

James Yost
Chair
Idaho

W. Bill Booth
Idaho

Guy Norman
Washington

Tom Karier
Washington



Northwest Power and Conservation Council

Jennifer Anders
Vice Chair
Montana

Tim Baker
Montana

Ted Ferrioli
Oregon

Richard Devlin
Oregon

October 2, 2018

DECISION MEMORANDUM

TO: Council members

FROM: Jennifer Light
Regional Technical Forum Manager

SUBJECT: Regional Technical Forum 2019 Work Plan, Budget, and Business Plan

PROPOSED ACTION: Council approval of the 2019 RTF Work Plan, Budget, and Business Plan

SIGNIFICANCE: The RTF works on a calendar year. Under the RTF Charter and By-laws, the Council has authority for approving the RTF's work plan and budget, with input from the Policy Advisory Committee and any interested parties. Staff is seeking approval for the 2019 Work Plan, Budget, and Business Plan today, to allow sufficient time for contracting in advance of the 2019 calendar year.

BUDGETARY/ECONOMIC IMPACTS

The RTF is funded through contributions from Bonneville and the region's utilities. In 2014, these entities signed on to a five-year funding agreement for continued support of the RTF. The 2019 work plan reflects the fifth and final year of the funding agreement. In addition to these funding contributions, the RTF is supported through in-kind contribution of Council staff time and other resources (such as office and meeting space). For 2019, the RTF work plan proposed a Council in-kind contribution of roughly 1.0 full time staff. This represents a full time RTF Assistant and other technical, administrative, and contracting support.

BACKGROUND

The Council created the RTF in 1999 in response to a 1996 Congressional mandate and recommendations from the 1997 Comprehensive Review of the Northwest Energy System. The legislative directive required the Council “to develop consistent standards and protocols for verification and evaluation of energy savings, in consultation with all interested parties.” Since 1999, the RTF workload has grown, as has the budget. In 2010, the Northwest Energy Efficiency Taskforce recommended that the RTF operations and budget be reviewed by a high-level committee to improve the operations of the RTF and to put it on a stable long-term funding basis. In response, the Council created the RTF Policy Advisory Committee (PAC). The RTF PAC provided its recommendations on a five-year funding agreement and structure to the Council at its June 2014 meeting in Missoula, Montana. The RTF PAC recommended an RTF budget of \$1.67 million for 2015, escalating to \$1.9 million in 2019 to account for inflation. The PAC also supported using the NEEA funding allocation shares to determine RTF funder contributions.

The proposed 2019 work plan, budget, and business plan represents the fifth year of the five-year agreement. A draft work plan was presented to the RTF in July of 2018. This initiated a 30-day stakeholder comment period. Staff received comments from the Bonneville Power Administration (see attached). Based on these comments and discussion with the Bonneville staff, the proposed 2019 work plan, budget, and business plan was refined slightly to clarify the proposed work around demand response technologies. No changes were made to the funding levels or allocation of funding. The RTF PAC met on September 5 to review the proposed work plan, and it has included a positive recommendation to the Council as part of this packet. The RTF adopted for recommendation to the Council at its September 18-19, 2018 meeting.

ANALYSIS

The \$1.88 million budget is adequate to support the feasible level of RTF work expected for the upcoming year. The RTF is currently operating on a \$1.83 million budget, and as of September has allocated 92 percent of its budget in contracts and deliverables, with the anticipation to allocate more to contracts in the next couple of months. This slight increase in budget for 2019 is in alignment with the funding plan to account for planned work, plus some inflation. The RTF, RTF PAC, and Council staff agree that this increase is appropriate given the agreed to funding agreements and planned work in 2019.

ATTACHMENTS

Proposed 2019 Business and Operating Plan

Recommendation Memo from the RTF Policy Advisory Committee

Bonneville’s Comments on 2019 Work Plan and Staff Response to Comments

Presentation on Proposed Work Plan

[Link](#) to Proposed Detailed 2019 RTF Work Plan (excel)

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October 2, 2018

MEMORANDUM

TO: Council Members

FROM: Tim Baker, Co-Chair, RTF Policy Advisory Committee
Cory Scott, Co-Chair, RTF Policy Advisory Committee

SUBJECT: Regional Technical Forum 2019 Work Plan, Business Plan, and Budget:
Recommendation of the Regional Technical Forum Policy Advisory
Committee

The Regional Technical Forum Policy Advisory Committee (RTF PAC) has completed its review of the proposed RTF 2019 Work Plan, Business Plan, and Budget and recommends to the Council approval of these items as submitted by the RTF. Additionally, the RTF PAC has affirmed its agreement on the recommendation for 2019 funding levels and the methodology for allocating funding among each of the RTF funders over the next year.

The RTF PAC appreciates the opportunity to offer this recommendation to the Council on the RTF 2019 Work Plan, Business Plan, and Budget, and respectfully requests approval.



Department of Energy

Official File

Bonneville Power Administration
P.O. Box 3621
Portland, Oregon 97208-3621

ENERGY EFFICIENCY

September 20, 2018

In reply refer to: PE-6

Ms. Jennifer Light
RTF Manager
Regional Technical Forum/NWPCC
851 SW Sixth Avenue 1100
Portland, OR 97204-1348

Dear Ms. Light:

Bonneville Power Administration (BPA) appreciates the opportunity to comment on the 2019 RTF Workplan and Business Plan. BPA relies heavily on the work of the RTF to update energy efficiency measures, develop new measures, review market models and provide guidance in evaluation approaches.

Both the Seventh Power Plan and BPA's Resource Program identified demand response as a cost effective solution for addressing capacity needs. BPA recognizes that capacity solutions, such as DR, are likely to play an important role in the Eighth Power Plan. Today, the RTF charter does not include demand response. The RTF can play a valuable role in creating/evaluating load shapes to refine the inherent capacity reduction value of EE measures without shifting the RTF focus to DR.

With RTF Policy Advisory Committee approval, BPA will support an RTF DR pilot in 2019 and will ensure BPA's demand response experts engage with the RTF and its subcommittees. BPA encourages the RTF to leverage such a pilot to test the fit of demand response to the RTF's work practices. For example, the RTF should assess the usefulness of developing regional average technology characteristics if DR programs can define and achieve custom performance characteristics from those technologies. BPA recommends the PAC define pilot success metrics and assess the pilot against those metrics, adopting appropriate RTF charter updates and scope for the next grant cycle based on pilot performance.

BPA has done extensive work on DR product development and supply curve development in its Demand Response Potential Assessment. BPA recommends that the RTF closely review and leverage BPA's work as well as other appropriate regional work products to avoid duplicative investments and potentially reduce the cost of RTF-developed DR technology estimates. BPA is

willing to share information from its DR Potential Assessment with the RTF, including additional refinements BPA has undertaken.

BPA supports the RTF's continued updates to existing energy efficiency measures and new measure development. BPA is concerned that there is a 5% reduction in 2019 budget in each of these areas. BPA is interested in understanding how the budget was developed and whether this change reflects a reduction in effort towards measure updates and development or if it more accurately represents estimated work costs.

BPA supports the RTF's continued investment in tool development. As programs and measures become more dependent on calculation and modeling tools, support for these tools will be important to program success and to continued measure development.

BPA's Strategic Plan outlined a vision for strengthening BPA's financial health, including robust cost management within BPA and for the efforts BPA funds. BPA understands that RTF's 2019 budget is set as part of the established funding agreements between the RTF and funders. However, BPA encourages the RTF to continue to look for cost savings throughout the year to reduce spending.

In closing, BPA appreciates the valuable work that the RTF does to provide technical expertise to inform programs and evaluation around the region. The RTF's continued focus on improving the verification and evaluation of energy efficiency savings provides a valuable resource for the region.

