

**ADMINISTRATIVE CHANGE TO
DOE O 412.1A, *Work Authorization System***

Locations of Changes:

Page	Paragraph	Changed	To
1	Header	This directive was reviewed and certified as current and necessary by Susan J. Grant, Director, Office of Management, Budget and Evaluation/Chief Financial Officer, 4-21-05.	Obsolete
1	3a	(See Attachment 1 for a complete list of Primary DOE Organizations.) This Order automatically applies to Primary DOE Organizations created after it is issued.	(See current listing at https://www.directives.doe.gov/references/DepartmentalElements)
1	Footer	Office of Procurement and Assistance Management	Office of Acquisition and Project Management
3	4.d(3)	"...DOE O 241.1A, Scientific and Technical Information Management, dated 4-9-01;"	"DOE O 241.1B, Scientific Technical Information Management dated 12-13-10;"
5	5.c.(6)	...to the field promptly after submission of the AFP...	...to the field promptly with submission of the AFP...
6	5.e.	Office of Management, Budget and Evaluation.	Office of the Chief Financial Officer.
n/a*	6.	DEFINITIONS.	Delete entire paragraph. Link no longer exists and the paragraph is optional
7	7.	7. REFERENCES	6. REFERENCES
7	d.	DOE O 135.1, Budget Execution Funds Distribution and Control, dated 9-30-95, describes DOE systems, policies, and assignment of requirements for	DOE O 135.1A, Budget Execution Funds Distribution and Control, dated 1-9-06, describes DOE systems, policies, and assignment of

Page	Paragraph	Changed	To
		control of the budget execution process.	requirements for control of the budget execution process.
7	e.	DOE O 241.1A...dated 4-9-01	DOE O 241.1B...dated 12-13-10
7	f.	DOE P 450.4, Safety Management System Policy, dated 10-15-06...	DOE P 450.4A, Integrated Safety Management Policy, dated 4-25-11...
7	g.	DOE P 450.5, Line Environment Safety and Health Oversight, dated 6-26-97...	DOE P 226.1B, Department of Energy Oversight Policy, dated 4-25-11...
7	h.	DOE O 452.1B...dated 8-6-01...	DOE O 452.1D...dated 4-14-09...
7	i.	DOE O 452.2B, Safety of Nuclear Explosive Operations, dated 8-7-01...	DOE O 452.2D, Nuclear Explosive Safety, dated 7-10-13...
7	k.	DOE/NNSA Weapon Quality Policy (QC-1) Development and Production Manual Technical Business Practices.	NNSA Policy Letter NAP-24, Weapon Quality Policy, dated 6-20-13.
8	k.	[Above replaced by two documents] becomes new paragraph letter [l.]	l. DOE O 414.1D Admin Chg 1, Quality Assurance, dated Apr 25, 2011.
8	l.	l. DOE O 470.1, Safeguards and Security Program, dated 9-28-95...	m. DOE O 470.4B Admin Chg 1, Safeguards and Security Program, dated 7-21-11...
8	m.	m. DOE O 534.1B, Accounting, dated 1-6-03, establishes requirements for financial management of cash, advances, receivables, inventories, and investment of funds; accountability for plant and capital equipment; current and long-term liabilities; and accounting for equity revenues, collections, expenses, and reimbursable work performed by	n. DOE O 534.1B, Accounting, dated 1-6-03, establishes requirements for financial management of cash, advances, receivables, inventories, and investment of funds; accountability for plant and capital equipment; current and long-term liabilities; and accounting for equity revenues, collections, expenses, and reimbursable

