



# **U.S. NUCLEAR WASTE TECHNICAL REVIEW BOARD**

**CONGRESSIONAL BUDGET JUSTIFICATION  
FISCAL YEAR 2022**

**INCLUDING BOARD PERFORMANCE AND MANAGEMENT GOALS FOR  
FISCAL YEARS 2021 THROUGH 2022**

**AND**

**EVALUATION OF BOARD PERFORMANCE IN FISCAL YEAR 2020**

**MAY 2021**



**U.S. NUCLEAR WASTE TECHNICAL REVIEW BOARD**

**CONGRESSIONAL BUDGET JUSTIFICATION**

**FISCAL YEAR 2022**

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## INTRODUCTION

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The U.S. Nuclear Waste Technical Review Board (Board) is an independent agency in the Executive Branch of the federal government. The Board performs ongoing and objective peer review of the technical and scientific validity of activities undertaken by the Secretary of Energy under the Nuclear Waste Policy Act (NWPA) (Public Law 97-425), as amended, including the packaging, transportation, and disposal of spent nuclear fuel (SNF) and high-level radioactive waste (HLW). The Board also advises and makes recommendations to Congress and the Secretary on technical issues related to nuclear waste management and disposal.

Contained in this Fiscal Year (FY) 2022 Congressional Budget Justification is the Board's Performance Plan for FYs 2021 through 2022 and the Board's evaluation of its FY 2020 performance. The Board's Budget Request for FY 2022 is \$3,800,000, which is a 5.6% increase from the agency's FY 2021 appropriations. The Board's Budget Request for FY 2022 reflects its continued strong commitment to sound budgeting and cost-effective management practices and the focus of the Board's leadership on maximizing program performance and efficiency through evidence-based decision making and ongoing evaluation of the agency's performance.

## ABOUT THE BOARD

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The Board was established in the 1987 amendments to the NWPA to "...evaluate the technical and scientific validity of activities undertaken by the Secretary after the date of enactment of the Nuclear Waste Policy Amendments Act of 1987 (NWPAA). In accordance with this mandate, and in line with the legislative history of the Nuclear Waste Policy Amendments Act (NWPAA), the Board conducts independent analyses of U.S. Department of Energy (DOE) activities and provides expert advice to DOE and Congress on technical issues related to nuclear waste management and disposal.

The law requires the Board to report its findings, conclusions, and recommendations to Congress and the Secretary. The legislative history of the NWPAA makes clear that the Board cannot compel DOE to accept Board recommendations, but DOE is expected to heed the Board's advice or clearly state why it does not. According to the NWPAA, "the Board shall cease to exist not later than one year after the date on which the Secretary begins disposal of high-level radioactive waste or spent nuclear fuel in a repository."

## THE BOARD'S CONTINUING ROLE

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When Congress amended the NWPA in 1987 to identify Yucca Mountain in Nevada as the sole site to be characterized for its suitability as the location for a deep geologic repository, concerns were raised that, without a comparison of sites, the technical and scientific credibility of the site-characterization effort might be questioned. Congress created the Board to ensure that an ongoing independent peer review of DOE's nuclear waste management activities would be undertaken, including packaging and transporting SNF and HLW and developing a repository for the permanent disposal of the wastes.

For more than 20 years following the enactment of the NWPAA, the Board's review focused largely on DOE work related to characterizing the Yucca Mountain site and developing a deep geologic repository. Since 2010, the Board's review has changed to focus on DOE research related to the packaging, storage and transportation of SNF, the performance of SNF and HLW in a repository, DOE studies related to the potential siting of a repository in different geologic environments, and efforts to integrate the waste management system. From the time the Board began operation, it has continued to report the findings, conclusions, and recommendations from its ongoing review of the technical and scientific validity of DOE's activities to Congress and the Secretary of Energy. The Board will continue these ongoing activities in FY 2022.

The Board's objective and independent review and analysis of DOE's activities will continue to be indispensable to the technical credibility, successful implementation, and public acceptance of the nuclear waste management program in the future.

## **BOARD STRATEGIC OBJECTIVES FOR FYS 2018 THROUGH 2022**

The Board established three Strategic Objectives in its Strategic Plan for FY 2018 through 2022. The Strategic Objectives reflect the Board's continuing commitment to its mission established in the NWPAA, including (1) conducting an ongoing, independent technical and scientific evaluation of DOE activities related to the NWPA and (2) advising Congress and the Secretary.

