

COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF THE AUDITOR GENERAL

SPECIAL AUDIT

OF

THE DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES' PENNSYLVANIA STATE PARK RESERVATION AND REVENUE SYSTEM

November 2002

TABLE OF CONTENTS

Letter from the Auditor General	1
Introduction	3
Executive Summary	5
Recommendations	6
Findings	
<u>Finding No. 1</u> : DCNR failed to ensure that the \$6.8 million PRRS/call center contract was managed properly, resulting in waste, delays in implementation of PRRS and failure of the system to meet contract requirements, all of which has cost an additional \$487,947 and increased the total price of the project to \$7.3 million	9
Conclusions and Recommendations	22
DCNR's Response to Finding No. 1 and Recommendations	23
Department of the Auditor General's Comments	27
<u>Finding No. 2</u> : As a result of DCNR's failure to properly manage the PRRS contract, the application was poorly designed and did not fulfill all the requirements of the contract	29
Recommendations	33
DCNR's Response to Finding No. 2 and Recommendations	34
Department of the Auditor General's Comments	35
<u>Finding No. 3</u> : DCNR failed to provide adequate security over PRRS software and sensitive customer data, which could result in identity theft and be costly and embarrassing to the	
Commonwealth	37
Recommendations	38

TABLE OF CONTENTS (Continued)

Page

DCNR's Response to Finding No. 3 and Recommendations	38
Department of the Auditor General's Comments	39
<u>Finding No. 4</u> : The revenue report required as part of the PRRS contract does not report accurate revenue amounts including the amount of taxes collected by DCNR	40
Recommendations	41
DCNR's Response to Finding No. 4 and Recommendations	41
Department of the Auditor General's Comments	42
Additional Responses of the Department of Conservation and Natural Resources to the Findings and Recommendations	43
Report Distribution List	59
Tables	
<u>Table No. 1</u> – Timeline of the Pennsylvania State Parks Reservation and Revenue System	10
Table No. 2 – Additional Costs Due To DCNR's Mismanagement	21
Table No. 3 – Revenue Variances by Fiscal Year	31

November 13, 2002

The Honorable Mark S. Schweiker Governor Commonwealth of Pennsylvania Room 225 Main Capitol Harrisburg, PA 17120

Dear Governor Schweiker:

The Department of the Auditor General has completed a special audit of the Department of Conservation and Natural Resources' Park Reservation and Revenue System (PRRS) for the period from July 1, 1995, through July 20, 2001. PRRS is a \$6.8 million automated central call center for reservations and information concerning the Commonwealth's parks and their facilities.

The audit was conducted in accordance with *Government Auditing Standards* issued by the Comptroller General of the United States. Fieldwork in the audit was conducted between August 15, 2001 and April 25, 2002. The audit objectives were to determine compliance with statutes, regulations, guidelines and procedures, assess internal controls, and determine the validity of allegations presented to us concerning PRRS project costs, system deliverables, controls, contract requirements and operations.

Our audit found that:

- DCNR failed to ensure that the PRRS contract was managed properly, resulting in waste, delays in implementation and failure of the system to meet contract requirements, all of which has cost an additional \$487,947 and increased the total cost of the project to \$7.3 million.
- As a result of DCNR's failure to properly manage the PRRS project, the application was poorly designed and did not fulfill all the requirements of the contract.
- DCNR failed to provide adequate security over PRRS software and sensitive customer data which could result in identity theft and be costly and embarrassing to the Commonwealth.

• The revenue report required as part of the PRRS contract does not report accurate revenue amounts, including the amount of taxes collected by DCNR.

The Commonwealth's state park system is a unique treasure that must be managed wisely for the benefit of the public. DCNR has emphasized the useful role of PRRS in making the park system more accessible and its operations more efficient. While we have no disagreement with DCNR about the goals of PRRS, the audit's findings revealed serious flaws in DCNR's management of critical areas. DCNR's response to the draft audit report's findings and recommendations did not address the management failures that led to the additional and unnecessary costs described in the report. As a result, there is reason to doubt DCNR's ability to carry out complex technology-related projects efficiently.

I urge the implementation of timely and complete corrective actions within DCNR to better serve Pennsylvania taxpayers.

Sincerely,

Robert P. Casey, Jr.

INTRODUCTION

The Department of the Auditor General (the Department) conducts special audits of Commonwealth agencies under the Governor's jurisdiction pursuant to its authority under the Fiscal Code 72 P.S. § 402.

The Pennsylvania state park system began in 1893 with the establishment of the first state park in Valley Forge. In 1929, the legislature established the Bureau of State Parks (BSP) to provide outdoor facilities and environmental education along with preserving park areas. Pennsylvania now has 116 parks and over 277,000 acres of property.

In the mid-1990s, BSP, now part of the Department of Conservation and Natural Resources (DCNR), wanted to improve customer services and consolidate and automate the park reservation systems. At that time, to reserve a cabin, campsite or pavilion, customers had to call the individual state park at their own expense to make a reservation. If the particular park did not have any openings, customers would then have to call additional parks until they found an opening. This process could become very time-consuming and frustrating for customers. In addition, reservations could only be taken for the current season.

In July 1997, DCNR entered into a contract with the Pennsylvania Industries for the Blind and Handicapped (PIBH) for a Park Reservation and Revenue System (PRRS) and the establishment of an automated central call center for reservations and/or information. Unisys, Inc. (Unisys) was selected as the subcontractor for design and development of the software for PRRS. The contract between DCNR and PIBH was to run through December 31, 2001, and its cost was not to exceed \$6,823,162. Of the \$6.8 million to be spent on the PRRS contract, approximately \$2.5 million was for software development with the remaining \$4.3 million for call center operations. The system was to become operational on December 3, 1997. However, it did not do so. DCNR began using the system in June 1998, although there were problems with the system, as discussed in this report. The term of the contract has been extended until December 31, 2002. As of December 2001, DCNR reported that the cost of the contract was \$7,304,738. PIBH has been paid in full for the software development portion of the contract.

In 2001, the Department received complaints regarding the management and costs of the PRRS contract. On July 20, 2001, the Department notified the Secretary of DCNR that a special audit of PRRS was going to be conducted in accordance with *Government Auditing Standards*. The objectives of the special audit were to determine compliance with relevant statues, regulations, guidelines and procedures; assess relevant internal controls; and determine the validity of allegations concerning project costs, system deliverables, controls, fulfillment and operations. An audit entrance conference was held with representatives of DCNR on August 15, 2001.

Fieldwork on the audit was conducted between August 15, 2001, and April 25, 2002, and included interviews of current and former DCNR employees, representatives of PIBH, and various subcontractors and employees of other state agencies. Documentation reviewed as part of the audit included records of DCNR, the Comptroller's Office for Public Protection and Recreation (the Comptroller's Office), PIBH and Unisys.

DCNR required that a representative from DCNR and the Comptroller's Office attend all interviews of DCNR employees conducted during the audit. Furthermore, the Office of the Budget would not permit the Department to review the working papers that support the performance audit it conducted of PRRS.

On August 5, 2002, the Department sent a copy of a draft report of the special audit to DCNR for review and comment prior to release of the final report. DCNR's response was received on September 18, 2002. The complete response, with the exception of the confidential section relating to Finding No. 3, has been included in this report. The Department's comments are included after the sections of the Response to which they relate.

EXECUTIVE SUMMARY

DCNR failed to ensure that the PRRS contract was managed properly, resulting in waste, delays in implementation of PRRS and failure of the system to meet contract requirements, all of which has cost the Commonwealth an additional \$487,947.

Specifically, DCNR:

- Failed to ensure that the PRRS provided by the subcontractor met contract requirements.
- Failed to ensure that its own staff provided overall quality assurance.
- Failed to ensure that the PRRS software was tested adequately prior to being accepted as required by the PRRS contract.
- Failed to implement a reporting requirement to substantiate invoices submitted by PIBH, resulting in delays in payments and the use of resources to resolve billing problems.
- Failed to properly manage the work done by a vendor it hired to provide services related to problems in PRRS. DCNR paid the vendor \$30,067.

One consequence of the delays in implementing PRRS was that DCNR entered into an additional \$76,000 contract with PIBH to provide work at the PRRS call center for trained employees.

DCNR paid Unisys approximately \$84,291 for additional work on PRRS which was not completed as required and attempted to enter into another contract with Unisys for work that was to have been provided as part of other contracts. DCNR paid a consulting firm \$93,555 for a review of PRRS and failed to accept or use the result of the review. DCNR incurred additional costs totaling \$154,430 for overtime and \$49,604 in consulting fees in connection with the failure of PRRS to meet contract requirements.

As a result of DCNR's failure to properly manage the development and implementation of PRRS, the application was poorly designed and did not fulfill all the requirements of the contract.

PRRS was not written using standard database design techniques, and required a significant amount of DCNR staff time to maintain it. DCNR had to restrict the ability for users to log and track software problems because the volume became so great.

PRRS cannot accurately account for revenues. It also cannot process credit card payments in accordance with the contract and most of the boating functionality required by the contract was not provided. The system double books locations, that is, it creates a reservation for more that one customer for the same site and day.

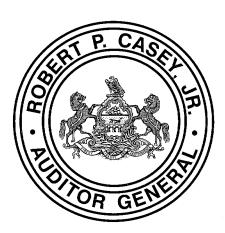
DCNR failed to provide adequate security over PRRS software and sensitive customer data, which could result in identity theft and be costly and embarrassing to the Commonwealth.

The revenue report required as part of the PRRS contract does not report accurate revenue amounts including the amount of taxes collected.

RECOMMENDATIONS

- 1. When DCNR enters into information technology contracts that require specialized technical expertise to manage and oversee the work, it should:
 - a) Obtain the technical assistance of other Commonwealth agencies, such as the Office of Information Technology in the Governor's Office.
 - b) Hire qualified staff to oversee the project and institute policies and procedures to confirm the required level of contractor performance.
 - c) Ensure that the primary contractor is qualified to manage technical vendor subcontracts or contract <u>directly</u> with such vendors itself.
- 2. DCNR should institute measures to ensure, at the very least, adequate oversight of contracts by its staff.
- 3. In the future, DCNR should ensure that staff contact persons are qualified to perform the duties and responsibilities set out in the Procurement Manual, including, but not limited to:
 - a) Ensuring that the contractor performs the work as required by the contract.
 - b) Evaluating the quality of deliverables.
 - c) Performing administrative details concerned with the approval of subcontractors.
 - d) Measuring the work performed against the work statement before making final payment.
- 4. DCNR should also ensure that all invoices are properly reviewed prior to submission to the Comptroller's Office. At a minimum, the accuracy and completeness should be verified and the contractor should be made aware of all requirements for substantiation of data used to determine and justify changes.
- 5. DCNR should attempt to obtain damages and/or repayment for failure to meet contract requirement from PIBH and its subcontractor, Unisys.

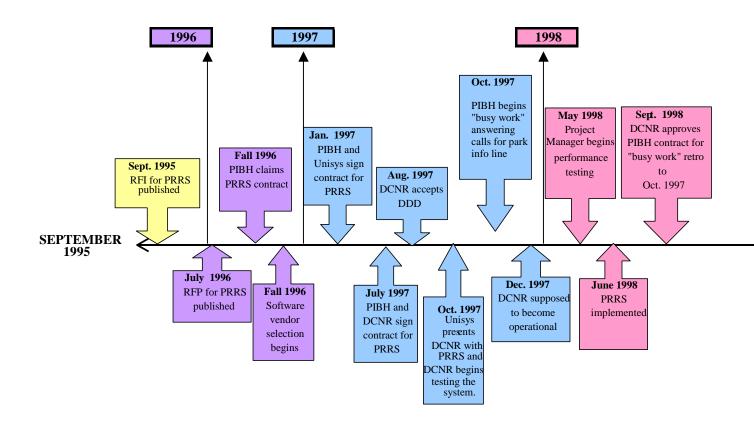
- 6. DCNR should re-engineer the system as expeditiously as possible and properly monitor the development to ensure that it complies with the system design requirements, as well as utilizes standard database design techniques.
- 7. DCNR should make the following improvements to the security of PRRS and over the security of its data. Due to the serious nature of the weaknesses, these improvements should be made as soon as feasibly possible:
 - a) Increase security over sensitive customer data.
 - b) Complete and implement the contractually required security features of PRRS.
 - c) Correct weaknesses concerning logical and physical security and implement requirements issued by the Governor's office.
 - d) Implement a security policy and require users to sign security agreements and confidentiality statements.
 - e) Implement a formal disaster recovery plan and test it for effectiveness, in accordance with requirements issued by the Governor's office. Update this plan regularly.
- 8. DCNR should address the failure to correctly calculate tax revenue as part of the reengineering of the system recommended in Finding No. 2 of this report.
- 9. In the interim, DCNR should examine current procedures to determine if tax calculations encompass all taxes that are being collected.
- 10. DCNR should establish <u>written</u> policies and procedures regarding tax calculation and reporting and distribute these procedures to all of the individual revenue-generating state parks and the PRRS section of DCNR.
- 11. DCNR, the Department of Revenue, and the Comptroller's Office should also conduct a review to determine if all taxes collected from state park activities have been reported and remitted to the Department of Revenue.



