MEMORANDUM FOR: SAMUEL T. MOK

Chief Financial Officer

Ellist P. Lewis

FROM: ELLIOT P. LEWIS

Assistant Inspector General for Audit

SUBJECT: The e-Payroll Quicksilver Project: "Go/No-Go" Decision,

Concerns Regarding Parallel Testing, Training and

Resolution Status of Prior Recommendations

Period Ending August 12, 2004 Audit Report No. 23-04-015-13-001

DATE: August 18, 2004

The attached report is submitted in final for your action. This report does not incorporate the Office of Chief Financial Officer's (OCFO) response to the draft report briefing. Due to the time sensitive nature of the information in this report, we had requested your response by the end of the day Wednesday, August 17. We did not receive your response until today (August 18), which was too late to include in this report. However, we noted nothing in your response that would change the conclusions or recommendations in this report. We will provide specific feedback on your response under separate cover.

Due to the significance of the issues presented and the need for timely closure, we request a response to this report by September 3, 2004.

Based on the information provided to the OIG in the OCFO's response to the Notice of Findings on August 5, 2004, and discussions held at the briefing of the draft report on August 12, 2004, we made minor changes to the original briefing to provide clarification and emphasis where appropriate. In addition, we relied on information gathered from June 23, 2004 to August 12, 2004, to finalize our conclusions regarding new and prior recommendations:

New Recommendations:

Recommendation 1: Do not reach a "GO" Decision until parallel testing assures the production environment data remains identical to the test environment data (ATST), and that data clean-up is complete and leads to 100% of DOL employees being paid accurately and timely.

• As part of the "Go / No Go" Decision making process, validate all steps in the acceptance/parallel test plan have been completed including NFC's tasks.

• Maintain the PeoplePower system, as the system of record, for payroll and HR purposes until full migration and conversion to NFC is complete.

OIG Conclusion: This recommendation is **unresolved.**

Recommendation 2: The CFO, who is responsible for the system "Go/No Go" decision:

- Shall incorporate input from key stakeholders such as the Secretary of Labor, MRB, TRB, AOs, CIO, OIG and NFC in the decision process.
 - o Shall request input from the stakeholders after the CFO briefs the acceptance test results to each stakeholder

OIG Conclusion: This recommendation is **unresolved.**

Recommendation 3: Document and identify the following benchmarks/metrics in the finalized Parallel Test Plan:

- Level of input from key stakeholders
- Criteria for the "Go/No Go" decision, including the acceptable level of tolerance for:
 - o <u>Key payroll attributes (e.g., gross pay, net pay, leave, taxes, allotments, etc.)</u>
 - o Degree of manual/human intervention to accomplish payments
 - o Errors (e.g., programming/mapping/data conversion errors)
 - o Training completeness

OIG Conclusion: This recommendation is **unresolved.**

Recommendation 4: Ensure that HR and Payroll employees' training continues in order for all key users to adequately perform their job function and allows for complete understanding of the system's features and processes.

OIG Conclusion: This recommendation is **unresolved.**

Status of Prior Recommendations from the OIG Interim Report 1 Issued March 22, 2004

Recommendation 1: Obtain written confirmation from NFC that the conversion can be completed by September 30, 2004. Insist on reviewing NFC project plans and maintain periodic discussions with NFC management to confirm continuously that NFC is on schedule to meet DOL's deadline.

OIG Conclusion: This recommendation was **closed** in prior report.

Recommendation 2: Develop a conversion plan that indicates the process and milestones that ensures all payroll and retirement data cleanup will be completed and how the conversion of the data to NFC will be accomplished.

OCFO Response: The project plan provided from the OCFO was the final plan. That plan was updated and provided to the OIG when requested.

OIG Conclusion: Based upon the project plans provided from the OCFO, this recommendation is **closed**.

Recommendations 3 and 4: Brief the TRB on the status of the e payroll project on a regularly scheduled basis to gain added insight and advice from knowledgeable and experienced department-wide IT managers. Commit to having the OCIO and TRB involved in the e payroll project and take advantage of the OCIO's authority to leverage DOL's IT resources to ensure project success.

OCFO Response: The OCFO combined these recommendations in their initial response. The OCFO has stated that they have had more substantive involvement with the OCIO than just a mere briefing of the TRB, and listed those areas of substantive involvement.