Sincerely,

A handwritten signature in blue ink, appearing to read 'K = Tm', followed by a long horizontal flourish.

Kim T. Thompson
Vice President, Energy Efficiency

Response to Comments submitted by the Bonneville Power Administration on the proposed 2019 RTF Work Plan

The Northwest Power and Conservation Council has received your comments regarding the proposed 2019 RTF Work Plan, Budget, and Business Plan. Council staff is grateful for your remarks and engagement.

Council staff has carefully reviewed your comments. Summary of key elements and staff replies are included below.

The next step is to seek Council approval of the proposed 2019 RTF Work Plan, Budget, and Business Plan.

Comment: With RTF Policy Advisory Committee Approval, BPA supports the RTF exploring demand response technologies in 2019 and will ensure BPA's demand response experts engage with the RTF and its subcommittees. BPA encourages the RTF to assess the fit of demand response in RTF's work practices. BPA recommends the RTF PAC define success metrics and assess the RTF's efforts against those metrics, adopting appropriate RTF charter updates and scope for the next grant cycle based on the performance against these metrics.

Response: Staff appreciates BPA's support of the RTF exploring demand response technologies in 2019 and the added willingness for BPA to provide experts to engage in this work. The RTF Policy Advisory Committee discussed the importance of defining metrics to assess the value of these efforts for the Council and the region. Staff will continue the discussion of metrics with the RTF PAC at its next meeting in December and work to closely monitor and report on those metrics throughout 2019.

Comment: BPA has done extensive work on demand response product development and supply curve development in its Demand Response Potential Assessment. BPA recommends that the RTF review and leverage BPA's work, as well as other appropriate regional work products, to avoid duplication and potentially reduce the cost to the RTF.

Response: Staff appreciates BPA's willingness to share its work on demand response with the RTF. Staff agrees that leveraging existing work from BPA and other entities is the best way to develop robust savings estimates without duplicating effort. This is standard practice for the RTF on its existing energy efficiency work, and staff plans to apply this standard practice to any demand response activities at the RTF.

Comment: BPA supports continued updates to the existing energy efficiency measures and new measure development. BPA is concerned that there is a 5 percent reduction in budget in these areas. BPA is interested in understanding how the budget was developed and whether this change reflects a reduction in effort towards efficiency measure development or a more accurate representation of the estimated work costs.

Response: The development of energy efficiency measures, both new and existing, is core to the RTF work. The first step in work plan development is to ensure sufficient resources are put to these two

items. For 2019, staff improved its estimates of per unit cost for each measure and standard protocol based on improved invoicing and tracking of the contract analyst team's work. This resulted in a greater per unit cost for new measure development and a smaller per unit cost for standard protocol development. With those estimates, staff then estimated the number of existing measures requiring updates (26 UES, 2 standard protocols) due to upcoming sunset dates or expected new data. Next step is to set a placeholder for new measure development based on potential items. For 2019, staff is anticipating up to 6 new UES measures and 2 standard protocols. The per unit estimates were then applied to these counts, resulting in a total budget of \$440,000. While this reflects a smaller estimate than 2018, staff believe that it better represents the resources required based on the improved tracking of analyst time.

It should also be noted that this reduction in budget was not done to support the \$93,000 (5 percent) of the budget allocated to demand response technologies. That budget came from a reduction in Eighth Plan support and Hourly Profile Development.

Comment: BPA understands that RTF's 2019 budget is set as part of the established funding agreement between the RTF and funders. However, BPA encourages the RTF to continue to look for cost savings through the year to reduce spending.

Response: Staff agree with the importance of cost management. As with past years, staff will manage the 2019 budget to ensure that the work is completed in the most cost-effective and efficient manner possible.



**Regional
Technical Forum**

2019 Business and Operating Plan 2015-2019 Funding Period

Proposed

August 30, 2018

Introduction

This document describes the proposed Regional Technical Forum's (RTF) 2019 work plan and the 2015-2019 Funding Period. The budget for 2019 is proposed at \$1,875,200.

The RTF staff will present the draft work plan and business plan to the RTF at the July meeting. This initiates a 30-day stakeholder comment period, ending on August 17, 2018. Staff will then incorporate stakeholder comments into a final proposed work plan and business plan. The RTF and the RTF Policy Advisory Committee will consider these proposed documents at their respective September meetings. The final work plan will be presented to the Council at its October 2018 meeting, accompanied by comments and recommendations from the RTF and RTF PAC. The Council will then make a final decision on the work plan and business.

Work Scope

The RTF will continue to pursue the tasks adopted by the Council in its charter, based on the original directive from Congress (1996) and the 1996 Comprehensive Review of the Northwest Energy System.¹ These are:

1. Develop and maintain standardized protocols for verification and evaluation of energy savings.
2. Conduct periodic reviews of the region's progress toward meeting its conservation resource goals, acknowledging changes in the market for energy services, and the potential availability of cost-effective conservation opportunities.
3. Provide feedback and suggestions for improving the effectiveness of the conservation resource development programs and activities in the region.

Consistent with these tasks, the RTF will continue to provide recommendations to the Bonneville Power Administration (Bonneville), the region's utilities, and system benefit charge administrators to facilitate the operation of their conservation resource acquisition programs. The 2018 work plan includes, but is not limited, to:

- Review and update existing measures and standardized protocols for verification and evaluation of energy savings. The RTF maintains and continually updates a library of around one hundred measures and protocols, approximately 30 percent of which will require updating in 2019 due to approaching sunset dates.
- Develop and maintain protocols by which the savings and the regional cost-effectiveness for energy efficiency measures, technologies, or practices not specifically evaluated by the RTF can be estimated.
- Coordinate with regional research entities to identify opportunities for improving understanding of various measures and protocols, and work to advance these measures that require additional research to inform reliable estimates by identifying potential research sponsors or using data collected by sponsors
- Develop new measures and protocols and review proposals for new measures and protocols.

¹ See the RTF Charter at <https://rtf.nwcouncil.org/about-rtf/charter-and-bylaws>



- Continue to standardize and update the Guidelines for technical review of measures, protocols, and impact evaluations, and explore paths for providing savings estimation guidance for custom projects.
- Update and develop new tools for measure analysis, including updates to ProCost, SEEM, and commercial building simulation models.
- Upon request of program sponsors, review measurement and verification and program impact evaluation plans and results to assess their suitability for use supporting studies for RTF-related measure evaluations.
- Provide support and outreach to small and rural utilities to ensure the unique circumstances and barriers of their service territories are accounted for when developing RTF technical measures and specifications.
- Support the Council's Eighth Power Plan development of conservation and demand response supply curves.
- Review efficiency-related technical analysis developed for the Council's Power Plan.
- Provide outreach, training support, and presentations for RTF related matters.
- Maintain a process through which Bonneville, the region's utilities, and system benefit charge administrators may demonstrate that different cost, savings, and cost-effectiveness findings should apply to their specific programs or service territories.

2019 Activities and Budget

The specific tasks contained in the RTF's work plan are largely driven by the requests it receives from parties within the region, primarily utilities, the Bonneville Power Administration (BPA), Energy Trust of Oregon (ETO), Northwest Energy Efficiency Alliance (NEEA), and state energy offices (SEO). To facilitate the submittal of proposals by parties in the region for review by the RTF, the RTF established an online proposal form. This proposal form is designed to collect the minimum data that is required for a measure to be considered for RTF approval. This proposal process allows the RTF to respond in a timely manner to emerging technical issues and questions, and prioritize incoming requests. In addition, the RTF will issue an annual request to BPA, the region's utilities, ETO, NEEA, and SEOs asking these entities to identify specific technical research and evaluation issues that they believe should be addressed during the coming year.

