



STATE OF TENNESSEE
COMPTROLLER OF THE TREASURY

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Justin P. Wilson
Comptroller

July 8, 2009

The Honorable Phil Bredesen, Governor
and
The Honorable Bill Ketron, Senator, Chair
The Honorable Charles Curtiss, Representative, Vice Chair
Fiscal Review Committee
and
Members of the General Assembly
State Capitol
Nashville, Tennessee 37243
and
The Honorable David Goetz, Commissioner
Tennessee Department of Finance and Administration
State Capitol
Nashville, Tennessee 37243

Ladies and Gentlemen:

This letter report contains the results of our limited review of Edison's Financial and Supply Chain Management (financial) component, which has been prepared in response to a written request by Senator Bill Ketron, Chairman of the Fiscal Review Committee of the Tennessee General Assembly. This letter report is the second of two letter reports on Edison.

Senator Ketron's Initial Request for a Review of Edison

Our review was initiated by a letter dated April 15, 2009, from Senator Ketron requesting that the Comptroller's Office review the implementation of the State of Tennessee's Enterprise Resource Planning Project, commonly referred to as Project Edison. Senator Ketron's letter stated that members of the General Assembly had received reports of problems in the handling of payroll, insurance, and employee taxes under Edison. Senator Ketron's letter further stated that the Fiscal Review Committee was interested in a survey of all state employees, if possible, concerning their experience with Edison. In addition to these payroll and benefits matters, Senator Ketron's letter referred to concerns relating to the timeliness of payments to state vendors under Edison as compared to the State of Tennessee Accounting and Reporting System (STARS). Senator Ketron's letter requested that the review be substantially

completed by May 15, 2009, in a form that could be presented to the Fiscal Review Committee and the rest of the General Assembly during the week of May 18, 2009. We performed a review of limited scope, not an audit. We reported the results of our review by letter report dated May 20, 2009, and we presented our results at a public hearing held on May 20, 2009.

Two Phase Approach

Our office developed a two-phase approach to Senator Ketron's request. In Phase One, the scope of our review focused on current issues related to the performance of Edison's Human Capital Management (HCM) component, which includes time-keeping, payroll, and benefits. The "go live" date for the HCM component was September 16, 2008. We attempted in the one-month time frame specified by Senator Ketron to gauge problems with the Edison system independently, to provide the General Assembly and the Governor with a snapshot of the status of the system.

Recap of Phase One: Review of Edison's HCM Component

We developed and administered a survey instrument for all state employees who were paid through the HCM component and who had state e-mail addresses, and a survey instrument for Human Resource (HR) Directors of state agencies, as identified for us by the Department of Human Resources. The survey of state employees was sent to 40,941 state employees via their state-assigned e-mail addresses. We received 15,795 survey responses, a response rate of 39 percent. The survey of state HR Directors was sent to 51 HR Directors. We received 32 survey responses, a response rate of 63 percent.

Summary of Results of Surveys of State Employees and Human Resource Directors

The survey instruments, the compilations of the survey results, and the comments may be viewed at the Comptroller's website, at <http://www.tn.gov/comptroller/edison/index.htm>.

As discussed in our May 20th letter report, the answers to the survey questions and the comments provided by state employees and state HR Directors who completed the surveys indicated that there exists serious, pervasive dissatisfaction with the accuracy, functionality, reliability, and efficiency of the HCM component, and that the respondents shared a widespread perception that the HCM component is complex, confusing, cumbersome, not user friendly, and unduly time consuming. Respondents attributed problems more to computer errors than to human errors.

Our Recommendations Relating to Edison's HCM Component

In our May 20th letter report, we concluded that these circumstances demanded a comprehensive, independent technical review of the functionality and ease of operation of the HCM component, as well as of the business rules that structure and control payments and information. We noted that this technical review should not be limited to addressing currently identified problems, but should also include an assessment of the best approach to enable the HCM component to achieve management's goals.