During FYS 2018 through 2022, the Board will:

- continue its evaluation of DOE activities related to implementation of the NWPA and relevant amendments to that Act. Based on its evaluation, the Board will report its findings, conclusions, and recommendations to Congress and the Secretary.
- develop objective technical and scientific information that will be useful to policy makers in Congress and the Administration on issues related to SNF and HLW management and disposal. The Board will communicate such information to Congress and the Secretary in letters, reports, and testimony.
- compile information and report to Congress and the Secretary on its findings, conclusions, and recommendations from experience gained over more than twenty-five years of reviewing the U.S. nuclear waste management and disposal program and from observing waste management efforts in other countries.

## **ACHIEVING THE STRATEGIC OBJECTIVES**

**LEADERSHIP ENGAGEMENT.** On an annual basis, the Board's leadership updates its Performance Goals (PGs) and Management Goals (MGs) for the current year and identifies Goals for the subsequent year that will lead to the accomplishment of the Strategic Objectives. The PGs and MGs are included in the Board's Performance Plan.

**LEARNING AGENDA APPROACH.** The Board's Performance Plan for a given year includes its *Strategic Objectives*, its *Performance Goals*, its *Management Goals*, and a description of Board

attributes, activities, and practices supporting achievement of the Goals. An evaluation of Board performance in a given year is included in the Board's budget request and is used as input in updating the Performance Plan and developing the Board's budget request for the subsequent year. In updating and implementing the plan, the Board's leadership will continue to use a learning agenda approach, which includes using evidence to:

- 1) proactively evaluate the agency's performance to determine what works well and where performance can be improved;
- 2) maximize results by strategically focusing resources and attention where the needs are greatest;
- 3) reinforce the strategic direction, timeliness, and relevance of the Board's technical evaluations of DOE activities;
- 4) adapt agency direction as evidence and context shifts;
- 5) ensure effective communications with DOE and Congress and ensure other stakeholders are informed of the Board's activities.

**EVIDENCE-BASED APPROACH.** To ensure the effective and efficient execution of its mission, as noted above, the Board employs a learning agenda and evidence-based approach to set priorities that guide its decision making, operational planning, and development of its budget. Additionally, in accordance with OMB Memorandum M-19-23, *Phase 1 Implementation of the Foundations for Evidence-Based Policymaking Act of 2018*, the Board has appointed a Chief Data Officer and Data Governance Body.

## **PERFORMANCE PLAN FOR FYS 2021 THROUGH 2022**

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**STRATEGIC OBJECTIVES AND PERFORMANCE GOALS FOR FYS 2021 THROUGH 2022.** Presented below are the Board's Strategic Objectives for FYS 2018 through 2022, followed by the relevant PGs and MGs for FYS 2021 through 2022. Both the Strategic Objectives and the PGs reflect the goals of the agency leadership and are outcome-oriented.

**STRATEGIC OBJECTIVE #1:** *The Board will continue its evaluation of DOE activities related to implementation of the NWPA and relevant amendments to that Act. Based on its evaluation, the Board will report its findings, conclusions, and recommendations to Congress and the Secretary.*

### **PERFORMANCE GOALS FOR FYS 2021 THROUGH 2022**

**PG 1-A:** In FY 2021, the Board will hold a public meeting on the prioritization of DOE's generic disposal research and development (R&D) activities.

**PG 1-B:** In FY 2021, the Board is planning to hold a public meeting on DOE's generic disposal R&D activities related to the disposal of SNF and HLW in clay-bearing rocks.

**PG 1-C:** In FYs 2021 through 2022, the Board will continue to review the technical issues DOE will need to address before it can begin the implementation of an integrated program for the nationwide transport of SNF and HLW.

**STRATEGIC OBJECTIVE #2:** *The Board will develop objective technical and scientific information that will be useful to policy makers in Congress and the Administration on issues related to SNF and HLW management and disposal. The Board will communicate such information to Congress and the Secretary in letters, reports, and testimony.*

#### **PERFORMANCE GOALS FOR FYs 2021 THROUGH 2022**

**PG 2-A:** In FY 2021 the Board will finalize a report on DOE R&D to determine the behavior of high burnup SNF during extended dry storage and transportation.

**PG 2-B:** In FY 2021, the Board will report on the system-wide implications of using large canisters for the dry storage of SNF.