During its operating year, the RTF typically adjusts the allocation of resources among the categories in its work plan based on requests received, proposals, and the pace of multi-year projects. Specifically, the RTF reviews the budgets allocated to the review of existing and new measures and, within those budget categories, reviews the allocation of funding between Unit Energy Savings (UES) measures and Standard Protocols. The RTF notifies the Council and its funders of all significant reallocation of resources or priorities.

The RTF divides its work into six categories of elective work and three categories for management and administration. Table 1 presents a summary of these categories for 2019. It includes components for Contract Request for Proposals (RFPs), a RTF contract analyst team and RTF Manager, and Council staff in-kind contributions. The component labeled "Subtotal Funders" represents the amount of funding required from the RTF's voluntary funders. A detailed budget for 2019 and the five-year funding period budget forecast are in the



accompanying Excel workbook. Each category of work is briefly discussed in the sections following Table 1.

Table 1: Planned RTF Activities for 2019

Category	Contract RFP 2019	RTF Contract Analyst Team and RTF Manager 2019	Total Funders 2019	Council In-Kind Contribution 2019
Existing Measure Updates	\$84,000	\$292,000	\$376,000	\$22,000
New Measure Development	\$41,000	\$223,000	\$264,000	\$9,200
Standardization of Analysis	\$23,500	\$210,000	\$233,500	\$1,500
Tool Development	\$130,000	\$151,400	\$281,400	\$15,000
Demand Response	\$0	\$93,000	\$93,000	\$5,000
Regional Coordination	\$0	\$130,000	\$130,000	\$16,000
Website, Conservation Tracking	\$60,000	\$5,000	\$65,000	\$45,000
RTF Member Support & Admin	\$182,000	\$90,000	\$272,000	\$10,000
RTF Management	\$3,300	\$157,000	\$160,300	\$66,500
Subtotal New Work	\$523,800	\$1,351,400	\$1,875,200	\$190,200

Existing and New Measure Development (\$640,000)

Review and maintenance of the RTF energy efficiency measure library is the core work of the RTF. This library includes around 70 unit energy savings (UES) measures and 7 standard protocols. The UES measures provide data on the energy savings, costs, and lifetime for a variety of energy efficiency opportunities across sectors. The standard protocols provide a standardized methodology to estimate energy savings using site specific data. Collectively, these measures provide unbiased analysis of energy savings to support program planning and evaluation, minimizing the need for BPA and each utility to conduct this analysis on their own.

With the approval of each new measure or existing measure update, the RTF sets a measure sunset date. A sunset date is a date is tied to when the RTF believes there might be significant changes in the market or new data requiring an updated analysis. In 2019, there are 26 UES measures and 2 standard protocols slated to sunset. In addition to the existing suite of measures, the RTF sets aside funding for review and development of new measures. For 2019, the RTF is anticipating up to 8 new UES or standard protocols. This estimate is based on a mix of known measures identified by stakeholders and placeholders to account for others not yet identified. Maintaining existing measures and updating new measures represents approximately one third of the overall budget.

As with past years, the RTF has allocated a portion of its 2019 budget for the review and development of measures specifically targeted at small and rural utilities in recognition of their limited resources and the unique circumstances of their service territories. For 2019, the RTF plans on allocating \$40,000 towards the development of measures identified by the small/rural subcommittee.



Standardization of Technical Analysis (\$233,500)

Consistency and rigor in the RTF analysis is critical for the final work product. To that end, the RTF maintains a set of *Operative Guidelines* that provide a transparent starting point for RTF decision making. The RTF contract analyst team thoroughly reviews each other's analysis against those *Guidelines* in preparation for developing recommendations to the RTF. This internal vetting process is critical to ensuring consistency and rigor in analysis. Given the importance of this internal vetting and review process, the RTF work plan explicitly accounts for this 12 percent of the budget; although the RTF considers this to be part of measure development.

Tool Development (\$151,400)

Over the past several years, the RTF has supported the enhancement of several tools to improve RTF analysis. As an independent technical body, the RTF sees the potential to provide an important role for the region in enhancing these tools, and developing new ones, that will support regional analysis of energy efficiency opportunities.

ProCost

ProCost is a tool used by the Council, RTF, and regional stakeholders to characterize the costs and benefits of energy efficiency measures and programs. This tool allows the comparison of energy efficiency on equal footing to other generation and demand side resources. In 2019, the RTF plans to make several enhancements to this tool in support of the Council's Eighth Power Plan analysis, which ultimately feeds into future RTF measure analysis. These updates include developing a methodology for valuing two peak periods, improving the ability to process many measures at once, and improvements to the line loss calculation.

SEEM

SEEM stands for Simplified Energy Enthalpy Model. This is a residential building energy use model that the RTF uses to estimate consumption and energy savings in residential housing. In 2019, the RTF plans to wrap up efforts to calibrate the outputs of this building model with data from the most recent Residential Building Stock Assessment. This work helps to ensure the model results best reflect actual energy savings in the real world.

Commercial Building Simulation Models

The RTF has been working to develop a suite of commercial building simulation models to support RTF and Council work. Similar to SEEM, the RTF is seeking to gradually build on and improve these models to provide the most accurate results of building consumption and energy savings for the commercial sector.

Saving Shape Development

Over the past couple years, the RTF has invested more time into understanding when its efficiency measures save energy. The RTF currently uses an extensive set of load shapes that provide information on when end uses use energy. Many RTF measures, however, have the potential to shift when the energy is used based on how the devices or systems are controlled. To better reflect when and how these energy savings are occurring, the RTF plans to invest time in 2019 to develop savings shapes. These savings shapes will support the estimation of



capacity savings from the RTF library of energy efficiency measures, and are expected to be useful for regional players to conduct similar analysis on their individual peak electric loads.

Demand Response (\$93,000)

In 2019, the RTF is allocating 5 percent of its budget to support analysis on up to six demand response technologies. The focus of this work will be developing technical inputs (*ex ante* estimates) of capacity potential to support supply curve development. Many of these technologies have overlap with energy efficiency opportunities.² For 2019, the plan is to develop per unit capacity savings estimates as one input into the Council's Eighth Plan development. For example, with smart thermostats, the RTF will estimate the demand response savings potential for these technologies across different climate zones, HVAC system types, and other attributes as appropriate. The RTF will also develop costs estimates for technology purchase and installation. As with its energy efficiency measures, the RTF will leverage existing studies and believes that the analysis and inputs for these demand response technologies will provide useful data to all regional stakeholders considering demand response in their integrated resource plans.

Regional Coordination on Energy Efficiency (\$130,000)

The RTF both relies on and is supportive of many regional efforts. To this end, approximately 7 percent of the 2019 budget is allocated to regional coordination. This includes:

Regional Research Coordination

The RTF does not conduct primary research, but requires data to support its measure development. This includes lab studies on new products, metered data in the field to ground analytical assumptions in real-world data, billing analysis to improve reliability, market research to inform baseline assumptions, and other such research. To that end, the RTF allocates budget to engaging with these regional entities to provide insight as to what data are most useful for RTF analysis and feedback to support rigorous research and analysis.

Eighth Plan Development Support

As a technical advisory committee to the Council, the RTF provides unbiased analysis to support Council work. In 2019, the RTF anticipates supporting the Council in its development of energy efficiency inputs into the Eighth Plan. This includes ensuring its existing measure suite is supportive of the planning needs and developing savings and cost assumptions for measures not in the RTF library.