Our Concerns about Edison's Financial Component

The problems with the HCM component indicated that there could be problems with Edison's financial component, which includes financial reporting, procurement, and logistics. We had received sufficient anecdotal evidence to indicate problems with the financial component that, if not rectified, could adversely affect the financial integrity of the state. The financial component, when fully implemented, will contain critical financial data pertaining to assets, liabilities, revenues, expenditures, and transfers processed by the state. Accuracy, reliability, completeness, and timeliness of financial data are essential for the proper functioning of state departments, agencies, offices, and commissions, and for the preparation of financial statements. Project Edison planned to implement the financial component in three waves. The "go live" date for Wave 1 was in January 2009, while the "go live" date for Wave 2 was in April 2009. The "go live" date for all Wave 3 agencies was planned for July 2009. Wave 3 included five of the eight largest state departments—Transportation, Human Services, Children's Services, TennCare, and Environment and Conservation—as well as Bond Finance, which is responsible for issuing all the state's general obligation debt and a substantial portion of the state's revenue-supported debt.

Our May 20th Recommendations Relating to Edison's Financial Component

Our May 20th letter report concluded that given the difficulties experienced to date with the HCM component, the implementation of Wave 3 of the financial component should be postponed. Due to the critical, limited time period before the next fiscal year end, we recommended that an independent review of the financial component be conducted by ERP specialists before the financial component was fully implemented. We further recommended that this review should include verifying the accuracy, completeness, timeliness, and reliability of information generated by the system. In addition, we recommended that while the state is in the process of contracting for these essential independent technical reviews, Project Edison and Department of Finance and Administration officials and staff should acknowledge that there are problems with the system's accuracy, functionality, reliability, and efficiency; work to identify and prioritize those problems; and allocate appropriate resources to resolve them. We noted that it would be appropriate to establish transparent monitoring and reporting on the progress made.

Phase Two: Our Review of Edison's Financial Component

After we completed Phase One, we initiated a similar limited review of Edison's financial component. In Phase Two, the scope of our review focused on current issues related to the performance of the financial component, which includes recording transactions related to assets, liabilities, revenues, and expenditures in the areas of procurement of goods and services, transfers to local governments and schools, draw downs of federal funds, investments, and payments of bond principal and interest. As with Edison's HCM component, we performed a review of limited scope, not an audit. This letter report contains the results of our review of Edison's financial component.

In our May 20th letter report, we stated that as part of the process of evaluating the performance of the financial component, we would develop and administer surveys for state Fiscal Directors and state fiscal staff. The survey instruments for state Fiscal Directors and state fiscal staff were developed and administered June 2-5, 2009. We sent 51 surveys to state Fiscal Directors. We received 40 responses from all planned implementation waves, a response rate of 78 percent. We sent 5,813 surveys to state fiscal staff. We received 1,543 survey responses, a response rate of 27 percent. The survey instruments,

the compilations of the survey results, and the comments may be viewed at the Comptroller's website, at <http://www.tn.gov/comptroller/edison/index.htm>.

Summary of Results of Survey of State Fiscal Directors

From responses to our survey of state Fiscal Directors, it appears that there are considerable concerns among state Fiscal Directors with regard to the accuracy, functionality, reliability, and efficiency of the financial component of the system. Edison's financial component includes 23 discrete modules. Overall, the following observations can be made based on the answers to the survey questions and the comments provided by state Fiscal Directors who completed the survey.

1. Of the 29 Fiscal Directors in Wave 1 and Wave 2, 24 identified one or more problem areas, and 12 or more Fiscal Directors listed problems in 10 areas. The five areas identified by the highest number of Fiscal Directors were: not able to pay invoices in a timely manner (22); insufficient financial reporting to meet business objectives (18); issue resolution not timely (18); issues with timeliness of transactions, draw downs, and payments (16); and not able to correct errors in a timely manner (15). A few of the Fiscal Directors indicated that Edison had lost data (4); transformed data from correct to incorrect (4); or miscalculated amounts (1).
2. Regarding the issue of late payment of invoices, 8 of the 29 Fiscal Directors in Wave 1 and Wave 2 indicated that their agencies had paid some late fees; 4 indicated that some vendors had refused to provide further goods and/or services until the payment process improves; and 1 indicated that some vendors had stopped providing goods and/or services to their agency altogether.
3. Of the 24 Fiscal Directors who identified one or more problem areas, 19 indicated that their problems were not resolved but ongoing. Of the 19, 3 indicated that their issues were pending but not being addressed, and 7 indicated that they didn't know the current status of their issues. Moreover, of the 24 Fiscal Directors, 15 indicated that new issues had surfaced in the last two weeks of May 2009, immediately prior to our survey. In addition, 11 of the 24 attributed the issues all or mostly to computer programming errors. Thirteen fiscal directors expressed varying degrees of dissatisfaction with the Edison issue resolution process.
4. Of the 29 Fiscal Directors in Wave 1 and Wave 2, 15 expressed varying degrees of dissatisfaction with the performance of the Edison financial component. When asked about their confidence level relative to accuracy, completeness, timeliness, and reliability, a significant number expressed varying degrees of lack of confidence with reference to recording information (11); processing of transactions (11); and reporting on activities (17).
5. With regard to the adequacy of training in advance of implementation, a question asked of all Fiscal Directors (Wave 1, Wave 2, and Wave 3), 37 of 40 Fiscal Directors checked that they had received some form of training in advance of implementation. Of the 37, 17 rated the training not helpful to some degree. With reference to all training, both before and after implementation, 20 of 38 who had received training indicated that the training as a whole fell short in sufficiently preparing them to perform their job duties. The Fiscal Directors had the same perception of the benefits, or lack of benefits, of training for their agency's fiscal staff.

