

# Memorandum

SEP 24 2004

DATE:

---

IG-34 (A04TG032)

Audit Report No.: OAS-L-04-21

SUBJECT

REPLY TO:

Evaluation of "The Federal Energy Regulatory Commission's Cyber Security Program - 2004"

TO: Chairman, Federal Energy Regulatory Commission

The purpose of this report is to inform you of the results of our annual evaluation of the Federal Energy Regulatory Commission's unclassified cyber security program. This evaluation was initiated in June 2004 and our field work was conducted through September 2004. The evaluation methodology is described in the attachment to this report.

### Introduction and Objective

The Commission's increasing reliance on information technology (IT) is consistent with satisfying the President's Management Agenda initiative of expanding electronic government. The Commission expects to invest \$23.5 million on IT related activities in Fiscal Year 2004 to meet mission requirements of regulating interstate transmission of natural gas, oil and electricity, and regulating gas and hydropower projects.

As required by the Federal Information Security Management Act (FISMA) and the Office of Management and Budget (OMB) implementing guidance, the Office of Inspector General (OIG) performed an independent evaluation to determine whether the Commission's unclassified cyber security program protected data and information systems.

### **Conclusions and Observations**

Our evaluation revealed that the Commission had made a number of improvements in its unclassified cyber security program. For instance, we found that the Commission had:

- Finalized a certification and accreditation methodology in March 2004 and recently completed the certification and accreditation process for all major applications and general support systems;
- Developed system-level contingency plans for all major systems; and,

 Utilized the National Institute of Standards and Technology (NIST) Security Self-Assessment Guide for IT Systems.

The above actions should continue to strengthen the Commission's cyber security program. However, we observed that the Commission had completely tested only one of five system-level contingency plans. Additionally, although the Commission used the NIST risk assessment methodology, it had yet to finalize a risk assessment methodology tailored to its needs—a key step in determining current security vulnerabilities within an organization and implementing mitigating controls. Successful completion of these ongoing initiatives should help correct remaining cyber security problems at the Commission.

Since no recommendations are being made in this letter report, a formal response is not required. We appreciate the cooperation of your staff throughout the audit.

George W. Collard, Acting Director Science, Energy, Technology, and Financial Audits Office of Audit Services Office of Inspector General

### Attachment

cc: Executive Director, FERC
Chief of Staff, DOE
Chief Information Officer, DOE

## SCOPE AND METHODOLOGY

We performed our evaluation between June and September 2004. We evaluated controls over network operations to determine the effectiveness of access controls related to safeguarding information resources from unauthorized internal and external sources. The evaluation included a limited review of general and application controls in areas such as certification and accreditation, access controls, application software development and change controls, and contingency planning.

We satisfied our evaluation objective by reviewing applicable laws and regulations pertaining to cyber security and information technology resources, such as FISMA and OMB Circular A-130 (Appendix III), and reviewing the Commission's overall cyber security program management, policies, and procedures. We also reviewed applicable standards and guidance issued by the National Institute of Standards and Technology. The Commission's headquarters were evaluated in conjunction with the annual audit of the Department's Consolidated Financial Statements, utilizing work performed by KPMG LLP, the Office of Inspector General contract auditor. Their review included limited analysis and testing of general and application controls for systems and a follow up review of the status of previously reported weaknesses.

We evaluated the Commission's implementation of the Government Performance Results Act of 1993 related to the establishment of performance measures for cyber security. We did not rely solely on computer-processed data to satisfy our objectives. Because our review was limited, it would not have necessarily disclosed all internal control deficiencies that may have existed at the time of our review.

The review was conducted in accordance with generally accepted Government auditing standards for performance audits and included tests of internal controls and compliance with laws and regulations to the extent necessary to satisfy the objectives. We held an exit conference with management officials on September 23, 2004.

