

# RATE PERIOD 2020-21

## EE GOAL AND IPR BUDGET PROPOSAL- DRAFT

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*June 2018*

### Executive Summary

Consistent with the NW Power and Conservation Council's Seventh Power Plan, BPA sees energy efficiency as an essential solution to meet its future energy needs. Informed by the results of the 2018 Resource Program, BPA is proposing to achieve between 74-101 aMW of programmatic energy efficiency savings in the 2020-21 rate period with a Conservation Purchases budget of \$134 million dollars. This range of savings reflects a gradual shift in BPA's savings portfolio to acquire energy efficiency measures that are best shaped to meet BPA's energy needs.

### Background

In 2015-2016, BPA engaged in a series of conversations with the region through its Focus 2028 process to build a common understanding of the challenges, risks, and opportunities BPA faces. Energy Efficiency was an area of focus in these discussions. Through the dialogue, BPA, customers and stakeholders identified six areas within Energy Efficiency for continued exploration by BPA. One of those areas was a reassessment of how BPA determines its EE goal. In the October 2016 Focus 2028 Energy Efficiency Close-out letter,<sup>1</sup> BPA committed to this review<sup>2</sup>, with the 2018 BPA Resource Program as a likely platform to inform this process. The Resource Program evaluates and identifies solution portfolios Bonneville may pursue to meet its future power supply obligations, with each portfolio including various resource options. With the results of the 2018 Resource Program, BPA has new insight into how it might more effectively deploy energy efficiency to meet its power needs.

The [2018-2023 BPA Strategic Plan](#) expresses an objective to increase its focus on targeted energy efficiency that delivers cost-effective solutions in support of BPA's evolving needs, capabilities, constraints and regional interests.

BPA is committed to achieving cost effective conservation through energy efficiency consistent with the Council's Seventh Power Plan. BPA currently determines its energy efficiency goal based on its preference customers' share of total load in the region. This number has historically been around 42 percent and thus BPA has adopted 42 percent of the Council's regional energy efficiency target as its own goal. In 2016, BPA released the Energy Efficiency Action Plan, which provides the road map for how BPA, in partnership with its preference customers, will achieve public power's share of the Seventh Plan regional goal. Through 2017, public power has exceeded the goals BPA set in the Action Plan.

In addition to the goal, or scale of energy efficiency achieved, BPA develops its EE portfolio to incorporate other key considerations including consistency with the Council's power plan, customer service, local utility opportunities, program stability and cost. As described in the strategic plan, BPA will also now focus on its power and transmission system needs. BPA has considered these components in developing this proposal for the programmatic energy efficiency goal and budget for BP-20.

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<sup>1</sup> [https://www.bpa.gov/EE/Policy/Documents/EE\\_Focus\\_2028\\_Closeout\\_letter\\_final.pdf](https://www.bpa.gov/EE/Policy/Documents/EE_Focus_2028_Closeout_letter_final.pdf)

<sup>2</sup> BPA currently commits to 42 percent of the regional goal, a proxy based on public power's share of load in the region

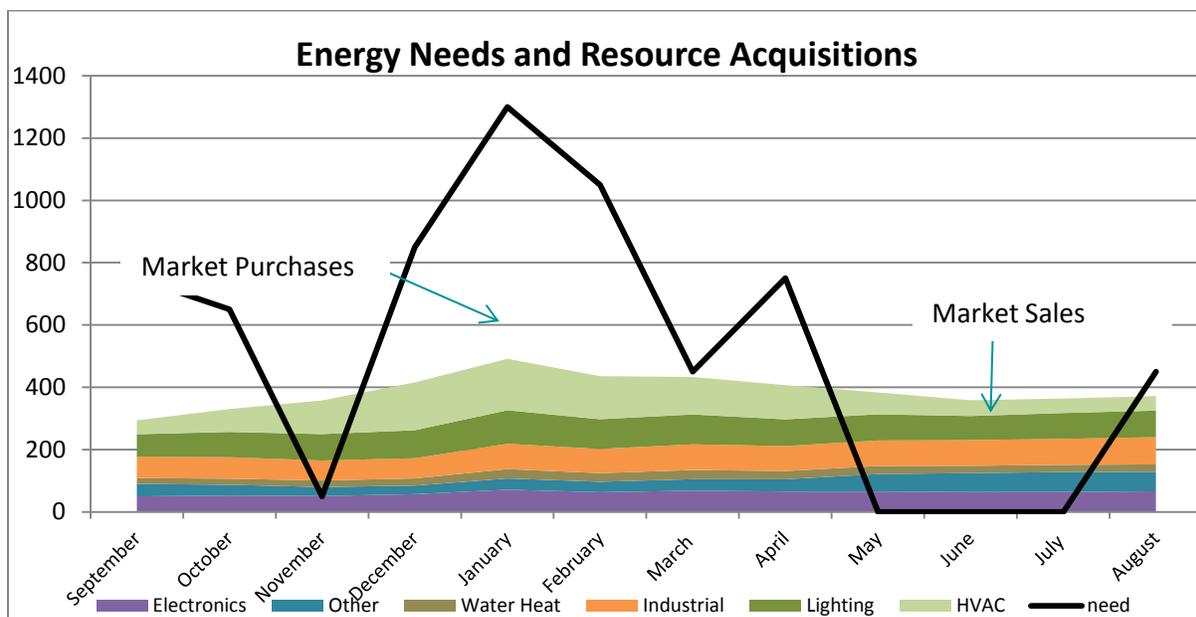
## 2018 Resource Program Results Summary

