B. Shirey, MR 3F-C
John M. Thomas III, MR 3S 120
OIG File No. 2009-12291-02

Office of the Inspector General

Audit Report

To the Chief Operating Officer

REVIEW OF POSTPONED AND CANCELLED CAPITAL PROJECTS –POWER SYSTEM OPERATIONS

Audit Team
Amy R. Rush
Holly B. Oswalt
Jamie M. Wykle

Audit 2009-12291-02
April 16, 2010

SYNOPSIS

As part of our annual audit plan, we reviewed the process for postponing and cancelling capital projects. Our audit objectives were to determine whether fiscal years (FY) 2007 and 2008 project postponements and cancellations were (1) properly approved, (2) effectively communicated, and (3) monitored to prevent inappropriate charges.

Our review specifically focused on the processes for Nuclear Power Group, Power System Operations (PSO), Fossil Power Group, and River Operations. Due to the unique aspects of each of these organizations, we will issue a separate report on each organization. This report addresses the process for the PSO organization.

Based on our review, we determined that PSO's postponed and cancelled projects (1) contained a capital classification designated by Fixed Asset Accounting (FAA), (2) were approved in accordance with Standard Programs and Processes (SPP) 2.1, and (3) had valid justifications for postponement and/or cancellation. We also noted that project changes were communicated internally using a listing of projects known as the "checkbook," rather than Five-Year Project Plans. We determined the use of the checkbook was a reasonable alternative to the Five-Year Project Plan.

We also determined that project cancellations required to be communicated to FAA were communicated to FAA in a timely manner. Finally, we noted that while there is no policy governing the splitting of project costs, there is an independent review of project costs performed by Financial Services personnel and an expectation for employees to appropriately charge their time to the specific project(s) they work on.

BACKGROUND

Each year, the Tennessee Valley Authority (TVA) initiates a wide variety of capital and operations and maintenance (O&M) projects. In that regard, TVA's project justification process is designed to ensure that such projects are aligned with TVA's vision, goals, and strategic plan objectives. As defined by TVA's SPP-2.1: Project Justification Process,[1] the process consists of identifying project initiatives, coordinating and completing project reviews, receiving funding, approving projects, and executing projects which include project postponement, cancellation, and closure. Projects are initiated, owned, managed, and executed by the respective Strategic Business Unit (SBU).

[1] During the review, SPP-2.1 was being revised to update the project authorization matrix. We used the latest approved revision for this testing.

According to TVA's Capitalization policy, projects are classified as capital if they result in the creation of new assets, the replacement of existing assets, or the removal of existing assets. Projects are considered O&M if they repair, restore, test, inspect, or assess existing assets. In addition, any capital project that is cancelled should be reclassified as an O&M project and project costs expensed. FAA personnel are responsible for determining the proper accounting classification for all projects under consideration for capitalization.

Capital projects greater than $250,000 are required to be entered as stand-alone projects in the Project Justification System (PJS), which serves as the official database containing project data and project approval status.[2] Depending on the cost and type of the project, there can be multiple levels of project approval. Projects less than or equal to $250,000 are grouped together and entered into the PJS as a "bucket." Projects are classified as one of three categories:

- Strategic – Projects initiated or sanctioned by the Board or management with costs greater than $8 million.
- Base – Projects specific to an SBU to maintain its mission with costs less than or equal to $8 million.
- Discretionary – Projects classified as Economic/Revenue, Capacity Growth, and Reimbursable.

Occasionally, projects may require a revision to change the project scope or priority and may need to be suspended, accelerated, or deferred.[3] When such a change occurs, the respective SBU must ensure the project change process is followed and adequately documented. Specifically, the SBU is required to (1) initiate a revised Project Justification (PJ) form with an explanation for the change and identification of the impacts on the project cost, schedule, scope, and/or benefits, (2) coordinate appropriate reviews for revisions to projects, and (3) update the Five-Year Project Plan.[4]

Depending on the project cost, projects are required to have various levels of approval. Specifically, each SBU is required to have an SBU Officer level of approval for capital projects. An SBU Executive is required to approve all capital strategic projects and base and discretionary capital projects greater than $2 million. In addition, Chief Executive Officer (CEO) and Chief Financial Officer (CFO) approvals are required for capital projects exceeding $8 million. The CEO determines whether Board approval is required for projects greater than $50 million. Upon approval, an SBU representative is required to inform the CFO

[2] According to Chief Financial Officer (CFO) personnel, PJS is a stand-alone application and is not linked to TVA's general ledger application.