→ FORS FIVEA

**2**001

DOE F 1325.8 (08-93)United States Government

Department of Energy

To Steph Fm Sue

## Memorandum

DATE:

SEP 30 2004

**REPLY TO** 

ATTN OF:

IG-34 (A04TG032)

SUBJECT:

Final Report Package for Evaluation of "The Federal Energy Regulatory Commission's

Cyber Security Program - 2004" Audit Report Number: OAS-L-04-21

TO:

Rickey R. Hass, Assistant Inspector General for Audit Operations

Attached is the required final report package on the subject audit. The pertinent details are:

1. Actual Staff days:

Actual Elapsed days:

95

2. Names of OIG and/or contractor audit staff:

Assistant Director:

Team Leader:

Auditor-in-Charge:

Audit Staff:

Kevin Majane Dan Weeber

Heather Lego

Mary Anthony and Chari Reines

3. Coordination with Investigations and Inspections:

Investigations:

Reginald France

June 1, 2004

Inspections:

Fatima Pashaei

June 1, 2004

egrge W. Collard, Acting Director

Science, Energy, Technology,

and Financial Audits Office of Audit Services Office of Inspector General

#### Attachments:

- 1. Final Report
- 2. Monetary Impact Report
- 3. Audit Project Summary Report
- 4. Audit Database Information Sheet

7. Contractor:

8. Contract No.:

9. Task Order No.:

### MONETARY IMPACT OF REPORT NO.: OAS-L-04-21

1. 7	Title of Audit:	Evaluation of "The Federal Energy Regulatory Commission's Cyber Security Program -2004"										
2. I	Division:	Science, Energy, Technology, and Financial Audits Division										
3. I	Project No.:	A04TG032										
4.	Type of Audit:								•			
	Financial: Financial S Financial F Other (specify Please report m lanations of aud	Related		tified in the	Program	y and Eff Results sing appl	icable colu	X mms. Prov	  vide additional			
	FINDING		COST IDANCE	QUESTIONED COSTS				MGT. POSITION	POTENTIAL BUDGET IMPACT			
(A)	(B) Title	(C) One Time	(D) Recurring Amount PerYear	(E) Questioned	(F) Unsup- ported	(G) Unre- solved	(H) Total (E)+(F)+(G)	(I) C=Concur N=Noncon U=Undec	(J) Y=Yes N=No			
	None											
TOT	ALS-ALL FINDINGS											
6.	,											

10. Approvals:

Division Director/Date:

Technical Advisor & Date

Page 1

# Office of the Inspector General (OIG) Audit Project Office Summary (APS)

.

Report run on:

September 29, 2004 11:08 AM

3			
•	21-J	M-04	21-JUN-04
1	17-s	EP-04	24-SEP-04 (
		88	95
	•	Elap.	Less Susp:
Date Cancelled: ) Report Number:	OAS-		
dit Codes and Perso	nnel	***	
•			
, , , , , , , , , , , , , , , , , , ,	530	MA.TAN	TF:
			<b>-</b>
			R
	7 <u>1</u> 7 11 17 W	and Graying C	
Task Information *	***		
Task Information *	***		
Task Information *  CO Tech. Rep:		•	
		•	
1	Date Terminated: Date Cancelled: Report Number: Report Type: GULATORY COMMISSION  AD: AIC: Team Ldr:	Date Terminated: Date Cancelled: Report Number: OAS- Report Type: LTR EGULATORY COMMISSION'S CY  dit codes and Personnel  AD: 530 AIC: 725 Team Ldr: 713	Date Terminated: Date Cancelled: )Report Number: OAS-L-04-21 Report Type: LTR LETTER EGULATORY COMMISSION'S CYBER SEC  AD: 530 MAJAN AIC: 725 LEGO Team Ldr: 713 WEEBE

Emp/Cont Name	**** Time	Charges **** Last Date
YI, J	3.1	18-SEP-04
WEEBER, D	11.0	18-SEP-04
REINES, C	17.3	18-SEP-04
LEGO, H	17.4	18-SEP-04
ANTHONY, M	18.0	04-SEP-04
Total:	66.8	

Attachment 4

→ FORS FIVEA

### AUDIT DATABASE INFORMATION SHEET

- 1. Project No.: A04TG032
- 2. Title of Audit: Evaluation of "The Federal Energy Regulatory Commission's Cyber Security Program 2004"
- 3. Report No./Date: OAS-L-04-21/September 24, 2004
- 4. Management Challenge Area: National Security
- 5. Presidential Mgmt Initiative: Expanded Electronic Government
- 6. Secretary Priority/Initiative: Information Technology Management
- 7. Program Code: Federal Energy Regulatory Commission
- 8. Location/Sites: Single-Site Audit/Federal Energy Regulatory Commission
- 9. Finding Summary: As required by the Federal Information Security Management Act (FISMA), we performed an independent evaluation to determine whether the Federal Energy Regulatory Commission's (Commission) unclassified cyber security program protected data and information systems. Our evaluation revealed that the Commission made a number of improvements in its cyber security program in areas such as certification and accreditation and contingency planning. However, we did note that the Commission had completely tested only one of five system-level contingency plans. Additionally, the Commission has not finalized its own risk assessment methodology.
- 10. Keywords:

Federal Energy Regulatory Commission

Federal Information Security Management Act

Cyber Security

Information Technology

FERC FISMA



DOE F 1325.8 (8-89) EFG (07-90)

### **United States Government**

**Department of Energy** 

# Memorandum

DATE: September 13, 2004

REPLY TO: IG-34 (A04TG032) Audit Report No.: OAS-L-04-21

SUBJECT: Evaluation of "The Federal Energy Regulatory Commission's Cyber Security Program - 2004"

то: Chairman, Federal Energy Regulatory Commission

The purpose of this report is to inform you of the results of our annual evaluation of the Federal Energy Regulatory Commission's (Commission) unclassified cyber security program. This evaluation was initiated in June 2004, and our field work was conducted through September 2004. The audit methodology is described in the attachment to the report.

### **Introduction and Objective**

The Commission's increasing reliance on information technology is consistent with satisfying the President's Management Agenda initiative of expanding electronic government. The Commission expects to invest \$23.5 million on information technology related activities in Fiscal Year 2004 to meet mission requirements of regulating interstate transmission of natural gas, oil and electricity, and regulating gas and hydropower projects.

As required by the Federal Information Security Management Act (FISMA) and the Office of Management and Budget (OMB) implementing guidance, the Office of Inspector General performed an independent evaluation to determine whether the Commission's unclassified cyber security program protected data and information systems.

### Conclusions and Observations

Our evaluation revealed that the Commission had made a number of improvements in its unclassified cyber security program. For instance, we found that the Commission had:

- Finalized a certification and accreditation methodology in March 2004 and began an effort to certify and accredit all major applications and general support systems;
- Utilized the National Institute of Standards and Technology Guide for self assessment of programs and systems; and,

Established a formal capital planning and investment control process.

Despite these improvements, we noted that the Commission had not completed contingency planning, risk management, and certification and accreditation of systems. For example, the Commission had developed system-level contingency plans for only three of five major systems and had completely tested only one of the plans. Although the Commission used the National Institute of Standards and Technology risk assessment methodology as required by FISMA, it had yet to finalize a risk assessment methodology tailored to its needs--a key step in determining current security vulnerabilities within an organization and implementing mitigating controls. Additionally, at the time of our review the Commission had only completed the certification and accreditation process for three of its five major applications and general support systems. Successful completion of these ongoing initiatives should help correct remaining cyber security problems at the Commission.

Since no recommendations are being made in this letter report, a formal response is not required. We appreciate the cooperation of your staff throughout the audit.

/S/
George W. Collard, Acting Director
Science, Energy, Technology,
and Financial Audits
Office of Audit Services
Office of Inspector General

#### Attachment

cc: Executive Director, FERC
Chief of Staff, Department of Energy
Chief Information Officer, Department of Energy

### SCOPE AND METHODOLOGY

We performed our evaluation between June and September 2004. We evaluated controls over network operations to determine the effectiveness of access controls related to safeguarding information resources from unauthorized internal and external sources. The evaluation included a limited review of general and application controls in areas such as certification and accreditation, access controls, application software development and change controls, and contingency planning.

We satisfied our evaluation objective by reviewing applicable laws and regulations pertaining to cyber security and information technology resources, such as FISMA and OMB Circular A-130 (Appendix III), and reviewing the Commission's overall cyber security program management, policies, and procedures. We also reviewed applicable standards and guidance issued by the National Institute of Standards and Technology. The Commission's headquarters were evaluated in conjunction with the annual audit of the Department's Consolidated Financial Statements, utilizing work performed by KPMG LLP, the OIG contract auditor. Their review included limited analysis and testing of general and application controls for systems and a follow up review of the status of previously reported weaknesses.

We evaluated the Commission's implementation of the Government Performance Results Act of 1993 related to the establishment of performance measures for cyber security. We did not rely solely on computer-processed data to satisfy our objectives. Because our review was limited, it would not have necessarily disclosed all internal control deficiencies that may have existed at the time of our review.

The review was conducted in accordance with generally accepted Government auditing standards for performance audits and included tests of internal controls and compliance with laws and regulations to the extent necessary to satisfy the objectives. We held an exit conference with the management on September XX, 2004.