<u>Finding No. 1 – DCNR failed to ensure that the \$6.8 million PRRS/call center</u> <u>contract was managed properly, resulting in waste, delays in implementation of</u> <u>PRRS and failure of the system to meet contract requirements, all of which has cost</u> <u>an additional \$487,947 and increased the total price of the project to \$7.3 million.</u>

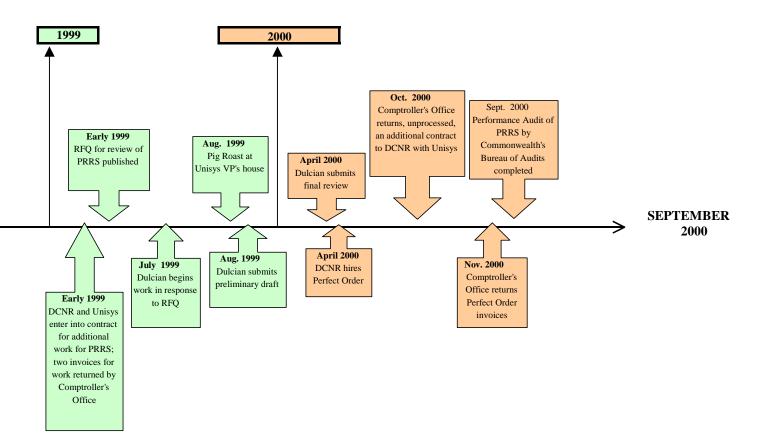
The audit found evidence of project mismanagement and specific failures related to the design and implementation of the system, resulting in cost overruns and deficiencies in the system that as of the conclusion of the audit had not been addressed. It is helpful to trace the principal events in the history of the contract to place each incident in context and show how specific failures affected the project and resulted in additional costs. Table No. 1 is a timeline of the relevant activities relating to the PRRS project discussed below in detail.

Table No. 1 -TIMELINE OF THE PENNSYLVANIASeptember 1995



STATE PARKS RESERVATION AND REVENUE SYSTEM

through January 2002



A. <u>DCNR failed to ensure that the PRRS software provided by the</u> <u>subcontractor met contract requirements.</u>

DCNR published a Request for Information concerning a state park facility reservation and revenue tracking system in Pennsylvania Bulletin on September 2, 1995. A Request for Proposal (RFP) was issued on July 27, 1996. However, shortly after the RFP was issued, DCNR decided to award the contract to PIBH.

PIBH is a nonprofit corporation which markets the products and services of its member organizations. Under Pennsylvania law, the procurement of supplies manufactured by, and services performed by, persons with disabilities is not subject to competitive bidding.¹ Shortly after the RFP for PRRS was issued, PIBH contacted DCNR stating that it wanted to exercise a right of first refusal for the contract. According to its proposal, PIBH's prior experience included issuing ID cards and drivers' licenses and operating a telephone center relating to the drivers' licenses. DCNR agreed to award to PIBH the information technology contract for a system that included a call center.

DCNR and PIBH agreed that AbiliTech, Inc. (AbiliTech) one of PIBH's member organizations, would operate the call center component of PRRS and that PIBH was to receive a five percent commission on all work billed by AbiliTech. AbiliTech is a Pennsylvania nonprofit corporation established for the purpose of enhancing "the employability of individuals through computer skills training and assistance technology." DCNR and PIBH also agreed that the project would be managed by AbiliTech. It appears, however, that no one was actually managing the contract. In an interview, the former President of AbiliTech, who was involved with this project, stated that AbiliTech's role was that of "facilitator," not project manager. He stated that PIBH was responsible for project management, but the President/CEO of PIBH described PIBH's role as passive, except when resolving disagreements between DCNR and Unisys. The PIBH President/CEO stated that AbiliTech was the project manager and that DCNR was responsible for the overall management of the contract. According to both gentlemen, DCNR originally appointed Unisys as project manager, but later named AbiliTech as project manager. The former President of AbiliTech stated that this change was never put "into writing" even though it is written into the contract between PIBH and DCNR.

According to PIBH's President/CEO in an interview with the auditors, PIBH did not have to submit a proposal to obtain the contract and did not have to show that it had done this specific type of work in the past. However, PIBH did submit a proposal to DCNR, which was later revised after PIBH had a "clearer" understanding of the project. He also stated that all of the software design work was done on a "pass-through" basis, that is, PIBH did not receive financial benefit from the software contract, and that it was a "simple contract" except for the software.

¹71 P.S. § 639.1 (Administrative Code § 2409.1). The section was repealed in 1998 by the enactment of the Commonwealth Procurement Code, 62 Pa. C.S. § 101, <u>et seq</u>., which contains a similar provision, 62 Pa. C.S. § 520. Pennsylvania courts have ruled that, pursuant to Section 639.1, Commonwealth agencies were required to purchase products and services from non-profit making agencies for the handicapped without competitive bidding if the products and services were furnished at a fair market price. The statute gave the power and duty to determine the fair market price to the Secretary of the Department of General Services (DGS). According to a DCNR employee, DGS established fair market price information in connection with this contract.

DCNR and PIBH decided that the PRRS software would be provided and installed by another vendor through a subcontract. An evaluation committee, comprised of representatives from DCNR, PIBH and AbiliTech, was assembled in the fall of 1996 to select the software vendor. A list of 14 vendors was compiled, the capabilities of the systems were compared and two vendors ultimately were asked to give final presentations. Unisys/Suncoast Scientific, Inc. (Suncoast)² and Info2000³ were selected as the final two vendors and made presentations to the committee. Each was scored based on 13 different areas. Unisys/Suncoast received the highest total score. PIBH and AbiliTech representatives told the auditors that they recommended Info2000 to DCNR, not Unisys, but that DCNR wanted Unisys.

On January 17, 1997, PIBH entered into a contract with Unisys to design, develop and implement the PRRS software. This was six months <u>before</u> PIBH entered into the contract with DCNR.

Representatives of DCNR, Unisys/Suncoast, and AbiliTech met and discussed the items to be included in PRRS. These meetings resulted in the compilation of the Detailed Design Document (DDD), a contractually required document, which addressed how the capabilities that were expected to be part of the system would be accomplished from a technical standpoint. The PIBH/DCNR contract states that the system capabilities will be those outlined in the contract unless "agreed upon in the Design Document." (Emphasis added.) The Unisys Statement of Work included in the PIBH/Unisys contract for PRRS states that the "Detailed Design document, as approved by PIBH, will become the controlling document that identifies the Scope of Work for this project."

In August 1997, DCNR's acceptance of the DDD was communicated to PIBH in two letters from the Chief of BSP's Division of Park Operations and Maintenance (DPOM). <u>Unisys considered the DDD to be the controlling document as to what work was to be performed as indicated in its contract with PIBH</u>. DCNR's Deputy Secretary for Administration, Assistant Director for BSP and the Chief of DPOM along with DCNR employees who were involved with PRRS stated to us during interviews that they were not aware if anyone reviewed the DDD to determine if it provided <u>all</u> system capabilities and requirements outlined in the PRRS contract.

The discrepancy between Unisys' understanding that the DDD was all-inclusive and the language of the contract between DCNR and PIBH, combined with DCNR's failure to ensure that all of the essential contract requirements were contained in the DDD, resulted in a gap between what DCNR required and what Unisys provided. We found no documentation that DCNR considered contracting directly with the software vendor itself to provide a greater degree of control over the project. Likewise, we found no evidence that DCNR performed an evaluation of PIBH's or AbiliTech's capability to manage the software subcontract. According to the President/CEO of PIBH, DCNR did evaluate PIBH's ability to provide the contracted services. However, this was not substantiated in interviews of DCNR employees.

² Suncoast is a Florida corporation specializing "in design, development, and implementation of integrated information management systems." Unisys had an agreement with Suncoast to sell Suncoast products and purchase its services.

³ Info2000, now Reserve America, was the vendor of a commercially available computer reservation system at the time of the contract.

From 1998 until the present, PRRS has had numerous problems and deficiencies attributable to the failure of DCNR to ensure that PIBH and the subcontractor, Unisys, provided the items specified in the contract.

B. <u>DCNR failed to ensure that its own staff provided overall quality assurance</u>.

DCNR appointed a project coordinator to work directly with the contractor and be responsible for overall quality assurance. According to DCNR management employees who were involved with PRRS, the project coordinator was responsible for signing off on system requirements. The project coordinator was a former park manager who previously developed a computerized reservation system for the individual park he managed. The individual had no experience with Oracle, the computer programming language used in PRRS. During an interview with the auditors, he stated that he didn't understand computer code and relied on others for this knowledge.

The current Chief of the Application Development and Consulting Division for DCNR, whose prior duties had included assisting on the PRRS contract, stated that she was concerned that the project coordinator selected would not have the technical experience with Oracle to properly oversee the contract. She said she "implored" the Assistant Director of BSP to hire an individual with the necessary computer knowledge to assist the project manger.

DCNR hired a technically proficient individual after the PRRS contract was signed. However, in an interview with our auditors, this employee stated that he was not involved with system acceptance sign-offs and was rarely consulted on such matters.

C. <u>DCNR failed to ensure that the PRRS software was tested adequately prior</u> to being accepted as required by the PRRS contract.

In October 1997, Unisys presented DCNR with the PRRS software. DCNR established a team to test the newly developed software. Initial testing of the software revealed numerous problems, some of which are discussed in Finding No. 2 of this report. DCNR employees involved with PRRS stated to us during interviews that, by the spring of 1998, they were receiving "pressure" from the Deputy Secretary of Administration to make the project available to the public. (The original due date for implementation of PRRS was December 1997.) The project coordinator stated that, in addition to the testing being performed by the team, he began performance testing appears to have been questionable. According to a DCNR employee who worked directly with the PRRS project coordinator, when the project coordinator would come across a problem during the performance testing, the manager stated to the Unisys representative on site that the component noted during the testing is "not working but it will; right?" After the Unisys representative stated that the problem would be fixed, the project coordinator declared that the portion of the system being tested had passed the performance test.

According to the DCNR employee, the project coordinator believed that Unisys would fix the problems in the system because it was marketing the system to other states and could not sell a system with errors. In interviews with auditors, several DCNR employees and representatives from both PIBH and Unisys stated that the project coordinator offered to leave DCNR and work for PIBH or Unisys on the PRRS project. The project coordinator stated in an interview that he never discussed employment with PIBH, but he had discussed it with Unisys. The project coordinator left his position with DCNR in May 2001. He was not hired by either PIBH or Unisys.

In interviews with auditors, several DCNR employees involved with PRRS, including the project coordinator, said that the DCNR Deputy Secretary for Administration had stated that if the system took reservations, it should be put into production. According to the interviews, the statement was made in June 1998, one month after performance testing was to have begun. In the Deputy Secretary for Administration's interview, she said she had been "pushing" to get the system into production and, for that reason, made the decision to implement it. She also acknowledged that there were basic problems with the design, but that the system fulfilled the reservation requirement.

The system went into operation before known problems were corrected. These problems made the system slow and difficult to use. In the project coordinator's interview, he stated that PRRS should not have been accepted and that it had not been proven to work before it went online. He said that DCNR, as a result of the failure to test the system thoroughly, learned of more problems after PRRS went into operation. It was observed during the audit that there were so many problems being reported in the system that DCNR had to restrict the usage of the problem-tracking log⁴ to system testers due to the volume of postings on the system.

Despite the problems above, on September 25, 1998, DCNR's Assistant Director of the BSP sent a memorandum to the Comptroller in which he stated that "While not perfect, I am pleased to report that PRRS is complete in that it meets the features and requirements as stated in the Detail Design Documents."

From the time the system was implemented in June 1998, until the following January, DCNR received no system updates, i.e., revisions to the software to correct problems within PRRS, from Unisys even though problems still existed. The first system update that DCNR received, in January 1999, contained several corrections. At least one of the corrections had a significant impact on the operation of the system; it locked everyone out of the system whenever an operator accessed a particular computer screen.

D. <u>As a result of delays in the implementation of PRRS, DCNR entered into an</u> additional \$76,000 contract with PIBH to provide work at the PRRS call center for trained AbiliTech employees.

In anticipation of the call center becoming operational in December 1997, AbiliTech hired and trained staff to operate the call center. The delays in implementing PRRS resulted in

⁴ A problem tracking log is a function of the software that allows a user to document problems with the system.

the delay in the opening of the call center. In order not to lose the trained employees, PIBH/AbiliTech wanted them to begin working.

On January 7, 1998, PIBH/AbiliTech submitted a proposal to DCNR for work to be performed by AbiliTech answering the parks information line and sending out mailings to customers. At that time, members of DCNR senior management were performing some of these functions. The volume of the calls and mail had greatly increased because the toll free reservation number had been advertised. However, the reservation system was not yet available to go into operation.

PIBH began to bill DCNR for this work in February 1998. DCNR's Chief of DPOM signed off on the invoices and submitted them to the Comptroller's Office for payment. According to the Chief of DPOM, the Comptroller's Office denied payment for these costs since the call center was not in service and, therefore, could not have costs charged against it. DCNR submitted the invoices to cover the costs of one PIBH subcontractor to do "busy work" due to delays caused by another one of its subcontractors. DCNR submitted these costs despite the fact that the Comptroller's Office had previously expressed its concern about charging costs before the call center was in service.

