

PART I: CAPITAL ASSET PLAN AND BUSINESS CASE (All Assets)

Agency U.S. Nuclear Regulatory Commission

Bureau

Account Title Salaries and Expenses

Account Identification Code 31-0200-0-1-276

Program Activity Nuclear Reactors

Name of Project Emergency Response Data System

Unique Project Identifier: 429-00-01-03-01-2020-00

(IT only)(See section 53)

Project Initiation Date 1988

Project Planned Completion Date: Through FY 2006

This Project is: Initial Concept _____ Planning _____ Full Acquisition _____ Steady State XX
Mixed Life Cycle _____

Project/useful segment is funded:

Incrementally X _____
Fully _____

Was this project approved by OMB for previous Year Budget Cycle?

Yes X No _____

Did the Executive/Investment Review Committee approve funding for this project this year? (PRC)

Yes X No _____

Did the CFO review the cost goal?

Yes X No _____

Did the Procurement Executive review the acquisition strategy?

Yes X No _____

Is this investment included in your agency's annual performance plan or multiple agency annual performance plans?

Yes X No _____

Does the project support homeland security goals and objectives, i.e., 1) improve border and transportation security, 2) combat bio-terrorism, 3) enhance first responder programs; 4) improve information sharing to decrease response times for actions and improve the quality of decision making?

Yes X No _____

Is this project information technology? (See section 300.4 for definition)

Yes X No _____

For information technology projects only:

a. Is this Project a Financial Management System? (see section 53.3 for a definition)

Yes _____ No X

If so, does this project address a FFMIA compliance area?

Yes _____ No X

If yes, which compliance area?

b. Does this project implement electronic transactions or record keeping that is covered by the Government Paperwork Elimination Act (GPEA)?

Yes _____ No X

If so, is it included in your GPEA plan (and does not yet provide an electronic option)?

Yes _____ No _____

Does the project already provide an electronic option?

Yes _____ No _____

c. Was a privacy impact assessment performed for this project?

Yes X No _____Information in this record was deleted
in accordance with the Freedom of Information
Act, exemptions 5
FOIA- 2003-241

A114

d. Was this project reviewed as part of the FY 2002 Government Information Security Reform Act review process?

Yes X No

d.1 If yes, were any weaknesses found?

Yes X No

d.2. Have the weaknesses been incorporated into the agency's corrective action plans?

Yes X No

e. Has this project been identified as a national critical operation or asset by a Project Matrix review or other agency determination?

Yes No X

e.1 If no, is this an agency mission critical or essential service, system, operation, or asset (such as those documented in the agency's COOP Plan), other than those identified above as national critical infrastructures?

Yes No X

SUMMARY OF SPENDING FOR PROJECT STAGES

(In Millions)

(Estimates for BY+1 and beyond are for planning purposes only and do not represent budget decisions)

	PY-1 and Earlier	PY 2002	CY 2003	BY 2004
Planning:				
Budgetary Resources				
Outlays				
Acquisition :				
Budgetary Resources				
Outlays				
Total, sum of stages:				
Budgetary Resources				
Outlays				
Maintenance:				
Budgetary Resources	320	320	330	327
Outlays	175	320	320	330
Total, All Stages:				
Budgetary Resources	320	320	330	327
Outlays	175	320	320	330

I. A. Project Description

1. Provide a brief description of this project and its status through your capital planning and investment control (CPIC) or capital programming "control" review for the current cycle.

ERDS was initiated in 1988 prior to the development of NRC's EA application and technology layers. Since ERDS is a steady-state system that originated many years ago, ERDS hardware and software is dated and in the future may lack vendor support, and may need to be replaced. ERDS project team members will

work with the OCIO EA team members to ensure that ERDS components will be appropriately addressed in the

2. What assumptions are made about this project and why?

It is assumed that this project will continue to operate at its current level and operational efficiency until it is replaced by an enhanced version. Current plans are that the system will be replaced over two years, beginning in FY 2005. That system will be fully supported by a CPIC.

3. Provide any other supporting information derived from research, interviews, and other documentation.

No other supporting information was derived from other sources.

I.B. Justification (All Assets)

1. How does this investment support your agency's mission and strategic goals and objectives?

The ERDS supports the agency's Nuclear Reactor Safety arena strategic goal by providing crucial information to the NRC and agency stakeholders in a timely manner. ERDS provides data regarding potential releases of radiation from nuclear power plants; and provides information on events at nuclear power plants.

NRC serves as the Lead Federal Agency under the Federal Radiological Emergency Response Plan. In this capacity the NRC directs and coordinates the Federal response activities of FEMA, EPA, USA, and DOE, as well as others. In order to assist the NRC's decision makers during an event response, all components of the OCIMS features and capabilities are used in the Operations Center.