RTF Member Support and Meeting Support (\$272,000)

The RTF consists of 30 voting members. It is these members themselves that do the final deliberation and decision making on the contract analyst recommendations. The RTF meets in person 12 days each year. It is at these in person meetings where the bulk of the member deliberations and decision occur. In 2019, the RTF is allocating 15 percent of its budget to ensuring (1) all members can attend these in person meetings, (2) the contract analysts can

² Likely technologies include smart thermostats, water heaters, lighting controls, electric vehicle chargers, refrigeration warehouse controls, and irrigation pumping controls.



attend the in-person meetings, and (3) all members are able to devote time to the RTF both at these in-person meetings and during other remote deliberations.

Regional Conservation Progress Survey (\$55,000)

Per its charter, the RTF supports the annual Regional Conservation Progress (RCP) survey to track the region's progress against the Council's Power Plan targets.

RTF Management and Administration (\$160,300)

Approximately 10 percent of the RTF budget goes to management and other administration. This includes direct support of the RTF Manager, website development, phone and conference lines, and other administrative functions.

Council In-Kind Support

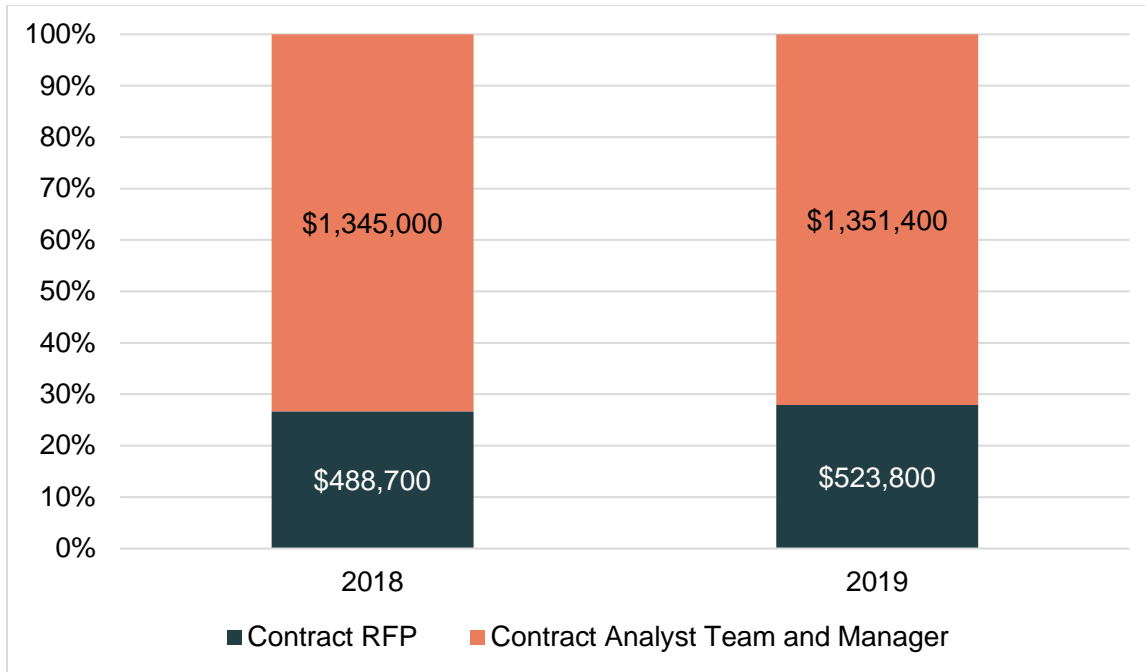
In addition to the \$1,875,200 budget supported by the region's funders, the Council contributes approximately \$190,200 of in-kind support to the RTF. This includes a full time RTF Assistant, who provides day to day support of the RTF operations. Additionally, Council staff provide in-kind support of technical analysis, contracting and legal assistance, and other administrative tasks.

Organization and Staffing

The full RTF meets about once a month for an all-day meeting. As regional demand for its products and services increase, the RTF is constantly looking for ways to improve its operational efficiency and lessen the burden it places on its volunteer members. One of the key ways the RTF has met this need is the creation of a dedicated contract analyst team that provides the majority of technical support for the RTF. This helps to ensure more consistency in analysis, while providing flexibility of measure development across a team. In 2019, the RTF work plan will continue to implement this strategy, although 28 percent of its budget will continue to be reserved for focused projects completed through other contracts. Figure 1 below shows this breakdown.

Figure 1: Percentage of Budget Allocated to RTF Manager/Contract Analyst Team vs. Contract RFP for 2018-2019





Figures 2 and 3 below show the change in allocation for the contract analyst team and contract RFP over the past two years, respectively. The RTF Manager will continue to oversee the work of a dedicated contract analyst team to provide subcommittee support, review research projects, develop technical work related to new and existing measure development, and work with external stakeholders on bringing measures through the RTF process. Funding set aside for outside contracts will be used to review RTF Manager and contract analyst team work products, conduct research projects as outlined in the work plan, aid in tool development, support Guidelines review, and provide further support to the small and rural utilities work plan.

Figure 2: Contract Analyst Team Allocation for 2018-2019

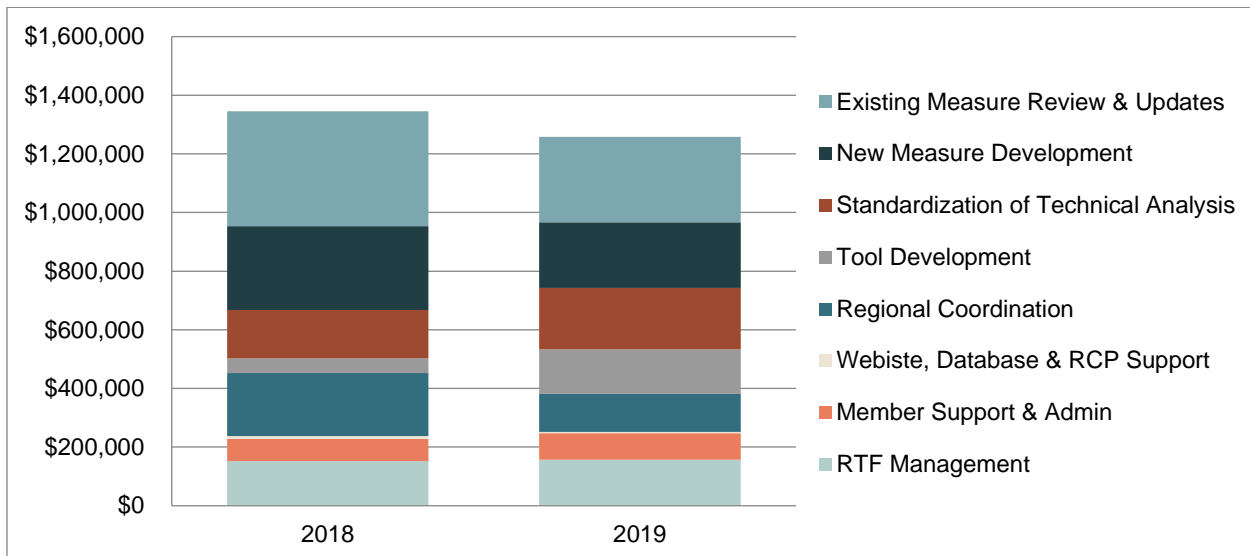
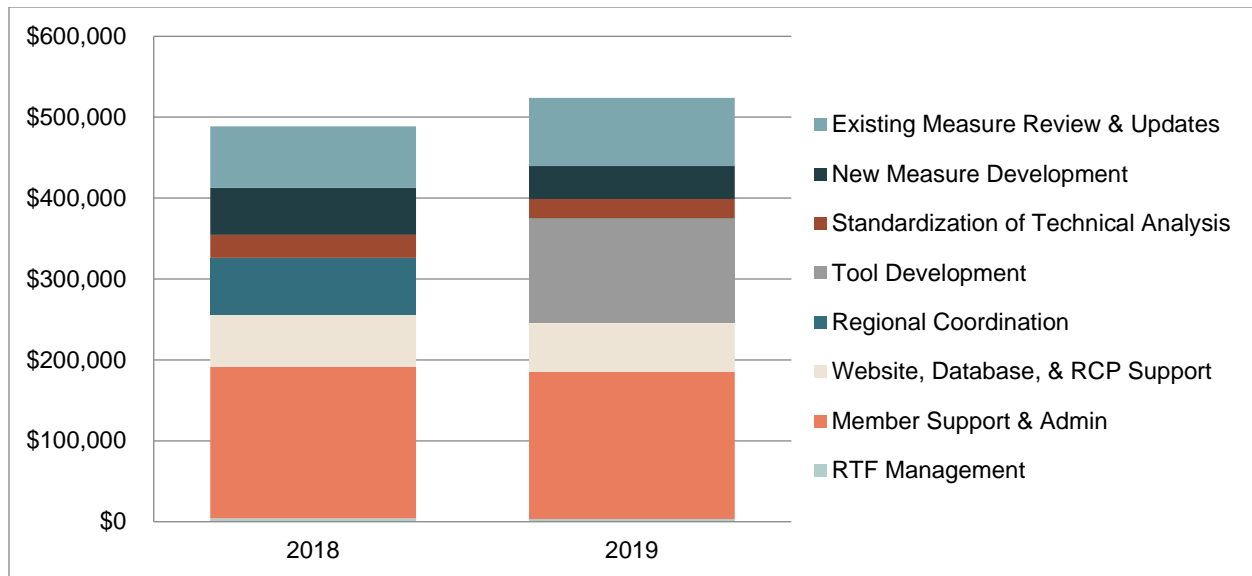