The Chief of DPOM stated that because the Comptroller's Office would not pay for the services under the PIBH/DCNR contract, DCNR had to enter into <u>another contract with PIBH so</u> that AbiliTech's costs could be paid. On May 18, 1998, the Comptroller's Office approved a sole source service purchase contract with PIBH totaling \$76,000. The contract included a note from the Comptroller stating that "Approval is based on the fact that PIBH has a call center ready, awaiting implementation of the park reservation system and individuals assigned by PIBH to the call center have already been trained to answer park inquiries." The contract was prepared on May 22, 1998, but contained an effective date of October 1, 1997. The contract was designed to cover costs incurred prior to the contract being written, which was not permitted according to the Commonwealth's contracting procedures in effect at that time.⁵ The contract was not formally approved until September 2, 1998.

We found no documentation that DCNR considered requiring PIBH and/or Unisys, the PRRS software contractor, to reimburse DCNR for the costs of retaining the previously trained employees or the need for the additional contract resulting from the delays in the implementation of the PRRS software.

E. <u>DCNR failed to implement a reporting requirement to substantiate invoices</u> <u>submitted by PIBH, resulting in delays in payments and the use of resources</u> <u>to resolve billing problems.</u>

According to the contract between PIBH and DCNR, PIBH is paid a monthly fee of \$8,120.86 for the operation of the centralized call center plus a monthly transaction fee based on the number and type of calls handled by the call center staff. The information concerning the number and type of calls used by PIBH in its invoices to DCNR is obtained from a report obtained from PRRS. The report, called "the Call Center Outcome Statistic Report" (CCOSR),

⁵ Office of the Budget, Management Directive No. M215.1.

is one of the requirements of the PRRS contract. DCNR provides this report to AbiliTech for preparation of the call center invoices.

A review of invoices and payments related to PRRS disclosed that when the Comptroller's Office began receiving invoices submitted by PIBH and approved for payment by DCNR, it could not substantiate the amounts on the invoice and requested further information from DCNR. In response, DCNR developed an additional report to substantiate the information recorded on the CCOSR. DCNR staff had to devote time to substantiation of the data used to calculate the amounts on the invoices. There was no evidence of intentional impropriety. The CCOSR contained design flaws that resulted in inaccurate numbers being recorded. For example, one transaction could be recorded as multiple transactions if a particular button was hit more than once.

As a result of the Comptroller's Office review, final payment of a portion of the invoices was withheld. Even after being made aware of the deficiencies in the reporting system, DCNR continued to submit invoices to the Comptroller's Office for payments based primarily on the inaccurate data from the CCOSR. Overpayments were prevented due to the action of the Comptroller's Office which made adjustments to the amounts on the invoices. The auditors were given no explanation for DCNR's failure to review the invoices. The auditors were told that DCNR provided AbiliTech with the report on which AbiliTech would base its invoice. While the Comptroller's Office was engaged in attempting to substantiate the invoices submitted by PIBH, PIBH continued to submit unsubstantiated monthly invoices until September 2001.

In September 1999, DCNR staff began working on changes to the collection of data in PRRS reports used to substantiate PIBH invoices. Not all of the problems were resolved. In April 2001, DCNR's PRRS section chief began to work on the remaining problems. In an interview, he state that, according to his estimates, 80 percent of his time between April and September 2001 was spent on PIBH invoices and that there were still outstanding PIBH invoices containing about \$50,000 in charges as of February 2002. He also stated that he would not be able to resolve the billing issues until after work on credit card integration at the call center, his top priority, was completed.

According to records of DCNR and the Comptroller's Office, the call center's activities were not accurately reported in PIBH invoices until September 2001.

F. <u>DCNR paid Unisys approximately \$84,291 for additional work on PRRS</u> which was not completed as required and attempted to enter into a \$94,975 contract with Unisys for work that was to have been provided as part of other contracts.

In early 1999, DCNR entered into a contract directly with Unisys to perform additional work on PRRS.⁶ The work consisted of ten tasks encompassing the expansion of capabilities of PRRS to deal with reservations, payments, fees, reports, letters and receipts.

⁶ DCNR was not required to competitively bid this contract since the amount is under \$100,000.

Unisys submitted invoices totaling \$91,739 for work completed from March 1999 through June 1999. The invoices were approved by the Chief of DPOM. However, there is no evidence to show that any review of the Unisys invoices was performed by DCNR prior to submission for payment to the Comptroller's Office. These invoices were returned by the Comptroller's Office on two occasions. The Comptroller's Office denied payment for two of the invoices, totaling \$7,447, and stated in one of its letters "we again request that Unisys provide an accounting of the hourly services provided on a *task by task* basis for the two outstanding and three prior invoices submitted under the contract. In addition, please ensure that actual invoices are submitted for the two outstanding charges that are reflected on the attached Statement of Account." There is no indication that these two invoices were ever paid.

Unisys was paid a total of \$84,291 for this contract. After the completion of the contracted work, a DCNR staff member reviewed the work performed by Unisys and found problems with the work. Out of the 10 tasks that were required under the contract, only four were completed in their entirety. There is no documentation or other evidence that anything was done to have Unisys correct the problems or finish the tasks. Payment made for these services was not recovered from Unisys for its failure to provide the contracted items.

DCNR later attempted to hire Unisys again. The Comptroller's Office returned to DCNR, unprocessed, a proposed contract with Unisys for an onsite database technician for PRRS at a cost of \$94,975. The Comptroller's Office noted several concerns, including the fact that some of the tasks included "were either contracted for with [another vendor], or were included as original deliverables in the contract for development of the PRRS." (Emphasis added.) DCNR did not enter into a contract for this work. There is no evidence that DCNR responded to the Comptroller's refusal to process the contract.

Due to the fact that DCNR was experiencing serious problems with the implementation of PRRS, DCNR and Unisys employees attended a party at the house of a Vice President of Unisys in August 1999. The Vice President for Unisys stated that the party was paid for by the DCNR Deputy Secretary for Administration and was held to "get rid of some bad feelings" between Unisys and DCNR staff that had developed during the creation and implementation of PRRS. The Deputy Secretary stated that the pig roast was held to patch up bad feelings between Unisys and DCNR employees because things had "gotten very ugly at the hands-on level." She stated that the employees were blaming each other for problems that occurred with PRRS. She stated that the party was her idea, was considered a work function and leave was not required, and that she and the Unisys Vice President picked up the costs.

Over 50 DCNR employees were sent an e-mail stating "The pig roast and pool party will be on Friday, August 27 [1999], from 1:30 to 4:00" They were informed that both the Director and Assistant Director of BSP would be in attendance and that they wanted all employees invited "that do not have schedule conflicts to attend . . . Please work with your schedules and supervisors to get to this event. If you can arrange your schedules, It is part of your work assignment." The e-mail also asked that employees reply to the Deputy Secretary for Administration with responses. Another e-mailed invitation stated that the party was being held to celebrate the "100,000 Reservation made" on PRRS. DCNR employees attended the party on Commonwealth time, with the exception of the Assistant Director of BSP who submitted a leave slip.

G. <u>DCNR paid a consulting firm \$93,555 for a review of PRRS and failed to accept or use the results of the review.</u>

In early 1999, to assist in fixing PRRS, DCNR put out a Request for Quotation (RFQ) for a Parks Reservation and Revenue Process Review. In part, the RFQ stated that:

In its current state, the Parks Reservation and Revenue System appears to be hampered by a significant amount of debugging and repairs. There are system performance concerns related to wide area network speed and in the working flow of many of the forms used for data input. There are also concerns in the area of system and data integrity and in the development of a systems audit trail that meets GAAP⁷ standards. There is concern with the high amount of maintenance needed to the system in its existing state as well as grave concern for the potential of high development cost in the future.

With the upcoming camping season approaching both field and central call center personnel have concerns with the speed of the system, integrity of the data, and the accuracy of reservations, that potentially stand to hinder the success of the Parks Reservation and Revenue System. (Emphasis added.)

Dulcian, Inc. (Dulcian), a New Jersey based consulting service firm, was hired as a result of the RFQ and began work on July 13, 1999. Dulcian was a pre-qualified vendor with the state and DCNR was not required to bid the contract. The preliminary draft of Dulcian's review, dated August 28, 1999, concluded:

It is our considered opinion that PRRS should be abandoned and redesigned. Its lack of system documentation, nonstandard design, and inability to follow standard accounting practice make the system difficult to maintain under the best of circumstances. The system is inflexible and requires many people just to maintain it and keep it running, without providing any new functionality. (Emphasis added.)

The Director of the Bureau of Information Technology for DCNR (BIT Director) and DCNR's Deputy Secretary for Administration met with a representative of Dulcian to discuss the review. The BIT Director stated that DCNR felt that the conclusions in the report were not what DCNR had requested. He stated DCNR wanted a "roadmap" that it could utilize to improve the system and increase functionality. He went on to say that DCNR felt that the system was "up and running and people were happy," DCNR did not have the resources to re-write the system; the

⁷Generally Accepted Accounting Principles (GAAP) are established by the Government Accounting Standards Board (GASB).

report consisted mostly of personal opinions; and it did not address the issue of how to fix and enhance the existing PRRS system. The Deputy Secretary for Administration stated that the Dulcian representative was to talk to all the parties and come up with a third-party assessment of the problems, why they occurred and how they could be fixed. However the Dulcian representatives refused to talk to Unisys.

On April 7, 2000, Dulcian forwarded to DCNR its final review of PRRS. The content of the report remained intact. However, the report now concluded, "It is our considered opinion that the existing PRRS should be debugged and fixed....". The report also stated that <u>it would take 402 working days to complete the proposed plan assuming that "a team of three people is working on the project full-time."</u> (Emphasis added.) DCNR paid Dulcian \$93,555 for its review. The Deputy Secretary shared that she does not consider the report to have ever been finalized because Dulcian's representative never spoke with Unisys. However, Dulcian was paid in full for the report. Unisys employees who worked on PRRS and the former President of AbiliTech, who described his role as "facilitator" of the PRRS project, were not aware of the deficiencies noted in the report. Representatives from Dulcian refused to be interviewed for this audit without being compensated for their time.

H. <u>DCNR failed to properly manage the work done by a vendor it hired to provide services related to problems in PRRS.</u>

In April 2000, DCNR hired Perfect Order, Inc. (Perfect Order), a Pennsylvania computer firm, to provide services to modify forms and correct problems noted in the problem logs. The DCNR employee assigned to oversee this contract did not review the work completed by Perfect Order at the time it was submitted because he was working on other issues related to PRRS. The BIT Director signed off on the invoices related to the unreviewed work and sent them to the Comptroller's Office for payment.

On November 14, 2000, the Comptroller's Office returned the Perfect Order invoices to DCNR and stated that the invoices could not be paid at that time because DCNR did not provide work orders to the contractor as required by the contract. The Comptroller's Office recommended that DCNR consult the DCNR chief counsel regarding legality before the invoices are returned for payment.

The BIT Director stated that after receiving the memorandum from the Comptroller's Office, a review of the work performed by Perfect Order was conducted and it was determined that all of the tasks were not completed. DCNR has met with representatives of Perfect Order to discuss the problems and stated that it would only pay for the tasks that were completed. DCNR paid Perfect Order \$30,067, although Perfect Order submitted invoices totaling \$96,092. Perfect Order has filed claim with the Board of Claims. As of DCNR's response, this matter was yet to be resolved.

I. <u>DCNR incurred additional costs totaling \$154,430 for overtime, \$49,604 in</u> <u>consulting fees in connection with the failure of PRRS to meet contract</u> <u>requirements and \$99,000 for questionable annual software licensing fees.</u>

In addition to the cost for the contracts listed above, DCNR paid overtime costs, totaling \$154,430, to both BIT and Parks staff to maintain PRRS and incorporate capabilities that should have been provided under the PIBH/DCNR contract. DCNR also hired a former employee as a consultant and paid him \$49,604 for 1,619.5 hours of work relating to PRRS from July 30, 1999 through December 28, 2001.

The PIBH/DCNR contract included a payment schedule listing an annual licensing fee for the fiscal years 1998-99 through 2003-04 for software provided by Suncoast to Unisys for PRRS, in an amount of \$33,000 per year. DCNR paid the \$33,000 <u>annual</u> licensing fee to PIBH during 1998, 1999, and 2000, and PIBH forwarded these fees to Unisys. During an interview with representatives of Suncoast it was noted that the company only charges a <u>one-time</u> licensing fee. Suncoast stated that the amount of this fee could not be disclosed due to its agreement with Unisys. Unisys also declined to provide this documentation. A PIBH representative stated that PIBH was not aware of the agreement between Unisys and Suncoast. The auditors found no documentation to explain the justification for payment of an annual fee or whether the annual payments were equal to the one-time licensing fee paid by Unisys to Suncoast.

As of the completion of fieldwork on this audit, DCNR was moving toward incurring even more costs in connection with the implementation of PRRS.⁸

The additional costs of DCNR's failure to properly manage the PRRS contract totaled \$487,947 as listed in Table No. 2 below. With two exceptions, the figures for the additional contracts and overtime expenses were provided by DCNR as of December 2001.