2. How does it support the strategic goals from the President's Management Agenda?

ERDS is responsive directly to the information needs of agency decision-makers. Supports HLS, War on Terrorism and revitalizing the economy.

3. Are there any alternative sources in the public or private sectors that could perform this function? No.

4. If so, explain why your agency did not select one of these alternatives.

5. Who are the customers for this project?

The stakeholders are the managers and professional staff in the reactor safety arena and NRC management in the regions and headquarters, staff involved in reactor protective measures in regions and headquarters, and state EOCs.

6. Who are the stakeholders of this project?

The organization and staff mentioned in (5) above, plus utility staff and managers and state governments.

7. If this is a multi-agency initiative, identify the agencies and organizations affected by this initiative. No.

8. How will this investment reduce costs or improve efficiencies? Not applicable.

9. List all other assets that interface with this asset: Emergency Telecommunications System and the agency Wide-Area Network.

Have these assets been reenigneered as part of this project? Yes X, No ____.

I.B. Justification (All Assets)

7. How does this investment support your agency's mission and strategic goals and objectives?

NRC Mission: To regulate the Nation's civilian use of byproduct, source, and special nuclear materials to ensure adequate protection of the public health and safety, to promote the common defense and security, and to protect the environment.

NRC's Strategic Goals	NRC Strategies	Supports	How Does Your Initiative Support this NRC Goal or Corporate Management Strategy?
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<p>1. Nuclear Reactor Safety: Prevent radiation-related deaths and illnesses, promote the common defense and security, and protect the environment in the use of civilian nuclear reactors.</p>	<p><i>We will respond to operational events involving potential safety or safeguards consequences.</i></p>	<p>X</p>	<ul style="list-style-type: none"> ▪ ERDS is a real-time data system that allows safety-related information to be downloaded from nuclear power plant computers to the NRC Operations Center (NRCOC). The ERDS collects nuclear power plant performance and environmental data from 72 commercial nuclear power reactor sites regulated by the NRC ▪ The transmission of data to ERDS is initiated at the reactor unit following the declaration of an alert of higher event classification. The workstation at the reactor site dials-in to the NRCOC ERDS system to allow the custom generation and display of trend plots and data. All plant dial-ins are validated under the ERDS software. Should data be tampered with on the dial-in data stream, checksums would fail and be rejected at the Alpha Servers. All user dial-ins are validated by the DEC Servers and all terminal dial-ins are validated by the DEC Servers and the Open VMS operating system security ▪ control ERDS design concept embodies automatic acquisition of a predetermined list of nuclear power plant parameters, with electronic transmission of the data over standard telephone lines, to a computer at the NRCOC and Incident Response Centers in the Regional Offices. Access is also provided to other users, such as the affected state agencies and NRC Technical Training Center (TTC). ▪ <u>The data received from the nuclear power plants are those which may assist the NRC in performing its role of oversight during a nuclear power plant emergency.</u>
<p>2. Nuclear Materials Safety: Prevent radiation-related deaths and illnesses, promote the common defense and security, and protect the environment in the use of source, byproduct, and special nuclear material for medical, academic, and industrial purposes.</p>	<p><i>We will respond to operational events involving potential safety or safeguards consequences</i></p>		<ul style="list-style-type: none"> ▪ ERDS collects data on reactor status

3. Nuclear Waste Safety: Prevent adverse impacts from radioactive waste to the current and future public health and safety and the environment, and promote common defense and security	<i>We will respond to operational events involving potential safety or safeguards consequences</i>		▪ ERDS collects data on reactor status
4. International Nuclear Safety Support: Support U.S. interests in the safe and secure use of nuclear materials and in nuclear non-proliferation			▪ ERDS collects data on reactor status
NRC Corporate Management Strategy 1: Employ innovative and sound business practices			▪ ERDS collects data on reactor status
NRC Corporate Management Strategy 2: Sustain a high-performing, diverse workforce.			▪ ERDS collects data on reactor status
NRC Corporate Management Strategy 3: Provide proactive information management and information technology services.			▪ ERDS collects data on reactor status
NRC Corporate Management Strategy 4: Communicate strategic change.			▪ ERDS collects data on reactor status

2. How does it support the strategic goals from the President's Management Agenda?

ERDS supports the reactor arena in providing information only.

Presidents Management Agenda (PMA)	Supports	How Does Your Initiative Support This PMA Item?
Human Capital		
Competitive Sourcing		
Financial Performance		
E-Government		
Budget and Performance Integration		

3. Are there any alternative sources in the public or private sectors that could perform this function?

No there are not any alternative sources in the public or private sectors that could perform this function.

