# DEPARTMENT OF ENERGY FY 1999 CONGRESSIONAL BUDGET REQUEST OFFICE OF SCIENTIFIC AND TECHNICAL INFORMATION ENERGY SUPPLY, RESEARCH AND DEVELOPMENT (Tabular dollars in thousands, Narrative in whole dollars)

#### TECHNICAL INFORMATION MANAGEMENT

#### PROGRAM MISSION

The mission of the Technical Information Management program (TIM) is to direct, coordinate, and implement the management and dissemination of scientific and technical information resulting from Department of Energy research and development (R&D) and environmental programs. The program also provides worldwide energy scientific and technical information to the Department of Energy (DOE), United States (U.S.) industry, academia, and the public through interagency and international scientific and technical information exchange agreements.

The Department of Energy makes a multi-billion dollar annual investment in energy- and environment-related R&D activities. The primary and immediate product of this investment is knowledge (or information) - knowledge that will lead to advances in basic science and technology; more efficient uses and conservation of our nation's energy resources; more advanced technologies for environmental protection and remediation; cleaner-burning fuels and better transportation sources. Ultimately, the application of the knowledge created by the Department's R&D contributes to a more competitive economy, a cleaner environment, a more secure national defense - in short, a higher standard of living. At the same time, other industrialized nations are also investing in energy R&D, and the resulting technical information is globally recognized as a valuable commodity that can be exchanged in order to save taxpayer dollars and avoid duplicative research. Without effective and comprehensive technical information management, returns on R&D investments will not be realized, and wasteful duplication of effort will likely result. Requirements for technical information management and dissemination are delineated in the American Technology Preeminence Act; the Paperwork Reduction Act (and implementing guidelines); Department of Energy enabling legislation; and international treaties/agreements with the International Atomic Energy Agency and the International Energy Agency.

The GOAL of the Technical Information Management program is:

To add value to America's investment in energy research and development by facilitating the use of scientific and technical information to advance U.S. interests.

#### PROGRAM MISSION - TECHNICAL INFORMATION MANAGEMENT (Cont'd)

### Specific GOALS include:

- Lead the Department in the collection, organization, preservation, and dissemination of scientific and technical information resulting from the Department's R&D programs; and
- Provide worldwide scientific and technical energy information to the Department, U.S. industry, academia, and the public.

### The OBJECTIVES related to these goals are to:

- Increase the number of researchers and citizens served with scientific and technical information at a lower cost per person served;
- Lead/advance the institutionalization of an electronic, decentralized technical information collection that contributes to the development of a National Library of Energy Science and Technology;
- Negotiate and implement agreements for DOE's widespread, electronic access to U.S. science journals;
- Provide more effective mechanisms for public access to global energy-related information; and
- Capitalize on interagency, domestic, and international opportunities to gain access to non-Departmental scientific and technical energy information for U.S. researchers, national security communities, policymakers, academia, and the public.

#### PERFORMANCE MEASURES:

- Number of persons served with scientific and technical information and reduction in cost per person served;
- Percent of Departmental technical information exchanged electronically;
- · Age and timeliness of information acquired and disseminated;
- Reduction in cost for information acquisition and processing;
- Level of partnering and adoption of common standards/practices within the Department and among interagency and international information communities;
- Percent and amount of foreign energy-related information acquired to augment the U.S. collection and promote national competitiveness;
- Amount of information disseminated and number and diversity of customer/market segments reached or "benefitted" by the Department's scientific and technical information collection;
- Percent of special customer projects/services completed on time and within budget; and
- Customer satisfaction with Departmental scientific and technical information products and services.