VENDOR / EXPENSE	COST
Additional Contract with PIBH	\$ 76,000
Unisys Contract ⁹	\$ 84,291
Dulcian Contract	\$ 93,555
Perfect Order Contract ¹⁰	\$ 30,067
Overtime Expenses for BIT and Park	\$154,430
Staff	
Consultant Fees	\$ 49,604
Total Additional Costs	\$487,947

Table No. 2 - Additional Costs Due To DCNR's Mismanagement

⁸ On February 20, 2002, DCNR issued a purchase order in the amount of \$82,505.09 for services related to PRRS to be provided by Avanco International, Inc., a software integration and applications development firm. As of July 24, 2002, none of the funds have been expended.

⁹Unisys invoiced for an additional \$7,447 that was denied payment by the Comptroller's Office.

¹⁰ Perfect Order invoiced for an additional \$66,025 that has not yet been paid.

Conclusions

DCNR contracted for an automated reservation and revenue system and centralized call center that, due to mismanagement, does not operate as contracted after six years and after expenditures of over \$7.3 million. While PIBH has been paid in full for the software development as of the end of fieldwork, the system still does not provide numerous capabilities and functions required by the contract. Major specific deficiencies in the system are discussed in detail in Finding No. 2.¹¹

DCNR lacked the staff and resources to properly manage a contract of this scope and complexity. DCNR failed to ensure that the system capabilities in the DDD, "the controlling document" for the scope of the work on the software subcontract, were the same as those in the contract with PIBH. The effects of this fundamental discrepancy were compounded by the poorly defined roles of PIBH and AbiliTech in the management of the software contract. DCNR failed to ensure that those organizations had the technical capability to manage the software subcontract.¹²

As the interviews and documentation discussed above in the body of this Finding show, management of the installation, testing and initial operational phases of the PRRS software became a series of improvised, conflicting and costly efforts resulting in waste and unnecessary delays.

Recommendations

When DCNR enters into information technology contracts that require specialized technical expertise to manage and oversee the work, it should:

- a) Obtain the technical assistance of other Commonwealth agencies, such as the Office of Information Technology in the Governor's Office.
- b) Hire qualified staff to oversee the project and institute policies and procedures to confirm the required level of contractor performance.
- c) Ensure that the primary contractor is qualified to manage technical vendor subcontracts or contract <u>directly</u> with such vendors itself.

DCNR should institute measures to ensure, at the very least, adequate oversight of contracts by its staff. The Governor's Procurement Manual (the Procurement Manual) states "Monitoring and control are essential to ensure the contractor uses and manages its resources in a manner that will provide the agency exactly what is has contracted for in terms of quality, timeliness, and economy of cost."¹³ DCNR has <u>not</u> been provided with what was contracted for in this case. In the future, DCNR should ensure that staff contact persons are qualified to

¹¹ The lack of capabilities and functions in PRRS was also noted in an audit of PRRS performed by the Bureau of Audits, part of the Governor's Office, Office of the Budget.

¹² This is not a reflection on the capability of PIBH/AbiliTech staff to operate the call center.

¹³ Office of the Budget, Management Directive No. M215.3.

perform the duties and responsibilities set out in the Procurement Manual, including, but not limited to:

- a) Ensuring that the contractor performs the work as required by the contract.
- b) Evaluating the quality of deliverables.
- c) Performing administrative details concerned with the approval of subcontractors.
- d) Measuring the work performed against the work statement before making final payment.

DCNR should also ensure that all invoices are properly reviewed prior to submission to the Comptroller's Office. At a minimum, the accuracy and completeness should be verified and the contractor should be made aware of all requirements for substantiation of data used to determine and justify changes.

DCNR's Response to Finding No. 1 and Recommendations

Finding No. 1

DCNR disagrees in significant respects with the conclusion of the AG that this contract was mismanaged by DCNR personnel, resulting in waste and additional expense which inappropriately increased the total cost of the project. Specifically, DCNR <u>did</u> create testing teams, <u>did</u> hire technical expertise for quality assurance, <u>did</u> perform testing of the deliverables, and <u>did</u> undertake the basic management functions required under this contract, which resulted in a successfully operating Central Reservation System.

As previously stated, DCNR strongly contends that the additional amount of \$487,947 was not unjustified cost related to deficiencies in contractor compliance with contract specifications, but were expenditures which resulted from necessary and realistic prioritization and adjustments of PRRS system needs in the early design phase. These decisions meant that lesser functionalities be addressed separately at later stages of PRRS development. Therefore, in DCNR's view, the cost of the contract was actually \$6.8 million, not \$7.3 million.

Even considering the cost to be \$6.8 million, as it should be and actually was, the AG's statement is still extremely misleading. It tends to imply that PRRS software cost \$6.8 million. To the contrary, the majority of costs in this contract did not relate to software development. Of the total contract amount (\$6.8 million), \$4,246,034.55 was payment to PIBH for over five years of operational services rendered for reservations and information calls. None of this expense involved software development. The majority of the overall costs for this contract are the operational costs of doing business for this type of customer service. Software development costs were only \$2,534,871.10. Again, the additional \$487,947 of costs were not part of the contract and were primarily for additional system functionality beyond the core requirements identified in the Detailed

Design Document by DCNR for implementation. These costs have proven to be a sound investment, in both providing a much needed service to the visiting public and freeing up thousands of hours of staff time in the State Parks to address customer needs, maintenance, and administration functions.

Designation of Project Manager

AG's report indicates, "No one was actually managing the contract." To the contrary, the PRRS Contract on page 61 clearly identifies a PIBH staff member as the Project Manager. This person was designated and did provide project management for PIBH/AbiliTech. The Project Manager attended regular meetings held during the software development period with AbiliTech/PIBH, Unisys and DCNR present. These meetings guided the production of the complex PRRS software. Therefore, the AG's statement that no one was actually managing the contract is in error.

Quality Assurance

AG's report indicates, "DCNR failed to ensure that its own staff provided overall quality assurance." To the contrary, DCNR'S Design Team Leader checked all designs in conjunction with his computer systems analyst and they advised DCNR's Project Manager of their analysis.

Project Manager

AG improperly identifies DCNR employees in several cases. For instance, DCNR designated a specific employee as Project Manager in the contract and on the organization sheets. The PRRS project organization established two major teams with workgroups. It is possible that one person AG may be calling the Project Manager headed one of these two teams and devoted his work efforts almost exclusively to the PRRS project. AG's draft report on page 13 seems to imply that this employee was Project Manager in several references (working for Unisys, testing, accepting software, etc.). This person was listed in the contract as the Project Coordinator and on organization sheets as both Design Team Leader and Product Design and Data Information Leader. In the Fall of 2000, the Project Coordinator was promoted from a Park Manager 3 position in the Operations Section to a Park Operations Manager 1 position as the first Chief of the newly formed Reservation and Revenue Section. The Project Coordinator was later reassigned to other duties. AG should correctly identify, by accurate work title, who they are referencing. In this regard, the AG report also identifies a Unisys representative as a Vice President when in fact that person's position is Client Business Director.

• Busy Work

DCNR acknowledges that there was a differential between the time the Call Center was ready and the time the application was ready. However, DCNR was able to use this situation to better prepare the CSRs. To do this, at the Comptroller's request, a separate SPC was prepared. This SPC was implemented to provide phone information on state parks and to prepare mailings. This separate SPC for information calls and mailings enabled the CSRs to develop a better understanding of park operations and customer requests. As a result, Section D of Finding No. 1 should be deleted or, at the very least, all references to DCNR contracting for "busy work" should be removed from the text and the Table No. 1.

• Unisys ITQ

DCNR acknowledges that the DDD was prioritized and that only the core elements were implemented. DCNR was still interested in implementing the lower priorities of the DDD, so the first ITQ was developed to accommodate those items. DCNR could not do the work in-house because of the loss of the computer system analyst who left the Department. During the course of the second ITQ, DCNR made the decision to have its Bureau of Information Technology handle all software and hardware matters because qualified new analysts had been hired. Therefore, entering into any further agreement with Unisys became unnecessary.

• Dulcian Report

While DCNR did not agree with all of Dulcian's recommendations and conclusions, the vendor had complied with the service requirements of the contract.

• <u>Perfect Order</u>

Upon completion of the contract, a review of the deliverables was conducted which determined that only one third of the work was acceptable. DCNR then paid for one third of the work performed by Perfect Order. DCNR has refused to make any further payments. Perfect Order has filed claim with the Board of Claims. This matter is yet to be resolved.

<u>Avanco Contract</u>

This contract was conducted with a successful completion. Avanco assistance was needed because of several factors. DCNR had heavy in-house staff turnover, leaving the remaining staff unfamiliar with the historical details of the PRRS. After the 1998 implementation, the PRRS needed software enhancements for new business rules, and with the limited staffing, these changes were made with no updating of the design documentation. The staff who made these changes eventually left DCNR. The new staff needed to have a document to help them understand the current design and

structure of the changed system, as the DDD was based on now outdated business rules and old technologies. DCNR also needed to take advantage of the ability to electronically document Functional Hierarchy Diagrams, Data Flow Diagrams and Entity Relationship Diagrams. The vendor reviewed the entire PRRS, form by form, providing a complete overview design of this application, along with descriptions of the forms, how globals were used, what forms were impacted by what tables, the coded relationships of these tables, how views were used and the procedures used within these forms. The final document has provided huge dividends, allowing technical staff to walk through potential changes to the application with the business knowledge experts. Using the final deliverable to provide a graphic representation of each module, they now know how these changes may impact other modules within this massive application.

• Additional Costs listed in Table No. 2

AG takes the position that all expenditures for additional work made were due to DCNR's mismanagement. This is in error. Development of new custom software of this magnitude did require some fixes and enhancements. This is not uncharacteristic of any similar new system software. This is part of the process of developing and implementing new software. Even widely popular proprietary software packages are rolled into production with the expectation that additional patches will be necessary to correct deficiencies.

Recommendations

DCNR used technical assistance from the Office of Information Technology, as well as other Commonwealth agencies, such as DEP.

DCNR had an Oracle Master as our Technical Coordinator on the project. The Technical Coordinator directed the application testing, server hardware and troubleshooting teams. Parks also hired an Application Developer completely dedicated to PRRS development. This person specialized in Oracle development work and assisted in the technical reviews of deliverables throughout the contract, but especially during the early phases of design. PRRS staff within Parks and BIT have been increased to work with the program as indicated in the introductory comments.

DCNR used other vendors, as opposed to having PIBH do additional subcontracts. Examples are Dulcian, Perfect Order, Unisys ITQ, and Avanco.

DCNR has established an area specifically designed for IT contract development and project management. This group is responsible for ensuring that tight requirements are developed, that measures are available to ensure compliance with contract requirements, and that there is a clear understanding on how to proceed when requirements are not met. Since instituted, this system has proven to be very effective ensuring contractors perform the work as required by the contract.

DCNR's BIT staff has the ability to closely examine contractual work. Projects are divided into manageable pieces for review purposes. Qualified employees in other bureaus join BIT staff in the review of deliverables. DCNR only enters into contracts when a clear outcome can be obtained.

Normally, a Commonwealth agency solely deals with the primary contractor and does not involve itself in teaming agreements with subcontractors. Therefore, it was not appropriate for DCNR to get integrally involved with the teaming arrangements of PIBH and its subcontractors. It was the expectation of DCNR that any subcontract PIBH would enter into would conform, in all respects, with the prime contract. However, because of the unique nature of this contract and its involvement with PIBH, DCNR did in fact involve itself more directly than it normally would with a prime's subcontractor. Nevertheless, in spite of DCNR's involvement with subcontractors, DCNR could not dictate each and every term and condition worked out between PIBH and its subcontractors or completely oversee the performance of those subcontractors.

Due to time and budgetary constraints associated with a very broad and complicated Detailed Design Document (DDD), the work needed to be prioritized to define the basic core elements required for reservation and revenue tracking. Consequently, the entire DDD could not be implemented under the initial budget and time constraints. However, given the priorities, final payments were properly made for the core requirements.

DCNR has improved invoice processing by providing verifiable data runs to the Comptroller's Office to support invoice approvals. In fact, all of the outstanding issues have been resolved and appropriate payments made to PIBH.

Department of the Auditor General's Comments

DCNR may have taken steps to draw on the technical expertise needed to manage and oversee the PRRS contract, but it did not do so to the extent necessary to prevent the additional costs described in the Finding.

The \$487,947 in additional costs may not, technically, be part of the original <u>contract</u> since the work related to these costs was not treated as an amendment to the original contract. However, these additional costs were required to furnish items included in the design document but not provided in the software and to fix problems with the system as delivered by PIBH. Therefore, the additional costs of \$487,947 are project-related and increased the cost of the <u>project</u>. Moreover, these costs, <u>all of which relate to the PRRS software portion of the contract</u>, would not have been incurred if DCNR had properly managed the project.

We disagree with DCNR's statement that the person listed in the contract as the Project Manager served in that capacity. The individual mentioned in the contract confirmed that he attended design meetings but denied being there as the project manager. In fact, he did not know that he was listed in the contract as project manager and stated that he never acted in that capacity. The technical support DEP provided to DCNR for PRRS was insufficient to meet DCNR's needs. The employee from DEP's Information Service Bureau skilled in IT contract administration, who assisted DCNR with the request for information and request for proposal, was not involved with DCNR's contract negotiation with PIBH. There is no documentation or other evidence that DCNR obtained the services of another person skilled in IT contracts to assist with the PRRS contract.