OIG Conclusion: Based upon the response provided from the OCFO and meetings with the OCIO, these recommendations are **resolved.** To close these recommendations, OCFO should brief the acceptance test results to the TRB/OCIO and incorporate their input in the "Go/No-Go" decision process.

Recommendation 5: Commit to developing an updated project migration budget indicating expected costs of migration.

OCFO Response: The OCFO provided summary and detailed project budgets. These budgets include DOL contractor costs, NFC development costs, training and related travel, and other costs. The Department did not establish an operating unit for this project; nor did it allocate new staff positions. Therefore there are no staff costs separate from the regular OCFO operating plan. The OCFO's project

budget contents are not out of the compliance with the Department's System Life Cycle Methodology.

OIG Conclusion: This recommendation remains **unresolved.** Based on the OCFO's e-Payroll Budget spreadsheet dated July 16, 2004, provided to the OIG, more relevant costs are being captured than previously identified by the OCFO. However, to manage a project of this importance and scope, the OCFO needs to provide OIG a more detailed project budget and tracking of costs.

Recommendation 6: If these actions cannot be taken within a reasonable amount of time, the DOL should reevaluate its ability to achieve the September 30, 2004 deadline.

OCFO Response: The OCFO believes it has achieved many of the actions recommended by the OIG and welcomes the OIG's involvement in the project.

OIG Conclusion: This recommendation is **unresolved**. To resolve and close this recommendation, the OCFO needs to continually review the project status, project plans and testing results for purposes of making a reliable "Go / No Go" decision.

Status of Prior Recommendations from the OIG Interim Report 2 Issued June 23, 2004

Recommendation 1: Ensure that the project plan adequately reflects the project's progress (i.e., completing blank fields, assigning resource names to tasks, and updating task completion percentages) and develop a plan structure that compares baseline project information to actual project information.

OCFO Response: The project plan is used by DOL primarily as a management tool. OCFO believes the project schedule does reflect the true status of the project. On July 16, the OCFO provided OIG three status reports used to inform the Project Manager of the status of specific tasks and their impact on the project. These reports portray that the Project Manager is aware of updates to task changes and completion dates. The self-assessment reports were color coded green prior to the change of a task, yellow during the change, and green after the change. The OCFO also updated resource names and completion percentages for DOL tasks on the project plan.

OIG Conclusion: Based upon the information provided, this recommendation is **resolved.** To close this recommendation, the project plan must include updated NFC task information, such as resource names and completion percentages. Furthermore, base-lined versus actual project task dates need to be provided or identified.

Recommendation 2: Develop a methodology for approving changes to the Project Plan including appropriate documentation of the approval process, including documentation of the date of the requested change, the date of the approval, the implementation of the change, a quality insurance sign off and a risk analysis of the change.

OCFO Response: OCFO's change control methodology has been to discuss minor changes to the plan in daily and weekly status meetings and highlight them in green on each release of the project plan. The OCFO has developed a method for major changes to the project plan. On July 16, the OCFO provided OIG three status reports used to inform the Deputy CFO of the status of specific tasks and the impact it has on the project.

OIG Conclusion: Based on the information provided by the OCFO to OIG, this recommendation is **closed.**

Attachment

cc: Greg James Patrick Pizzella

Barbara Burkhalter



United States Department of Labor Office of Inspector General The e-Payroll Quicksilver Project:

"Go/No Go" Decision, Concerns Regarding Parallel
Testing, Training, and
Resolution Status of Prior Recommendations
Period Ending August 12, 2004

Audit Report No. 23-04-015-13-001



The e-Payroll Quicksilver Project: Resolution Status of Prior Recommendations and Concerns Regarding Parallel Testing, Training, and "Go/No Go" Decision

This audit was performed by Urbach Kahn & Werlin Advisors, LLP, under contract to the Office of Inspector General, and, by acceptance, it becomes a report of the Office of Inspector General. The audit was conducted in adherence to the Government Auditing Standards published by the Government Accountability Office.

