

Supporting Statement
FERC-521, Payments for Benefits from Headwater Improvements
(Three-year extension requested)

The Federal Energy Regulatory Commission (FERC or Commission) requests the Office of Management and Budget (OMB) to review and approve the information collection FERC-521 (Payments for Benefits from Headwater Improvements) for a three-year period. There is no change to the reporting or recordkeeping requirements.

1. CIRCUMSTANCES THAT MAKE THE COLLECTION OF INFORMATION NECESSARY

The purpose of FERC-521 is to implement information collections pursuant to Section 10(f) of the Federal Power Act (FPA).¹ Under Section 10(f) licensees of unlicensed non-Federal hydroelectric power projects that are directly benefited by a headwater project must pay an equitable portion of the annual costs of interest, maintenance, and depreciation of the headwater project. This payment is called the headwater benefit payment. The Commission requires basic project information including location and storage capacity to be filed by the owner of any headwater project constructed by the United States, a licensee, or a pre-1920 permittee that is upstream from a non-Federal hydroelectric project.

2. HOW, BY WHOM, AND FOR WHAT PURPOSE THE INFORMATION IS TO BE USED AND THE CONSEQUENCES OF NOT COLLECTING THE INFORMATION

FERC-521 implements the existing regulations and is necessary for the determination of headwater benefits derived by downstream parties. The regulations set forth a formula²

¹ 16 USC 803.

² $P = \frac{C_p * E_n}{(E_j + E_d)}$; In this formula the following applies:

- **P** = annual payment to be made for headwater benefits received by downstream project
- **C_p** = Annual Section 10(f) cost of headwater project
- **E_n** = Annual energy gains received at a downstream project (or group of projects)
- **E_j** = portion of annual energy generated at the headwater project assigned to the joint-use power cost

for determining an equitable apportionment of the annual charges for interest, maintenance, and depreciation for a storage reservoir or other headwater improvement owned by the United States, a licensee, or a pre-1920 permittee. Energy gains are determined by FERC using various analytical methods. The method chosen depends upon the complexity of the river basin and the potential headwater benefits. Complex river basins that include a large number of headwater and downstream projects often require a detailed computer analysis using FERC's computer modeling simulation program *Headwater Benefits Energy Gain Model (HWBEG)*. For river basins that are not complex or in which the headwater benefits are expected to be small, the Commission relies on a flow duration methodology to determine energy gains. Headwater benefit determinations are based on the calculation of the average energy gains of a project. To determine how much annual energy is produced, it is necessary to calculate how much energy the downstream project would have produced if the upstream projects did not exist. The amount of energy that a hydropower project produces depends primarily on on-stream flow, reservoir storage, head, size and efficiency of turbines and generators, and load to be served.

In determining energy gains, the size and efficiency of the turbines and the generators, and the load to be served will remain constant, while stream flow, reservoir storage, and head will vary depending on the operation conditions of the upstream reservoirs. Because head and stream flow determine the amount of energy produced at the hydropower project, a relationship of generation as a function of the head and stream flow can be developed. Commission experience has shown that the relationship between generation and stream flow is an adequate tool for estimating generation in calculating gains.

If the information were not collected, there would be no data available to determine the benefits received from downstream parties from the operation of storage reservoirs, or other headwater improvements.

3. DESCRIBE ANY CONSIDERATION OF THE USE OF IMPROVED INFORMATION TECHNOLOGY TO REDUCE THE BURDEN AND TECHNICAL OR LEGAL OBSTACLES TO REDUCING BURDEN

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- E_d = annual energy gains received at all downstream projects (except ones specified in 18 CFR 11.10(b))

FERC continually considers the use of improved information technology to reduce burden in the filing requirements for submission of information concerning headwater benefits. FERC-521 may be eFiled through FERC's eFiling system.

4. DESCRIBE EFFORTS TO IDENTIFY DUPLICATION AND SHOW SPECIFICALLY WHY ANY SIMILAR INFORMATION ALREADY AVAILABLE CANNOT BE USED OR MODIFIED FOR USE FOR THE PURPOSE(S) DESCRIBED IN INSTRUCTION NO. 2

In an effort to alleviate duplication, filing requirements are periodically reviewed as OMB review dates arise, or as the Commission may deem necessary in carrying out its regulatory responsibilities. The reporting requirements associated with FERC-521 are basic filing requirements pertaining to headwater benefits. There are no similar sources of information available.

5. METHODS USED TO MINIMIZE THE BURDEN IN COLLECTION OF INFORMATION INVOLVING SMALL ENTITIES

The filing requirements are imposed on both large and small entities. Specific efforts have been made to minimize the burden imposed on small entities who file the data. For example, only those hydropower projects with an installed generating capacity greater than 1.5 MW are subject to headwater benefits charges. No final charge assessed may exceed 85 percent of the value of the energy gains for the assessment period. The data required is specific to each respondent. Therefore, the reporting burden varies between each respondent.

6. CONSEQUENCE TO FEDERAL PROGRAM IF COLLECTION WERE CONDUCTED LESS FREQUENTLY

If the information were collected less frequently, the Commission would be placed at a disadvantage due to not having available data for determining the benefits from headwater improvements.

7. EXPLAIN ANY SPECIAL CIRCUMSTANCES RELATING TO THE INFORMATION COLLECTION

There are no special circumstances as described in 5 CFR 1320.5(d)(2) related to FERC-521.

