



Cost-Share Proposal Form for NorthWestern Energy (NWE) Project 2188 TAC Funds

Project 2188 (Madison-Missouri River) License Protection, Mitigation and Enhancement (PM&E) projects are required to offset impacts to river resources from the continued operation of one or more of NWE's nine hydro developments (Hebgen, Madison, Hauser, Holter, Black Eagle, Rainbow, Cochrane, Ryan and Morony Dams). PM&E projects need to be prioritized toward in-river or on-the-ground measures that directly benefit fisheries and/or wildlife populations and their habitats:

Priority 1: 2188 License projects which meet License Article requirements and PM&E for fisheries or wildlife populations or their habitats within the main stem Madison River (Hebgen Reservoir to Three Forks) or Missouri River (Hauser Reservoir to Fort Peck Reservoir)

Priority 2: 2188 License projects which meet License Article requirements and PM&E for fisheries or wildlife populations or their habitats in primary tributaries or on adjacent lands and, in doing so, provide PM&E for Madison River (Hebgen Reservoir to Three Forks) or Missouri River (Hauser Reservoir to Fort Peck Reservoir) resources.

Priority 3: 2188 License PM&E projects which meet License Article requirements by providing scientific or other tangible PM&E benefits to Madison-Missouri River fisheries or wildlife populations or their habitats. These projects must be located in the greater Missouri River drainage upstream from Fort Peck Reservoir, but not necessarily located on the main stem Madison River or Missouri River or their adjacent lands or primary tributaries.

All TAC project proposals must include the following information:

Project Title: Equipment 225 or 250 Yamaha outboard jet

Date: 11.5.2022

Explain how this Project addresses a specific Project 2188 License Article(s):

Article 414, 416 and 417 PM&E requirements for License 2188.

Provide justification for Priority 1, 2 or 3 (above) that you selected:

This is a priority 1 application because it deals with implementing P,M & E requirements on the mainstem Missouri river between Hauser Reservoir and the headwaters to Fort Peck Lake.

Project Sponsor (submitted by): Grant Grisak – NorthWestern Energy

Location of Proposed Project: NA

Total Project Cost: **\$33,063**

TAC Funds (Cost-Share) Requested for Project: **\$33,063**

I. Introduction; brief statement of project to be completed with pertinent background information.

Northwestern Energy operates a 2010 Wooldridge boat with a 225 Yamaha jet outboard to implement PM&E requirements for License 2188. The outboard motor has 1150 hrs on it, as of November 2022, and is beginning to show signs of significant wear. Specifically, when operating at normal cruise speed (4600 RPM) the engine will fluctuate between 4500 and 4800 RPM with no throttle adjustment. In addition, when applying throttle with a heavy load on board (electrofishing equipment & workers) the engine

will occasionally cut out and struggle to get on plane. Both of these conditions indicate carburation issues that have not been identified as correctable by our outboard mechanic.

The engine is very well maintained and gets annual winterizing, oil change, spark plug change and water-jacket impeller replacement. It also gets frequent wear ring and impeller replacement as needed; generally 2x per year. We operate the outboard with ALL manufacturers recommended lubricants, fuel and maintenance timing. Despite a structured maintenance program, the engine is displaying signs of significant wear with carburation problems.

Efforts to replace this engine have revealed a major supply chain shortage. Marine outboard dealers have been contacted in Great Falls, Helena, Billings, Spokane, Seattle, Bend, OR and Miami, FL and all comment that outboard availability may be as much as 2 years out. Knowing this outboard cannot be replaced immediately if it fails, NWE is applying for TAC funds in 2023 and will order a replacement outboard with the expectation it would not be delivered until several months later. By that time, this outboard would have an additional 120-240 hours on it and be even closer to replacement necessity.

Yamaha recommends replacing the existing Yamaha F225 TXR with a Yamaha F225 XB or a F250 XB. Both outboards weigh the same so there is no risk of over weight or over power with this Wooldridge hull. Either of these outboards would be pursued based on likely availability and estimated time of delivery. Florida's Outdoor Network is a government marine procurement program that recognizes NWE as an eligible participant through the FERC licensing process. They have two 2022-2023 Yamaha F250XB motors in stock at \$26,100 each, shipped to anywhere in the continental US. These are prop motors and would require conversion to jet. Discussions with Luke O'Leary from Outboard Jets Inc. (San Leandro, CA) indicated the new outboard can be easily converted for \$3,463 in materials, plus \$900 shipping, plus \$1,600 local conversion and install. Estimated jet delivery time is 7 months. New gauges and shifting harness are \$1,000. Estimated conversion, replacement and break-in would be late 2023.

NWE continues to pursue availability of Yamaha outboard motors at several locations during this application process.

- II. Objectives; explicit statement(s) of what is intended to be accomplished.
Comply with P,M &E requirements of FERC License 2188.
- III. Methods; description of how Project objectives will be accomplished.
NA
- IV. Schedule; when the Project work will begin and end. This work is done throughout the entire field season.
ASAP
- V. Personnel; who will do the work? Identify Project leader or principal investigator. .

Grant Grisak - NWE
- VI. Project budget must include amounts for the following: NA

***NorthWestern Energy TAC funds will not be used for agency overhead on projects that do not fund personnel. Applications for materials and equipment should not contain overhead.**

- VII. Deliverables; describe work product (reports, habitat restoration, etc.) which will result from this Project. How will "success" for this project be monitored or demonstrated?
- VIII. Cultural Resources. Cultural Resource Management (CRM) requirements for any activity related to this Project must be completed and documented to NWE as a condition of any TAC grant. TAC funds may not be used for any land-disturbing activity, or the modification, renovation, or removal of any buildings or structures until the CRM consultation process has been completed. Agency applicants must submit a copy of the proposed project to a designated Cultural Resource Specialist for their agency. Private parties or non-governmental organizations are encouraged to submit a copy of their proposed project to a CRM consultant they may have employed. Private parties and non-governmental organizations may also contact the NWE representative for further information or assistance. Applications submitted without this section completed, will be held by the TAC, without any action, until the information has been submitted.

NA

IX. Water Rights. For projects that involve development, restoration or enhancement of wetlands, please describe how the project will comply with the Montana DNRC's "Guidance for Landowners and Practitioners Engaged in Stream and Wetland Restoration Activities", issued by the Water Resources Division on 9 March 2016.

Summarize here how you will comply with Montana water rights laws, policies and guidelines: NA

All TAC Project proposals should be 7 pages or less and emailed (as a WORD file) to each of:

- Andrew.Welch@NorthWestern.com
- Jon.Hanson@Northwestern.com
- Grant.Grisak@Northwestern.com

Further questions about TAC proposals or Project 2188 license requirements or related issues may be addressed to:

Andy Welch

Manager, Hydro License Compliance

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