**PG 2-C:** In FY 2021, the Board will finalize a report summarizing its review activities, and its findings, conclusions and recommendations, from January 1, 2016, through December 31, 2018.

**PG 2-D:** In FY 2021, the Board will issue a report recording key observations and recommendations by the current Board members, based on the technical work they have performed during their tenure on the Board.

**STRATEGIC OBJECTIVE #3:** *The Board will compile information and report to Congress and the Secretary on its findings, conclusions, and recommendations from experience gained over more than twenty-five years of reviewing the U.S. nuclear waste management and disposal program and from observing waste management efforts in other countries.*

#### **PERFORMANCE GOALS FOR FYs 2021 THROUGH 2022**

**PG 3-A:** In FY 2021, the Board will issue a report to Congress and the Secretary presenting a Survey of National Programs for Managing HLW and SNF.

**PG 3-B:** In FY 2021 through 2022, the Board will conduct technical information exchange activities with other countries, such as Finland and Sweden, where deep geologic repositories for SNF or HLW are being licensed or constructed.

**PG 3-C:** In FYs 2021 through 2022, the Board will continue to monitor activities in other countries related to programs for the management and disposal of SNF and HLW.

**MANAGEMENT GOALS FOR FYs 2021 THROUGH 2022.** To enhance the effectiveness and efficiency of Board activities supporting its Strategic Objectives and PGs, the Board has identified the following MGs for FYs 2021 through 2022:

**MG-1:** The Board will continue to implement actions to optimize organizational efficiency and accountability and maximize employee performance.

**MG-2:** The Board will identify any potential constraints on the agency’s ability to perform its mission and implement the changes that may be necessary for mitigating such constraints through proactive management and allocation of resources.

**MG-3:** The Board will continue to maintain effective communications among its geographically dispersed Board members. The Board will also facilitate communication between Board members and the professional staff members who support the Board’s technical and scientific review of DOE activities from the Board offices in Arlington, Virginia.

**MG-4:** The Board will continue webcasting its meetings and making available archived recordings of the webcasts on its website. During the COVID-19 pandemic, the Board will use videoconferencing to hold its meetings virtually, to the extent this can be done without reducing the effectiveness of the meetings concerned.

**MG-5:** The Board will continue to conduct its ongoing reviews in the most cost-effective means possible.

**MG-6:** The Board will take action to ensure that, as far as possible, institutional memory and expertise are passed on to succeeding Board members and staff. When appropriate, the Board may also provide opportunities for one or more undergraduates or graduate students in disciplines related to the Board’s activities to support the Board’s technical staff in performing information research and technical analysis.

**MG-7:** The Board will update its technical resources and capabilities, as necessary, to maintain and improve the core competencies of its professional staff. The Board will develop and implement initiatives to identify, recruit when necessary, and retain highly qualified professionals with the expertise and related knowledge needed to support the work of the Board members and to help the Board achieve its Strategic Objectives and PGs.

**BOARD ATTRIBUTES, ACTIVITIES, AND PRACTICES SUPPORTING THE ACHIEVEMENT OF THE PERFORMANCE GOALS AND STRATEGIC OBJECTIVES.** The following attributes, activities, and practices support the implementation of the Board’s ongoing peer review and reflect the Board’s commitment to its core values of objectivity, openness, technical and scientific rigor, and timeliness.

**AUTHORITY UNDER THE LAW.** The Board has the necessary authority, under current law, to achieve its Strategic Objectives and PGs.

**CULTURE OF ACCOUNTABILITY.** Analyses of DOE’s technical and scientific work are performed by Board members who are appointed by the President from a list of nominees submitted by the National Academy of Sciences. The Board members are eminent experts in their fields and serve part-time. They are supported by a small, full-time professional staff whose members are highly credentialed in the relevant scientific and technical disciplines. The Board reports its findings, conclusions, and recommendations to Congress and the Secretary of Energy, and the Chair and other members of the Board and Board staff testify before Congress, as requested. Board reports, testimony, and correspondence, along with meeting agendas, transcripts, presentations, webcasts, and public comments, are posted on the Board’s website at [www.nwtrb.gov](http://www.nwtrb.gov).

**EFFECTIVE USE OF ANALYTICAL RESOURCES.** Board members and members of the Board’s professional staff are assigned by the Chair to lead or support Board activities, as appropriate. The Board maintains the option of organizing panels and working groups to help facilitate, integrate, and focus its technical and scientific review, and for other purposes. When necessary, the Board is authorized by its enabling legislation to hire expert consultants to support the Board’s in-depth reviews of specific technical topics.