[3] According to CFO personnel, project postponements or deferrals include projects where the in-service date (ISD) has been extended past the original planned ISD. During the period of postponement, costs may still be incurred, and work may still be performed on the project.

[4] The Five-Year Project Plan is a "living" document comprising the current list of projects maintained as the SBU's funded and prioritized projects currently being implemented or planning to be implemented.

PJS system administrator of approvals, and the system administrator marks PJS as "Project Management Council (PMC) Approved."

Once projects are approved, a project manager is responsible for ensuring the project is completed to implement the approved scope at the lowest possible cost within the approved budget and on schedule. A Project Control Specialist (PCS) is responsible for initiating changes affecting project funding and/or scheduling, working with the project managers to monitor project costs. In addition, PSO has a Change Control Board (CCB) consisting of the Vice President or designee, a Financial Services representative, project managers, and associated personnel needed to provide explanations of project changes. The charter of the CCB is to review projects to ensure that they are needed and comply with their approved scope, funding, and schedule and to recommend changes in plans when required to meet goals, commitments, and budgets.

We determined there were a total of 589 postponed capital projects and 87 cancelled capital projects in FYs 2007 and 2008. Of those totals, PSO had 233 postponed and 4 cancelled projects. As of FY 2008, projects deemed as postponed had a total requested budget and total expenditures of approximately $1 billion and $107 million, respectively. PSO-cancelled projects had no expenditures as of FY 2008.

	Postponed Projects	Cancelled Projects
Fossil Power Group	232	79
Nuclear Power Group	80	3
Power Supply Operations	233	4
River Operations	32	1
Other	12	0
Total	**589**	**87**

Table 1

OBJECTIVES, SCOPE, AND METHODOLOGY

As part of our annual audit plan, we reviewed the process for postponing and cancelling capital projects. Our audit objectives were to determine whether FYs 2007 and 2008 project postponements and cancellations were (1) properly approved, (2) effectively communicated, and (3) monitored to prevent inappropriate charges.

Our review specifically focused on the processes for Nuclear Power Group, PSO, Fossil Power Group, and River Operations. Due to the unique aspects of each of these organizations, we will issue a separate report on each organization. This report addresses the process for the PSO organization. To achieve our objective, we:

- Reviewed relevant policies and procedures governing the approval, communication, and monitoring of PSO capital projects, including SPP-2.1: Project Justification Process and ESP-07.001: Change Control Board.
- Interviewed PSO Project Management including PCS personnel, the Project Finance Specialist responsible for the PJS, PSO Controller personnel, and FAA personnel.
- Identified 233 postponed[5] and 4 cancelled PSO projects in FYs 2007 and 2008.
- Selected a statistical sample[6] of 22 postponed projects and a judgmental sample of 1 postponed project and 4 cancelled projects.
- Obtained and reviewed project documentation including PJ forms, Capital Reporting Summaries, impact memos, Change Control Notices, and year-to-date cost information.
- Observed work management and CCB meetings.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. Although we did not test for compliance with laws and regulations, nothing came to our attention during the audit that indicated noncompliance with laws and regulations.

FINDINGS

We determined the sampled PSO's postponed and cancelled projects (1) contained a capital classification designated by FAA, (2) were approved in accordance with SPP-2.1, and (3) had valid justifications for postponement and/or cancellation.

Our testing also disclosed that all project cancellations required to be communicated to FAA were communicated to FAA in a timely manner. We also noted that checkbooks were used to communicate project changes within PSO rather than five-year business plans. We determined the use of the checkbook was a reasonable alternative to the Five-Year Project Plan.

Finally, we noted that while there is no policy governing the splitting of project costs, there is an independent review of project costs performed by Financial Services personnel and an expectation for employees to appropriately charge their time to the specific project(s) they may be working on.