#### PROGRAM MISSION - TECHNICAL INFORMATION MANAGEMENT (Cont'd)

#### Significant ACCOMPLISHMENTS AND PROGRAM SHIFTS:

The Technical Information Management program continues to make progress toward strategic priorities, known collectively as "Bringing Science Information to the Desktop." These priorities are described below:

#### • Electronic Information Exchange and the Information Bridge through EnergyFiles

As technology and common standards advance, it becomes more timely and economical to exchange both bibliographic and full-text information in electronic media. While it will be necessary for the Department to maintain a centralized point of coordination for this electronic infrastructure (for policy, standards, archiving, etc.), Departmental elements will realize efficiencies in information technology, management, printing, and publishing as a result of Department-wide electronic exchange. The Information Bridge, which provides access to 40,000 full-text, electronic DOE R&D reports, will continue to enable the user to bypass expensive and time-consuming bibliographic searches and requests for paper reports. The Information Bridge is available through EnergyFiles, a virtual information environment of electronic resources throughout the Department. Distributed information collections throughout the Department will also be electronically interconnected and searchable.

#### • Enhanced Access to Electronic Science Journals

The Technical Information Management program is aggressively pursuing agreements for the availability of electronic science journals for the Departmental research community. The program will negotiate licenses with two main science journals in FY 1999, thereby saving the Department the cost of multiple paper-based subscriptions. Electronic journal agreements are estimated to save the Department \$8,000,000 annually.

#### • Archive of Legacy Documents

The Department's valuable historic collection of scientific and technical information represents billions of dollars of research and development and constitutes much of our nation's energy-related science base. Currently, the vast majority of this legacy collection is in microfiche or paper media rather than in electronic form, which is targeted as the primary means of archival by FY 2000. Interagency standards, cooperation, and agreements are now allowing the use of optical media as an acceptable means of storage. In addition to saving resources, optical media also allow a more user-friendly and cost-effective means of access and retrieval.

#### PROGRAM MISSION - TECHNICAL INFORMATION MANAGEMENT (Cont'd)

Significant ACCOMPLISHMENTS AND PROGRAM SHIFTS:

### Push Technologies

The Technical Information Management program will proactively provide information of interest to individual researchers and program managers based on user-defined preferences. This will involve the development of subject- or discipline-based profiles where information about newly added R&D reports or articles will be automatically transmitted to scientists and researchers with similar interests or ongoing projects.

### TECHNICAL INFORMATION MANAGEMENT PROGRAM FUNDING PROFILE

(dollars in thousands)

	F	Y 1997	FY 1998			FY 1998		F	Y 1999
	Current		Original		FY 1998	Current		Budget	
Subprogram	App	ropriation	App	ropriation	Adjustments	Appropriation		I	Request
Program Support	\$	2,300	\$	1,600	\$0	\$	1,600	\$	2,340
Program Direction		8,700		7,500	0		7,500		7,500
Subtotal	\$	11,000	\$	9,100	\$0	\$	9,100	\$	9,840
Construction		1,000		1,000	0		1,000		0
Subtotal, Technical Information Management	\$	12,000	\$	10,100	\$0	\$	10,100	\$	9,840
Adjustment		-263 a/		-68 b/	0		-68_b	/	0
Total, Technical Information Management	\$	11,737	\$	10,032	\$0	\$	10,032	\$	9,840
Full-time equivalents		126		105	0		105		99

a/ Share of Energy Supply, Research and Development general reduction for use of prior year balances assigned to this program (\$163,000) and FY 1997 emergency flood supplemental rescission (\$100,000). The total general reduction is applied at the appropriation level.

### Public Law Authorization:

Public Law: 95-91, DOE Organization Act

b/ Share of Energy Supply, Research and Development general reduction for use of prior year balances assigned to this program. The total general reduction is applied at the appropriation level.

### TECHNICAL INFORMATION MANAGEMENT (Dollars in thousands)

#### PROGRAM FUNDING BY SITE

	FY 1997	FY 1998		FY 1998	FY 1999
	Current	Original	FY 1998	Current	Budget
Field Offices/Sites	Appropriation	Appropriation	Adjustments	Appropriation	Request
Oak Ridge Operations Office					
Office of Scientific and Technical Informatio	\$12,000	\$10,100	\$0	\$10,100	\$9,840
Subtotal	\$12,000	\$10,100	\$0	\$10,100	\$9,840
	2.52		,	60. 1	,
Adjustment	-263 a			-68 b/	
TOTAL	\$11,737	\$10,032	\$0	\$10,032	\$9,840

a/ Share of Energy Supply, Research and Development general reduction for use of prior year balances assigned to this program (\$163,000) and FY 1997 emergency flood supplemental rescission (\$100,000). The total general reduction is applied at the appropriation level.