**TRANSPARENCY, COLLABORATION, AND PUBLIC ENGAGEMENT.** To support its peer review and information gathering activities, the Board holds public meetings, at which technical information is presented by representatives of DOE, its contractors, and other organizations involved in nuclear waste management and disposal. At these meetings, Board members and Board staff question presenters, and time is provided for input and comments from interested members of the public. The Board typically holds two or three public meetings per year and announces them in the *Federal Register* from four to six weeks before the meetings are held. The Board continues its goals of transparency of deliberations by webcasting its public meetings and archiving them on the Board’s website. In addition to the Board’s public meetings, Board panels or other small groups of Board members and staff also hold smaller meetings, as needed, to investigate specific technical topics. In order to continue its review of DOE’s activities as effectively as possible, the Board has held a number of virtual meetings and, in, July 2020, held its first virtual public meeting. This was managed successfully and the Board plans to hold more virtual public meetings while the current pandemic continues.

Board members and staff also engage in site visits, visits to national laboratories and facilities, and meetings with DOE and national laboratory and contractor staff working on specific projects and programs. Board members and staff attend technical symposia and conferences related to SNF and HLW management and disposal. Representatives of domestic and international organizations involved in the management and disposal of SNF and HLW are invited to participate in Board public meetings and workshops. On occasion, Board members and/or staff travel to other countries to meet with such organizations to observe their technical programs and best practices, perform benchmarking, and assess potential analogs, among other things. Information gathered from these visits is used to enhance the Board’s evaluation of DOE activities and to advise and inform Congress and the Secretary of Energy. Since March 2020, Board members and staff have participated in virtual meetings, symposia, and conferences.

**EQUITY CONSIDERATIONS.** In executing its review and analysis, the Board will continue to ensure its actions do not adversely affect disadvantaged communities.

## **EVALUATION OF BOARD PERFORMANCE IN FY 2020**

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The Board uses annual evaluations of its performance as input in updating its PGs and MGs for the current year and identifying PGs for the subsequent year. The PGs reflect the objectives of the agency leadership and are outcome-oriented. The annual evaluations of the Board’s performance also are used as input to the development of the Board’s annual budget request submittal.

**BOARD PERFORMANCE IN FY 2020 – PERFORMANCE GOALS.** The PGs, which are the subject of this evaluation, were included as part of the Board’s Performance Plan for FYs 2020 through 2021 contained in the Board’s Budget Request Submittal for FY 2021. In the following evaluation, the

Strategic Objectives on which the PGs are based are stated followed by a table displaying the associated PGs and the activities undertaken by the Board to accomplish the PGs in FY 2020.

***STRATEGIC OBJECTIVE #1:*** *The Board will continue its evaluation of DOE activities related to implementation of the NWPA and relevant amendments to that Act. Based on its evaluation, the Board will report its findings, conclusions, and recommendations to Congress and the Secretary.*

<b>FY 2020 PERFORMANCE GOAL</b>	<b>BOARD ACTIVITIES</b>
<p><b>PG 1-A:</b> The Board will hold a public meeting on DOE’s research and development (R&amp;D) on packaging, drying, and storing SNF.</p>	<p>On November 19, 2019, the Board held a public meeting in Alexandria, VA on DOE R&amp;D activities related to packaging, drying, and dry-storage of SNF: <a href="#">November 19, 2019, Board Meeting</a>.</p> <ul style="list-style-type: none"> <li>➤ Following the meeting, the Board issued a letter to DOE, providing the Board’s observations: <a href="#">January 10, 2020, Board letter</a>.</li> </ul>
<p><b>PG 1-B:</b> The Board will review DOE R&amp;D activities related to the management and disposal of aluminum-based SNF.</p>	<p>DOE-NE presented its R&amp;D related to the management and disposal of aluminum-based SNF at the Board’s public meeting in November 2019. The Board plans to hold a fact-finding meeting with DOE-EM during FY 2021 to review its R&amp;D in these areas.</p>
<p><b>PG 1-C:</b> The Board will continue to monitor and review DOE R&amp;D activities related to transport, storage, and disposal of borosilicate glass waste.</p>	<p>Throughout FY 2020, the Board obtained and reviewed DOE research results and reports on the disposal of borosilicate glass waste to remain cognizant of ongoing DOE efforts in this area.</p>
<p><b>PG 1-D:</b> The Board will continue to review the technical issues DOE will need to address before it can begin the implementation of an integrated program for the nationwide transport of SNF and HLW.</p>	<p>In FY 2020, the Board continued its review of issues related to the transport of SNF and HLW, including DOE R&amp;D activities related to the development of containers in which SNF will be transported from DOE sites to other storage facilities or a repository site for disposal.</p>