Figure 3: RTF Contract RFP Allocation for 2018-2019





2019 Funding

Proposed funding levels for the RTF are developed with advice from the RTF Policy Advisory Committee (RTF PAC). In 2014, the RTF PAC recommended a five-year funding level starting at \$1.67 million per year with an annual increase of 2.5 percent for wage and inflation rates over the following years. The RTF PAC also recommended that funding shares should follow the allocation method developed for NEEA funding, with an adjustment for Northwestern Energy.³

This approach solicits funding from Bonneville, several of the large generating public utilities, and all six investor-owned utilities in the region. Table 2 shows the 2019 funding shares and contributions by funder.

Table 2: 2019 Funding Shares

Organization	NEEA Funding Allocation	Share of RTF Budget (rounded)**
Bonneville Power Administration	36.04%	\$695,900
Energy Trust of Oregon	20.15%	\$389,000
Puget Sound Energy	14.14%	\$273,000
Idaho Power Company	8.97%	\$173,100
Avista Corporation, Inc	5.74%	\$110,900
PacifiCorp (Washington)	2.54%	\$49,100
Northwestern Energy	4.04%	\$40,900*
Seattle City Light	3.66%	\$70,600

³ NorthWestern Energy's NEEA share is based on the entire state of Montana, while the RTF share is only western Montana. This equates to a total RTF funding amount of \$1,637,600 for the starting year of 2015.



PUD No 1 of Clark County	1.31%	\$25,400
Tacoma Power	1.10%	\$21,200
Snohomish County PUD	0.65%	\$12,600
Eugene Water and Electric	0.32%	\$6,100
PUD No 1 of Cowlitz County	0.38%	\$7,400
Total	99.03%	\$1,875,200

* Northwestern's contribution adjusted to \$40,900 for 2019. The RTF will adjust its work plan accordingly.

** All funding shares adjusted by 100%/99.03% because Chelan Country is present in NEEA funding, but not RTF funding.

Multi-Year Funding Period of the RTF

The RTF PAC approved a RTF developed multi-year work plan and budget for 2015-2019 to aid in long-term work plan development. This 5-year period coincided with the current NEEA funding cycle, and may vary in the upcoming years depending on future NEEA funding cycle changes. Annual work plan development is intended to provide flexibility to meet regional needs year to year and keep focus on high priority work. Table 3 shows RTF funding for the 2015-2017 calendar year, committed 2018 funding, and projected funding for the 2019 calendar year based on work plan priorities in the future, and a forecasted 2.5% inflation rate (wage plus inflation) each year.

Table 3: 2015-2019 Funding Plan

	Previously Funded				Proposed Funding
	CY 2015	CY 2016	CY 2017	CY 2018	CY 2019
Contracts	\$425,600	\$508,000	\$480,300	\$488,700	\$523,800
Contract Analyst Team	\$1,087,000	\$1,020,000	\$1,162,500	\$1,192,000	\$1,194,400
RTF Manager	\$125,000	\$135,000	\$147,000	\$153,000	\$157,000
Subtotal Funders	\$1,637,600	\$1,663,000	\$1,789,800	\$1,833,700	\$1,875,200
Council Staff In-Kind Contribution	\$201,600	\$148,100	\$204,200	\$194,500	\$190,200



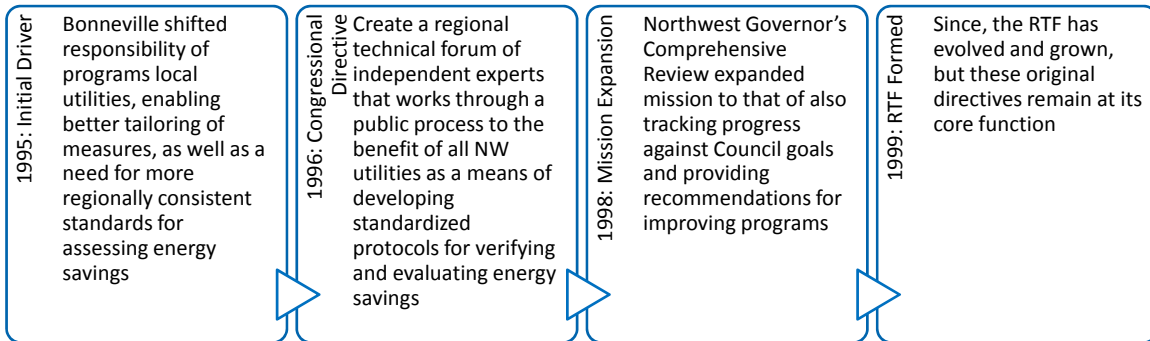


Proposed 2019 Work Plan and Business Plan

Jennifer Light
October 10, 2018

RTF BACKGROUND

Development of the RTF



Current Charter

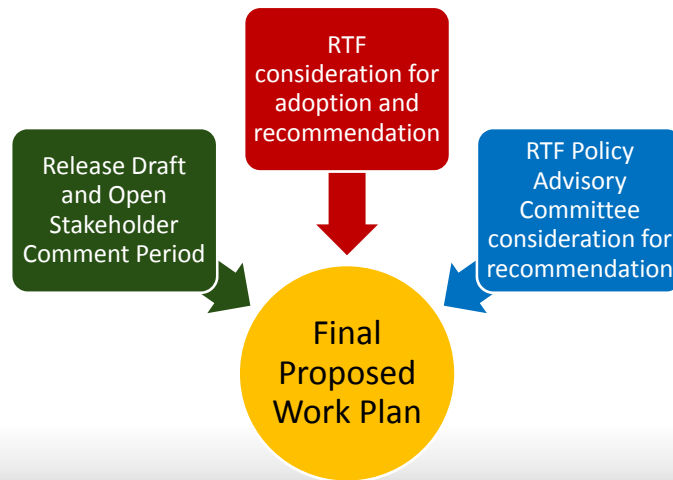
- Develop and maintain measure library with savings, lifetime costs, and estimated value to power system
- Establish a process for updating list of resources and an appeals process for demonstration of different values
- Develop set of protocols by which savings and system value should be estimated
- Assist the Council in assessing measures, technology development trends, and effect of trends on future performance and availability of resources
- Track regional progress toward meeting Council targets annually