The Oracle Master was not responsible for reviewing the PRRS Oracle code being developed by Unisys. In fact, he described his main function as being a liaison between the Unisys developers and the park users. The Application Developer left DCNR employment for a period of time and while working for DCNR, the Application Developer could not exclusively devote his time to PRRS application development. Neither the Oracle Master or the Application Developer was responsible for the system acceptance testing. This was the responsibility of the Project Coordinator who admittedly has no knowledge of Oracle.

DCNR <u>never</u> evaluated the primary contractor's final proposal to determine the contractor's ability to manage and oversee an IT contract. If it had, DCNR may not have needed to contract directly with the other vendors to evaluate or correct problems in *PRRS*.

DCNR did not institute its IT contract development and project management section until 2002. This was after DCNR failed to properly manage four IT contracts (PIBH, Dulcian, Unisys, Perfect Order).

Prior to 2002, no individual or group was dedicated to ensuring compliance with IT

DCNR's response about a Commonwealth agency solely dealing with the primary contractor does not address the recommendation that DCNR's staff contact persons should be qualified to perform administrative details concerned with the approval of subcontractors. To the extent that we can decipher the response, it appears to be an acknowledgement by DCNR of its ambivalence and confusion concerning the overall management of the contract.

DCNR's comment that it prioritized areas of functionality in order to have PRRS implemented "during the season for which the rollout has been publicized" implies that the project was driven more by public relations concerns that by contract requirements and sound management.

DCNR should ensure that the invoice procedures on future IT contracts provide a level of oversight sufficient to substantiate and validate payments to vendors.

<u>Finding No. 2 - As a result of DCNR's failure to properly manage the PRRS</u> <u>contract, the application was poorly designed and did not fulfill all the requirements</u> <u>of the contract.</u>

DCNR paid over \$7.3 million for a reservation system that failed to meet the requirements of the contract. These failures were so significant that they affected day-to-day operations and DCNR's ability to account for transactions and ensure accurate and complete revenue reporting.

PRRS was required by the contract to give call center employees and DCNR employees (users) the ability to take advance telephone reservations, register guests, process payments and account for revenues from all park services. These services include camping, cabins, boating, pavilions, meeting rooms, and concessions. However, PRRS was plagued with numerous flaws in its design that frustrated users and resulted in inconsistent and inaccurate information.

The Commonwealth's Bureau of Audits, Office of the Budget, conducted a performance audit of PRRS, dated September 28, 2000. The audit, in part, states, "The Parks Reservation and Revenue System vendor [PIBH] has not performed key duties under the contract" and identifies deficiencies, including that the credit card interface was not delivered and that PRRS is unable to control and account for revenues. The magnitude of the problem was acknowledged in an internal cover memo written by the Deputy Secretary for Administration to numerous DCNR executives, stating "This is not fun reading. This is even stronger than I anticipated. However, the bottom line for me is to keep the system running and not to have the Comptroller hold up critical contracts that will help us do that."

A. <u>Poor Database Structure</u>

Using standard database design techniques, data are stored in such a way that there is one, and only one result when a user requests customer information from the database. This is assured by storing each piece of information in only one location or table. With the exception of the unique identifiers (key fields) that connect or link tables, each piece of information appears only once. For example, name, address, and customer identification number may be stored in the customer table and the reservation table may contain site number, dates reserved, and customer identification number. In this example, the key field customer identification number could be used to extract information from both the customer and reservation tables. The use of standard database design techniques ensures that the system is reliable and accurate, and also improves system efficiency by reducing the occurrence of duplicated data.

PRRS was not written using standard database design techniques. There were numerous instances where the same data were improperly stored in multiple locations. This deviation from standard design has resulted in PRRS not accurately accounting for revenues. For example, the total payment amount was stored in more than one table. When a reservation was changed, the total payment data may not have been updated in all tables. Consequently, it was difficult, if not impossible, to determine which of the stored total payment amounts was correct.

Another example of non-standard database design is that few tables within PRRS contained the necessary key fields, which represent primary keys that allow the tables to be connected or linked. The final report produced by Dulcian¹⁴ stated, "Only 24 of the 169 tables have primary keys. It is standard industry practice for each table to have a primary key." When tables are not linked, information cannot be obtained from more than one table and data cannot be properly updated. Consequently, PRRS produced incorrect reservation and payment information.

B. <u>High Maintenance Requirements</u>

DCNR employees and other sources interviewed stated that since implementation, DCNR programmers have devoted the majority of their time to keep the system operational. Time that could be spent fixing problems with the database structure must be spent correcting data and maintaining facility data, i.e., information on cabins, campsites, pricing, etc.

DCNR employees stated that a significant amount of time has been spent making corrections directly to data. A DCNR programmer stated that although this practice is not advisable, it is currently necessary. When data are accessed and modified outside of PRRS, there is no history of the original transaction and integrity is compromised.

Facility data was to be maintained by park employees. However, PRRS only allows this information to be entered one facility at a time. Because of this limitation and the large number of facilities at each park, DCNR programmers have been maintaining all the facility data. Time spent maintaining this information could be better spent fixing the many system deficiencies noted in this report.

In addition, PRRS documentation is outdated and inadequate to support changes to the application. A contract has recently been entered into with Avanco to document the code changes that have been continuously made to PRRS. As noted in Finding No. 1, the purchase order for this contract is \$82,505.09.

A well-documented system should explain what each section of the application does and how it relates to other sections. This information provides guidance for reviewing and changing the application code. One of the few comments that were included regarding a section of the application by a Unisys developer stated "Bubble gum and bailing wire would hold it in better. I should just scrap it and start over."

C. <u>PRRS Cannot Accurately Account for Revenues</u>

For a period of four fiscal years, PRRS reported \$5.1 million more in revenues than were reflected in actual bank deposit records reported by the DCNR Comptroller's Office as shown in Table No. 3.

¹⁴ See the discussion of Dulcian contract in Finding 1, Section G on pp. 18-19 of this report.

Revenue:	FYE 6/30/98	FYE 6/30/99	FYE 6/30/00	FYE 6/30/01	TOTAL
Per PRRS	\$532,975	\$9,268,453	\$12,751,048	\$13,488,807	\$36,041,283
Per DCNR Comptroller's Office	<u>\$0</u>	<u>\$7,102,353</u>	<u>\$11,477,256</u>	<u>\$12,312,756</u>	<u>\$30,892,365</u>
Variances	\$532,975	\$2,166,100	\$1,273,792	\$1,176,051	\$5,148,918

Table No. 3 - Revenue Variances by Fiscal Year

The deficiencies in PRRS's ability to account for revenue were addressed in two other reports. The first report is the final report produced by Dulcian, transmitted to DCNR on April 7, 2000, that stated:

The revenue module contains some flaws and does not meet accounting standards. The system does not always recognize revenue from reservations or cancellations appropriately. It appears that the revenue module was designed by people without a thorough knowledge of accounting, resulting in transactions being created incorrectly....

This report recommended numerous steps that "should be taken to make PRRS fully functional and meet the requirements of the business it was designed to support." These steps were broken out into short-term, intermediate and long-term improvements.

The second report is the performance audit report on PRRS issued by the Bureau of Audits, Office of the Budget, dated September 28, 2000. This report also identified "contractually required essential attributes of the reservation system" that PIBH had not ensured to be "sufficiently functional for the intended purpose." The items included:

- Adequate functionality and reporting capability to properly monitor and manage the reservation function as well as to control and account for revenues.
- Adequate security, internal controls, and management reporting to ensure that revenue transactions and reservation data are processed, accurately, timely, and consistently.
- An accounting system, with appropriate audit trails and revenue security which meets the requirements of GAAP and the reporting requirements of the Commonwealth of Pennsylvania.

The Bureau of Audits' report recommends a system reengineering effort to resolve the application deficiencies.

In a letter to the Department, dated February 19, 2002, DCNR stated that it was unable to specifically identify the revenue variances noted and that PRRS does not accurately account for revenues. Although the letter identified several items that may have contributed to the above difference, DCNR stated, ". . . there is no way to know which ones contribute to the exact

amount." However, during our review, several sources interviewed noted that many of the revenue problems occurred due to the system's poor design.

This letter also stated "DCNR does not use the figures out of PRRS as absolute figures. PRRS figures provide DCNR with a guideline on what is occurring, in general as to revenue."

Due to the profound problems with PRRS's ability to accurately account for revenues, the \$5.1 million difference between the PRRS revenue reports and the bank deposits recorded by the Comptroller's Office may never be resolved.

In addition, PRRS's inability to account for revenue also impacts the calculation and reporting of taxes as discussed in Finding No. 4.

D. <u>Voluminous System Problems Logs</u>

PRRS provided the ability for users to log and track software problems; however, the volume became so great that DCNR had to restrict usage of this feature. A DCNR employee confirmed a statement made in the Bureau of Audits, Office of the Budget, performance audit, that there were 270 system-related problems logged as of July 2000.

One problem log entry stated, "It is not possible to track a reservation from beginning to end, including dates reservation was made, when changes were made & what they were and when all payments were made. It doesn't follow standard business or accounting practice." Other entries stated that PRRS's inability to generate a transaction's complete history has resulted in incorrect refunds, duplicate refunds, and refunds where no original payment could be found. These problems, resulting from the poor database structure, are serious deficiencies in a system that is required to track reservations and account for revenue.

E. <u>Double Bookings</u>

According to DCNR and call center staff, double bookings have resulted in a significant number of customer complaints and have caused additional work for the individual parks. A double booking is a system error that creates a reservation for more than one customer for the same site and day. A fully functional reservation system would not permit double bookings. To alleviate the problem, some parks set aside special sites to be used when double bookings occurred. If not needed, these sites remained vacant, resulting in lost revenue. Double bookings also occurred for white-water rafting and all of the customers who made reservations could not be accommodated.

F. <u>Inability to Process Credit Cards</u>

According to the contract, PRRS was to process payments by cash, checks, credit cards and gift certificates. However, PRRS was unable to process credit card payments, which is a significant deficiency in a reservation system. Call center and DCNR employees (users) had to enter the credit card information into PRRS and then re-enter this information into additional credit card processing software. In addition to the duplicate work for PRRS users, this has caused ongoing reconciliation problems between the two systems and significant security concerns. Because of the sensitive nature, these weaknesses are only discussed in general terms in Finding No. 3.

DCNR employees have devoted numerous hours over the past several years to correct PRRS's inability to process credit card payments. However, as of April 25, 2002, PRRS still cannot process credit card payments for individuals making advance telephone reservations through the call center.

G. <u>Limited Boating Functionality</u>

Most of the boating functionality as required by the contract, was not provided. More specifically, PRRS is not capable of consistently and accurately calculating fees for the rental of marina and mooring facilities. Also, PRRS is unable to print boating permits or receipts. Further, because the permit number is not entered into PRRS, the system cannot provide DCNR with information on a customer holding a particular permit. DCNR employees are spending significant time manually performing these functions.

Overall, DCNR failed to properly manage the PRRS contract for the development and implementation of PRRS. Specifically DCNR:

- Did not adequately monitor the ongoing progress of the system development. Reports of significant problems were ignored.
- Did not hold the contractor, PIBH, responsible for the completion of PRRS in accordance with the contract.
- Did not properly test the system to assure that it was working as intended before acceptance sign-off. The acceptance letter stated that PRRS would continue to be extensively tested.
- Reported that PRRS was complete and released final payment to the contractor even though numerous problems remained unresolved.

Recommendations

DCNR should attempt to obtain damages and/or repayment for failure to meet contract requirements from PIBH and its subcontractor, Unisys.

DCNR should re-engineer the system as expeditiously as possible and properly monitor the development to ensure that it complies with the system design requirements, as well as utilizes standard database design techniques.

DCNR's Reponse to Finding No. 2 and Recommendations

Finding No. 2.

The application designed at the onset of this project needed to be changed as the scope and magnitude of the needs became apparent. This audit report focuses on a time not consistent with the full history of the PRRS. Technology can become outdated quickly. Over a period of months and years, applications needed to be changed to keep pace with other standard software such as Oracle and Oracle tools. DCNR has an executive level task force in place to monitor the PRRS and to keep track of progress on critical issues. DCNR will consider AG recommendations in those areas as the task force moves forward. DCNR will work with the PPR Comptroller's Office to deal with current issues and to ensure that the software modifications address identified needs. Even though there are still outstanding issues, DCNR has made significant progress in improving the PRRS software as follows:

- Upgraded both the forms and database version to current levels of Oracle that are supported.
- Improved credit card functionality The PRRS program handled credit cards, but was not integrated. Both the field parks and the Call Center have an integrated credit card acceptance.
- Improved efficiency Previously it took 3.75 minutes to refund a canceled reservation. In 2002, it now takes less than 30 seconds to do the same function.
- Improved accuracy The Call Center has gone from an average of 58 mistakes per day on reservations when the program first was used to averaging only two reservation mistakes in the summer of 2002.
- Improved the Local Area Network to permit the PRRS to run faster.
- Implemented and upgraded Citrix to permit software version control.
- Added security measures not envisioned in the original contract.
- Improved the efficiency of the operating program.

The following are DCNR's responses to specific comments made in Finding No. 2:

• Double Bookings

The double bookings due to software are quite rare and have been virtually eliminated. They were never a significant number when compared to the hundred of thousands of reservations made. Predicament campsites are found in every campground by bureau policy, and are not solely used to alleviate double booking issues. They are most often used when campers cannot use their camping equipment on a campsite or there exists tree damage to a site, site flooding, neighbor complaints, etc. The predicament site concept is a good customer service practice and a sound management policy.