6. For the 11 Fiscal Directors preparing for Wave 3 implementation who responded to the survey, several indicated that they had not been adequately consulted as to role mapping (2), security profiles (3), workflow analysis (5), business process design (7), and testing (4). Regarding satisfaction, 8 of 11 expressed varying degrees of dissatisfaction with the development process; and 8 of 11 also expressed varying degrees of dissatisfaction with the issue resolution process.
7. Of the 40 Fiscal Directors who responded to the survey, 21 marked that the state should delay implementation of Wave 3. Fiscal Directors indicating that the state should delay implementation included 3 of 8 in Wave 1; 10 of 21 in Wave 2; and 8 of 11 in Wave 3.
8. In response to the question, "How confident are you that Wave 3 implementation will result in the accurate, complete, timely, and reliable processing of transactions and information?" 9 of 11 Wave 3 Fiscal Directors expressed varying degrees of lack of confidence. Regarding the probability of success for a Wave 3 implementation on July 1, 2009, 9 of 11 Wave 3 Fiscal Directors, also, expressed varying degrees of lack of confidence. In responses to both questions, 5 of the 11 responding Wave 3 Fiscal Directors (45%) indicated the lowest category, "Not Confident."

Summary of Results of Survey of State Fiscal Staff

With reference to the survey of fiscal staff, the responses from Wave 1 and Wave 2 fiscal staff paralleled the responses of the Wave 1 and Wave 2 Fiscal Directors.

Because of the pending implementation of Wave 3, this summary focused on the responses of Wave 3 fiscal staff. We received 225 responses from Wave 3 fiscal staff. Based on the answers to the survey questions and the comments provided by Wave 3 fiscal staff that completed the survey, the following observations can be made:

1. Of the 225 Wave 3 fiscal staff, between 49 and 61 (depending on the aspect of the project) indicated that in their opinion they should be consulted by Project Edison staff about several critical aspects of the project. A significant number, however, indicated that they had not been adequately consulted as to role mapping (32), security profiles (40), workflow analysis (42), business process design (43), speed charts (35), and testing (44). Regarding satisfaction, 158 of 225 (70%) expressed varying degrees of dissatisfaction with the development process; and 163 of 225 (72%) expressed varying degrees of dissatisfaction with the issue resolution process.
2. With reference to delaying Wave 3 implementation, of the 225 Wave 3 fiscal staff, 156 (69%) checked that implementation should be delayed, while 69 (31%) checked that implementation should not be delayed. The responses of Wave 3 fiscal staff were consistent with the responses of Wave 3 Fiscal Directors. In comparison, for all 1,543 fiscal staff respondents, 822 (53%) checked that implementation should be delayed, while 721 (47%) checked that implementation should not be delayed.

3. The responses of Wave 3 fiscal staff to the questions on confidence were also parallel to those of the Wave 3 Fiscal Directors. In response to the question, "How confident are you that Wave 3 implementation will result in the accurate, complete, timely, and reliable processing of transactions and information?" 164 of 225 Wave 3 fiscal staff (73%) expressed varying degrees of lack of confidence; and 168 of 225 Wave 3 fiscal staff (75%) expressed varying degrees of lack of confidence regarding the probability of success for a Wave 3 implementation on July 1, 2009. In responses to these questions, 101 (45%) indicated the lowest category, "Not Confident," as to transaction processing; and 110 (49%) indicated "Not Confident" as to successful implementation on July 1, 2009.