Values of the RTF

- Leverages the work across the region to reduce the individual burden on any one utility
- Brings together thirty, unbiased, technical experts to analyze the data and provide recommendations
- Uses a public process to bring transparency, as well as additional ideas and expertise, to the analysis
- Removes some of the friction between utilities and regulators when estimating and claiming savings

WORK PLAN DEVELOPMENT

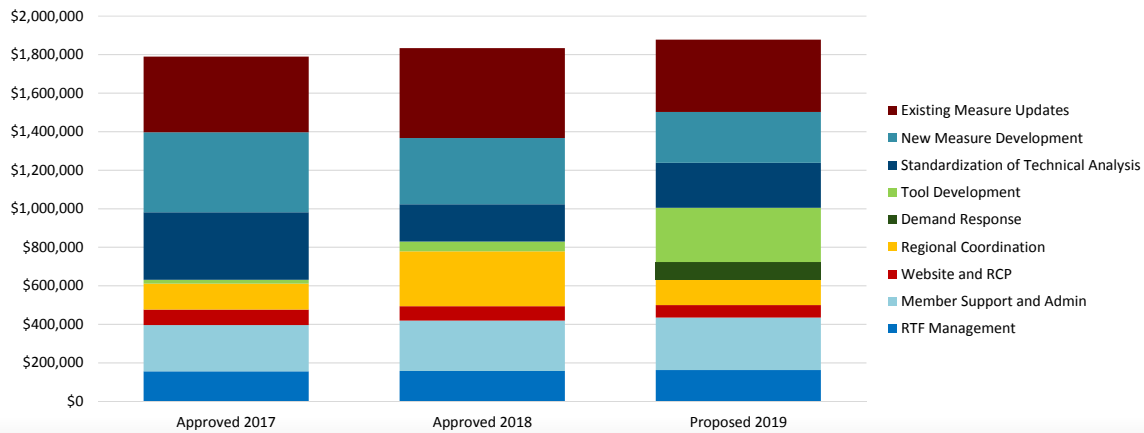
Work Plan Development Process



Proposed Budget

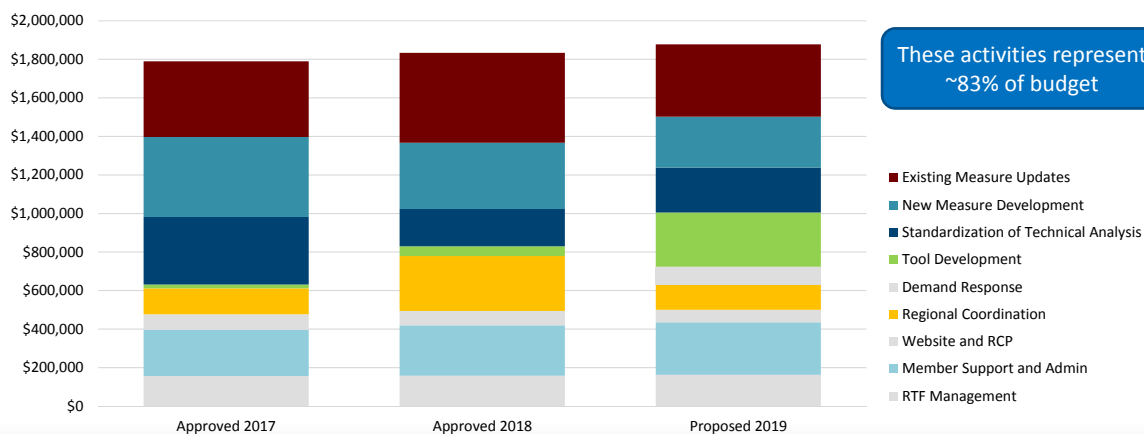
Category	Contract RFP	Contract Analyst and Manager	Subtotal Funders	Council In-Kind Contribution	% of Total
Existing Measure Review and Update	\$84,000	\$292,000	\$376,000	\$22,000	20%
New Measure Development	\$41,000	\$223,000	\$264,000	\$9,200	14%
Standardization of Technical Analysis	\$23,500	\$210,000	\$233,500	\$1,500	12%
Tool Development	\$130,000	\$151,400	\$281,400	\$15,000	15%
Demand Response	\$0	\$93,000	\$93,000	\$5,000	5%
Regional Coordination	\$0	\$130,000	\$130,000	\$16,000	7%
Website and RCP	\$60,000	\$5,000	\$65,000	\$45,000	3%
Member Support and Administration	\$182,000	\$90,000	\$272,000	\$10,000	15%
RTF Management	\$3,300	\$157,000	\$160,300	\$66,500	9%
Subtotal New Work	\$523,800	\$1,351,400	\$1,875,200	\$190,200	100%

Comparison to Previous Years

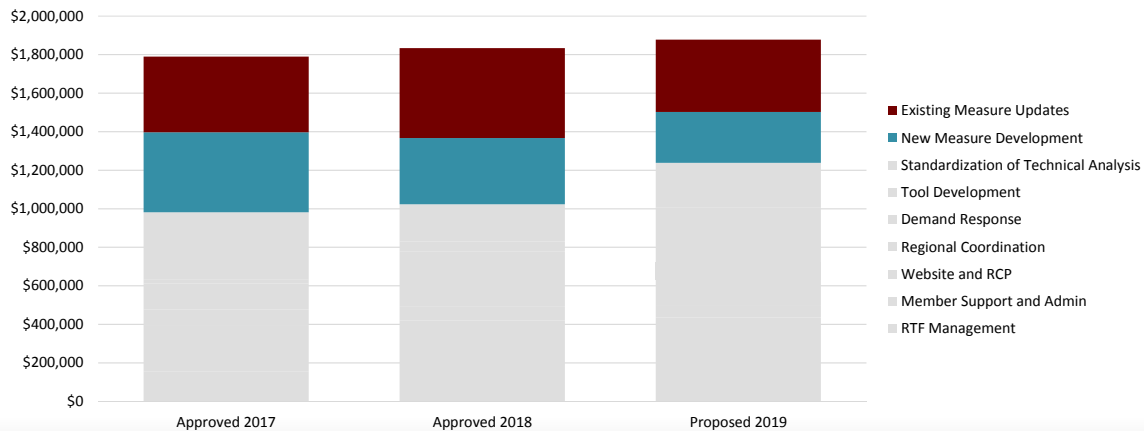


Note: Increase in total budget is based on the agreed to budgets in the 5-year funding agreements

Activities Directly Related to Maintaining RTF Measure Library



Measure Development



Measure Development

- Starting point for developing the work plan is always the measure development
- Estimate number of existing and new measures based on:
 - Sunset dates
 - Known research and other activities with new data
 - New measures proposals to date
 - Placeholders for additional new measures not yet identified
- Estimate QA/QC and other costs based on past experience

Comparing Measure Development Budgets

Measure Type	2017	2018	2019
Existing UES	12	23	26
Existing SP	6	1	2
New UES	7	8	6
New SP	6	4	2
Total Budget*	\$592,500	\$571,000	\$440,000