Page	Paragraph	Changed	To
		DOE on behalf of Federal and non-Federal entities.	work performed by DOE on behalf of Federal and non-Federal entities.
8	8. [7.]	CONTACT. For assistance, contact the Office of Procurement and Assistance Management, 202-586-8182.	CONTACT. For assistance, contact the Office of Acquisition and Project Management, 202-287-1310.
n/a	All	Deleted Attachment 1 as it is obsolete	
Att 1	All	Change to Attachment 1 due to deletion of previous Attachment 1.	
Att 1	Item 16	Name (typed):	Name:
Att 2	All	Attachment 3	Attachment 2
Att 2, No page #	Item 5	5. Budget and Reporting Code:	5. STARS Accounting Flexfield string (as available):
Att 2, No page #	Item 13.	Proposal Description (Approach, Anticipated Benefits in 200 Words or Less):	Proposal Description (Approach, anticipated benefits in 200 words or less):
Att 2, No page #	Header	(page 1 of 3)	[Delete]
Att 2, No page #	A.	The two page DOE (including NNSA) Work Proposal is...	Pages 1 and 2 of the Work Proposal are...
Att 2, No page #	B. Item 1.	The first two characters of this number are to signify the DOE organizational code used when assigning regular contract numbers, such as EM, SC, and DP.	The first two characters of this number are to signify the DOE organizational code used when assigning regular contract numbers.
Att 2, No page #	B. Item 5.	The Budget and Reporting (B&R) Code in accordance with the B&R Classification Codes set forth on the Chief Financial Officer home	The STARS Accounting Flexfield (AFF) string in accordance with the AFF values and the B&R Classification Codes set forth

Page	Paragraph	Changed	To
		page, www.cfo.doe.gov .	on the Chief Financial Officer iPortal website at https://iportalwc.doe.gov/webcenter/content/conn/iPortalContent/path/MyWebCenterSpaces/EFASC1/BARC/index.htm .
Att 2, No page #	Header	(page 2 of 3)	[Delete]
Att 2, No page #	Header	(page 3 of 3)	[Delete]
Att 2, No page #	p.	...package form.	...proposal form.

SUBJECT: WORK AUTHORIZATION SYSTEM

1. **OBJECTIVES.** To establish a work authorization and control process for work performed by designated site and facility management contractors, and other contractors as determined by the procurement executive, consistent with the budget execution and program evaluation requirements of the Department of Energy's (DOE's) Planning, Programming, Budgeting, and Evaluation process.
2. **CANCELLATIONS.** DOE O 412.1 *Work Authorization System*, dated 4-20-99. Cancellation of a directive does not, by itself, modify or otherwise affect any contractual obligation to comply with such a directive. Cancelled directives that are incorporated by reference in a contract remain in effect until the contract is modified to delete the references to the requirements in the cancelled directives.
3. **APPLICABILITY.**
 - a. **Primary DOE Organizations, Including National Nuclear Security Administration (NNSA) Organizations.** Except for the exclusions in paragraph 3c, this Order applies to all Primary DOE Organizations that direct work to be performed by site and facility management contractors and other contractors determined by the procurement executive. (See current listing at <https://www.directives.doe.gov/references/DepartmentalElements>).

The Administrator of NNSA shall assure that NNSA employees and contractors comply with their respective responsibilities under this Order.

 - b. **Site/Facility Management Contractors.** This Order will be applicable to contractors by provisions within the Department of Energy Acquisition Regulation (DEAR).
 - c. **Exclusions.**
 - (1) Facilities and activities of the NNSA Office of Naval Reactors and Bonneville Power Administration are excluded from the requirements of this Order.
 - (2) Work involving reimbursable work for others and services, products, or materials regularly produced for sale at scheduled rates under DOE programs (e.g., routine irradiation services, radioisotopes, production or transmission of electricity) are excluded from the requirements of this Order.

4. REQUIREMENTS.

- a. Authorizations and deauthorizations for all DOE funded work must be documented in work authorizations. [Paperless generation and electronic transfer are preferred (see Attachment 2 for sample format).]
 - (1) A program office may request a contractor to use a suggested standard work proposal (Attachment 3) to provide information for program planning, budget formulation, or documentation of part or all of a work assignment.
 - (2) A site and facility management contractor may use a work proposal to propose work to a program office (see Attachment 3 for sample format).
- b. At a minimum, each work authorization will contain the following information:
 - (1) project title and reference to work proposal number, if applicable;
 - (2) Headquarters programmatic point of contact, organization, and telephone number;
 - (3) Headquarters budget point of contact, organization code, and telephone number;
 - (4) responsible program;
 - (5) responsible program Secretarial Officer;
 - (6) responsible field organization;
 - (7) responsible contracting officer if different from 4b(6) above;
 - (8) site/facility management contractor name, point of contact, and telephone number;
 - (9) work authorization number (see paragraph 4c below), with revision number if applicable;
 - (10) budget and reporting code and funding level;
 - (11) dates for performance period, work start, and work completion;
 - (12) statement of work (see paragraph 4d below);
 - (13) reporting requirements, including (a) project management or status reports and (b) reports or publications for the purpose of informing DOE, the

scientific community, and the public of the project results (e.g., scientific advances or technical progress); and