**8. DESCRIBE EFFORTS TO CONSULT OUTSIDE THE AGENCY:
SUMMARIZE PUBLIC COMMENTS AND THE AGENCY'S RESPONSE**

In accordance with OMB requirements the information collection renewals are published in the Federal Register thereby providing public utilities and licensees, state commissions, Federal agencies, and other interested parties an opportunity to submit data, views, comments, or suggestions concerning the collection of data. The Commission published a 60-day notice³ and 30-day notice⁴ in the Federal Register in Docket No. IC23-12-000 regarding FERC-521. No public comments were received.

9. EXPLAIN ANY PAYMENT OR GIFTS TO RESPONDENTS

The Commission does not make payments or provide gifts for respondents related to FERC-521.

**10. DESCRIBE ANY ASSURANCE OF CONFIDENTIALITY PROVIDED TO
RESPONDENTS**

The information submitted to the Commission is public, therefore, the information is not considered confidential. Specific requests for privileged treatment will be considered pursuant to 18 C.F.R. Section 388.112.

**11. PROVIDE ADDITIONAL JUSTIFICATION FOR ANY QUESTIONS OF A
SENSITIVE NATURE, SUCH AS SEXUAL BEHAVIOR AND ATTITUDES,
RELIGIOUS BELIEFS, AND OTHER MATTERS THAT ARE COMMONLY
CONSIDERED PRIVATE.**

There are no questions of a sensitive nature associated with the FERC-521 reporting requirements.

12. ESTIMATED BURDEN OF COLLECTION OF INFORMATION

³388 FR 34495 (5/30/2023)
⁴488 FR 53877 (8/9/2023)

There are no changes to the reporting requirements. The estimated average annual burden and cost⁵ follow for the FERC-521 information collection as follows:

FERC-521: Payments for Benefits from Headwater Improvements						
	Number of Respondents (1)	Annual Number of Responses per Respondent (2)	Total Number of Responses (1)*(2)=(3)	Average Burden & Cost Per Response (4)	Total Annual Burden Hours & Total Annual Cost (3)*(4)=(5)	Cost per Respondent (\$) (5)÷(1)
Federal and Non-Federal project owners	3	1	3	40 hrs.; \$3,640	120 hrs.; \$10,920	\$3,640

The total estimated annual cost burden to each respondent is \$3,640 [40 hours * \$91.00/hour = \$3,640].

13. ESTIMATE OF THE TOTAL ANNUAL COST BURDEN TO RESPONDENTS

The costs for this collection are entirely related to burden hours and are provided in Questions #12 and #15.

14. ESTIMATED ANNUALIZED COST TO FEDERAL GOVERNMENT

The Commission bases its estimate for “Analysis and Processing of filings” on FERC’s salaries and benefits for professional and clerical support.

The Commission bases the cost associated with the Paperwork Reduction Act of 1995 (PRA) administration on staff time, and other costs related to compliance with the PRA. These costs include reviewing and analyzing the reporting/recordkeeping/posting requirements, developing, processing, and issuing the public notices and PRA supporting

⁵ The estimates for cost per response are derived using the 2022 FERC average salary plus benefits of \$188,922/year (or \$91.00/hour). Commission staff finds that the work done for this information collection is typically done by wage categories similar to those at FERC.

statement and materials, analyzing, and addressing any public comments, and publishing notices in the Federal Register.

The estimated annualized cost to the Federal Government for FERC-521 is:

	Number of Employees (FTEs)	Estimated Annual Federal Cost
Analysis and Processing of filings ⁶	0.12	\$22,671
PRA ⁷ Administrative Cost ⁸		\$7,694
FERC Total		\$30,365

15. REASONS FOR CHANGES IN BURDEN INCLUDING THE NEED FOR ANY INCREASE

There are no changes to reporting requirements. Moreover, there is no foreseeable change in either the number of respondents or the frequency with which they must respond. Therefore, there is no change to the estimated reporting burden.

FERC-521	Total Request	Previously Approved	Change due to Adjustment in Estimate	Program Change Due to Agency Discretion
Annual Number of Responses	3	3	0	0
Annual Time Burden (Hr.)	120	120	0	0
Annual Cost Burden	\$ 0	\$ 0	\$ 0	\$ 0

⁶ The FERC 2022 average salary plus benefits for one FERC full-time equivalent (FTE) is \$188,922/year (or \$91.00/hour). The decimal 0.12 represents 250 hours (250 / 2080 = .12 rounded).

⁷ Paperwork Reduction Act of 1995

⁸ The PRA Administrative Cost is the average annual FERC cost associated with preparing, issuing, and submitting materials necessary to comply with the PRA for rulemakings, orders, or any other vehicle used to create, modify, extend, or discontinue an information collection. It also includes the cost of publishing the necessary notices in the Federal Register.

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The format, label, and definitions of the table above follow the Office of Management and Budget’s online submittal system for information collection requests.

16. TIME SCHEDULE FOR PUBLICATION OF DATA

There is no plan for publication of this information collection.

17. DISPLAY OF EXPIRATION DATE

The PRA information (including expiration date and OMB Control No.) is available on www.ferc.gov

18. EXCEPTIONS TO THE CERTIFICATION STATEMENT

There are no exceptions.