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REQUEST FOR PROPOSALS

Climate File Exploration and Measure Impact October 18, 2021

I. Contracting Organizations

The Northwest Power and Conservation Council's (Council) Regional Technical Forum (RTF) is issuing this Request for Proposals.

A. The Council

The Council is an interstate compact agency formed by the states of Idaho, Montana, Oregon, and Washington as authorized by Congress in the Pacific Northwest Electric Power Planning and Conservation Act, 16 U.S.C. §839, et seq. The Council is composed of eight Council members, two appointed by the governor of each of the four states. Congress charged the Council with developing two major planning documents:

- A program for the protection, mitigation and enhancement of fish and wildlife affected by the development and operation of hydroelectric facilities in the Columbia River Basin, and
- A plan for meeting the electric energy needs of the Pacific Northwest for the next 20 years that includes an examination of conservation, renewable, and conventional energy sources that are available to meet those needs.

Congress also charged the Council with informing the Pacific Northwest public of major regional power issues and insuring widespread public involvement in the formulation of its regional power plan and fish and wildlife program.

B. The RTF

The RTF is an advisory committee to the Council. Per a congressional directive, the RTF was chartered in 1999 to:

- Develop standardized protocols for verification and evaluation of energy savings,
- Track regional progress toward the achievement of the region's conservation and renewable resource goals, and
- Provide feedback and suggestions for improving the effectiveness of conservation and renewable resource development programs in the region.

 Conduct periodic reviews of the region's progress toward meeting its conservation and renewable resource goals.

II. Services Sought by the RTF

The RTF is seeking a contractor to provide support in an exploration on the impacts of weather, including future and extreme weather events, on energy savings and capacity for weather sensitive measures.

A. Climate File Exploration

The RTF currently uses Typical Meteorological Year (TMY3) files for measure analysis. The current files represent typical weather based on a historic time period through 2005. Recognizing these historical data are not reflective of the future weather anticipated during the Council's twenty-year planning horizon, the Council created Future Meteorological Year (FMY) files for use in the 2021 Power Plan.¹ Further, NREL recently released updated TMY data that is based on more recent weather (1998 – 2017).² The contractor will explore the differences in these various datasets. At a minimum, this exploration will include:

- Differences in heating and cooling degree days across the 9 cities representing the regional heating and cooling zones
- Differences in anticipated energy savings (both heating and cooling) for multiple weather sensitive measures (a minimum of 4 measures, to be selected with the RTF Manager for representativeness)
- Implications for moving to a weather file other than TMY3, including considerations around alignment with the Council plan, alignment with evaluated energy savings, usability with existing building simulation models³, and other factors

<u>Deliverable:</u> Summary of findings delivered by February 28, 2022.

B. Recommendation of Weather Files for RTF Analysis

After completion of Task A, the contractor will develop a recommendation for which weather file(s) the RTF should use for future measure analysis. This should include consideration around balancing alignment needs with Council planning and near-term program savings. The contractor will work with the RTF Manager and other Council or RTF analysts to define a full suite of considerations for informing the recommendation.

<u>Deliverable:</u> Recommendation memo completed by March 15, 2022

¹ More information on the FMY files and methodology is available here: https://nwcouncil.box.com/s/iup2w2txjzuluany4tqvgw6o3uj4ye8l.

² https://nsrdb.nrel.gov/about/tmy.html.

³ The RTF currently uses both EnergyPlus and SEEM for building simulation.

C. Exploration of Savings Impact from Extreme Weather Events

Recent events, including record breaking heat domes and freeze events, demonstrate that future weather is likely to not only be warmer in general, but more extreme. The RTF is interested in understanding the impact on this extreme weather on weather sensitive measure savings. This includes both electric and natural gas heating measures, as well as cooling measures. The contractor will develop a method to explore the impacts on energy and peak savings (both cooling and heating) from various extreme weather scenarios. For heat pump equipment specifically, this analysis should include an exploration into the impacts on the mix of use between the compressor and backup electric resistance heat assuming both typical and optimized controls. Proposers shall include a matrix of at least 5 extreme weather scenarios to include in this portion of the analysis.

<u>Deliverable:</u> Memo and presentation summarizing the findings of the analysis completed by May 30, 2022.

III. Timeline and Budget Expectations

All work anticipated under this Request for Proposals would begin in January 2022 and be completed by May 30, 2022. The RTF reserves the right to revise the timeline as needed.

For planning purposes, the RTF is currently estimating a budget of \$50,000 to complete this work. The RTF reserves the right to revise the budget. Proposals should include anticipated time and materials required for completion of the work outlined above irrespective of the RTF's estimated budget.

IV. How to Submit a Proposal and Required Elements

Proposals shall be submitted to the RTF in electronic format by November 30, 2021.

Proposals shall be emailed to:
Northwest Power and Conservation Council
Jennifer Light
RTF Manager/Chair
ilight@nwcouncil.org
(503) 222-5161

Proposals shall include the following elements:

- Contact information and brief description of the firm submitting the proposal
- Description of the technical and management approach to complete the work and deliver the services
- Qualifications of all personnel who will be working on the project
- Budget proposal that includes the hours and rates of all personnel, and a not-to-exceed amount
- Reporting schedule and project timeline

- Web site addresses or listing of similar work that can be reviewed by the proposal evaluation team
- Any other material the proposer deems pertinent

Any questions regarding this RFP shall be directed to Jennifer Light. Please note that responses will be limited to correcting errors in the RFP or clarifying the RFP's provisions. If questions received identify significant information that would assist proposers in submitting proposals, such information will be made available by reasonable means, such as posting on the RTF's webpage, to all persons or entities who have received the RFP to ensure all proposers have access to the same information.

V. How the RTF Will Select a Final Proposal

An evaluation team will review the proposals. The team will be comprised of staff from the Council's conservation group and RTF contract analyst team. Proposals will be evaluated based on the proposed approach to and qualifications for the services sought in Section II above. The evaluation committee will also consider the proposer's cost of services.

VI. Right to Reject and Proposal Costs

The RTF reserves the right to reject any and all proposals and may cancel, modify, or revise this RFP at any time. The RTF shall not be obligated to procure any services resulting from this RFP. Neither the Council nor the RTF is liable to any proposer for any loss or expense caused by or resulting from a delay, suspension, or cancellation of the RFP, award, or rejection of any proposal. Proposer shall bear all costs incurred in developing and submitting its proposal.

VII. Project Schedule

Proposals Due: November 30, 2021

Selection of Winning Proposal(s): Week of December 13, 2021

Project Start Date: Week of January 1, 2022 (or as agreed to)

VIII. Equal Opportunity

The Council and the RTF promote equal opportunity for all individuals without regard to race, color, national origin, religion, sex, gender, gender identity (including gender expression), sexual orientation, marital status, age, disability, genetic information, military or veteran status, or any other protected status in accordance with applicable federal, state, and local laws.

IX. Diversity, Equity, and Inclusion

Responders are encouraged to review the Council's <u>inclusion statement</u>. The Council is interested in learning from and encourages, in all opportunities, the participation of those who are also taking steps to ensure diversity, equity, and inclusion in their work. To this end, please consider providing a response to the following questions. Providing a response is voluntary. Responses will not be considered in proposal evaluation and selection.

• Please indicate if you are a small, minority, woman, or veteran-owned business.

• Please outline any efforts taken at your organization to promote diversity, equity and inclusion in your organization's practices or policies, including, for example, staffing and contracting

X. Disclosure Notice

The Council does its work in public as required by the Northwest Power Act. The Council, although not a federal agency, complies with the Freedom of Information Act. The Council's policy is available for review on our <u>website</u>.