- (14) Headquarters, field organization, contractor, and if involving changes to scope, schedule, or funding, contracting officer signature blocks.
- c. Each work authorization must have a unique, standardized identification number, which must remain unchanged for the total life of the work assignment.
- d. The statement of work will include the following information as appropriate:
 - (1) detailed statement of work to be performed or reference to a work proposal, project plan, or similar document describing the scope of work in detail;
 - (2) required milestone dates;
 - (3) deliverables, including technical information as required by DOE O 241.1B, *Scientific and Technical Information Management*, dated 12-13-10; and
 - (4) associated performance-based indicators/targets consistent with DOE G 120.1-5, *Guidelines for Performance Measurement*, dated 6-30-96, and any additional guidance that will assist the contractor in the performance of the work.
- e. DOE field organizations (contracting officers) must receive a work authorization signed by the appropriate Primary DOE Organization, who must review and approve the work as acceptable for the contractor before obligating funds for the contract.
 - (1) Program offices may delegate some of the program managers' responsibilities and authorities to DOE field organizations (e.g., assignment of tasks and/or distribution of funds to contractors under their cognizance).
 - (2) When responsibilities have been delegated, the field organization is responsible for preparing and issuing the work authorization.
- f. A signed copy of each work authorization accepted by the contractor must be forwarded to DOE (preferably electronically) as evidence of acceptance of the authorized work.
 - (1) If the authorization does not change scope, schedule, or cost (e.g., incremental funding), then contractor signatures are not necessary. (Note, however, that if any changes are made, this information should still be forwarded to DOE as noted above.)

- (2) Work is not authorized to commence until the contractor receives both funding (via a signed contract modification) and the related work authorization.
- g. Funding guidance necessary to support work authorizations will be provided through the existing approved funding program (AFP) process.
 - (1) The contractor retains the flexibility to manage individual tasks within the work assignment.
 - (2) Manpower and dollars may be shifted, as necessary, subject to Government imposed constraints and program office direction.
- h. Authorizations for work planned in the current fiscal year are to be issued by the beginning of the fiscal year to the maximum extent possible.
 - (1) Work authorizations should be transmitted to the field promptly following the issuance of the advice of allotment by the Office of Management, Budget and Evaluation.
 - (2) Paperless generation and electronic transfer are preferred.

5. RESPONSIBILITIES.

- a. Under Secretaries. Establish DOE policy for assignment and control of work authorization for designated site and facility management contractors.
- b. Primary DOE Organizations.
 - (1) Inform other DOE organizations of restrictions or constraints on the use of facilities under their cognizance.
 - (2) Recommend to the cognizant Under Secretary appropriate changes in the policies for work authorization for designated site and facility management contractors.
- c. Program Secretarial Officers.
 - (1) Provide general approval of work to be accomplished under the provisions of this Order, normally as part of institutional planning, budget formulation or execution, or similar processes. (Approval of specific work authorizations and associated documentation may be delegated.)
 - (2) Prepare work authorizations in accordance with paragraph 4, aggregating related work assignments at the highest appropriate level.

- (3) To the maximum extent possible, issue full annual funding and associated work authorizations to site and facility management contractors as early in the fiscal year as possible.
- (4) Ensure work to be assigned by work authorization—
 - (a) is appropriate for performance by a contractor;
 - (b) has clearly articulated requirements and technically and programmatically adequate documentation; and
 - (c) will be performed in a manner compliant with the terms and conditions of the contract, including security and environmental, safety, and health (ES&H) requirements.
- (5) As needed, revise and issue work authorizations to DOE field organizations and request necessary AFP changes through the Chief Financial Officer in accordance with established procedures for administrative control of funds.
- (6) Transmit work authorizations to the field promptly with submission of the AFP to the Chief Financial Officer.
- (7) Ensure that formal agreement is reached with DOE field organizations anytime they are delegated technical assessment or technical oversight and control of work assignments.
- (8) Monitor performance and reports submitted by contractors, unless this function is delegated, to ensure contractors comply with all work requirements defined in their contracts, including the statement of work, reporting requirements, documentation, data, cost management, work products, milestone schedules and deliverables.

d. DOE Field Organizations.