Executive Summary

- 1. There may not be an adequate, finalized, and approved process in place to support the Department's "Go/No Go" decision to meet the migration target date of September 30, 2004.
 - Unclear definition of the metrics and benchmarks for making the "Go/No Go" decision.
 - The OCFO has not documented the criteria for a "Go/No Go" decision in its finalized Parallel Test Plan.
 - It is unclear to the OIG what specific key stakeholders will be included in the decision process and how their input will be solicited.
- 2. Factors that have hindered or are still impeding the progress of parallel testing for users:
 - Integration/System Testing was conducted in conjunction with Parallel/Acceptance Testing, which is not a typical SDLC phased approach.
 - Programming/Mapping errors outside of user's control.
 - Approximately 193 different types of errors remain to be corrected.
 - About 5,217 individual errors remain outstanding that are comprised of the 193 different error types.
 - Approximately 400 employee records as of 8/12/04 have yet to be applied to the NFC system.
 - Incorrect data has been an obstacle for users throughout parallel testing due to the inability to complete data clean-up.
- 3. An inconsistency exists as to whether user training was effective enough to ensure users are sufficiently familiar with the system's features and functions to operate it effectively and efficiently.
 - Head e-Payroll project team evaluation survey results indicated that of the respondents:
 - 85% reported all topics were adequately covered.
 - OIG training evaluation survey results of users from various headquarter agencies indicated:
 - Although feedback related to the trainer's delivery of course materials was positive, 10 out 10 users believe that the lecture format was ineffective.

To ensure effective management of the project, including meeting the current deadline of September 30, 2004, we recommend immediate action on the following:

- Recommendation 1: Do not reach a "Go" Decision until parallel testing assures the production environment data remains identical to the test environment data (ATST), and that data clean-up is complete and leads to 100% of DOL employees being paid accurately and timely.
 - As part of the "Go/No-Go" decision making process, validate all steps in the Acceptance/Parallel Test Plan have been completed including NFC's tasks.
 - Maintain the PeoplePower system, as the system of record, for payroll and HR purposes until full migration and conversion to NFC is complete.
- **Recommendation 2:** The CFO, who is responsible for the system "Go/No Go" decision:
 - Incorporate input from key stakeholders such as the Secretary of Labor, MRB, TRB, AOs, CIO, OIG, and NFC in the decision process.
 - Request input from the stakeholders after the CFO briefs the acceptance test results to each stakeholder.
- Recommendation 3: Document and identify the following benchmarks/metrics in the finalized Parallel Test Plan:
 - Level of input from key stakeholders
 - Criteria for the "Go/No Go" decision, including the acceptable level of tolerance for:
 - Key payroll attributes (e.g., gross pay, net pay, leave, taxes, allotments, etc.)
 - Degree of manual/human intervention to accomplish payments
 - Errors (e.g., programming/mapping/data conversion errors)
 - Training completeness
- **Recommendation 4:** Ensure that HR and Payroll employees' training continues in order for all key users to adequately perform their job function and allows for complete understanding of the system's features and processes.

Resolution Status of Prior Recommendations from the OIG Interim Report 1 Issued *March 31*, 2004:

 Recommendation 1: Obtain written confirmation from NFC that the conversion can be completed by September 30, 2004, for DOL. Insist on reviewing NFC project plans and maintain periodic discussions with NFC management to confirm continuously that NFC is on schedule to meet DOL's deadline.

Status: Closed

- **Recommendation 2:** Develop a detailed conversion plan that indicates the process and milestones that ensures all payroll and data validation will be completed and how the conversion of the data to NFC will be accomplished.

Status: Closed

Recommendations 3 and 4: Brief the TRB on the status of the e-payroll project on a regularly scheduled basis to gain added insight and advice from knowledgeable and experienced department-wide IT managers. Commit to having the OCIO and TRB involved in the e-payroll project and take advantage of the OCIO's authority to leverage DOL's IT resources to ensure project success.

Status: Resolved

To close this recommendation, OCFO shall brief the acceptance test results to the TRB/OCIO and incorporate their input in the "Go/No-Go" decision process.



Resolution Status of Prior Recommendations from the OIG Interim Report 1 Issued *March 31*, 2004:

- **Recommendation 5:** Commit to developing an updated project migration budget indicating expected costs of migration.

Status: Unresolved

Itemized listing of project costs and expenses need to be provided to OIG.