Project Edison Obtains Services of Gartner

Consistent with the recommendations in our May 20, 2009, letter, Project Edison and the Department of Finance and Administration obtained the services of Gartner, Inc., to perform a review of the HCM and financial components. According to its website, Gartner, headquartered in Stamford, Connecticut, is "the world's leading information technology research and advisory company." Gartner's website states that Gartner has 4,000 associates, including 1,200 research analysts and consultants in 80 countries, and that Gartner is partner to 60,000 clients in 10,000 distinct organizations.

Communication of Our Interim Findings to Gartner, Project Edison, F&A, and Fiscal Review

During the course of our review of Edison's financial component, we promptly communicated our interim findings to Gartner, Project Edison, F&A, and Fiscal Review Committee staff. We shared survey results for key questions and state employee comments with all parties in early June 2009. We also met with Gartner staff when they began their review of Edison's HCM and financial components and briefed them on our methodology and results.

Subsequent Actions by the Commissioner of the Department of Finance and Administration and by Project Edison

Prior to the transmittal of this letter report, on June 26, 2009, the Commissioner of the Department of Finance and Administration and the Project Edison Steering Committee decided to proceed with implementation for two agencies on July 6, 2009, and to delay implementation of the financial and procurement modules in the remaining agencies.

According to the June 26, 2009, letter from F&A Commissioner David Goetz to Senator Ketron, to move the project forward, the Project Edison team developed a plan for the remaining agencies to implement the financial and procurement components more slowly and with "end-to-end agency testing."

Significant aspects of the plan include the following:

1. All but two agencies scheduled for July implementation will be moved to September and October to allow additional time for user training, review of agency specific configurations, and appropriate sign-offs.

2. Based on specific requests from agencies in Waves 1 and 2, Project Edison staff will conduct workshops in July to help resolve any remaining issues for those agencies.
3. Business process training sessions will occur in August and September to allow agencies to process their own transactions from start to finish using their own data, security, and workflow.
4. Agencies will be required to review and sign-off on their specific configurations to further assure readiness, using the Gartner readiness assessment checklist.
5. A special team of Edison experts will be established to work with individual agencies to assure they understand how to use existing reports and to develop their own custom queries in Edison.
6. The Edison help desk will add second level support staff to assist agencies with common system use issues in real time, and the Project Edison team will continually review the help desk structure to assure that appropriate services are being delivered.

These actions are appropriate and consistent with our May 20, 2009, recommendations.

Specific Recommendations

To further ensure the integrity of the state's financial system, Department of Finance and Administration and Project Edison officials and staff should also consider the following specific steps:

1. review the effectiveness of Edison's training programs and make modifications as necessary;
2. develop a comprehensive list of problems with the Edison financial component on a module by module basis;
3. devote sufficient staff and other resources to promptly resolve each identified problem;
4. institute a thorough, documented testing process, in full consultation with user departments and agencies;
5. periodically survey key fiscal staff regarding Edison problems and performance with the objectives of promptly identifying and resolving problems;
6. assess the risks of fraud, abuse, and illegal acts;
7. evaluate the presence, appropriateness, and effectiveness of internal controls designed to mitigate those risks to acceptable levels, including documentation of the controls and risks and the way they have changed with the implementation of Edison, and ensure that departments have appropriately addressed these issues;

8. assess the capability of the Edison financial component to both process transactions and provide essential financial information with accuracy, completeness, timeliness, and reliability;
9. continue to ensure that the system development process includes full user acceptance prior to a “go live” decision; and
10. continue to review the effectiveness of the help desk functions, organizational placements, and staff resources and make modifications as necessary.

Overall Conditions Essential for Successful Implementation

Establishing and adhering to fundamentally sound systems development processes and principles are essential for successful implementation, as is the allocation of appropriate resources in terms of personnel and equipment.

Successful implementation requires effective management of three critical phases:

- a) system development (matching hardware, software, and business processes);
- b) full testing, for both normal and unusual transactions, including user acceptance; and
- c) transitioning the fully tested and approved system into production, where the system processes transactions and records financial and programmatic information with accuracy, completeness, timeliness, and reliability.

The vast number of concerns expressed by state employees at all levels demands Project Edison staff acknowledge and systematically address those concerns appropriately. Moreover, Project Edison staff should not proceed to the “go live” stage for any agency until the system applications for that agency are in fact ready; readiness being demonstrated by both user acceptance and third party verification.