- (1) Ensure work to be assigned by work authorization—
 - (a) is within the contracting officer's representative's (COR's) delegated authority and
 - (b) is not duplicative of other ongoing work under the contractor's responsibility.
- (2) Ensure work performed by contractors does not violate constraints on use of DOE-controlled facilities and is carried out in a manner that protects the workers, the public, and the environment against ES&H hazards and safeguards and security risks arising from the performance of contract work.

- (3) Ensure work authorization requirements have been satisfied before authorization to proceed and that the contractor has a clear understanding of what is required by the sponsoring program office before work commences.
 - (4) Review all work authorizations under their cognizance to ensure they are appropriate for performance; within mission; and for institutional plans as applicable, within scope and agreed to general levels of effort.
 - (5) Issue and revise work authorizations for assigned work if the assignment decision has been delegated.
 - (6) Ensure the contractor provides a signed copy of the work authorization and all required reports to Program Secretarial Officers as required.
 - (7) Monitor performance and reports submitted by contractors to ensure that work performed and costs incurred conform to work authorizations issued.
 - (8) Authorize work in accordance with the AFP, programmatic guidance, contract-specific COR appointment letters, and established procedures for administrative control of funds.
 - (9) Ensure costs related to work authorizations can be adequately tracked before issuing authorizations.
 - (10) Review work proposals prepared by contractors for consistency with program and other guidance.
 - (11) Transmit work proposals, with any comments and recommendations, to program offices in accordance with program guidance and budget time frames issued by the Chief Financial Officer.
 - (12) Ensure contractors provide technical information to the Director of Scientific and Technical Information in accordance with reference 7e below.
 - (13) Perform contract oversight activities in accordance with the contract-specific COR appointment letter.
- e. Office of the Chief Financial Officer. Performs tasks of an accounting and budgetary nature associated with the process described in this Order such as issuing allotments, AFPs, and financial reports.

6. REFERENCES.

- a. Title XXXII of P.L. 106-65, National Nuclear Security Administration Act, dated October 5, 1999, as amended.
- b. DOE G 120.1-5, *Guidelines for Performance Measurement*, dated 6-30-96, provides guidance on performance measurement in DOE.
- c. DOE O 130.1, *Budget Formulation*, dated 9-29-95, establishes policy provisions and defines roles and responsibilities of Departmental organizations and contractors participating in the Department's annual budget formulation process.
- d. DOE O 135.1A, *Budget Execution Funds Distribution and Control*, dated 1-9-06, describes DOE systems, policies, and assignment of requirements for control of the budget execution process
- e. DOE O 241.1B, *Scientific and Technical Information Management*, dated 12-13-10, provides guidance concerning the reporting and dissemination of technical information. Scientific and technical information resulting from work funded by DOE is to be made broadly available to the scientific community and the public, within appropriate adherence to statutorily mandated protections.
- f. DOE P 450.4A, *Integrated Safety Management Policy*, dated 4-25-11, provides for a formal process to plan, perform, assess, and improve the safe conduct of work.
- g. DOE P 226.1B, *Department of Energy Oversight Policy*, dated 4-25-11, provides policy for DOE line management oversight of ES&H.
- h. DOE O 452.1D, *Nuclear Explosive and Weapon Surety Program*, dated 4-14-09, establishes requirements and responsibilities for the DOE Nuclear Explosive and Weapon Surety Program to ensure adequate safety, security, and control of nuclear explosives and nuclear weapons.
- i. DOE O 452.2D, *Nuclear Explosive Safety*, dated 7-10-13, establishes requirements and responsibilities for ensuring the safety of both routine and planned DOE nuclear explosive operations and associated activities and facilities.
- j. DOE O 452.4A, *Security and Control of Nuclear Explosives and Nuclear Weapons*, dated 12-17-01, establishes DOE, including NNSA, requirements and responsibilities to prevent the deliberate unauthorized use of U.S. nuclear explosives and U.S. nuclear weapons.
- k. NNSA Policy Letter NAP-24, *Weapon Quality Policy*, dated 6-20-13.