**STRATEGIC OBJECTIVE #2:** *The Board will develop objective technical and scientific information that will be useful to policy makers in Congress and the Administration on issues related to SNF and HLW management and disposal. The Board will communicate such information to Congress and the Secretary in letters, reports, and testimony.*

<b>FY 2020 PERFORMANCE GOAL</b>	<b>BOARD ACTIVITIES</b>
<p><b>PG 2-A:</b> The Board will issue a report on the technical issues DOE will need to address before it can begin the implementation of an integrated program for the nationwide transport of SNF and HLW.</p>	<p>The Board completed this task at the end of FY 2019 and issued a report to Congress and the Secretary of Energy on <i>Preparing for Nuclear Waste Transportation: Technical Issues that Need to be Addressed in Preparing for a Nationwide Effort to Transport Spent Nuclear Fuel and High-Level Radioactive Waste.</i></p>
<p><b>PG 2-B:</b> The Board will issue a report summarizing its review activities, and its findings, conclusions and recommendations, from January 1, 2016, through June 30, 2018.</p>	<p>In 2020, the Board continued to develop a report to Congress and the Secretary of Energy summarizing its review activities, and its findings, conclusions, and recommendations. The reporting period of the report has been extended to include January 1, 2016, through December 31, 2018. The Board expects to issue this report in FY 2021.</p>
<p><b>PG 2-C:</b> The Board plans to issue a report on DOE R&amp;D activities to determine the behavior of high burnup SNF during extended dry storage and transportation.</p>	<p>In 2020, the Board continued work on the report and now expects to issue it in FY 2021.</p>
<p><b>PG 2-D:</b> The Board plans to issue a report on the system-wide implications of using large canisters for the dry storage of SNF.</p>	<p>In 2020, the Board continued to draft a report on the system-wide implications of using large canisters for the dry storage of SNF. The Board expects to issue this report in FY 2021.</p>

*STRATEGIC OBJECTIVE #3: The Board will compile information and report to Congress and the Secretary on its findings, conclusions, and recommendations from experience gained over more than twenty-five years of reviewing the U.S. nuclear waste management and disposal program and from observing waste management efforts in other countries.*

FY 2020 PERFORMANCE GOAL	BOARD ACTIVITIES
<p><b>PG 3-A:</b> The Board will issue a report to Congress and the Secretary on advances in repository science and operations from international underground research laboratory collaborations.</p>	<p>Following the Board workshop on advances in repository science and operations from international underground research laboratory collaborations in April 2019 (<a href="#">April 24-25, 2019, Workshop</a>), the Board published a report for Congress and the Secretary of Energy titled “<a href="#">Filling The Gaps: The Critical Role Of Underground Research Laboratories in the U.S. Department of Energy Geologic Disposal Research and Development Program</a>”. The report was published in January 2020.</p>
<p><b>PG 3-B:</b> The Board will continue to monitor activities in other countries related to programs for the management and disposal of SNF and HLW and update the information on its website, as appropriate.</p>	<p>The Board was planning to host a meeting of the Advisory Bodies to Government (ABG) in 2020 in the United States, but this has been postponed due to the COVID-19 pandemic. The ABG is a group of advisory bodies, like the Board, from other countries, that meet each year to share new information and lessons learned on the topics of nuclear waste management and disposal.</p> <p>The Board has continued to maintain contact with relevant organizations in other countries to remain apprised of progress in the development of their waste management and disposal programs.</p>

**BOARD PERFORMANCE IN FY 2020 – MANAGEMENT GOALS.** To enhance the effectiveness and efficiency of Board activities supporting its Strategic Objectives and PGs, the Board identified the MGs in the table below for FYs 2020 through 2021. The MGs were included in the Board’s Budget Request Submittal for FY 2020. The associated activities undertaken to accomplish the MGs are opposite their respective MGs in the table.