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### TECHNICAL INFORMATION MANAGEMENT PROGRAM SUPPORT

(Tabular dollars in thousands, narrative in whole dollars)

**Mission Supporting Goals and Objectives:** The Program Support subprogram provides funds for collecting, disseminating, and preserving/protecting appropriate Department of Energy information for the benefit of U.S. educational, industrial, and research communities as well as developing and maintaining systems and technologies to transition from traditional information media to electronic information exchange. This includes funding for the digitization and electronic availability of full-text Departmental R&D reports -- the Information Bridge. Specifically, funding is used to procure software and information technology that will promote distributed, decentralized, electronic processing of research data. Contracts are utilized to develop information systems and to analyze and process domestic and foreign technical information. Resources are also used to develop and maintain classified information processing technology and repository capabilities.

#### II. Funding Schedule:

Program Activity	FY 1997	FY 1998	FY 1999	<b>\$ Change</b>	% Change
Program Support	\$2,300	<u>\$1,600</u>	\$2,340	<u>\$+740</u>	+ 46.2%
Total, Program Support	<u>\$2,300</u>	<u>\$1,600</u>	<u>\$2,340</u>	<u>\$+740</u>	+ 46.2%

### TECHNICAL INFORMATION MANAGEMENT PROGRAM SUPPORT

### **III.** Performance Summary - Accomplishments:

Program Support	<u>FY 1997</u>	<u>FY 1998</u>	<u>FY 1999</u>
• Implement "Bringing Science Information to the Desktop" initiatives, including electronic science journals, push technologies, and searchable distributed information collections. Streamline collection, management, and dissemination of DOE R&D results by transitioning from predominately paper-based environment to electronic information exchange and locator technology, including the Information Bridge. Capital equipment funding is included for computer hardware to support electronic information exchange efforts. Initiate licenses and access to electronic science journals for the Departmental research community.	\$1,700	\$1,200	\$1,740
• Enhance U.S. economic competitiveness by providing access to foreign technical information by domestic research and industrial communities.	350	200	300
<ul> <li>Protect national security while enabling simplified electronic exchange of and access to classified technical information; implement declassification process in support of continued openness initiatives.</li> </ul>	250	200	300
Total, Program Support	<u>\$2,300</u>	<u>\$1,600</u>	<u>\$2,340</u>

### TECHNICAL INFORMATION MANAGEMENT PROGRAM SUPPORT

### **EXPLANATION OF FUNDING CHANGES FROM FY 1998 TO FY 1999:**

### **Program Support**

The increase reflects a strategic investment of additional resources in electronic exchange of scientific and technical information.  Following a significant funding reduction in FY 1998, this investment will maintain and operate the Information Bridge which provides  DOE R&D report literature full text on-line to the entire DOE complex. The investment will also provide support for electronic full-text access to two major science journals. Push technologies, searchable distributed collections, and machine-translated foreign R&D literature will complete "Bringing Science Information to the Desktop."	\$+540,000
Fulfill U.S. obligations to exchange scientific and technical information with two multilateral international energy agencies. The increase will ensure continued domestic access to foreign research results.	\$+100,000
The increase in classified information support reflects a continued emphasis on declassification as well as the need to modernize exchange and management of classified/sensitive data.	\$+100,000
Total Funding Change, Program Support	<u>\$+740,000</u>

(Tabular dollars in thousands, narrative in whole dollars)

### I. <u>Mission Supporting Goals/Ongoing Responsibilities</u>

This program provides Federal staffing and resources to direct, coordinate, and implement the management and dissemination of scientific and technical information resulting from Department of Energy research and development and environmental programs; provide worldwide energy scientific and technical information to the Department of Energy, United States (U.S.) industry, academia, and the public; and fulfill international and interagency scientific and technical information commitments in support of Departmental and U.S. obligations.