- l. DOE O 414.1D Admin Chg 1, *Quality Assurance*, dated Apr 25, 2011.
 - m. DOE O 470.4B Admin Chg 1, *Safeguards and Security Program*, dated 7-21-11, provides requirements and responsibilities for the appropriate protection levels against unauthorized access; theft, diversion, loss of custody, or destruction of nuclear weapons or components; espionage; loss or theft of classified matter or Government property; and other hostile acts that impact national security, the health and safety of employees, the public, or the environment.
 - n. DOE O 534.1B, *Accounting*, dated 1-6-03, establishes requirements for financial management of cash, advances, receivables, inventories, and investment of funds; accountability for plant and capital equipment; current and long-term liabilities; and accounting for equity revenues, collections, expenses, and reimbursable work performed by DOE on behalf of Federal and non-Federal entities.
7. CONTACT. For assistance, contact the Office of Acquisition and Project Management, 202-287-1310.



SAMUEL W. BODMAN
Secretary of Energy

SAMPLE WORK AUTHORIZATION

U.S. DEPARTMENT OF ENERGY CONTRACT WORK AUTHORIZATION			
1a. Project Title:		1b. Work Proposal Number (if applicable):	
2. Headquarters Program Point of Contact.			
Name:		Organization Code:	Telephone No.:
3. Headquarters Budget Point of Contact.			
Name:		Organization Code:	Telephone No.:
4. Responsible Program:		5. Responsible Secretarial Officer:	
6. Responsible Field Organization:			
7a. Site and Facility Management Contractor:		7b. Contractor Point of Contact.	
		Name: Telephone No.:	
8. Work Authorization Number:		9. Revision Number:*	
10. Funds Authorized (\$ in thousands).			
Budget and Reporting Code:		Previous:	Change: Current:
11. Performance Period Covered by Funds.		12. Work Start Date:	13. Expected Completion Date:
From: To:			
14. Statement of Work:			
(Attach a detailed description of work to be performed or reference to a work proposal, project plan, or similar document that describes the scope of work, milestones, deliverables, performance measures/expectations.)			
15. Reporting Requirements (Status reports, scientific and technical information or similar):			
16. Work Authorization Program Official.			
Name :		Signature:	Date:
17. DOE Field Organization Official.			
Name (typed):		Signature:	Date:
18. Contractor's Authorized Representative.			
Name (typed):		Signature:	Date:
19. DOE Contracting Officer (or delegated representative).			
Name (typed):		Signature:	Date:
*The revision number will consist of a 2-digit program identifier, 4-digit sequential number, and the last digit of the fiscal year.			

U.S. DEPARTMENT OF ENERGY WORK PROPOSAL

1. Work Proposal Number:		2. Revision Number:		3. Date Prepared:	
4. Work Proposal Title:			5. STARS Accounting Flexfield string (as available):		
6. Work Proposal Term: Begin _____ End _____					
7. Name (Last, First, MI) and Phone Number of the Headquarters Program Manager:			8. Headquarters Organization:		
9. DOE Field Organization Work Proposal Reviewer:			10. DOE Field Organization:		
11. Contractor Work Proposal Manager:			12. Contractor Name:		
13. Proposal Description (Approach, anticipated benefits in 200 words or less): 					
14. Contractor Work Proposal Manager: _____ (Signature)			15. DOE Field Organization Official: _____ (Signature)		
16. Detail Attachments: (See Specific Attachments)					
<input type="checkbox"/> a. Facility Requirements		<input type="checkbox"/> g. Future Accomplishments		<input type="checkbox"/> m. ES&H Consideration	
<input type="checkbox"/> b. Publications		<input type="checkbox"/> h. Relationships to Other Projects		<input type="checkbox"/> n. Human/Animal Subj	
<input type="checkbox"/> c. Purpose (mandatory)		<input type="checkbox"/> i. NEPA Requirements		<input type="checkbox"/> o. Security Requiremen	
<input type="checkbox"/> d. Background		<input type="checkbox"/> j. Milestones		<input type="checkbox"/> p. Other (specify)	
<input type="checkbox"/> e. Approach		<input type="checkbox"/> k. Deliverables			
<input type="checkbox"/> f. Technical Progress		<input type="checkbox"/> l. Performance Measures/ Expectations			