<b>FY 2020 MANAGEMENT GOAL</b>	<b>BOARD ACTIVITIES</b>
<p><b><u>MG-1:</u></b> The Board will continue to implement actions to optimize organizational efficiency and accountability and maximize employee performance.</p>	<p>In FY 2020, the Board:</p> <ul style="list-style-type: none"> <li>• proactively evaluated its performance to identify opportunities for improvement;</li> <li>• focused on where needs were greatest to ensure efficient operations;</li> <li>• evaluated how to achieve the best results.</li> </ul>
<p><b><u>MG-2:</u></b> The Board will identify any potential constraints on the agency’s ability to perform its mission and develop and implement integrated strategies for mitigating such constraints through proactive management and allocation of resources.</p>	<p>In FY 2020, the Board assessed operational constraints that may affect its ability to achieve its mission and focused attention and resources on addressing and mitigating the constraints. Following the retirement of two professional staff members in 2019, the Board hired three new members of the professional staff in FY 2020.</p>
<p><b><u>MG-3:</u></b> The Board will maintain and enhance effective communications among Board members who are geographically dispersed. The Board will also facilitate communication between the Board members and the professional staff members who support the Board’s technical and scientific review of DOE activities from the Board offices in Arlington, Virginia.</p>	<p>In FY 2020, the Board continued to use an electronic drop box to facilitate Board member access to source materials, information write-ups by professional staff, and draft Board documents. The Board continued to hold monthly teleconferences, moving to video teleconferencing as telework became the norm.</p>
<p><b><u>MG-4:</u></b> The Board will continue webcasting its meetings and making available archived video recordings of the webcasts on its website.</p>	<p>In November 2019, the Board webcast its public meeting, in line with its recent practice, and archived the recording of the meeting on the Board’s website at <a href="http://www.nwtrb.gov">www.nwtrb.gov</a>. In July 2020, the Board held its first virtual public meeting as it continued its work, despite the challenges brought on by COVID-19.</p>

<p><b><u>MG-5:</u></b> The Board will continue to conduct its ongoing reviews in the most cost-effective means possible.</p>	<p>In FY 2020, meetings were held in Alexandria, VA in November 2019 and virtually in July 2020 due to COVID-19. The Board continues to reduce the demand for printed copies of reports by making them available for download from its website. Internal documents are coordinated electronically, and the staff will continue transitioning to electronic records.</p>
<p><b><u>MG-6:</u></b> The Board will take action to ensure that institutional memory and expertise are passed on to succeeding Board members and staff. When appropriate, the Board may also provide opportunities for one or more undergraduates or graduate students in disciplines related to the Board’s activities to support the Board’s technical staff in performing information research and technical analysis.</p>	<p>In FY 2020, updates and briefings on the Board’s mission, the Board’s work-in-progress, and plans for future review activities were discussed by Board members and staff at Board business meetings held in conjunction with the Board’s public meetings. The Board held an additional business meeting in February 2020 to work on reports in progress and plan future review activities.</p>
<p><b><u>MG-7:</u></b> The Board will update its technical resources and capabilities, as necessary, to maintain and improve the core competencies of its professional staff. The Board will develop and implement initiatives to identify, recruit when necessary, and retain, highly qualified professionals with the expertise and related knowledge needed to support the work of the Board members and help the Board achieve its Strategic Objectives and Performance Goals.</p>	<p>In FY 2020, the Board continued to increase the efficiency of its technological resources and capabilities by providing training on relevant software. On an ongoing basis, key IT systems and programs are updated to take advantage of recent technological advances. The Board is currently moving to maximize the use of electronic resources to reduce its reliance on its physical library system.</p>

## APPROPRIATIONS LANGUAGE

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### **U.S. NUCLEAR WASTE TECHNICAL REVIEW BOARD**

#### **SALARIES AND EXPENSES (INCLUDING TRANSFER OF FUNDS)**

“For necessary expenses of the U.S. Nuclear Waste Technical Review Board, as authorized by Public Law 100-203, § 5051, \$3,800,000 to be derived from the Nuclear Waste Fund and to remain available until September 30, 2023.”

(Energy and Water Development and Related Agencies Appropriations Act, 2021.)