Program direction provides overall direction, coordination, implementation, and administrative support required to fulfill the responsibilities of the Technical Information Management Program. Program direction is divided into the following categories:

Salaries and Benefits provides for Federal staff involved in policy development and coordination; implementation and performance of program activities; representation in international information exchange agreements; human resource management; and other Federal responsibilities.

Travel provides for program-related travel to conduct and fulfill responsibilities outlined under salaries and benefits.

Support Services provides on-site services in such areas as mail operations, local area network support, and analysis of electronic information exchange.

Other Related Expenses represent maintenance and utilities costs for the Office of Scientific and Technical Information facility and equipment for office automation and work requirements.

### II. <u>Funding Table:</u>

11. <u>Funding Labic.</u>					
	FY 1997	FY 1998		FY 1998	FY 1999
	Current	Original	FY 1998	Current	Budget
	<b>Appropriation</b>	<b>Appropriation</b>	<b>Adjustments</b>	<b>Appropriation</b>	Request
Oak Ridge, TN (HQ)					
Salaries and Benefits	\$ 7,500	\$ 6,610	\$ 0	\$ 6,610	\$ 6,610
Travel	110	110	0	110	110
Support Services	280	200	0	200	200
Other Related Expenses	<u>520</u>	300	0	<u>300</u>	300
Total	\$ 8,410	\$ 7,220	\$ 0	\$ 7,220	\$ 7,220
Full Time Equivalents	124	102	0	102	96
Washington, D.C. (HQ)					
Salaries and Benefits	\$ 270	\$ 270	\$ 0	\$ 270	\$ 270
Travel	20	10	0	10	10
Support Services	0	0	0	0	0
Other Related Expenses	0	0	0	0	0
Total	\$ 290	\$ 280	\$ 0	\$ 280	\$ 280
Full Time Equivalents	2	3	0	3	3
Total, Technical Information  Management Program					
Salaries and Benefits	\$ 7,770	\$ 6,880	\$ 0	\$ 6,880	\$ 6,880
Travel	130	120	0	120	120
Support Services	280	200	0	200	200
Other Related Expenses	<u>520</u>	300	0	<u>300</u>	300
Grand Total	\$ 8,700	\$ 7,500	\$ 0	\$ 7,500	\$ 7,500
Full Time Equivalents	126	105	0	105	99

Ш.	Performance Summary - Accomplishments:	<u>FY 1997</u>	<u>FY 1998</u>	<u>FY 1999</u>
	Salaries and Benefits:	\$ 7 770	\$ 6 880	\$ 6 880

The Technical Information Management program is Federally managed and implemented due to the program's inherent government responsibilities. These responsibilities include: (1) maintaining and coordinating a formal Departmental infrastructure to define and implement policy and standards for scientific and technical information in areas such as public access, electronic information exchange, and information security; (2) representing the United States in two multilateral international information exchange agreements, resulting in the acquisition of 85,000 foreign research summaries per year; and (3) management of proprietary and classified information, including serving as the central repository for the Department's 50-year collection of classified and sensitive information. Through partnering, outsourcing, and use of electronic information management technology, Federal staffing has declined from 362 employees to 105 in the last two decades. The FY 1999 budget request reflects a 6 FTE reduction; remaining staff will continue focusing on defining and developing a decentralized electronic "virtual library" of scientific and technical information throughout the Department.

Travel: 130 120 120

Travel funding is required for the partnering and coordination inherent in a nationwide, distributed research and information environment.