4. If so, explain why your agency did not select one of these alternatives.

5. Who are the customers for this project?

The customers for ERDS are all NRC responders and regional office personnel, the state agencies and local governments. Internal customers are those staff needed the information on status of reactors during events.

6. Who are the stakeholders of this project?

Stakeholders include the NRC staff, state and local governments.

7. If this is a multi-agency initiative, identify the agencies and organizations affected by this initiative.

No, this is not a multi-agency initiative.

10. How will this investment reduce costs or improve efficiencies?

ERDS is necessary to ensure that the NRC's Operations Center continues to provide all the response capabilities needed by the response organization to respond to events. The systems must be fully integrated and operator friendly and meet the technological needs of the response teams. It has a need to be up and running 24 hours a day, 7 days a week ("always on").

11. List all other assets that interface with this asset: the Agency wide-area network, the Emergency Telecommunications System and the Emergency Response Data System (ERDS). Have these assets been reengineered as part of this project? Yes X, No .

I.C. Performance Goals and Measures (All Assets)

This section does not apply to ERDS

Fiscal Year	Strategic Goal(s) Supported	Existing Baseline	Planned Performance Improvement Goal	Actual Performance Improvement Results	Planned Performance Metric	Actual Performance Metric Results
2002						
2003						
2004						
2005						
2006						
2007						

I.D. Program Management [All Assets]

1. Is there a program manager assigned to the project? If so, what is his/her name? Yes X No
John Jolicoeur X
2. Is there a contracting officer assigned to the project? If so, what is his/her name? Yes No X
Stewart
3. Is there an Integrated Project Team? Yes No
- 3.A. If so, list the skill set represented.
4. Is there a sponsor/owner? Yes, DIRO/NSIR Yes X No

Part II: Additional Business Case Criteria for Information Technology**II. A. Enterprise Architecture****II.A.1 Business**

A. Is this project identified in your agency's enterprise architecture? If not, why?

Yes, the ERDS is listed in the agency's portfolio database.

B. Explain how this project conforms to your departmental (entire agency) enterprise architecture.

The ERDS falls within the scope of NRC's baseline EA. As such, this system supports the performance of the business functions identified in the agency enterprise business model, documented in the NRC publication: NRC Enterprise Model, provides the data required by NRC's Service to Citizens – public health, and utilizes products and components that are aligned with NRC's current application and technology standards and future direction as specified in NRC's existing technology planning documents. Although the NRC's existing technology planning documents are being updated, the current documents identify some core technology needs. These core technology needs are in the process of being updated and expanded through an evolving organizational EA governance process that will ensure that all current and future technology needs are vetted by NRC business managers to validate links to NRC business drivers for the identified technologies. When fully functional, NRC's integrated EA and CPIC processes will enable NRC to apply the same sound risk management strategies to its IT investments that have long characterized NRC's core business operations. NRC has also provided the Federal Enterprise Business Reference Model (FEBRM) with high level business functions and subfunctions derived from the NRC Enterprise Model. NRC is working to uncover additional internal cross-cutting initiatives and has begun to look at other agency business processes and state business processes to identify potential areas for collaborative efforts.

C. Identify the Lines of Business and Sub-Functions within the Federal Enterprise Architecture Business Reference Model that will be supported by this initiative.

The ERDS supports the Service to Citizens: public health function and the prevention of illness subfunction.

D. Briefly describe how this initiative supports the identified Lines of Business and Sub-Functions of the Federal Business Architecture.

ERDS provides data for the analysis of nuclear power plant conditions, which allows the development of appropriate public protective measures.

E. Was this project approved through the EA Review committee at your agency?

The EA committee in NRC reviewed this project.

F. What are the major process simplification/reengineering/design projects that are required as part of this initiative?

There were no major process simplifications/reengineering or design changes needed for ERDS. This is a steady state system, and no changes were required.

G. What are the major organization restructuring, training, and change management projects that are required?

There are no major organization restructuring, training, and change management projects required, except that continued operator training is required.

H. What are the Agency lines of business involved in this project?

This systems deals directly with the power reactor line of business in the NRC. Within the reactor line of business, this system deals directly with the incident response program.

I. What are the implications for the agency business architecture?

There are no changes envisioned for ERDS, and there are no changes for the NRC's business architecture.

II.A.2 Data

A. What types of data will be used in this project?

This project processes nuclear power plant data reflecting plant conditions, radiological releases, and meteorological data.

B. Does the data needed for this project already exist at the Federal, State, or Local level? If so, what are your plans to gain access to that data?

No, these data do not exist in other Federal agencies, not state governments (with the exception of the State of Illinois) One of the customers of the data are the various state and local governments.

C. Are there legal reasons why this data cannot be transferred? If so, what are they and did you address them in the barriers and risk sections above?