Inability to Process Credit Cards

The software now is processing credit card payments. PIBH did provide software with credit card capability. What was not included was the interface to credit card processing software. During initial development, DCNR could not tell PIBH what credit card system would be selected as Treasury was establishing a statewide contract. It was unclear who was responsible to install the actual linkage from the custom PRRS software to whatever software would work with the credit card clearinghouse. When PNC was finally selected to handle state credit cards, Unisys offered to develop the interface at an additional cost. DCNR determined that it would be more effective to handle the interface directly and chose not to incur extra cost. Without the interface, it was impossible to test the PRRS software for credit card usage. DCNR now has the interface implemented for both park and Call Center staff to accept payment by credit card.

Recommendations

DCNR recognizes that performance of the contract was hampered by a number of adverse circumstances beyond the control of the parties. Identification of liability and assessment of damages would be difficult. Moreover, as a legal matter, DCNR was not directly in privity with either Abilitech or Unisys under the prime contract. Consequently, DCNR had little control over the contractual relationship PIBH held with its subcontractors.

DCNR is continuously improving and enhancing the system to meet the demands of the customers and changes to business rules and policies. This will be done following the Charles Barker design principles.

Department of the Auditor General's Comments

DCNR failed to properly manage the PRRS contract with PIBH and PIBH's subcontractors. While DCNR did not contract directly with the subcontractors, that did not absolve DCNR from exercising control over the work of the subcontractors through the primary contractor, PIBH. As a result, the application was poorly designed, it did not provide the services required by the contract between DCNR and PIBH, and there were avoidable cost overruns.

DCNR mistakenly contends that these poor results were unavoidable consequences of

- 1) Outdated technology and application software.
- 2) Circumstances beyond DCNR's control, specifically their lack of control over subcontractors.

We recognize the need to upgrade technology and software and the negative results that can occur when that is not done. If that were the cause, we would have indicated it. However, that was not the cause. The failure to meet significant contract requirements was caused by poor system design, not the need to upgrade software. If the work had been properly managed the design flaws would have been recognized and corrected prior to final payment and cost overruns would have been avoided.

DCNR should follow through with the recommendations contained in the report, including action to recover damages, repayment or both from PIBH and its subcontractor for failure to meet contract requirements.

Finding No. 3 - DCNR failed to provide adequate security over PRRS software and sensitive customer data, which could result in identity theft and be costly and embarrassing to the Commonwealth.

Numerous deficiencies in PRRS security were identified during our review. Since these weaknesses are of a sensitive nature, details were omitted from this finding. However, a separate report was sent to DCNR management, which identified specific weaknesses and made recommendations to improve the security over PRRS software and sensitive customer data. Generally, we identified weaknesses in security procedures, logical access controls¹⁵, physical access controls, and contingency planning, as follows:

- Numerous security weaknesses were noted over the handling of sensitive customer data. These weaknesses could be costly to the customers, result in identify theft, and be embarrassing to the Commonwealth. Sensitive customer data should be handled and stored in such a manner that privacy is not compromised.
- Contractually required security features of PRRS were not completed. This could result in call center employees or DCNR employees (users) having the ability to bypass security to access, change, and delete sensitive customer data. Good security procedures include granting users only the level of access needed to perform their job responsibilities.
- Weaknesses also exist concerning logical access. Inactive users are not properly revoked from system access, password security policies are weak, and the system cannot provide a list of users who have access to the system. These weaknesses could result in unauthorized access to the software and data, which DCNR would be unable to detect. DCNR should follow the logical access security requirements issued by the Governor's Office.¹⁶
- Physical access weaknesses were also noted. Computer equipment was unsecured, which could provide an entry point for unauthorized access to the system. Computers should be secured when not in use to prevent unauthorized access.
- DCNR does not require users of PRRS to sign security agreements and confidentiality statements. PRRS users have access to sensitive and confidential customer data. Employees should be made aware of the consequences if they violate their agreements.
- A formal disaster recovery plan has not been implemented. A well-designed and tested disaster recovery plan ensures business continuity will occur in the event of a disaster or

¹⁵Controls, implemented through software, designed to grant or prevent access to various computer resources, such as programs or data. For example, a computer system that requires a password to log on uses logical access controls.

¹⁶ See Information Technology Bulletins, issued by the Governor's Office of Administration/Office of Information Technology, I-series: Contingency Planning and Security.

emergency. According to requirements issued by the Governor's Office,¹⁷ agencies must develop an Enterprise Business Recovery Plan using the approved methodology.

DCNR failed to ensure that PRRS was designed with adequate security capabilities. Further, there have been no formal security procedures and requirements written and communicated to the users of the system.

Recommendations

DCNR should make the following improvements to the security of PRRS and over the security of its data. Due to the serious nature of the weaknesses, these improvements should be made as soon as feasibly possible.

- a) Increase security over sensitive customer data.
- b) Complete and implement the contractually required security features of PRRS.
- c) Correct weaknesses concerning logical and physical security and implement requirements issued by the Governor's Office.
- d) Implement a security policy and require users to sign security agreements and confidentiality statements.
- e) Implement a formal disaster recovery plan and test it for effectiveness, in accordance with requirements issued by the Governor's Office. Update this plan regularly.

DCNR's Response to Finding No. 3 and Recommendations

Finding No 3:

Security on the PRRS is improving and never has been known to have been compromised.

In a separate confidential portion of this response identified as Part II, DCNR has noted specific actions taken to improve security issues identified in the confidential report provided by the Auditor General.

Recommendations

DCNR is using the latest credit card software that now offers encryption and instituted a firewall to prevent unauthorized access. In addition, PA State Police background checks are preformed on all Call Center employees prior to assignment to the Call Center.

¹⁷ See Information Technology Bulletins, issued by the Governor's Office of Administration/Office of Information Technology, I-series: Contingency Planning and Security.

DCNR has modified the PRRS system to use updated security technology superior to what was required by the original contract.

DCNR has established a secure computer facility that requires keycard access. The backup server has been removed from the PIBH location and placed in a secure location.

DCNR has drafted an Internet security and network policy to be signed by all employees and contractors involved with the PRRS.

DCNR has acquired the hardware infrastructure necessary to support the enhanced enterprise disaster recovery plan under development.

Department of the Auditor General's Comments

DCNR states that "Security on the PRRS never has been known to have been compromised." We are not surprised by this response. Due to the severe nature of the weaknesses we identified, as disclosed in detail in our confidential report to management, unauthorized access to PRRS software and sensitive customer data would go undetected. We encourage DCNR to implement policies and to enforce contractual terms that ensure the security of PRRS and its data.

Finding No. 4 -The revenue report required as part of the PRRS contract does not report accurate revenue amounts including the amount of taxes collected by DCNR.

State park patrons are subject to two types of taxes: the six-percent sales tax on certain items sold within the state park (i.e., books) and the six-percent hotel occupancy tax imposed on each cabin rental. By law, DCNR is required to file monthly tax returns with the Department of Revenue. The taxes collected are to be remitted, in full, to the Department of Revenue at the time the return is filed.¹⁸

The PRRS contract contains a requirement that a revenue report be generated by PRRS including a separate line item for taxes. However, the system, as implemented, does not accurately report revenue and taxes.¹⁹

Specific computer system flaws that contributed to the tax amounts not being properly reported by PRRS include, but are not limited to:

- The tax is posted to the wrong accounts.
- The Treasury check approval form used for refunds does not calculate tax,
- The form used by individual parks to transmit funds to the Commonwealth account does not show the lodging tax.
- The tax is applied inappropriately when <u>transferring</u> a stay from a cabin.

As a result of the failure of PRRS to include accurate tax reports, DCNR staff must complete a minimum of 160 <u>manual</u> transactions on a monthly basis to determine the amount of taxes collected and to remit the proper amounts to the Department of Revenue. A review of the tax submittals for fiscal year 2000-01 indicated that <u>DCNR filed incomplete tax returns for seven of the twelve months under review.</u> The incomplete tax returns mainly consisted of omissions of *call center* data for certain days within the given month and omissions of *individual state park* information for the entire month. The missing tax amounts were later reported to the Department of Revenue²⁰.

The delays in reporting taxes to the Department of Revenue were a direct result of PRRS not generating accurate revenue and tax figures. If PRRS had worked as intended, DCNR staff would not need to manually calculate the amount of taxes collected by DCNR. Rather, the tax amount could be obtained directly from the detailed revenue report required by the contract.

Other aspects of PRRS' poor design and undelivered contract requirements have also contributed to the delay in reporting tax information for the *individual state parks*. In a

¹⁸ 72 P.S. § 7222

¹⁹ See Finding No. 2 for additional information.

²⁰In contrast, private businesses and individuals subject to Pennsylvania sales and hotel occupancy taxes face penalties for late and under reporting of taxes. The penalty for late payments is 5 percent per month from the date due until the date filed to a maximum of 25 percent.

February 2, 2001, letter to the Comptroller's Office, the PRRS section chief wrote:

It was more critical to resolve credit issues for the citizens for the Commonwealth, keeping the program functioning, dealing with the Call Center credit card issues, and cleaning up the backlog of refunds by check that were taking three to four months. After these issues were resolved, I started verifying the parks [sic] tax reports and compiling the data.²¹

In an effort to address the delays in reporting taxes, DCNR has hired a fiscal technician, trained its field staff, and is in the process of revising the form used by park staff to report taxes. Training is to be scheduled after the form is revised. However, these efforts will not address the underlying system problems.

DCNR would not need to incur the expenses associated with the additional staff time and training needed to manually calculate taxes if it had properly addressed the failure of PRRS to record accurate tax amounts and other revenue figures.

Recommendations

DCNR should address this issue as part of the re-engineering of the system recommended in Finding No. 2 of this report. A report that accurately records revenue, including taxes, would allow DCNR to eliminate costs associated with the staff time and training required for manual preparation of tax remittances.

In the interim, DCNR should examine current procedures to determine if tax calculations encompass all taxes that are being collected. DCNR should establish <u>written</u> policies and procedures regarding tax calculation and reporting and distribute these procedures to all of the individual revenue-generating state parks and the PRRS section of DCNR. These written policies and procedures would aid the employees responsible for reporting taxes collected and help to ensure continuity and consistency in calculating the taxes owed to the Commonwealth.

DCNR, the Department of Revenue and the Comptroller's Office should also conduct a review to determine if all taxes collected from state park activities have been reported and remitted to the Department of Revenue.

DCNR's Response to Finding No. 4 and Recommendations

Finding No. 4

DCNR understands the issue raised in this Finding and is appropriately collecting and transmitting sales taxes to the Department of Revenue outside the PRRS. Additional DCNR comments follow the specific AG Recommendations below.

²¹ The issues referred to in the letter (refunds, credit card implementation, etc.) resulted from the failure of PIBH/Unisys to provide contracted items. See Finding No. 2 for details.

Recommendations

Sales taxes and hotel taxes collected are being transmitted to the Department of Revenue. While the report presently generates some inaccurate figures and therefore, needs to be redesigned, manual steps are being completed by DCNR in the interim to make sure accurate figures are obtained for this important transfer of funding data. DCNR appreciates the recommendations and suggestions in this area. IT staff will work with the Comptroller's Office to confirm that the improvements to the system result in an accurate, reliable and detailed audit trail.

Additionally, DCNR has added a full-time Administrative Assistant to guide the accounting issues, ensure GAAP compliance, and adequately document changes to records.

Department of the Auditor General's Comments

The response did not address the underlying issue of PRRS's failure to accurately account for revenues, including taxes. Revenue-tracking was supposed to be a key element of PRRS. If the revenue component worked as intended, DCNR would be able to place reliance on the revenue figures, including taxes, rather than using them as "a guideline on what is occurring in general as to revenue." Additionally, DCNR would not have to incur additional expenses associated with the staff time and training needed to calculate revenues and taxes manually.

ADDITIONAL RESPONSES OF THE DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES TO THE FINDINGS AND RECOMMENDATIONS

<u>Note</u>: DCNR's response consisted of two parts: a public portion and a confidential portion in response to Finding No. 3. The public portion of DCNR's response consists of four sections. <u>Sections I, II and IV are included on the following pages. Section III of the response dealt with each specific finding and the responses in that Section are included under each of the specific findings in the report. Much of DCNR's response consisted of a history of the PRRS and call center project, a large portion of which is not directly relevant or responsive to the Findings of the special audit. Likewise, the special audit did not involve or question aspects of PRRS and the call center which DCNR claim as positive improvements over the prior system. Those apparent improvements could have been achieved at a substantially lower cost if DCNR had, from the beginning, exercised proper and effective management of the project. After reviewing DCNR's response the Department has made the following changes to the report:</u>

- The wording in Finding No. 1 has been changed to reflect the cost increase as an increase in the project price rather than the contract price.
- The individual referred to as the project manager in the draft report is now referred to as the project coordinator.

The Department's comments have been included after each section of DCNR's responses.