## FY 2022 BUDGET REQUEST BY OBJECT CLASS

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### U.S. NUCLEAR WASTE TECHNICAL REVIEW BOARD

#### FY 2022 Budget Justification by Object Class

(Figures Rounded in Thousands of Dollars)

Object Class	Object Class Title	FY 2020 Enacted	FY 2021 Enacted	FY 2022 Request
11.0	Salaries	\$2,165	\$2,187	\$2,246
12.0	Benefits	\$566	\$572	\$587
21.0	Travel and Transportation	\$125	\$25	\$75
23.1	Rent	\$264	\$350	\$380
23.3	Communications and Utilities	\$50	\$50	\$50
24.0	Printing and Reproduction	\$20	\$20	\$20
25.0	Consultants	\$80	\$75	\$85
25.1/2	Contractual Services - Other	\$85	\$80	\$85
25.3	Contractual Services - Federal	\$200	\$200	\$222
26.0	Supplies and Materials	\$25	\$22	\$30
31.0	Equipment	\$20	\$20	\$20
<b>Total Budgetary Resources</b>		<b>\$3,600</b>	<b>\$3,600</b>	<b>\$3,800</b>
Total Full Time Equivalent Employees		16	16	16

## **DETAILS OF BUDGET REQUEST BY OBJECT CLASS**

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To fulfill its statutory mandate for reviewing the technical and scientific validity of activities undertaken by the Secretary of Energy related to nuclear waste management and for providing independent technical and scientific information and advice to Congress and the Secretary, the Board requests \$3,800,000, which is a 5.6% increase from the agency's appropriations for FY 2021. The Board's Budget Request reflects its continuing commitment to efficient and cost-effective budgeting and management practices even as costs rise.

A detailed explanation of the Board's request by Object Class follows.

### **OBJECT CLASS 11.0, SALARIES: \$2,246,000**

The estimate for this object class includes funding for 11 part-time Board members, one senior executive, professional staff, and General Schedule (GS) administration staff, and includes within-grade increases. The Board members are Special Government Employees and, in accordance with the Board's enabling legislation, each member is compensated at the rate of pay of Executive Schedule Level III. The senior executive acts as the chief operating officer for the Board, and the professional staff members support the work of the Board members in evaluating the technical and scientific validity of DOE activities related to the management and disposal of SNF and HLW. The GS staff members perform administrative activities related to the Board's ongoing technical and scientific evaluation and the operation of the organization. Administrative support activities include budget preparation and financial management, dissemination of Board publications, information technology activities, facilities management, travel planning, management of meeting logistics, and preparation and implementation of Board responses to federal directives.

The Request also includes a 2.7 % pay increase in civilian salaries, FERS increase, and supplemental funds for a performance award pool in FY 2022. In accordance with OMB memo M-19-24, the Board established a Workforce Fund Plan which identifies the strategic spending of award funds. The Board plans to spend three percent of its projected employee salaries, including the salaries of those personnel expected to be hired during FY 2021, on awards to staff to incentivize continued high-level performance. As a result, the Board's projected awards spending level is \$55,863.

### **OBJECT CLASS 12.0, CIVILIAN PERSONNEL BENEFITS: \$587,000**

The estimate for this object class represents the government's contribution for the government employee fringe benefits for Board members and staff as required by OMB memo M-08-13.

### **OBJECT CLASS 21.1, TRAVEL AND TRANSPORTATION: \$75,000**

The estimate for this object class reflects reduced travels costs due to the COVID-19 pandemic as the Board plans to host both virtual and in-person meetings. The Board expanded its leased office space, in part to reduce future travel costs. Travel costs may consist of Board members, staff, and consultants required to travel for in-person fact-finding meetings, professional meetings, conferences, orientation activities, national laboratories, and other events and venues related to

accomplishing the Board's Strategic Objectives and Performance Goals, as detailed in the Board's Performance Plan for FYs 2021 through 2022.

**OBJECT CLASS 23.0, RENTAL PAYMENTS TO THE GENERAL SERVICES ADMINISTRATION (GSA): \$380,000**

The amount requested in this object class category is to cover the expense of rental payments to GSA Public Building Services (PBS) under an Occupancy Agreement for leased office space in Arlington, VA. The amount reflected includes the estimated tax assessment, tax escalation fee, and GSA PBS fee for the FY 2022 lease year period.

**OBJECT CLASS 23.3, COMMUNICATION, UTILITIES, MISCELLANEOUS: \$50,000**

The estimate for this object class represents costs for telephone service, postage, local courier services, video teleconferencing, webcasting support, internet, and mailing services. Furthermore, this amount includes the cost to achieve the Board's objective of network consolidation, modernization, and network re-architecture by transitioning to GSA's Enterprise Infrastructure Systems (EIS) contract.