The data provided are unanalyzed nuclear power plant data and comprise sensitive unclassified pre-decisional information.

B. If this initiative processes spatial data, identify planned investments for spatial data and demonstrate how the agency ensures compliance with the Federal Geographic Data Committee standards required by OMB Circular A-16.

No, spatial data are not processed in ERDS.

II.A.3 Application and Technology

A. Discuss this initiative/project in relationship to the application and technology layers of the EA.

Include a discussion of hardware, applications, infrastructure, etc.

This project was completed prior to the completion of NRC's EA architecture layers. Since ERDS is a steady-state system, the ERDS project team will work with CIO's Architecture Team to assure that requirements are met.

B. Are all of the hardware, applications, and infrastructure requirements for this project included in the EA Technical Reference Model? If not, please explain.

ERDS hardware, applications, and infrastructure requirements are under discussion with the OCIO EA team that is updating the current version of NRC's TRM. Indications are that ERDS current hardware and software will be considered "legacy" in the updated TRM. ERDS team members will work closely with OCIO EA team members to determine when hardware and software must be replaced, identify the applicable target technologies, and contribute to the overall migration planning effort.

II. B. Security and Privacy

NOTE: Each category below must be addressed at the project (system/application) level, not at a program or agency level. Referring to security plans or other documents is not an acceptable response.

II.B.1. How is security provided and funded for this project (e.g., by program office or by the CIO through the general support system/network)?

Security for ERDS is provided in several ways. Security for the Wide-Area-Network is provided by the Office of the Chief Information Officer; this security is address in a separate Exhibit 300 submission. Access for ERDS is protected by physical security (the physical location for ERDS is in a security building, then within the secure building, ERDS terminals are located within a security, limited access "Operations Center". In addition to physical security, there are security procedures and limited access to the terminals within the Operations Center.

A. What is the total dollar amount allocated to security for this project in FY 2004?

There are no ERDS security funds specically allocated.

II.B.2 Does the project (system/application) meet the following security requirements of the Government Information Security Reform Act, OMB policy, and NIST guidance?

The ERDS meets the security requirements of the Government Information Security Reform Act, OMB policy and NIST guidance.

A. Does the project (system/application) have an up-to-date security plan that meets the requirements of OMB policy and NIST guidance? What is the date of the plan?

Yes, ERDS has an up-to-date security plan that was completed in June 2001.

B. Has the project undergone an approved certification and accreditation process? Specify the C&A methodology used (e.g., NIST guidance) and the date of the last review.

The ERDS did undergo an approved certification and accreditation process. This process followed the NIST guidance, and was completed in June 2001.

C. Have the management, operational, and technical security controls been tested for effectiveness? When were most recent tests performed?

Yes, the management, operational and technical security controls were tested for effectiveness in February 2001.

D. Have all system users been appropriately trained in the past year, including rules of behavior and consequences for violating the rules?

Yes, the system users are appropriately training by team coordinators, whose job it is to provide training on rules of behavior and the consequences for violating the rules.

E. How has incident handling capability been incorporated into the system, including intrusion detection monitoring and audit log reviews? Are incidents reported to GSA's FedCIRC?

Intrusion detection is accomplished at several levels. The first level is incorporated through Novell software on RCS servers for the primary and backup servers. Audits are accomplished via Novell logs. While there are no instances of attempted intrusion, NRC would report the attempted intrusions to GSA if they occurred.

F. Is the system operated by contractors either on-site or at a contractor facility? If yes, does any such contract include specific security requirements required by law and policy? How are contractor security procedures monitored, verified, and validated by the agency?"

NRC follows Management Directive 12.3 on matters concerning security and contractors. Contractors with access to ERDS are required to undergo a background investigation. The contractors with access to ERDS are required to have an "L" level clearance.

II.B.3 How does the agency ensure the effective use of security controls and authentication tools to protect privacy for those systems that promote or permit public access?

This does not apply, since ERDS is not accessed by the public.

II.B.4 How does the agency ensure that the handling of personal information is consistent with relevant government-wide and agency policies.

This is applicable to ERDS. ERDS is a limited access system within the NRC.

II.B.5 If a Privacy Impact Assessment was conducted, please provide a copy to OMB.

ERDS does not contain any personal information about individuals.

II. C. Government Paperwork Elimination Act (GPEA)

ERDS is not covered by GPEA.

II.C.1 If this project supports electronic transactions or record-keeping that is covered by GPEA, briefly describe the transaction or record-keeping functions and how this investment relates to your agency's GPEA plan.

See above

II.C.2 What is the date of your GPEA plan?

See above

II.C.3 Identify any OMB Paperwork Reduction Act (PRA) control numbers from information collections that are tied to this investment.

See above.