DCNR'S RESPONSE



Pennsylvania Department of Conservation and Natural Resources

Rachel Carson State Office Building, P.O. Box 8767, Harrisburg, PA 17105-8767 Office of the Secretary

September 18, 2002

717-772-9084 FAX: 717-705-2832

Peter J. Smith, Esquire Kathleen A. O'Connell, CPA Department of the Auditor General Finance Building Harrisburg, PA 17120

Dear Mr. Smith and Ms. O'Donnell:

This is the Department of Conservation and Natural Resources' Official Response to the Draft Report of a Special Audit of our State Park Reservation and Revenue System. I have provided the Response in two parts for your use, as follows:

- 1. Part I is the Department's Official Response, which will be made part of the public report.
- 2. Part II is the Confidential Section to Finding No. 3, which will not be seen by the public.

Please note that the enclosed original copy of the DCNR Response is reproduced on one side of the paper only; on all subsequent copies, the Response will be copied using both sides of the paper in order to conserve resources. If you have any questions, kindly contact Philip Van Zile, Assistant Chief Counsel for DCNR, telephone 717-772-4171.

Sincerely yours,

John C. Oliver Sceretary

Enclosure

PART I

I. SUMMARY STATEMENT

We appreciate the opportunity to provide a management response to the Department of the Auditor General's (AG) Special Audit of the Department of Conservation and Natural Resources' (DCNR) Pennsylvania State Park Reservation and Revenue System (PRRS). We hope that you will take our comments and suggestions as seriously as we have taken yours.

While some of your recommendations and findings--especially in the area of security and confidentiality--are helpful and already in the process of being implemented, or about to be, others are based on inaccurate assumptions. Two primary assumptions, used throughout the report, are inaccurate. The first relates to, in your words, "DCNR agreed to award to PIBH (Pennsylvania Industries for the Blind and Handicapped) the information technology contract for a system that included a call center." As stated in your report, Pennsylvania law provided PIBH with a right of first refusal for the contract. As a result of this law, DCNR was forced to select and ultimately to contract with PIBH directly. From that point on, DCNR could only recommend to PIBH the selection of subcontractors, teaming agreement contracts, etc., but, as with any other contracted vendor, expected PIBH to meet all contractual obligations. As a result of the procurement law and its contractual result, many of the report findings and recommendations relating to delays, additional expenditures, damage recourse, etc. were neither within our control nor addressable by our staff.

The second assumption made in the AG's report related to the report provided by Dulcian, a contractor hired by DCNR. The AG's report accepts this report from Dulcian as completely accurate without any regard to consideration that this report might be a vendor-biased one that could have been written with ulterior motives in mind--such as building a case to provide additional work for Dulcian. Your report, in a number of places, provides quotes from this document, including added emphasis on page 18, that serve to substantiate errors/findings against DCNR. We did not believe their report was entirely accurate, and, therefore, did not use it in its entirety. We had additional avenues of recourse we used to address system issues.

In this response, DCNR will provide a history of the implementation effort for the PRRS and Call Center, respond directly to the four (4) findings in the report and the related recommendations, and clarify areas in which the audit report is inaccurate. The PRRS is a successful initiative. It has met and often exceeded its objectives.

When DCNR envisioned a central reservation program, the objective was to improve customer services, standardize park procedures and fully automate the park reservation and revenue systems. The PRRS and Central Call Center have largely achieved that important objective. This entire program is working for both the state park customers and DCNR staff statewide. Development of the entire program involved having a vendor, PIBH, provide both software and a Call Center operation using a convenient toll free number. PIBH's Call Center provides satisfactory service to hundreds of thousands of callers annually. State Park office staff also use this software, and it has greatly reduced the reservation and revenue workload at the park level.

The public finds the system effective, allowing customers to easily obtain park information and easily reserve cabins, campsites, group tenting sites, pavilions, yurts, camping cottages, and whitewater launch times.

When DCNR started this process, its reservation systems were not uniform. The systems used were varied and limited the number of sites customers could reserve. In some cases, reservation opportunities were non-existent. The procedures did not take advantage of current technologies. In fact, most reservations were taken by hand. The Bureau of State Parks conducted extensive research to find a solution. Many systems were considered, but most would have reduced options and limited DCNR's ability to track all services DCNR provides to its customers. DCNR's current system better meets the needs of its customers than other systems DCNR and PIBH considered when making the selection of a system designer. The PRRS and Central Call Center allow DCNR customers to have all the services enjoyed before implementation plus additional expanded services such as an increase in the number of sites reservable and a convenient toll free number for reservations up to eleven (11) months in advance of the arrival date. Since inception, over 448,000 reservations have been made and over 598,000 information calls have been handled. While not without limitations, the PRRS provides quality reservation services to DCNR customers and lightens the workload in the field offices thus permitting park staff to better serve its customers. From calendar year 1999 to 2001, an increase of fourteen (14) percent in reservations and sixteen (16) percent in customer service calls occurred. This impressive record is testament that the PRRS is serving the citizens and guests of the Commonwealth of Pennsylvania well.

Given the direct customer interface and mission critical nature of the application, DCNR made great strides to better support the PRRS, even though at that time DCNR did not have a full time information technology (IT) bureau. When the Department of Environmental Resources (DER) was split into the two agencies, the Department of Environmental Protection (DEP) and DCNR, the majority of DER IT support went to the DEP with DCNR being allotted only three IT positions. The agreement was DEP would work to provide DCNR with the same level of support they enjoyed as a unified organization. With that assurance, DCNR secured a dedicated Oracle programmer position to aid in the support and review of contractor Oracle development work. During the first few years, DCNR IT needs grew, and the ability of DEP to set DCNR primary needs at a high internal priority waned. It became clear DCNR needed a full IT support complement. In 2000, DCNR reorganized to include a Bureau of Information Technology (BIT). Four (4) positions [three (3) developers and one (1) database analyst] in BIT were committed to Oracle support for the Department, with an emphasis on supporting the PRRS. The contract was written with the goal of allowing DCNR to take over the support of this application. These positions were to fulfill that role. During the early stages of BIT, these positions were called upon to support efforts beyond the PRRS application.

BIT has been working to achieve a full complement of sixteen (16) IT staff personnel. BIT established areas for web development and support, networking and desktop support, and application development and consulting type support. As these areas were being staffed, the original four (4) positions became more focused on Oracle related efforts. During 2002, BIT reorganized to include an area dedicated to contracted efforts and project management. With this change, the PRRS development positions are now far more focused on Oracle development for

the PRRS specifically. The reorganization has allowed BIT to better monitor IT contracts from a sound requirements definition to a successful implementation. Since its reorganization, DCNR has not experienced a failed IT contract and customer satisfaction has improved dramatically.

Along with the changes within BIT, the Bureau of State Parks has increased the staffing of the PRRS Section. Additionally, workloads for reconciliations, refunds, and the Call Center have diminished, which means park and customer questions can now be handled in a more timely fashion. With a more distributed workload, there is more time available for application testing of enhancements by the user community. This was a major accomplishment.

Because of the Departmental and BIT reorganization, the PRRS is getting the focused attention it needs. In the past year alone, the entire infrastructure has been upgraded including the servers, the Oracle forms, the backend database, the terminal presentation software, and the credit card tools. Better security has been implemented and the speed of many areas of the application has been improved dramatically. Now DCNR can keep current with emerging technologies and use them to increase the functionality and dependability of the PRRS. As the in-house staff became more familiar with the application, Parks and BIT were able to implement a number of business rule changes such as the addition of camping cottages and the ability to allow customers to bring the family pet to selected campsites. Oracle software has changed as well, and DCNR stands ready to take advantage of the new technologies Oracle brings to the table. Many future modifications and enhancements await the PRRS as DCNR begins to revamp this five (5) year-old application to incorporate new business rules and Oracle improvements, such as database level validations, a new look and feel of Oracle forms and web tools. These efforts will require the aid of contracted support. To make these contracts a success, BIT has been developing documentation and coding standards by which the vendors will be measured.

Department of the Auditor General's Comments

DCNR was not forced to select and contract with PIBH. DCNR's assertion that the problems cited in the special audit report were caused by provisions of "Pennsylvania law" which are intended to help the disadvantaged is an attempt to divert attention from DCNR's own failure to properly carry out its overall responsibility for the project, particularly the software portion of it.

There is no evidence that DCNR found the <u>content</u> of Dulcian's work to be inaccurate. DCNR paid Dulcian in full and stated in its response that Dulcian had complied with service requirements of the contract. Even if it assumed that Dulcian's conclusions may have been selfserving, it does not diminish the fact or magnitude of the weaknesses of PRRS described by Dulcian such as missing functionality, non-standard design elements, data integrity problems and the failure to meet accounting standards.

It is encouraging that DCNR has implemented changes to strengthen its IT contracting procedures and the level of support given to PRRS. However, the number and scope of the changes confirm the special audit's conclusions that DCNR lacked staff and resources to properly manage the contract during the critical period when PRRS was being implemented.

DCNR'S ADDITIONAL RESPONSES (Continued)

II. DISCUSSION

The next section of this response is a positive statement addressing how DCNR developed and implemented the PRRS. It focuses on project preparation as well as PRRS system design, development/implementation, and operation.

A. PROJECT PREPARATION

State Park managers and staff were organized into a task force to improve reservation offerings. This group spent extensive time analyzing how manual systems could be implemented in an automated environment, studying available automated systems, weighing customer needs, reviewing business rules and considering the unique circumstances of managing a large and varied State Park system such as Pennsylvania's. The group presented findings to DCNR management, which were consistent with these highly specialized considerations.

DCNR made the final decision to establish a central reservation system for State Park facilities in 1995. After completing the Request For Information process, DCNR proceeded with development of a Request For Proposal. Prior to the pre-proposal conference and proposal submission, PIBH informed DCNR that it would exercise its right to assume the contract under existing law. DCNR consulted with the Department of General Services and was advised PIBH had a legal right to assume the contract, without competition, if it could demonstrate its ability to perform the contract requirements. The mechanism the Commonwealth uses for determining a contractor's ability to perform a service is the submission of a proposal; so DCNR required PIBH to develop and submit a complete project proposal. The submission was evaluated and found to adequately demonstrate PIBH's ability to perform the service.

DCNR wanted a unified approach that would prevent one vendor from suggesting another vendor is at fault, should the PRRS not be working completely for the public. PIBH did not have an in-place reservation software and, as a result, PIBH needed to partner with a vendor that could offer this component. PIBH and DCNR systematically and jointly considered subcontractors to provide the software. Approximately six (6) software vendors gave initial presentations. Two vendors accommodated the majority of system requirements. Info 2000 had a program used by a number of other states. Its software was not ORACLE based and could not meet all the needs of DCNR and State Park customers. Every other state used as a reference indicated they had experienced Info 2000 software crashes and inflexibility in accommodating their business needs. SunTrack software by SunCoast Scientific references revealed a solid system. SunCoast would provide source code to DCNR so DCNR could make business rule changes as needed. Through a scored evaluation method, it was determined that Unisys and SunCoast Scientific, using Oracle software, would be able to best meet DCNR program needs. Although the scoring of the software showed a clear advantage in selecting the SunCoast/Unisys solution, AbiliTech and PIBH indicated they preferred Info 2000 software for what DCNR felt were clearly inappropriate reasons, but stated they could work with either vendor. Info 2000 did not use Oracle software, but instead used a combination of middleware to achieve its functionality. Using various software packages was a weak point, as it would be hard to troubleshoot problems. As noted earlier, DCNR wanted a contract that required a vendor to supply both software and a Call Center operation; so PIBH began its relationship with Unisys, while DCNR negotiated a contract directly with PIBH as the Contractor for this effort.

B. PRRS SYSTEM DESIGN

After the extensive requirements gathering that occurred prior to the RFP, the next step was to finalize the requirements and to begin the design of the PRRS application. Work groups were established in the following areas:

- 1. Product design and data information
- 2. Integration
- 3. Security
- 4. Notebook Manual
- 5. Call Center
- 6. Policy
- 7. System testing, server hardware and troubleshooting
- 8. Telecommunications
- 9. Park Workstations
- 10. Park Facility preparation
- 11. Training
- 12. Marketing
- 13. Disaster Recovery

These work groups met on a regular basis. Meetings of work group leaders were held to coordinate their products.

The IT program was developed using a rapid application development (RAD) process. During this process, certain innovations such as including attendance reporting and printing boat agreement renewals were discussed and presented as part of the overall design. Iterations of the Detailed Design Document (DDD) were developed and provided to the appropriate PRRS work groups for comment. Enhanced design functionalities were identified as possibilities for current and future PRRS enhancements, but many were not needed for basic reservations and information calls which were the main purpose of the contract.

Throughout the entire process, DCNR understood its obligations and maintained a focus on the core needs of the application. Prior to 1997, DCNR publicized the transition to the central reservation system. It was important to alert the public to the change. State park attendance averages approximately 36 - 38 million visitors annually. Families depend on parks for annual vacations, reunions, etc; so DCNR was determined to offer this service as soon as it became available. When the original proposal was submitted by the PIBH/Unisys/SunCoast team, it was estimated that 80% of the PRRS needs were already contained within various business modules that comprised the SunCoast product. including a Company, Person and Object Tracking module, an Accounting, Fees and Billing module, and Executive Decision Support module. Also, SunCoast had begun to develop a Reservation module for another park system. This meant that only 20% of the overall PRRS solution had to be built as part of the contractual work effort. This 20% would cover whatever customization needs might arise for Pennsylvania park reservation and registration type business rules. It was also estimated that this 20% would only take a few months to develop.