**OBJECT CLASS 24.0, PRINTING AND REPRODUCTION: \$20,000**

The estimate for this object class is for costs associated with creating and publishing Board reports that are required by statute to be sent to Congress and the Secretary of Energy and the Board sends to a large number of other interested parties. The estimate also includes the costs associated with the publication of additional copies of earlier reports and technical materials, as well as such other costs as those associated with publishing meeting notices in the *Federal Register*. In keeping with the federal government's efforts to increase efficiency, the Board makes all its reports, publications, and correspondence available for download from its website to reduce the number of hard copies it needs to produce.

**OBJECT CLASS 25.0, CONSULTANTS: \$85,000**

The estimate for this object class includes funding for consultants to support and supplement Board and staff analyses of specific technical and scientific issues as authorized by the Board's enabling statute. Requested funding for this object class also includes estimates for expert consultants to assist the Board in developing and implementing methods that will increase public on-line access to its publications, informational resources, and other Board matters.

**OBJECT CLASS 25.1/2, CONTRACTUAL SERVICES – OTHER: \$85,000**

The estimate for this object class includes the cost of such items as meeting-room rentals, stenography and audio-visual support services, webcasting services for virtual meetings, and video recording equipment rentals for public meetings; facility maintenance agreements; and professional development for Board supervisors and staff. Other program support contracts include services for report editing and production, as well as provision of an offsite data center to allow Continuation of Operations in the event of loss of power or an incident in the Board's offices, along with contracted commercial information technology (IT) support in compliance with the

Federal Information Security Modernization Act (FISMA) of 2014. Support includes information security protections to prevent unauthorized access, use, disclosure, disruption, modification, or destruction of information and information systems on our network. Furthermore, the Board's network is monitored to timely detect and report cyber incidents and ensure necessary resources are maintained for cybersecurity needs at the Board's offsite data center. This budget estimate also includes funding to ensure the Board complies with Executive Order 13556, Controlled Unclassified Information (CUI), policies issued by the National Archives and Records Administration (NARA), 32 CFR Part 2002, "Controlled Unclassified Information," and OMB M-19-21, *Transition to Electronic Records*. This estimate further includes funding the contract to support the Board's requirement to maintain an Equal Employment Opportunity (EEO) program as required in Executive Order 12067, *Providing for Coordination of Federal Equal Employment Opportunity Programs*.

**OBJECT CLASS 25.3, CONTRACTUAL SERVICES - FEDERAL: \$222,000**

The estimate for the object class includes funding for administrative support services provided by other federal agencies, including payroll and accounting services received from GSA Office of the Chief Financial Officer (OCFO) as well as human resource services related to managing electronic official personnel folders, conducting personnel actions, and initiating personnel clearances, and legal support services received from GSA Commissions and Boards Services (CABS). The estimate also includes security background investigations performed by the Defense Counterintelligence and Security Agency (DCSA), USAJOBS recruitment assistance received through the Office of Personnel Management (OPM) and other support provided through interagency agreements. The Board's enabling legislation authorizes the procurement of necessary administrative services from GSA on a reimbursable basis. This estimate includes an increase in the costs of payroll and financial reporting and services and \$6,200 in building security fees levied by the Department of Homeland Security (DHS) Federal Protective Service (FPS). Furthermore, this estimate encompasses the support received from the Department of Health and Human Services (HHS), Federal Occupational Health Service (FOH) to provide occupational and/or environmental health services as well as personal identity verification (PIV) card support from GSA's Managed Service Office (MSO) for all Board personnel.

**OBJECT CLASS 26.0, SUPPLIES AND MATERIALS: \$30,000**

This estimate includes anticipated expenses for office supplies, subscriptions to technical publications and on-line academic journals and research databases, meeting supplies, and off-the-shelf technical reports and studies.

**OBJECT CLASS 31.0, EQUIPMENT: \$20,000**

This object class includes costs to maintain IT and other electronic equipment, including computer hardware and software. The object class includes funding for the continuation of ongoing maintenance to the Board's IT and physical security equipment, continuity of operations (COOP), support of E-Gov telecommuting efforts, and technical support for the management and ongoing maintenance and upgrades of the Board's cybersecurity initiatives.