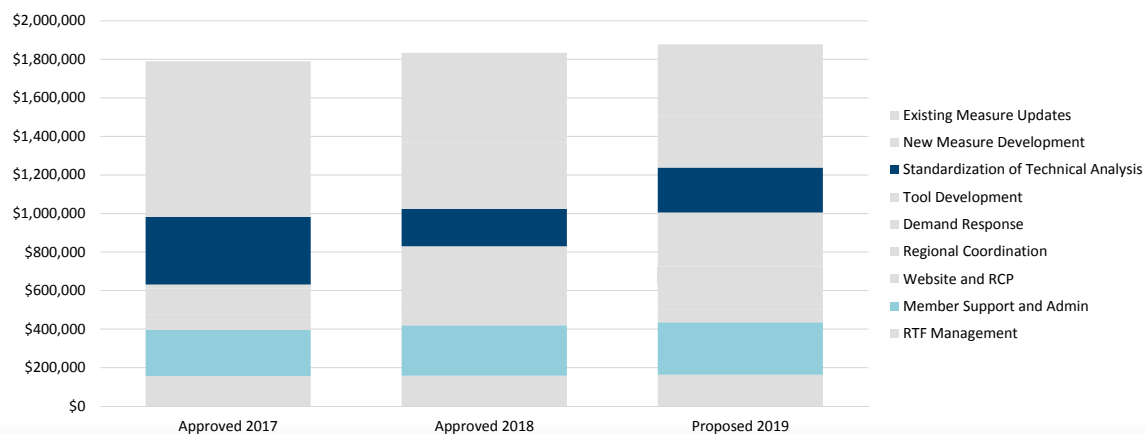
Overestimated
cost of SPs

Underestimated
cost of new UES

* This does not reflect other work that is in support of measures such as QA/QC, connecting on potential research to support measure updates, evaluation guidance, etc.

- RTF plans to support many measures in 2019
- Biggest driver in budget change is improved estimation of cost per measure

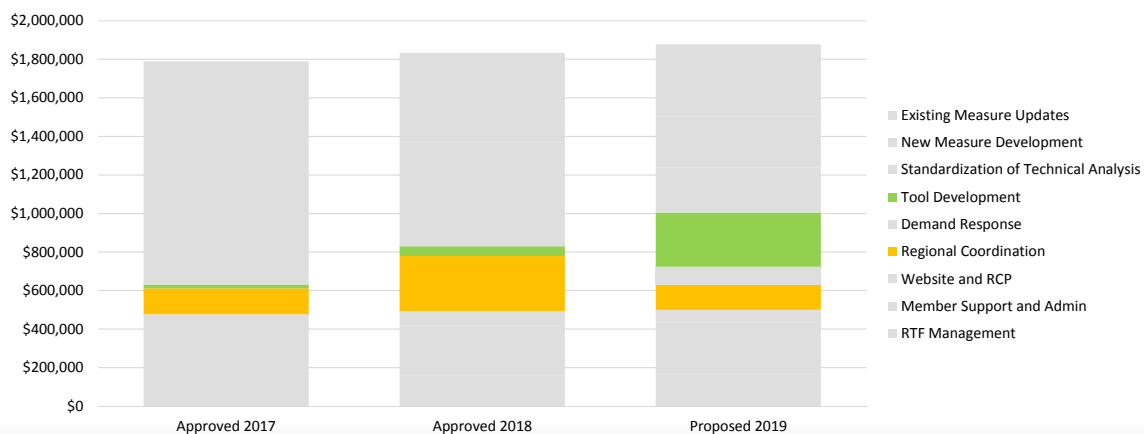
Measure Collaboration



Measure Collaboration

- RTF works because of the collaboration across the analyst team and membership in review, deliberation, and approval of measures
- Standardization of technical analysis supports:
 - Internal review and deliberation to ensure consistency with guidelines and approaches across measures
 - Guidelines maintained to ensure materials are up to date and reflect decision making
- Membership and meeting supports:
 - Participation and attendance of all members and analysts travel
 - Other meeting administration (ex: minutes and webinar) to enable public engagement and transparency

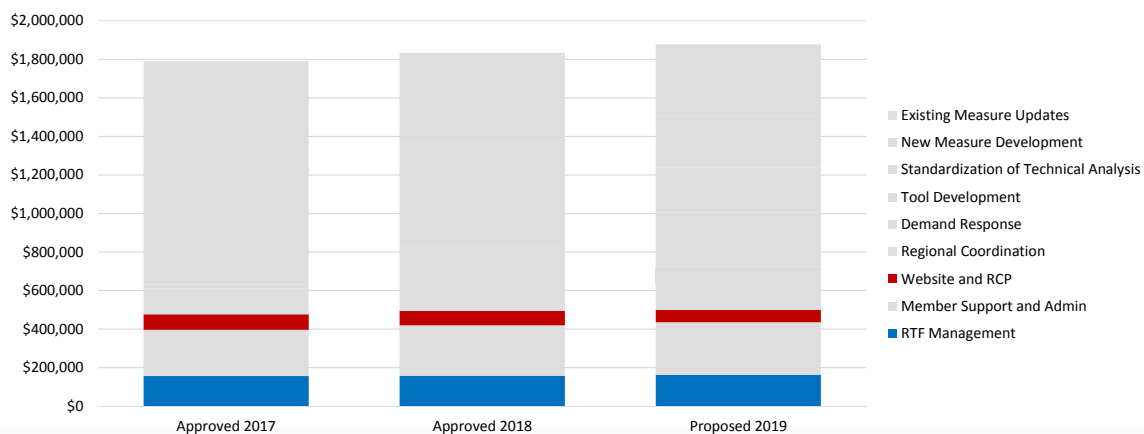
Tools and Regional Coordination



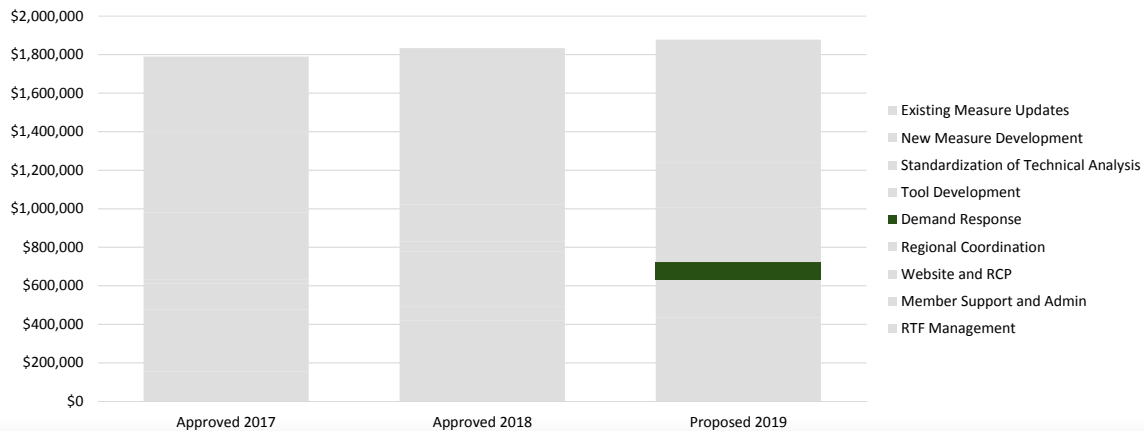
Tools and Resources

Work Plan Category	Purpose	Percent Budget
Tools		15%
SEEM	Completion of calibration to RBSA II	1%
Commercial Building Models	Enhancements to support savings estimation and hourly profile development	6%
ProCost	Updates to value multiple peak periods and other enhancements	3%
Saving Shape Development	Improve select hourly profiles to inform capacity savings at any hour	5%
Coordination on Regional Efforts		7%
End Use Load Research	Inform and learn from this work as it relates to hourly profile development	1%
Market Analysis	Review and leverage to support baseline development	1%
Other Research	Inform and leverage other research in support of measure updates	2%
Eighth Plan Support	Review and conduct technical analysis for conservation supply curves	3%

Other Management Items



Demand Response Exploration

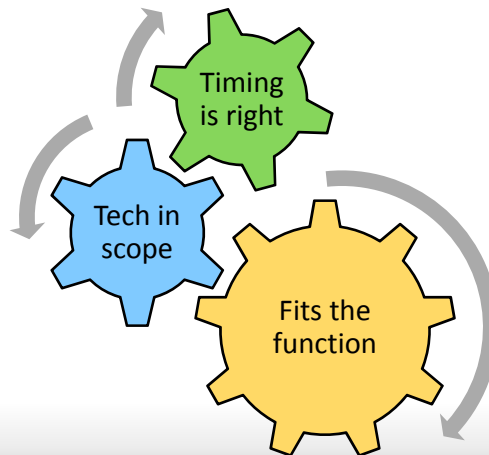


Demand Response: Proposed Scope

- Assessment of up to 6 DR technologies for estimating potential per unit savings and technology cost
- *Ex ante* estimates for planning (ex: supply curve development)
- Examples:



Why the RTF?