Although time goals are appropriate for accomplishing certain stages in the development and implementation of the system, those goals should include benchmarks for each of the key steps in the process and should also provide transparency. These time goals should not unilaterally drive the decisions of going forward. More time may well be required to ensure sound development and implementation of the system across state agencies. Pressure to meet time deadlines before the users are fully prepared to assume control of the system will cause even more delays and expense and will put the efficient and effective operation of the state at risk.

The establishment of benchmarks and time goals, the acknowledgement and resolution of employee concerns, and the progress toward such objectives should be in a format that is accessible to all. Such reporting should document user acceptance and third party verification.

A method to ensure transparency and accountability would be to require regular reporting to the Fiscal Review Committee or the committee’s designee. The purpose of all such measures should be to ensure that any future problems with Edison are identified early and communicated promptly and that the Edison team can seek input and advice from all.

The Full Extent of the Gartner Review and Recommendations

Although the Department of Finance and Administration has provided us their perspective of the Gartner review of Edison, we have not received any direct information from anyone with Gartner.

When we met with Gartner representatives at the outset of their review, we advised them that we, as the external auditors for the State of Tennessee, would be required by auditing standards to review their work in detail as part of our planning for our audits.

In light of the stresses that will be added to the system, specifically the work load on the help desk and other support staff, with the addition of the two agencies, it is essential that we obtain direct information regarding the findings of Gartner and the processes by which it was decided that these two agencies could move forward. It is equally important to understand the reasons for delaying Edison implementations for the remaining agencies. Finally, it is important to understand fully the checklist developed by Gartner and how it might be applied to future implementations for other state agencies.

The Importance of an Objective Review of Internal Controls by Management

The importance of an effective risk mitigation strategy cannot be overstated. There is a risk present in every situation. A primary responsibility of management, at all levels, is to engage in a documented assessment of the risks of fraud, waste and abuse, and then to design and implement adequate internal controls to mitigate effectively those risks.

Management should have a process to ensure that the controls are effective and are working as designed. A key part of that process is an ongoing monitoring program, in which individuals independent of the transaction or operation in question regularly review the transactions/operations. Deviations or other concerns should be promptly and thoroughly reported to someone at a higher level in the organization for further review and remediation.

Risks are greatly increased during any implementation of a new system. When a system is as comprehensive, large and complex as Edison, those risks are magnified. When there are problems reflected by overruns in time and budget, those risks are even higher. Adding to these concerns are the risks that individuals will find ways to work around the system or "circumvent the controls" to get the job done. We are not referring to cases where agencies have developed an alternative business process that has been approved by top management. Agencies should consult with Project Edison and their internal audit staff before implementing such a process to create greater efficiencies.

Many of the comments we have received from fiscal staff and directors indicated that "workarounds" were occurring on a widespread basis. These efforts may be well intentioned and perhaps produce results that are praiseworthy and may have been encouraged.

Unapproved "workarounds" are contrary to a system of effective internal controls, and could facilitate fraud, waste and abuse, and other non-compliance with relevant laws, regulations, grants, contracts, policies, and procedures. In addition, these conditions create an environment wherein circumvention of established controls is deemed acceptable. Such an environment undercuts the entire integrity of the state.

We will address these critical aspects of internal control in a separate letter to the Commissioner of Finance and Administration.

Conclusion

The State is faced with unprecedented challenges in the next few years with the higher risks associated with the efforts to bring the Edison system on line and to administer effectively Recovery Act funding.

The State has committed significant funds and resources over a period of several years to develop a modern, integrated system to replace multiple legacy systems with the goals of increasing operating efficiencies and reducing operating costs. That implementation has faltered. This has occurred in some measure because of the gaps in expectations between Project Edison and agency staffs and the consequent confusion of responsibilities. The volume and intensity of employee comments related to problems, complaints, and workarounds demonstrate the many hurdles that remain to be overcome before Project Edison can achieve its goals.

It is paramount that the efforts of Project Edison and agency staffs are structured by industry best practices, that activities are clearly focused, that responsibilities are carefully assigned, and that progress toward goals and objectives is effectively monitored through benchmarks and transparent reporting.

The financial integrity and the efficient and effective ongoing operations of the State of Tennessee depend upon the successful implementation of Project Edison.

Sincerely,

A handwritten signature in black ink, appearing to read "Justin P. Wilson". The signature is written in a cursive style with a large initial "J" and "W".

Justin P. Wilson
Comptroller of the Treasury

JPW/gmk
09-03