5 Postponed projects are defined as projects having an in-service date deferred to a later date.

6 For projects selected in the samples, we reviewed all revisions within scope for the project.

APPROVAL OF PROJECTS

According to TVA's SPP-2.1, each SBU is required to obtain approval as defined in the Project Authorization Matrix for funded projects and project revisions meeting certain criteria. Such project approval is required to be documented on the PJ form. We selected a sample of 23 postponed and 4 cancelled projects and reviewed the PJS documentation for each project. We verified that all projects were approved in accordance with SPP-2.1 and contained a capital classification designated by FAA.[7]

However, we noted that (1) 15 of the postponed projects contained an approval by the SBU which occurred after the PMC date and (2) 4 cancelled projects had not been marked as PMC approved. According to project management, projects that had a PMC approval occurring prior to the SBU approval were due to timing issues. According to a PSO Specialist, the cancelled projects were not required to be sent to PMC because no spending occurred in the fiscal year in which they were cancelled. However, SPP-2.1 states an SBU representative is required to inform the CFO PJS system administrator of approvals so the system administrator can mark the project as "PMC Approved" in PJS. After further discussions with PSO project management personnel, we determined the signature approvals as documented during the CCB meetings are considered the official approvals rather than those in the PJS.

COMMUNICATION OF PROJECT STATUS

To facilitate project tracking, project status must be communicated by PSO project management to FAA, PSO Financial Services, and internal project personnel. Specifically, projects having a cancelled status should be communicated to FAA and PSO Financial Services to ensure accuracy and timeliness of financial reporting. Cancelled projects as well as projects having a postponed status are required to be communicated within the organization to better facilitate project management. According to FAA process documentation and the Controller's Web site, communication of project status to FAA includes the submission of Form 4013, Capital Projects Completion/Cancellation Notice, for projects that are cancelled. Project cancellation status must also be submitted to PSO Financial Services since that organization is currently responsible for writing off project costs. Communication of project status within the organization occurs through impact memos and/or change control notices (CCN) as well as a "checkbook" which serves as PSO's Five-Year Project Plan. SPP-2.1 requires that project status be updated on the Five-Year Project Plan.

[7] We did not test the accuracy of FAA's classification during this review. We relied on procedures performed in the Office of the Inspector General Audit 2009-12429; where no exceptions were identified in our testing of FAA financial reporting controls related to the capital classification of projects.

Communication to FAA and Business Services

For the four sampled cancelled projects, we determined that communication to FAA from PSO Financial Services for one cancelled project was timely and that such communication was not required for the other three. According to PSO Financial Services personnel, PSO project management is not required to communicate the cancellation of projects with no associated costs. We verified there were no project costs associated with these three projects.

Communication Within PSO

We obtained impact memos and/or CCNs for the 23 postponed and 4 cancelled projects and verified the sampled projects were included on the impact memo or CCN, without exception. We requested Five-Year Project Plans which corresponded to the sampled projects; however, PSO was not able to provide the information. According to PSO personnel, rather than using the Five-Year Plan to communicate projects, a listing of projects called a checkbook is updated with project revisions on a weekly basis, and this information is communicated within the PSO organization as well as to the Chief Operating Officer. We determined the checkbook was a reasonable alternative to the Five-Year Project Plan and verified that all sampled projects were updated and included on the checkbook, without exception.

Based on discussions with project personnel and the review of project documentation, we determined that each of the sampled projects had been postponed or cancelled for valid reasons. Reasons for postponing or cancelling projects included customer delays or cancellations and the identification of additional work to be performed.

MONITORING OF PROJECTS

According to TVA's Capitalization policy, FAA is responsible for determining the proper accounting classification for all projects under consideration for capitalization. According to FAA personnel, the project classification allows the SBU to charge appropriate costs related to the project as either capital or O&M, depending on the project classification. Specifically, if a project is designated as "capital," by FAA, it is the responsibility of the project manager to ensure only capital-type costs[8] are charged to that project. Similarly, only noncapital costs should be charged to O&M. Any capital project that is cancelled should be reclassified as an O&M project and project costs expensed. Project managers along with project control specialists examine project costs for discrepancies or budget variances. PSO Financial Services personnel, who are independent of project management, attend CCB meetings, review and provide explanations for cost variances, and assist with analyzing details of questionable charges.

We reviewed a selection of costs for the sampled postponed projects and determined there were no charges made to the project which could be potential

[8] Capital costs are costs incurred on the purchase of land, buildings, construction, and equipment needed to bring a project to a commercially operable status.

O&M expenses. In addition, we determined that project costs were written off in a timely manner for one of the four sampled cancelled projects. The remaining three projects had no project costs. During the review of project costs, we identified 12 PSO projects in which travel costs were split among projects. According to PSO Financial Services personnel, there is no policy governing the splitting of project costs; however, there is the expectation for employees to appropriately charge their time to the specific project(s) they may be working on, and if that included more than one project, it would be appropriate to split costs. In addition, there is an independent review of project costs performed by Financial Services personnel.