What are we offsetting?



Budget was built first assuming no DR

1. Measure development and management
2. Collaboration (members and CAT)
3. Tool development and coordination

When adding in DR, it required a reallocation from two categories

- Eighth Plan support
- Savings shape development

Questions

James Yost
Chair
Idaho

W. Bill Booth
Idaho

Guy Norman
Washington

Tom Karier
Washington



Northwest **Power** and **Conservation** Council

Jennifer Anders
Vice Chair
Montana

Tim Baker
Montana

Ted Ferrioli
Oregon

Richard Devlin
Oregon

October 2, 2018

DECISION MEMORANDUM

TO: Council members

FROM: Jennifer Light
RTF Manager

SUBJECT: Recommendations for 2019-2021 RTF Membership

PROPOSED ACTION: Approve the staff recommendations for Voting Members to serve on the Regional Technical Forum for 2019 through 2021, including the reappointment of Jennifer Light as RTF Chair and Charlie Grist as Vice-Chair (list attached).

SIGNIFICANCE: Under the RTF charter and bylaws, the Council, in consultation with the Chair of the Power Committee and the Power Division Director, appoint the RTF membership, as well as Chair and Vice-Chair positions. This is done approximately every three years to ensure the RTF continues to provide the technical expertise and the forum necessary to advise the Council and to assist the region in the evaluation and verification of energy savings.

BUDGETARY/ECONOMIC IMPACTS

The RTF is funded by regional utilities and organizations based on the budget approved by the Council. The Council also provides in-kind support of the RTF in the form of staff support (legal, administrative, financial, and technical) and meeting space. The approval of the membership and officer recommendations do not put any additional budgetary or resource burden on the Council.

BACKGROUND

The RTF plays a key role in the region as the non-constituent based group of technical experts who develop standardized estimation methods and protocols for verifying and evaluating conservation savings. Since its authorization by Congress in 1996, the RTF has had a lasting impact on the region's conservation savings.

The process of appointing RTF Voting Members occurs approximately every three years, as set forth in the RTF's charter and bylaws. The RTF solicits nominations for voting members from the Bonneville Power Administration, the region's utilities, the state energy offices, energy efficiency professionals, renewable resource developers, public interest groups, customers, and other experts from within and outside the region. RTF staff review the nominees' qualifications and make member recommendations to the Council's Director of the Power Planning Division and the Chair of the Power Committee. The full Council, in consultation with the Director of the Power Division and the Chair of the Power Committee considers the recommendations and appoints voting members in accord with the principles set forth in the Council's rules on advisory committees and the RTF's charter and bylaws.

In addition to voting members, the RTF also has a non-voting membership group known as "corresponding members" who are called upon to serve on RTF subcommittees, attend RTF meetings, and offer comments on matters, providing an additional breadth of expertise to the RTF. Corresponding members may include energy consultants or independent contractors with a high level of technical expertise in one or more areas of energy efficiency and in some instances may receive compensation from the RTF for their time and work. Corresponding members are appointed by the Director of the Council's Power Planning Division, in consultation with the Chair of the Power Committee.

In addition to RTF voting and non-voting members, members of the public may also attend RTF meetings. As a technical advisory committee to the Council governed by the Federal Advisory Committee Act (FACA), RTF meetings are open to the public, with exceptions allowed for closing RTF meetings in a few specified circumstances.

In July 2018, the Council announced that it was soliciting applications for RTF membership, both voting and non-voting. The Council received 21 resumes from current members and 17 resumes from new applicants expressing interest in voting member positions. The RTF charter allows for the appointment of 20-30 voting members.

After an extensive review and evaluation process, staff have come up with recommendations they are confident will maintain the technical expertise and participatory level necessary to accomplish the diversity of tasks included in the RTF's work for 2019 through 2021. This list represents a mix of technical expertise, sector experience, and technology focus. While the recommended voting members are non-constituent based (not representing any specific entity), staff have considered the diversity of the proposed member's institutional experience and believes it provides a necessary range of perspectives. The recommended group contains 12 new voting members and 18 voting members continuing on from current service.

The list of applicants recommended by staff for appointment as voting members is attached, as is a spreadsheet detailing the names and self-reported skills of all applicants. The first decision for the Council to make is whether to approve these people as voting members of the RTF. Current members and new applicants not recommended for appointment as voting members will be given the opportunity to participate as corresponding members. The list of applicants recommended for appointment as corresponding members is also attached.

In addition to appointing voting members to serve on the RTF, the RTF charter also calls on the Council to select the Chair and Vice-Chair. The staff recommend that the Council reappoint Jennifer Light, RTF Manager for the Council, as RTF Chair and Charlie Grist, Manager of Conservation Resources for the Council, as RTF Vice-Chair. Jennifer Light RTF Manager and has served as Chair of the RTF for the past 3 years. In these roles, she is intimately familiar with the work plan requirements, and works well with all the stakeholders, including the RTF Policy Advisory Committee. Charlie Grist has served ably in the position of Vice Chair, has extensive experience in energy efficiency, and works well with the membership and stakeholders.

ALTERNATIVES

With regard to the voting members, the Council could appoint fewer, or other, applicants to serve on the RTF from the list of candidates. Staff does not support this alternative insofar as it might limit the technical expertise, capacity, and diversity of the RTF. This could potentially make it more difficult for the RTF to accomplish its 2019 Work Plan.

As for the RTF Chair and Vice-Chair, the Council is free to select other voting member candidates to fill these positions, assuming of course a willingness to serve. Staff does not recommend this alternative, in as much as the work load of the RTF staff requires daily management and oversight by the Chair and Vice-Chair to assure its successful execution. Council staff have ably served as RTF Chair and Vice-Chair, and appointment of a voting member, who is not on Council staff, as Chair or Vice-Chair will likely result in additional work for Council staff who assist with the management, administrative, and business operations of the RTF, given the lack of familiarity of non-Council staff with Council operations generally.

Also, be aware that if a Council staff person does not serve as Chair and/or Vice-Chair, FACA still requires that we designate a Council employee to serve as the RTF's Designated Federal Officer (or in this case, Designated Council Officer). Under FACA the agency has to designate an employee to be responsible for calling, attending, and adjourning advisory committee meetings, approving meeting agendas, maintaining records, etc. The overlap in duties between the advisory committee chair and the DFO position has been one of the reasons why the Council's practice has been to name a Council employee as chair of each advisory committee, and in the interest of efficiency, entrust the responsibilities of the DFO to that staff member.

ATTACHMENTS

2019 Staff Recommendations (sent via email)

2019 Expertise Matrix (sent via email)

Applicant Resumes and Letters of Interest are available upon request