

U.S. DEPARTMENT OF ENERGY
OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY
NEPA DETERMINATION



RECIPIENT: Defensewerx

STATE: DC

PROJECT TITLE: DOE Voucher Program: Voucher Opportunity 6 - Hydropower Testing Network

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
	PIA	GFO-VoucherOpp6-001	

Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Policy 451.1), I have made the following determination:

CX, EA, EIS APPENDIX AND NUMBER:

Description:

A8 Awards of certain contracts	Awards of contracts for technical support services, management and operation of a government-owned facility, and personal services.
A9 Information gathering, analysis, and dissemination	Information gathering (including, but not limited to, literature surveys, inventories, site visits, and audits), data analysis (including, but not limited to, computer modeling), document preparation (including, but not limited to, conceptual design, feasibility studies, and analytical energy supply and demand studies), and information dissemination (including, but not limited to, document publication and distribution, and classroom training and informational programs), but not including site characterization or environmental monitoring. (See also B3.1 of appendix B to this subpart.)
A11 Technical advice and assistance to organizations	Technical advice and planning assistance to international, national, state, and local organizations.
B3.6 Small-scale research and development, laboratory operations, and pilot projects	Siting, construction, modification, operation, and decommissioning of facilities for smallscale research and development projects; conventional laboratory operations (such as preparation of chemical standards and sample analysis); and small-scale pilot projects (generally less than 2 years) frequently conducted to verify a concept before demonstration actions, provided that construction or modification would be within or contiguous to a previously disturbed or developed area (where active utilities and currently used roads are readily accessible). Not included in this category are demonstration actions, meaning actions that are undertaken at a scale to show whether a technology would be viable on a larger scale and suitable for commercial deployment.

Rationale for determination:

In November 2022, the U.S. Department of Energy (DOE) issued a Broad Agency Announcement indicating an interest in entering into one or multiple agreements with partnership intermediaries to work with DOE's Office of Technology Transfer (OTT), other DOE offices and programs, and DOE National Laboratories and Facilities. Through one or more Partnership Intermediary Agreements (PIAs), DOE would expand its capabilities to connect and engage with the broader energy and national security ecosystem and address gaps facing companies, organizations and communities seeking to engage with DOE and/or develop, scale, commercialize, deploy, and adopt technologies relevant to DOE's mission. This NEPA determination (ND) evaluates the DOE Voucher Opportunity (VO) Program.

DOE has completed NDs which applied to five previously proposed Voucher Opportunities (VOs). This ND (GFO-VoucherOpp6-001) applies to an additional opportunity: Voucher Opportunity 6 (VO-6) – Hydropower Testing Network (HyTN). VO-6 would involve collaboration with DOE's Water Power Technologies Office (WPTO). DEFENSEWERX would serve as the partnership intermediary for this voucher opportunity.

The proposed HyTN VO-6 would support physical testing of hydropower technologies at existing research and development facilities. For the purposes of this VO, physical testing would be defined as hands-on experiments in a laboratory environment that would involve hardware, such as a prototype, system, component, or coupon. The HyTN VO-6 is not intended to support fabrication or manufacturing activities for commercial products. Testing activities and locations are not yet fully defined.

The HyTN VO-6 would occur in three phases: Phase 1 – Testing Capability Selection; Phase 2 – Technology Developer Selection and Matchmaking; and Phase 3 – Project Execution.

Activities to be conducted by DEFENSEWERX would be administrative in nature, including facilitation of partnerships between organizations, market research and engagement, establishing a network of organizations (i.e., voucher providers) which have capabilities to provide technical support at existing facilities, facilitation of an application review

and voucher matching process, project monitoring, and providing funds to voucher providers (i.e., organizations/facilities within the network) who provide technical support to voucher recipients (i.e., entities requesting technical support for testing of technologies). Facilities admitted into HyTN would issue vouchers to be redeemed by voucher recipients for technical assistance with physical testing of technologies. Testing activities may include evaluation of device and/or material performance, aquatic species passage, and grid integration testing. Hydraulic laboratory facilities in the network may be “open loop” (i.e., water for testing activities may be obtained from and discharged into a natural waterway) or “closed loop” (i.e., water for testing is not discharged into a natural waterway) facilities.

Federal laboratories may be identified as eligible testing facilities. Agencies with relevant testing capabilities may include the US Geological Survey (USGS), the US Army Corp of Engineers (USACE), and the US Bureau of Reclamation (USBR). If accepted into HyTN, the agencies would act as voucher providers to support testing activities funded through an Inter-agency agreement.

Facilities to be included in the network would be selected during Phase 1 of the project. During this phase, facilities would submit a list of testing capabilities they would offer to voucher recipients. These capabilities and other application materials would be reviewed by WPTO prior to admission into the network. After Phase 1, facilities may continue to apply to join the network via the HyTN website pending review and approval by WPTO. During Phase 2, technology developers would submit applications to receive vouchers for technical support from the network. WPTO would review applications and match them to appropriate testing facilities. Testing activities at HyTN facilities would occur during Phase 3.

Expected hazards of testing activities would be those common to laboratory facilities capable of hydropower technology testing activities, including handling of hazardous materials, equipment, and heavy machinery. Activities may occur around wet areas or facilities with large amounts of water for testing, presenting potential risk of slipping and/or drowning. To mitigate risks posed by hazards, project activities would follow all relevant policies (e.g., health and safety, materials handling, equipment operation, etc.) set by the host facility which would comply with federal, state, and local regulations.

The proposed HyTN VO-6 would only support testing activities at existing purpose-built facilities. Project activities would not involve physical modification or construction of new facilities, ground disturbing activities, installation or deployment of equipment outdoors, or changes in the use, mission, or operation of existing facilities.