**WORK PROPOSAL REQUIREMENTS FOR OPERATING/EQUIPMENT
OBLIGATIONS AND COSTS**

CONTRACTOR NAME:		WORK PROPOSAL NO.:		REV. NO.:		DATE PREPARED:	
	Prior Years	BY -1	Budget Year (BY)		BY +1	BY +2	Total to Complete
17. Staffing (staff years):			<u>Request</u>	<u>Authorized</u>			
a. Scientific	.....	.....	.....	.....	.....	.....	.....
b. Other Direct	.....	.....	.....	.....	.....	.....	.....
c. Total Direct.	.....	.....	.....	.....	.....	..	.....
18. Operating Expense:							
a. Total Obligations	.....	.....	.....	.....	.....	.....	.....
b. Total Costs	.....	.....	.....	.....	.	.....	.....
19. Equipment:							
a. Equipment Obligations	.....	.....	.....	.....	.....	.....	.....
b. Equipment Costs	.....	.....	.....	.....	.	.....	.....
20. Milestone Schedule:	<u>Proposed</u>			<u>Authorized</u>			
21. Reporting Requirements (Description):							

DOE WORK PROPOSAL INSTRUCTIONS

A. Pages 1 and 2 of the Work Proposal are optional but may be required by a program office for planning and budget formulation. It may be used as all or part of the documentation of a Work Authorization. The form may also be used by a site and facility management contractor to describe prospective work. The form is intended to provide an overview of the effort, including each of the tasks necessary for project completion. Proposals should be limited to a single project to allow reporting of costs, obligations, and other information.

B. Page 1 of the form.

Item 1. Enter a unique number for the proposal. The first two characters of this number are to signify the DOE organizational code used when assigning regular contract numbers. The third character is to be the letter "W." The remaining four characters will be a unique sequential number assigned by the requesting organization.

Item 2. If the initial proposal is changed, a revision is indicated by placing a number in this space, starting with the number "1" and proceeding in sequence.

Item 3. The month, day, and year the form is prepared (e.g., 10/01/03).

Item 4. A descriptive title of the work being proposed.

Item 5. The STARS Accounting Flexfield (AFF) string in accordance with the AFF values and the B&R Classification Codes set forth on the Chief Financial Officer iPortal website at <https://iportalwc.doe.gov/webcenter/content/conn/iPortalContent/path/MyWebCenterSpaces/EFASCI/BARC/index.htm>.

Item 6. The start and estimated completion dates of the proposal. Use a two-number format for month, day, and year (e.g., 10/01/03). For proposals initiated for an indefinite period of time, the completion date should be shown as "OPEN."

Item 7. When known, enter the name and phone number of the DOE/NNSA program manager responsible for the overall program.

Item 8. The DOE/NNSA Headquarters office responsible for the overall program.

Item 9. When known, enter the name and phone number of the DOE field organization individual responsible for reviewing the proposal.

Item 10. The DOE field organization responsible for the work proposal.

Item 11. When known, enter the name and phone number of the contractor individual responsible for the proposal.

Item 12. Enter the name of the contractor responsible for the proposal.

Item 13. A description of the proposal, in 200 words or less, highlighting the purpose, approach, and anticipated benefits the proposal will provide in the program's mission.

Item 14. The signature of the contractor representative responsible for the proposal and the date are to be entered when the proposal is given to the reviewing official.

Item 15. The signature of the reviewing official and the date are to be entered when the proposal is forwarded to the program manager.