The purpose of the Resource Program is to identify power needs and potential solutions to meet BPA power supply obligations. These combinations of solutions, known as portfolios, represent the mix of options available to BPA. Generally, the portfolios exhibit the tradeoff between increasing cost and decreasing cost variability. Through an examination of the three lowest-cost portfolios, the Resource Program concluded that BPA can meet its future power supply obligations through a combination of energy efficiency, demand response and market purchases.

The results affirm that conservation is a key component in any resource strategy that ensures BPA can meet its obligations at low cost. Overall, the Resource Program identified 900-1,400 aMW of conservation that could be implemented within public power loads from 2020-2039 to meet potential future BPA obligations.

In addition to specifying conservation amounts, the Resource Program portfolios identified specific types of EE measures that satisfy the objectives of meeting BPA's energy and capacity needs at low cost and/or reduced cost variability. Many of the selected measures were those that saved energy during the winter, when BPA's energy needs are greatest. The figure below shows how the shape of specific end uses, like HVAC, contributes a higher proportion of their savings to filling the energy need in the winter months. Similarly, these measures contribute lower savings in months when BPA is energy surplus.

Overall, the results of the Resource Program conclude that energy efficiency is a crucial resource to meeting BPA's energy needs at the lowest cost. The following figure represents the interactions of the energy need, EE acquisitions, market purchases and market sales and reflects the challenges of planning for the federal system given the seasonal nature of the hydroelectric generation output. It depicts the tradeoffs between acquiring resources to meet winter and summer needs while trying to not further exacerbate the springtime surplus.

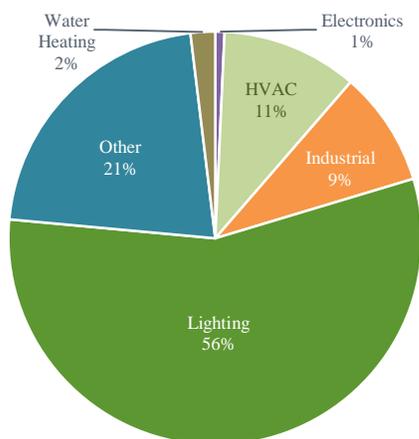


## The Energy Efficiency Program

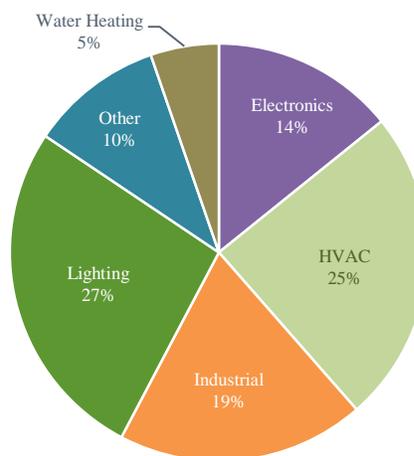
As defined in the 2016 Energy Efficiency Action Plan, BPA's Energy Efficiency program consists of programmatic, market transformation and Momentum Savings. These three sources of energy efficiency contribute to meeting BPA's goals. This proposal focuses on programmatic savings, which are those savings BPA acquires under Energy Conservation Agreements with its preference customers or through customer self-funding. Today, BPA acquires a wide variety of programmatic savings with no insight into how those savings contribute to BPA's system needs. For example, a commercial lighting measure is treated on par with a residential heating measure, regardless of its value to the BPA system. BPA's current programmatic portfolio relies heavily on lighting efficiency, which is relatively low cost and high yield and has allowed public power to achieve its regional goals at a very low first-year cost.

The Resource Program selected a mix of specific end uses that varies from BPA's current programmatic acquisitions, with a higher proportion of savings coming from HVAC, electronics and water heating measures. The pie charts below compare BPA's current savings acquisitions to the savings chosen by the Resource Program. Energy savings from end uses identified in the Resource Program are generally more difficult to capture and require additional intervention to motivate consumer action. Many of these measures have a higher first-year cost and higher barriers to implementation for consumer. All else being equal, a shift to those measures identified as valuable in the Resource Program could increase BPA's programmatic efficiency portfolio cost by more than \$1 million per aMW (currently ~\$1.33 million per aMW). This increased per-unit cost could require an increase in BPA's Conservation Purchases budget while achieving fewer overall aMW.