Project activities would be required to fall within the existing permits, licenses, and authorizations of the host facility (voucher provider). If a facility applied to join the network but lacked required permits, licenses, and/or authorizations, that facility would be required to obtain such requirements before providing support as part of the HyTN VO-6.

Testing activities could occur at open loop facilities that take in and discharge water from natural aquatic environments. These facilities would be required to have all necessary federal, state, and local permits to operate. Open loop systems must have established protocols and processes to mitigate impacts on water quality and aquatic species. Any proposed activities at these types of facilities would be contained within the facility itself and have no impact on the water source or its sediment. While facilities have not yet been determined for the HyTN VO-6, the S.O. Conte Anadromous Fish Research Laboratory (Turner Falls, MA) and St. Anthony Falls Laboratory (Minneapolis, MN) are examples of such facilities. Open water field testing activities would not be supported by the HyTN VO-6.

Proposed activities to be supported by the HyTN VO-6 which would involve the collection or use of living organisms must be reviewed by DOE to determine if this ND (GFO-VoucherOpp6-001) applies to such activities. A concurrence form has been created to collect the necessary information for review. A completed concurrence form must be emailed to gonepa@ee.doe.gov (Golden Field Office NEPA Division) with the email subject line “(WPTO) HyTN Project Concurrence Request.” After completing a sufficiency review, DOE would notify project proponents whether the ND is applicable or if additional review is required.

DOE has considered the scale, duration, and nature of proposed activities to determine potential impacts on resources, including those of an ecological, historical, cultural, and socioeconomic nature. DOE does not anticipate impacts on these resources which would be considered significant or require DOE to consult with other agencies or stakeholders.

Any work proposed to be conducted at a federal facility may be subject to additional NEPA review by the cognizant federal official and must meet the applicable health and safety requirements of the facility.

NEPA PROVISION

DOE has made a conditional NEPA determination.

The NEPA Determination applies to the following Topic Areas, Budget Periods, and/or tasks:

This ND applies to all proposed activities; however, any proposed activities to be supported by the HyTN VO-6 which would involve the collection or use of living organisms must be reviewed by DOE to ensure this ND is applicable to those types of activities. Such activities may be subject to additional review.

The NEPA Determination does not apply to the following Topic Area, Budget Periods, and/or tasks:

DOE may issue voucher opportunities and mechanisms to provide financial support through the partnership intermediary agreement (PIA) with DEFENSEWERX or other partnership intermediaries (PIs) in the future. Such activities would be subject to additional NEPA review.

Include the following condition in the financial assistance agreement:

Proposed activities to be supported by the HyTN VO-6 which would involve the collection or use of living organisms must be reviewed by DOE to determine if this ND (GFO-VoucherOpp6-001) applies to such activities. A concurrence form has been created to collect the necessary information for review. A completed concurrence form must be emailed to gonepa@ee.doe.gov (Golden Field Office NEPA Division) with the email subject line "(WPTO) HyTN Project Concurrence Request." After completing a sufficiency review, DOE would notify project proponents whether the ND is applicable or if additional review is required.

DOE may issue voucher opportunities and mechanisms to provide financial support through the partnership intermediary agreement (PIA) with DEFENSEWERX or other partnership intermediaries (PIs) in the future. Such activities would be subject to additional NEPA review when sufficient information is available for DOE to conduct a meaningful analysis of potential impacts to the human environment.

Notes:

Water Power Technologies Office (WPTO)

This NEPA determination requires legal review of the tailored NEPA provision.
NEPA review completed by Melissa Parker, 06/05/2024.

FOR CATEGORICAL EXCLUSION DETERMINATIONS

The proposed action (or the part of the proposal defined in the Rationale above) fits within a class of actions that is listed in Appendix A or B to 10 CFR Part 1021, Subpart D. To fit within the classes of actions listed in 10 CFR Part 1021, Subpart D, Appendix B, a proposal must be one that would not: (1) threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, or similar requirements of DOE or Executive Orders; (2) require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities (including incinerators), but the proposal may include categorically excluded waste storage, disposal, recovery, or treatment actions or facilities; (3) disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that preexist in the environment such that there would be uncontrolled or unpermitted releases; (4) have the potential to cause significant impacts on environmentally sensitive resources, including, but not limited to, those listed in paragraph B(4) of 10 CFR Part 1021, Subpart D, Appendix B; (5) involve genetically engineered organisms, synthetic biology, governmentally designated noxious weeds, or invasive species, unless the proposed activity would be contained or confined in a manner designed and operated to prevent unauthorized release into the environment and conducted in accordance with applicable requirements, such as those listed in paragraph B(5) of 10 CFR Part 1021, Subpart D, Appendix B.

There are no extraordinary circumstances related to the proposed action that may affect the significance of the environmental effects of the proposal.

The proposed action has not been segmented to meet the definition of a categorical exclusion. This proposal is not connected to other actions with potentially significant impacts (40 CFR 1508.25(a)(1)), is not related to other actions with individually insignificant but cumulatively significant impacts (40 CFR 1508.27(b)(7)), and is not precluded by 40 CFR 1506.1 or 10 CFR 1021.211 concerning limitations on actions during preparation of an environmental impact statement.

A portion of the proposed action is categorically excluded from further NEPA review. The NEPA Provision identifies Topic Areas, Budget Periods, tasks, and/or subtasks that are subject to additional NEPA review.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: _____



Date: 6/7/2024

FIELD OFFICE MANAGER DETERMINATION

- Field Office Manager review not required
- Field Office Manager review required

BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :

Field Office Manager's Signature: _____

Field Office Manager

Date: _____