As the design was finalized, it became increasingly clear that more customization would be needed than was originally realized. PIBH now estimated that DCNR would only be able to utilize 20% of the business logic from the base modules. Accordingly, 80% of business rules would need to be a customized effort. At that point, the Bureau of State Parks prioritized the functionalities contained within the Design Document. To do that, the work group team went back to the core requirements for this application. A solution had to be developed that could be implemented during the season for which the rollout had been publicized and would keep the initial implementation within budget. Areas of functionality were prioritized and designated as candidates for the initial implementation of the PRRS.

C. PRRS SYSTEM DEVELOPMENT/ IMPLEMENTATION

Upon completing the design document, the team began work on the customized portions of the software. The date for the publicized rollout was approaching; so assessments needed to be made concerning the status of the product's ability to provide the core program needs. DCNR told PIBH to start using the software with the public in June of 1998, as it could handle reservation and information calls. DCNR had a plan to add the remaining elements desired.

Since 1999, DCNR primarily has been handling enhancements with in-house support. One contract was implemented to aid in this effort, but because of DCNR's limited staffing, control of this contract did not meet expectations. Contracted support was avoided until in-house staff had a better familiarity with the specified tasks and documented standards could be developed for measuring contractor performance.

DCNR has since contracted for Citrix and database support, which have aided in bringing PRRS into a more current tool set. They have also upgraded the Commonwealth recommended credit card tool – IC Verify. This enhancement allows the technical staff to call upon various software technical support experts for setup and configuration since all tools now are at supported versions. DCNR has also implemented non-standard support hours for application or networking issues that happen after standard work hours.

Newer database disaster recovery techniques can be applied to the PRRS backend. This fall, PRRS will take advantage of the primary and secondary infrastructure that will create an environment were every piece of data will be stored simultaneously within two databases, both with a RAD configuration. With this setup, four disks that house the exact same data records would have to coincidentally crash.

Agenda items for the coming year include continuing with tool upgrades, looking at new ways the Oracle database and forms can better manage and secure information, establishing an off-site location for the secondary server, and implementing new business enhancements as defined by the Bureau of State Parks.

D. PRRS SYSTEM OPERATION

Most of the cost of the contract was not for software. Software costs amounted to \$2,534,871.10, or only 37% of the total cost, while operational costs for reservations, information calls, etc. handled by the Call Center amounted to \$4,246,034.55 (the actual amount spent based on number of calls handled up to August 9, 2002) or 63% of the total cost. It is important to note that DCNR incurred no additional costs beyond those originally budgeted for the development phase of the PRRS software portion of the PIBH contract.

The benefits of the central reservation system are numerous. Visitors now are certain that they have a campsite before they drive for several hours to get to the campground. Callers now have one toll free phone number to call. The old reservation systems were not user friendly and caused major telephone problems in some rural telephone systems. Under the new system, reservation rules for different facilities were made more consistent and some are now identical. Referral reservations are now commonplace. When the Call Center cannot accommodate a request to reserve a facility at one park, the Call Center finds another park which has a vacant facility that can be reserved. Operators now handle information calls six (6) days a week from 7 a.m. to 5 p.m. Previously, information for analysis is now available for managers. This information was not readily available under the previous systems.

The process of getting DCNR to a point where today it runs a Call Center and maintains a software program has been progressive. DCNR saw the contract with PIBH as one with two (2) distinct components. One was the initial development and implementation of the software program. The other was the operation of the Call Center, which was needed to provide the customer service.

Prior to going live in 1998, the Bureau of State Parks had to standardize all information needed for use in the program as well as information to be used by the Customer Service Representatives (CSRs) in conjunction with the program. Park staff compiled various types of feature data for the 7,000 plus campsites, 36 group tenting areas, 280 cabins, 299 pavilions, 30 small camping cottages, and 10 walled tents for input into the PRRS so that the Call Center would have all the same data on each reservable site, regardless of park

location. These feature lists ranged from a few to as many as 28 different features. In addition, general information on the park facilities that are not reservable had to be compiled and put into a format that CSRs could readily access in order to answer customer inquiries. An extensive manual on park activities and features was developed for CSRs. This manual included items such as bicycling, horseback riding, brochures, leased campsites, park concessions, metal detecting, other state recreation and natural resource agencies, and other relevant information.

As DCNR compiled the information and looked at how other Call Centers were being operated, it was evident DCNR needed to use a phased-in process. While the contract envisioned a single step, the more feasible approach required a series of steps. By creating a pilot registration operation at Gifford Pinchot State Park for testing, the contractor was able to develop a more efficient Call Center and support group. Turning Call Center staff who were not familiar with park operations into experts on all the various activities, features, and facilities in PA State Parks with training was a massive undertaking. DCNR facilitated the training process in the fall of 1997 when it decided to have the CSRs start handling the information calls and questions that were being handled by Central Office staff. Not only did it help the CSRs get to know Pennsylvania and the layout of the State Park system, it gave them a feel for the attitude and concerns of customers. In addition, it freed up over 2,000 hours of full-time staff in Central Office to do other assigned tasks. By the time the PRRS went live on June 18, 1998, the Call Center was better equipped to handle the information calls and the reservation calls.

DCNR studied how other state park systems started central reservation call centers. Learning from their experiences, DCNR went live differently than any other state. Instead of doing a large scale marketing campaign and telling the general public that June 18th would be the day the system would be available to handle calls, DCNR phased in Call Center operations over the summer without the volume overload experienced by other states. This method allowed DCNR to get up and running with fewer issues than the other states. Those that advertised greatly all crashed during their opening day due to an overwhelming number of calls that no operation could handle. DCNR's decision to start taking reservations on a staggered basis allowed the program to get up and running smoothly. In fact, DCNR's PRRS has never crashed in the four years of its successful operation.

To bring uniformity to the DCNR's State Park system, DCNR had to look at all business rules and policies. Many had to be modified and others created. Customers as well as park staff now are seeing the advantages of rules and policies being enforced by the program uniformly across the Commonwealth.

During 1999 and 2000, the Program Coordinator, while monitoring activity at the Call Center, noted operational issues that prevented the Call Center from performing to DCNR's satisfaction. The performance concerns were presented to PIBH with a request to resolve them within a given time frame. In particular, the following items were requested:

- Submitting reports on a timely basis.
- Establishing of a chain of command so that personnel could be handled internally.
- Upgrading the computers to a Windows 2000 platform to be able to operate the upgraded software.
- Increasing customer service training for CSRs.
- Ensuring management is on site whenever the Call Center is open.
- Complying with Commonwealth policies.
- Instituting PA State Police background checks on all staff hired by the contractor to ensure no history of fraud or similar offenses since they would have access to sensitive information.

With the cooperation of and assistance from DCNR and PIBH, AbiliTech/Elwyn was successful in addressing DCNR's concerns.

With the enhanced software and cooperation of the contractor, there have been advances in customer service and improvements for the field park staff. As the Call Center staff has become acquainted with park operations and has become more proficient in the use of the software, there has been added success in strengthening the team approach to provide customer service. This service by the Call Center has now enabled park staff to perform other much needed park maintenance and customer service tasks.

DCNR has taken what it has learned, and identified what has and has not worked well, evaluated other Call Centers, and begun to develop a new RFP for Call Center services. This RFP is to be completed in 2002 so that a new contract can be in place for 2003. This will enable even more progress towards the most efficient and effective Call Center possible.

The Department of the Auditor General's Comments

DCNR wrote in its response, "PIBH had a legal right to assume the contract, without competition, <u>if it could demonstrate its ability to perform the contract requirements</u> [emphasis added]." We question whether DCNR <u>ever</u> evaluated PIBH's ability to provide the contracted items and particularly PIBH's ability to manage the software portion of the project. As we stated in Finding No. 1, there was no evidence that PIBH demonstrated, or that DCNR evaluated, the ability to manage the software portion of the failure to carry out those crucial preliminary steps was also demonstrated by the fact that DCNR began working with PIBH, including selecting the software vendor, <u>prior</u> to receiving PIBH's final proposal.

DCNR could have divided the project into two contracts, one for the call center and the other for the software. According to DCNR's response, it did not wish to do so because then one vendor could suggest that another vendor was at fault if PRRS did not work completely. DCNR did not resolve this concern by awarding the contract to PIBH. PIBH was only a middleman between DCNR and the subcontractors and did not actually manage their work. As a result, there is no clear line of accountability for the additional costs.

DCNR's statement that PIBH made the final determination of the software vendor is contradicted by the President/CEO of PIBH, the former President of AbiliTech and DCNR's Project Coordinator. All stated that DCNR, not PIBH, selected Unisys to be the software vendor.

It is both misleading and inadequate for DCNR to claim that failures and problems in the design and implementation of PRRS are explained by the need to prioritize certain functionalities. Apparently both DCNR and Unisys greatly underestimated the extent of the need to customize the system. The assertion that only 20 percent of the software system had to be built by Unisys as part of the contract work is not supported anywhere in the documentation. (A Suncoast official involved in the project told us that he never heard of the estimate mentioned by DCNR in its response and, that the estimate was unreasonable based upon the system requirements.). After work began on the Design Document, it became apparent that much more work would have to be done to ensure that the software met contract requirements. This situation could have been avoided through better management of the initial planning of the system requirements by DCNR.

The priorities that were eventually established by DCNR were determined informally, without documentation and without amending the contract. DCNR's contention that it prioritized the functionality to be provided by PRRS is not supported by any documentation or in any of the 13 interviews we conducted of individuals directly involved in the design and implementation of PRRS. According to several individuals, the revenue and fiscal models, the last two modules to be designed, were not completed at the time the DCNR Deputy Secretary of Administration directed that PRRS go on line. The statement in DCNR's response that it prioritized areas of functionality in order to get PRRS implemented "during the season for which the rollout had been publicized" is troubling. It implies that the project was driven more by public relations concerns than by contract requirements and sound management.

DCNR entered into a separate contract with PIBH for call center employees to answer telephone calls and prepare mailing because AbiliTech was concerned that the existing trained staff would resign during the unanticipated period of time it took to make the software operational. This was not a preconceived training opportunity and was not work the call center employees were originally hired or trained to do under the PRRS contract. Therefore, it was essentially busy work, even if DCNR derived some incidental benefit from it. Furthermore, the costs of such work were incurred as a direct result of delays in the software portion of the PRRS contract and should have been charged to the contractor and subcontractor, not paid by DCNR.

III. DCNR's RESPONSE TO AG FINDINGS AND RECOMMENDATIONS

The next section of this report will provide DCNR's response to the AG's four (4) findings identified in its report. To do so, DCNR will list each of the findings and recommendations verbatim, followed by DCNR's response to each finding and recommendation. After addressing each finding and recommendation specifically, DCNR will include additional comments where appropriate.

DCNR comments included in this section are presented under each of the four findings in the report.

IV. <u>CONCLUSION</u>

DCNR is pleased to report that our State Park revenue has increased since the Park Reservation and Revenue System was put in place. New revenue has been received through recent initiatives with the PRRS being the prime reason for this revenue increase. Customers are complimenting DCNR on improved visitor services. Increased public awareness of State Park services has been achieved through PRRS marketing. Workloads in field offices have been reduced and customer services have increased. Accurate and timely management information is now available and being used by DCNR for making decisions.

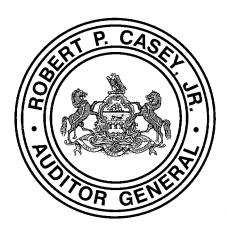
We acknowledge the problems with revenue tracking and are taking the necessary corrective actions. Software bugs are being identified and repaired. Other improvements and enhancements have already been completed. Credit card interfaces have been implemented and are working well. Call Center operators are scheduled better to respond to seasonal, weekly and daily rush periods. A systematic approach has been established to evaluate deficiencies with the application

PRRS has been a major effort that has improved customer service, reduced workload, improved revenue handling, and provided management information. While not perfect, this large and complex system has contributed significantly to the public service the Bureau of State Parks provides. It improves how park visitors make reservations while greatly expanding the opportunities to reserve state park facilities in advance. Visitors arrive, knowing that they will not be disappointed. They know that desired facilities are available. This immediately creates a positive interaction between park employees and the customers. All of these points are indicative of DCNR's success in achieving its objective: to improve customer services, standardize park procedures and fully automate the park reservation and revenue systems.

The program works for State Park customers and it works for park staff. We are meeting customer needs and the needs of field offices. This large customer service initiative has been very successful.

Department of the Auditor General's Comments

DCNR reported that PRRS was the prime reason for the increase in state park revenue. The Office of the Budget tried to assess this claim during its audit conducted in 2000 but was unable to do so. The condition of revenue records precluded the Office of the Budget from obtaining reliable data. Therefore, we question how DCNR can claim that the PRRS system is the prime reason for the revenue increase when PRRS still does not produce reliable revenue figures. It should also be noted that DCNR has instituted other revenue-generating initiatives, and, effective May 1, 2000, DCNR increased the prices for state park usage, i.e., rates for cabins and camping. These actions obviously account for at least part of the rise in revenues.



<u>COMMONWEALTH OF PENNSYLVANIA</u> DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES' PARK RESERVATION AND REVENUE SYSTEM REPORT DISTRIBUTION LIST

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