 Recommendation 6: If these actions cannot be taken within a reasonable amount of time, the DOL should reevaluate its ability to achieve the September 30, 2004 deadline.

Status: Unresolved

To resolve the OCFO needs to continually review the project status, project plans and testing results for purposes of making reliable "G0/No Go" decisions.



Resolution Status of Prior Recommendations from the OIG Interim Report 2 Issued *June 23*, 2004:

 Recommendation 1: Ensure that the project plan adequately reflects the project's progress (i.e., completing blank fields, assigning resource names to tasks, and updating task completion percentages) and develop a plan structure that compares base-lined project information to actual project information.

Status: Resolved

On July 16, the OCFO provided OIG 3 status reports used to inform the Project Manager of the status of specific tasks and their impact on the project. These reports portray that the Project Manager is aware of updates to task changes and completion dates. The self-assessment reports were color coded green prior to the change of a task, yellow during the change, and green after the change. The OCFO also updated resource names and completion percentages for DOL tasks on the project plan.

To close this recommendation, the project plan must include updated NFC task information, such as resource names and completion percentages. Furthermore, base-lined versus actual project task dates need to be provided or identified.

Recommendation 2: Develop a methodology in accordance with best practices for approving changes to the Project Plan including appropriate documentation of the approval process, such as the date of the requested change, the person requesting the change, the approval of the change, the date of the approval, the implementation of the change, a quality assurance sign-off, and a risk analysis of the change.

Status: Closed

Audit Objective

To determine whether the conversion and migration effort of the Department of Labor's Payroll functions are being effectively managed to ensure the project will meet the target date of September 30, 2004; as directed by the President's Management Agenda Quicksilver Project, "e-Payroll: Payroll Processing Consolidation"

Audit Scope

For this interim report, we audited the project management activities of the Office of the Chief Financial Officer (OCFO) located in Washington, DC, and related supporting documentation that is being used to achieve a September 30, 2004, implementation date for a conversion and migration to the e-Payroll system including:

- 1. the completeness of documentation required by DOL's SDLCM;
- 2. project management compliance with activities specified within the DOL SDLCM or another OCIO approved System Development Life Cycle (SDLC) methodology;
- 3. project management involvement of DOL Business Sector decision making authorities; and
- 4. responsibilities and progress of any third party agencies involved with the conversion/migration.

This report is not based on an assessment of all management controls that could be considered as the audit progresses.

Compliance/noncompliance of any of the above will be reported using interim reports as well as an overall report at the conclusion of the audit. This interim report is based on our work from June 19, 2004 to August 12, 2004.

The audit period for this engagement is January 1, 2004 – September 30, 2004.

Audit Methodology

We have:

- Assessed the activities and documentation developed for each SDLC phase
- Assessed project management activities during the course of system development and implementation
- Reviewed conversion and migration documentation developed during the decisionmaking process
- Conducted interviews with key DOL personnel including members of the OCFO, OIG, BLS, OASAM and AO groups
- Participated in NFC instructed training
- Obtained and analyzed OCFO Fit-Gap reports
- Reviewed OCFO provided testing/training documentation

Audit Methodology continued...

We have:

- Reviewed IV&V project plan, cost benefit analyses, test reviews, and status reports
- Performed preliminary interviews and assessments of contracted parties hired to provide resolution
- Attended OMB meetings
- Attended bi-weekly AO Committee meetings
- Adhered to the Government Auditing Standards issued by the Comptroller General of the United States

Reporting

This report is the third interim report of a series of interim reports numbered:

- Report 1: Audit Report No. 23-04-010-13-001
 - "The e-Payroll Quicksilver Project: Status and Concerns Period Ending March 22, 2004"
- Report 2: Audit Report No. 23-04-012-13-001
 - "The e-Payroll Quicksilver Project: Resolution Status of Prior Recommendations and Project Plan Not Effectively Communicating Progress Period Ending June 23, 2004"

New Issues:

- 1. There may not be an adequate, finalized, and approved process in place to support the Department's "Go/No Go" decision to meet the migration target date of September 30, 2004.
- Unclear definition of what will constitute approval by DOL to make the "Go/No-Go" decision
 - It is unclear to the OIG what specific key stakeholders will be included in the decision process (e.g., Secretary, OCFO, CIO, AO (in representation of the user community), IV&V team, TRB, MRB, NFC, OIG etc).
 - It is unclear what process will be used to brief the Acceptance Test Results to the stakeholders and how their input will be solicited.
- OCFO has provided OIG with informal "Go/No Go" decision process criteria. OIG finds that the criteria is lacking specific benchmarks and metrics for consideration in making the "Go/No Go" decision, such as:
 - The acceptable level of error tolerance
 - Input from key stakeholders
 - Confirmation that system errors have been corrected at the completion of the parallel test
 - Confirmation of training completeness, and user preparedness and satisfaction
 - Confirmation that policy, procedures, and program issues have been resolved
- The OCFO has removed the "Go/No Go" decision criteria from the Parallel Test Plan.
 - The migration effort proceeded without predetermined test result criteria. Performance and acceptance tolerances were not documented prior to the commencement of parallel testing.

Possible negative results if not addressed

- Without specified criteria regarding the critical elements necessary for acceptance by the key stakeholders involved in the "go-live" decision:
 - Decision makers may make an uninformed and/or inaccurate decision
 - May lead to implementing a system that is not fully ready for production
 - May lead to varying levels of processing errors and delays affecting DOL employees
 - May result in the implementation of a system that does not meet user needs, leading to user dissatisfaction

New Issues continued:

- 2. Factors that have hindered or are still impeding the progress of parallel testing for users:
- Integration/System Testing was conducted in conjunction with Parallel/Acceptance Testing, which is not a typical SDLC phased approach.
 - As part of Integration Testing, not all integrated program components or modules were validated to determine proper functionality prior to the start of Parallel Testing.
 - As part of System Testing, not all system functions were validated to determine whether it meets technical and interface requirements (e.g., Employee Express) prior to Parallel Testing.
- Approximately 193 different types of errors remain to be corrected.
 - About 5,217 individual errors remain outstanding that are comprised of the 193 different error types
- Approximately 400 employee records as of 8/12/04 have yet to be applied to the NFC system, and NFC
 has yet to inform DOL the maximum number of employees that can be paid by their "alternative payment
 process" in the case that not all employee records are applied to the master file. Employee records not
 applied to the NFC system are due to:
 - Unresolved mapping/system issues
 - Conversion errors regarding data incompatibility between the NFC system and PeopleSoft
- Incorrect data has been an obstacle for users throughout parallel testing due to the inability to complete data clean-up (e.g., Job Codes, Tenures, Taxes).

Possible negative results if not addressed

These key issues if not abated could result in:

- Untimely and inaccurate payroll processing
- Time-consuming, inefficient manual work
- Unidentified system security vulnerabilities (e.g., user permissions)

New Issues continued:

- 3. An inconsistency exists as to whether user training was effective enough to ensure users are sufficiently familiar with the system's features and functions to operate it effectively and efficiently.
- e-Payroll project team evaluation survey results indicated that of the respondents:
 - 89% rated the training as good to excellent
 - 85% reported all topics were adequately covered
 - 87% reported the length of training was adequate to excellent
 - 87% reported the training was well sequenced
- OIG training evaluation survey results of 12 users from various headquarter agencies indicated:
 - Limited Length of Training
 - Users expressed concern that the allowance of time provided for training may not allow for the testing
 of all scenarios that may be encountered after the system is implemented
 - Inadequate Training
 - Although feedback related to the trainer's delivery of course materials was positive, 10 out of 10 users believe that the lecture format was ineffective
 - Hands-on training was not provided prior to the commencement of parallel testing
 - Only users receiving suspense errors experienced hands on training with the system
 - Training levels varied based on the number and various types of suspense errors encountered
 - Training Results
 - After the completion of training, 10 out of 12 users interviewed are highly concerned about DOL
 employees getting paid during the first pay period due to the fact that they are concerned about
 performing their job functions effectively. The remaining two users believe that employees will get paid,
 but remain concerned about the accuracy of the payment.