III.	Performance Summary - Accomplishments:	<u>FY</u>	<u> 1997</u>	<u>FY</u>	<u>1998</u>	<u>FY</u>	<u>1999</u>
	Support Services:	\$	280	\$	200	\$	200
	FY 1998 and FY 1999 are at the base level of support services needed primarily for internal and external automatic data processing functions.						
	Other Related Expenses:		520		300		300
	Expenses reflect facility maintenance costs, including scheduled replacement of parts, equipment, and supplies. Expenses also reflect a transition to Pentium-based computer processors and a Windows NT environment.						
	Total Program Direction	\$	58,700		7,500		7,500

### IV. EXPLANATION OF FUNDING CHANGES FY 1998 TO FY 1999:

While there are no funding changes, a basic cost-of-living increase for	\$ 0
salaries and benefits is offset by a reduction of six FTEs.	
Total Funding Change, Program Direction	\$ 0

Support Services	FY 1997 (\$000)	FY 1998 (\$000)	FY 1999 (\$000)	FY 1998/FY 1999 Change (\$000)
Technical Support Service				
Analysis and Support of Electronic Information Exchange	\$ 170	\$ 100	\$ 100	0
Management Support Services				
ADP Support	110	100	100	0
Total Support Services	\$ 280	\$ 200	\$ 200	0

Other Related Expenses	FY 1997 (\$000)	FY 1998 (\$000)	FY 1999 (\$000)	FY 1998/FY 1999 Change (\$000)
Training	\$ 15	\$ 15	\$ 15	0
Facility Management	395	200	200	0
Software Procurement/Maintenance Activities/Capital Acquisitions	110	85	85	0
Total Budget Authority	\$ 520	\$ 300	\$ 300	0

### TECHNICAL INFORMATION MANAGEMENT CONSTRUCTION

(Tabular dollars in thousands, narrative in whole dollars)

**I.** <u>Mission Supporting Goals and Objectives:</u> Construction funding is provided to update and renovate general purpose infrastructure in support of the TIM process.

### **II.** Funding Schedule:

	Program Activity	FY 1997	FY 1998	<u>FY 1999</u>	<b>\$ Change</b>	%Change
	Construction	<u>\$1,000</u>	<u>\$1,000</u>	<u>\$ 0</u>	<u>\$-1,000</u>	<u>-100.0%</u>
	Total, Program Support	<u>\$1,000</u>	<u>\$1,000</u>	<u>\$ 0</u>	<u>\$-1,000</u>	<u>-100.0%</u>
III.	Performance Summary - Accomplishments:			<u>FY 1997</u>	<u>FY 1998</u>	<u>FY 1999</u>
	<ul> <li>Heating, ventilation and air condition (HVAC) Retrofits of OSTI Facility, Oak Ridge, TN (Project No. 95-A-500) will be completed in FY 19</li> </ul>	98.		\$1,000	\$1,000	\$ 0
	Total Construction			<u>\$1,000</u>	<u>\$1,000</u>	<u>\$ 0</u>

### **EXPLANATION OF FUNDING CHANGES FROM FY 1998 TO FY 1999:**

Decrease reflects completion of HVAC Retrofit Project in FY 1998.	<u>\$-1,000,000</u>

Total Funding Change, Construction \$-1,000,000

## TECHNICAL INFORMATION MANAGEMENT CAPITAL OPERATING EXPENSES AND CONSTRUCTION SUMMARY (Dollars in thousands)

	FY 1997	FY 1998	FY 1999	\$ Change	% Change	
Capital Operating Expenses Capital Equipment (total)	. \$43	\$0	\$200	\$+200		
Construction Project Summary (both Operating and Co	onstruction I	Funded)				
Project No. Project Title	TEC	Previous Appropriated	FY 1997 Appropriate	FY 1998 d Request	FY 1999 Request	Unapprop. Balance
95-A-500 Office of Scientific and Technical Information Heating, Ventilation, and Air Conditioning HVAC Retrofits	\$4,000	\$2,000	\$1,000	\$1,000	\$0	\$0
Total Technical Information Management	\$4,000	\$2,000	\$1,000	\$1,000	\$0	\$0