DOE WORK PROPOSAL INSTRUCTIONS CONTINUED

Item 16. Detailed attachments are to be completed if they are necessary to understand or will enhance the proposal. Any attachments accompanying the proposal should be indicated by checking the appropriate blocks. Each attachment page should include the contractor name, the proposal number, and the date prepared.

a. **Facility Requirements.** If execution of the proposal requires the use of existing or approved facilities, briefly describe the required use and location, with associated gross square footage and impact on site utility services by fiscal year in which the proposal begins and each subsequent fiscal year during the anticipated life of the proposal. Facility needs will be reviewed in context of overall site planning and utilization and expressed in terms of space function (e.g., office, storage space, site utilities)

b. **Publications.** List all publications pertaining to the proposal during the prior fiscal year. Provide the title or subject and planned date of publications of all topical reports over the life of the proposal. Periodic progress reports are to be listed in this section.

c. **Purpose.** Provide the reasons for the proposal and the objectives that will accomplish the stated purpose. Each objective should be the single highest level of measurable achievement that can serve as a criterion for measuring the success or failure of the proposal.

d. **Background.** Present a brief historical overview of the proposal or preview work or theories that have led to the proposal.

e. **Approach.** Explain the management controls and methodology that will be used to execute the proposal in all fiscal years.

f. **Technical Progress.** Attach the last Technical Progress Report if required by the program. Also, describe the technical progress in BY-3 (the last complete fiscal year) and expected progress for BY-2, BY-1, and BY.

g. **Future Accomplishments.** Describe any anticipated benefits that will accrue in the future which are attributable to the proposal.

h. **Relationship to Other Projects.** Provide a description of any relationships, interrelationships, or dependencies which the proposal has with other known federally funded projects.

i. **NEPA Considerations.** In accordance with the National Environmental Policy Act of 1969, describe the long-term and short-term potential impacts and effects of the work package upon the ecosystem and NEPA documentation that must be prepared.

j. **Milestones (if applicable).** A detailed explanation of the milestones presented on the second page of the proposal (item 20) should be given. For basic research, the only milestone may be the submission of a yearly progress report.

k. **Deliverables.** An itemized list of deliverables under the proposal excluding reports in item 21.

l. **Performance Measures and Expectations.** A description of the performance measures described as outcomes and the expectations for achieving those measures by which the success of the proposal will be measured.

m. **ES&H Considerations.** A description of the ES&H hazards arising from performance of the proposed work and mitigating actions to protect the workers, the public, and the environment.

DOE WORK PROPOSAL INSTRUCTIONS CONTINUED

n. Human/Animal Subjects Research. Briefly describe any anticipated human subjects or animal subjects research activity that may occur as part of the proposed work.

o. Security Requirements. Identification of applicable security requirements.

p. Other. Any other attachments should be specified in the space provided on the work proposal form.

C. Page 2 of the Form—General. Header information on this page should be filled in as it appears on page 1. The “Authorized” column is not completed unless requested by the program when funds have been authorized. The column heading designations on page 2 of the DOE/NNSA Work Proposal form are defined below. The relationship between the fiscal years (FYs) and budget years (BYs) for which information is being provided is illustrated in the table below.

Prior Years. For proposals related to projects, information for all prior years in which work was performed should be provided to allow calculation of total project cost and other information. This column is optional and should only be completed when requested by the program in the program guidance.

Item 17. Designate personnel staffing in full-time equivalent person-years. Enter the numbers of scientific and other direct person-years for all columns.

Item 18. Enter estimates for total obligations and total costs per year for all columns. This should include inventories.

Item 19. Enter estimates for total obligations and total costs per year for all columns for equipment directly related to the proposal.

Item 20. Enter the titles of supporting tasks in the “Milestone Schedule” column. Each task should be followed by the total obligations in thousands of dollars in the “Proposed BY” column. The dates (MO/YR) on which the tasks are projected for start and completion should be entered in the “Proposed Schedule” columns and will be completed, if requested by the program manager, when funds have been authorized. Based on the allocation of funds, enter the dates for planned start and completion of the respective tasks when requested.

Item 21. Enter all reporting required for the proposed work, including a description and frequency for each report.

CALENDAR YEAR THAT DOE PREPARED BUDGET (BY)			
2000	2001	2002	2003
BY-3 FY 1999	FY 2000	FY 2001	FY 2002
BY-2 FY 2000	FY 2001	FY 2002	FY 2003
BY-1 FY 2001	FY 2002	FY 2003	FY 2004
BY FY 2002	FY 2003	FY 2004	FY 2005
2001	2002	2003	2004
CALENDAR YEAR THE CONGRESS CONSIDERS BUDGET (BY)			