2017 Savings Achievements



Resource Program Output



## Proposed Energy Efficiency Goals and Budget for 2020-2021

In developing its proposed approach to establishing the energy efficiency goal and budget for 2020-2021, BPA maintained the principles that have been established through previous public processes and the BPA Strategic Plan 2018-2023. The following principles, which are core to the continued success of the EE program, drive the recommendation:

1. **Maintain customer equity in acquisition budget allocation.** Since the establishment of the Post-2011 program design, which defined an allocation of Energy Efficiency Incentive among utility customers using the Tier One Cost Allocator, customers have continued to support such an equitable allocation of BPA's Conservation Acquisition funding. BPA plans to maintain the TOCA-based funding allocation for EEI.
2. **Retain program stability.** Significant swings in program scale, budgets and qualifying measure sets over short time horizons are difficult for utilities and trade allies to absorb and could erode program infrastructure or continuity. BPA should avoid significant swings to maintain the stability and success of regional energy efficiency infrastructure. Additionally, another element of the Focus 2028 EE closeout letter focused on improving the customer experience. Stability supports a positive customer experience.
3. **Align with BPA's strategic plan.** Recognizing cost pressures, energy efficiency will align with the goals of the BPA 2018-2023 Strategic Plan and consider the impact to BPA's long-term financial health when determining the scale and approach of its EE program.
4. **Acquire savings that provide high value to BPA.** BPA's program should emphasize BPA priorities, balanced with customer needs. The Resource Program provides BPA with better insight to the types of measures that provide the highest contribution to its power needs.

With those four principles in mind, BPA developed a proposal for its Energy Efficiency program in 2020-2021. This proposal represents a step toward an EE program more closely aligned with BPA's power supply obligations and evolving needs.

## Conservation Purchases Budget and Programmatic Savings Scale

BPA proposes to set its Conservation Purchases budget at **\$134 million**. Absent any changes in program offerings, this budget would acquire 101 aMW<sup>3</sup> of energy efficiency, which is the level of programmatic savings BPA would have targeted to complete its 2016 EE Action Plan<sup>4</sup>.

BPA will leverage insights from the Resource Program to adjust its mix of programmatic energy efficiency achievements. The types of energy efficiency that will meet BPA's priorities and resource needs may be more difficult to accomplish or come at a higher unit cost to acquire. Therefore, BPA expects to acquire between **74-101<sup>5</sup> aMW** of energy efficiency. That range of programmatic acquisition adequately captures the scale of energy efficiency BPA's Resource Program identified across its three lowest-cost portfolios.

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<sup>3</sup> Includes EEI and customer self-funded savings

<sup>4</sup> [https://www.bpa.gov/EE/Policy/EEPlan/Documents/2016-2021\\_BPA\\_EE\\_Action\\_Plan.pdf](https://www.bpa.gov/EE/Policy/EEPlan/Documents/2016-2021_BPA_EE_Action_Plan.pdf)

<sup>5</sup> This reflects an evolution of BPA's program, which continues to capture some areas of savings that do not fit needs identified as optimal by the Resource Program. Meeting the overall Seventh Power Plan goal will depend on the savings achieved through programmatic, NEEA and Momentum savings.

## **Forward Planning**

BPA is expecting to complete an updated Resource Program in 2020 and will be engaged in the Council's Eighth Power Plan development. The 2018 Resource Program enhanced Bonneville's understanding of its forecast obligations and needs and gave perspective on viable least-cost resource options. The Resource Program has helped BPA define a more refined approach to energy efficiency acquisition; there is a constructive and collaborative opportunity to leverage this learning to benefit the next cycle of regional power resource planning.

## **Programmatic Impacts**

BPA is evaluating the programmatic impacts of this proposal. Programmatic changes in the October 2019 Implementation Manual could include increased incentives and support for HVAC and weatherization measures and a decreased emphasis on lighting measures. Ahead of any such changes, BPA will undertake a more detailed assessment and design process involving internal and external subject matter experts and informed by regional collaboration. Bonneville recognizes the impact that program changes can have on customer programs and end-user relationships. Thus, BPA will carefully determine the nature, process and timeline of changes to its Energy Efficiency program.

BPA will work to balance the need for program stability and certainty with the need to update the program and will adhere to its practice of providing six-month advance notice of pending changes and an Implementation Manual that will be in effect for the 2020-2021 rate period.

## **FINANCIAL DISCLOSURE**

This information was publicly available on June 18, 2018, and contains information not sourced directly from BPA financial statements.