Possible negative results if not addressed

- The difference in CFO and OIG training results may indicate users are now experiencing difficulties with functions and processes that did not arise during formal classroom training. The inability of users to use the new system effectively or fully could impact the processing of DOL personnel pay and other payroll management functions under the e-Payroll system, resulting in:
 - Unreliable Human Resources (HR) Information
 - Inaccurate and/or Nonpayment
 - Delayed Processing and/or Pay

Recommendations

To ensure effective management of the project, including meeting the current deadline of September 30, 2004, we recommend immediate action on the following:

- Recommendation 1: Do not reach a "Go" Decision until parallel testing assures the production environment data remains identical to the test environment data (ATST), and that data clean-up is complete and leads to 100% of DOL employees being paid accurately and timely.
 - As part of the "Go/No-Go" decision making process, validate all steps in the Acceptance/Parallel Test Plan have been completed including NFC's tasks.
 - Maintain the PeoplePower system, as the system of record, for payroll and HR purposes until full migration and conversion to NFC is complete.
- Recommendation 2: The CFO, who is responsible for the system "Go/No Go" decision:
 - Incorporate input from key stakeholders such as the Secretary of Labor, MRB, TRB, AOs, CIO, OIG, and NFC in the decision process.
 - Request input from the stakeholders after the CFO briefs the acceptance test results to each stakeholder.
- Recommendation 3: Document and identify the following benchmarks/metrics in the finalized Parallel Test Plan:
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 - Degree of manual/human intervention to accomplish payments
 - Errors (e.g., programming/mapping/data conversion errors)
 - Training completeness
- Recommendation 4: Ensure that HR and Payroll employees' training continues in order for all key users to adequately perform their job functions and allows for complete understanding of the system's features and processes.

Status of Prior Recommendations from the OIG Interim Report 1 Issued *March 31*, 2004

Recommendation 1: Obtain written confirmation from NFC that the conversion can be completed by September 30, 2004, for DOL. Insist on reviewing NFC project plans and maintain periodic discussions with NFC management to confirm continuously that NFC is on schedule to meet DOL's deadline.

Status: Closed

Recommendation 2: Develop a detailed conversion plan that indicates the process and milestones that ensures all payroll and data validation will be completed and how the conversion of the data to NFC will be accomplished.

Status: Closed

Status of Prior Recommendations from the OIG Interim Report 1 Issued *March 31*, 2004 continued...

Recommendations 3 and 4: Brief the TRB on the status of the e-payroll project on a regularly scheduled basis to gain added insight and advice from knowledgeable and experienced department-wide IT managers. Commit to having the OCIO and TRB involved in the e-Payroll project and take advantage of the OCIO's authority to leverage DOL's IT resources to ensure project success.

Status: Resolved

To close this recommendation, OCFO shall brief the acceptance test results to the TRB/OCIO and incorporate their input in the "Go/No-Go" decision process.

Status of Prior Recommendations from the OIG Interim Report 1 Issued *March 31*, 2004 continued...

Recommendation 5: Commit to developing an updated project migration budget indicating expected costs of migration.

Status: Unresolved

Itemized listing of project costs and expenses need to be provided to OIG

Recommendation 6: If these actions cannot be taken within a reasonable amount of time, the DOL should reevaluate its ability to achieve the September 30, 2004 deadline.

Status: **Unresolved**

The OIG will continue to monitor OCFO's compliance with DOL's SDLCM manual throughout the duration of the project.

Status of Prior Recommendations from the OIG Interim Report 2 Issued *June 23*, 2004

Recommendation 1: Ensure that the project plan adequately reflects the project's progress (i.e., completing blank fields, assigning resource names to tasks, and updating task completion percentages) and develop a plan structure that compares base-lined project information to actual project information.

Status: Resolved

On July 16, the OCFO provided OIG 3 status reports used to inform the Project Manager of the status of specific tasks and their impact on the project. These reports portray that the Project Manager is aware of updates to task changes and completion dates. The self-assessment reports were color coded green prior to the change of a task, yellow during the change, and green after the change. The OCFO also updated resource names and completion percentages for DOL tasks on the project plan.

To close this recommendation, the project plan must include updated NFC task information, such as resource names and completion percentages. Furthermore, base-lined versus actual project task dates need to be provided or identified.

Recommendation 2: Develop a methodology in accordance with best practices for approving changes to the Project Plan including appropriate documentation of the approval process, such as the date of the requested change, the person requesting the change, the approval of the change, the date of the approval, the implementation of the change, a quality assurance sign-off, and a risk analysis of the change.

Status: Closed