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FINDING OF NO SIGNIFICANT IMPACT
TENNESSEE VALLEY AUTHORITY

2018 WHOLESALE RATE CHANGE

The Tennessee Valley Authority (TVA) is proposing to change the rates that local power companies (LPCs) that distribute TVA power pay for wholesale power. Under the proposal, TVA would refine the structure of its wholesale electric power rates to better align wholesale rates with underlying costs. In addition, TVA proposes several administrative changes associated with its rate structure, including simplifying the rate schedule language and improving processes for approving and publishing rates.

The actions under consideration encompass changes to pricing structures and rates for electricity and to certain administrative practices. Changes to pricing structures and rates are proposed for two broad groups: wholesale Standard Service, which consists of residential and small commercial and industrial customers served by LPCs, and large commercial and manufacturing customers with power demands over 5,000 kW, which include customers served by LPCs and customers directly served by TVA.

The electric utility industry is facing competitive and technological changes that will impact the traditional electric utility business model through distributed generation, energy efficiency, technological advances, shifts in customer behavior, and regulatory requirements. This complex interplay of factors creates a need for self-funded electric utilities such as TVA to adjust their pricing structures and their management of generation and transmission assets. Identifying and appropriately apportioning costs of providing electric service is an important factor in equitably addressing this ongoing need.

In 2015, TVA, the Tennessee Valley Public Power Association (TVPPA), and the Tennessee Valley Industrial Committee (TVIC) commenced discussions to incrementally improve pricing signals and fixed cost recovery, as well as to encourage technology investment. The rate change TVA implemented in 2015 focused on better aligning pricing with underlying cost drivers. Since 2015, TVA has been discussing next steps with LPCs and directly served customers, and has now proposed a rate change that would be implemented beginning in 2018.

The primary objectives of this proposed rate change are to continue to improve the alignment of wholesale rates with their underlying costs to serve and to facilitate measured, managed changes in LPCs' retail rate structures. The proposed changes will reduce upward rate pressure by mitigating the effects of uneconomic development in distributed energy resources (DER). The intent is to implement changes concurrently at wholesale and retail and to enhance the fairness of the rate designs for both TVA and LPCs by diminishing cost shifting among consumers and among LPCs. The proposed changes will ensure that rates remain as low as feasible for all consumers, consistent with TVA's mission to serve and to improve the quality of life in the Valley.

TVA's current energy prices over-incentivize consumer installation of DER, leading to uneconomic results for the people of the Valley as a whole. Over the next decade, forecasted load is expected to be flat or declining, resulting in little need for new energy sources. At the

same time, consumer interest in renewable energy continues to rise. The imbalance created by uneconomic DER investment means that costs are shifted to consumers throughout the Valley who cannot afford DER or otherwise do not choose to invest in DER.

TVA also proposes to lower energy rates for large general service customers. TVA cost of service analysis indicates an excess of the revenues collected from large general service consumers over the costs incurred by TVA to serve these consumers. Benchmarking studies place TVA in the 4th quartile (the bottom 25%) among peers for commercial rates. The marked inequity in large general service rate levels persuaded TVPPA and TVIC to agree with TVA's proposal to lower energy rates for large general service customers.

The impacts of TVA's proposed action (energy rate reduction and grid access charge of 0.5 cents per kWh) and of the reasonable alternatives to the proposed action were assessed in the attached environmental assessment (EA) finalized on May 4, 2018. The EA is incorporated herein by reference.

Description of Alternatives

TVA evaluated five alternatives in the EA: the No Action Alternative to maintain the current rate structure and four alternative rate changes. The four alternative rate changes vary by the amount of the energy rate reduction and corresponding grid access charge, as follows:

Alternative B: Energy rate reduction and grid access charge (0.25¢/kWh)
Alternative C1: Energy rate reduction and grid access charge (0.5¢/kWh)
Alternative C2: Energy rate reduction and grid access charge (1¢/kWh)
Alternative D: Energy rate reduction and grid access charge (2.5¢/kWh)

None of the rate change alternatives reviewed in the EA would change the amount of revenue TVA collects. TVA proposes to make several other changes in rates, including:

1. Incorporating the environmental adjustment and other adjustments currently on the adjustment addendum into the base rates;
2. Moving all hydro allocation adjustments (credits to residential customers, debits to non-residential customers) from base rates to the appropriate adjustment addendum;
3. Decreasing Large General Service rates to move them closer to what it costs to serve those customers. Rates for Standard Service and Large Manufacturing Service will be increased slightly so that this change is revenue neutral;
4. Updating the power cost recovery components of LPCs' resale rates to account for changed Standard Service wholesale rates and changed hydro allocation adjustments;
5. Changing the fuel cost adjustment mechanism to administer the resource cost allocation to three rate classes instead of two rate classes;
6. Providing LPCs flexibility in their administration of the hydro allocation credits distributed to residential consumers;
7. Implementing a series of rate administration simplification initiatives to simplify business conducted through the rate schedules, including:
   - Modifying Part B of the Outdoor Lighting rate schedule to replace the list of available fixtures with a cost-based formula;
   - Consolidating the B, C and D rate schedules into one manufacturing schedule document and one general service schedule document, maintaining structured and rates for each class; and
   - Phasing out or eliminating mid-month billing; and
8. Updating ESS (Electricity Sales Statistics) reporting requirements.

Although provided for under the current wholesale rate schedule and not a change to the wholesale rate schedule, TVA also proposes to rebalance the hydro allocation credits distributed to residential consumers with the hydro allocation debits collected from nonresidential consumers to reflect recent declines in commercial and industrial sales. Under Alternatives C1, C2 and D, TVA would establish implementing guidelines for the proposed rate change for retail customers to ensure a gradual transition and minimize bill impacts.

TVA's preferred alternative is Alternative C1 (0.5¢/kWh) as it allows the agency to implement a change to lessen the perils of cost shifting, at the lower end of the range (0.25¢ to 2.5¢/kWh) considered in the EA. This would allow for a gradual transition and provide TVA an opportunity to make appropriate adjustments in future rate corrections if necessary. Alternative C1 represents the grid access charge and reduction in standard service energy rate that TVA and LPCs have agreed upon. If approved by the TVA Board of Directors, the rate change would be effective October 1, 2018.

Impacts Assessment

In the environmental review, TVA considered the potential impacts of the proposed rate changes to socioeconomics, energy production and use, air resources, water resources, land use, and production of solid and hazardous waste. The potential for environmental impacts of changes to air quality, water quality, waste, or land use depends upon: (a) how and when the wholesale rates set by TVA are reflected in the retail rates established by LPCs; (b) the related decisions made by consumers of electricity in the region in response to rate structure revisions, and (c) how TVA provides energy and meets demand in response to the decisions made by LPCs and the retail consumers.

TVA expects some minor socioeconomics impacts to result from all alternatives. Under Alternative A, cost shifting from DER participants to nonparticipants would continue and likely worsen over time. Higher retail energy rates would likely stimulate minor additional investment in DER compared to the current conditions, if all else is equal. However, this would increase the amount of cost shifting to nonparticipant consumers compared to current conditions. In contrast, Alternatives B, C1, C2, and D would avoid or lessen potential cost shifting while maintaining revenue neutrality. Under Alternative B, no change in the trend of DER adoption is expected, while under Alternatives C1, C2, and D, it is expected that the penetration of DER may be slowed marginally. For those with existing DER investments where rates are specified by contract, the time for those investments to break even would not be affected.

TVA expects that under Alternative B (reduction in Standard Service energy rate by 0.25¢ per kWh and adding a corresponding grid access charge) most LPCs would not change retail Standard Service rates. Therefore, there would be no to very limited effects on energy use or monthly bills at the retail level for Standard Service customers. Alternatives C1, C2, and D would have minor effects on energy use and monthly bills to Standard Service customers, with negative effects to some customers and positive effects to some customers. The proposed implementing guidelines established by TVA for the proposed rate change for retail customers under Alternatives C1, C2, and D would ensure a gradual transition and minimize bill impacts.

Across the alternatives, there would be a mix of minor negative and minor positive economic effects on households for all alternatives. Each alternative, including the no action alternative (Alternative A), has the potential to slightly increase the monthly bill for a majority of

residential customers. Under Alternatives C1, C2, and D, for instance, high-usage households would likely see a decrease of more than 1.5 percent in their average monthly bills while low-usage households would likely see a small increase in their average monthly bills. Low-usage households' monthly bills would increase by a lower amount than moderate-use households. Impacts to low-income households, which likely span a variety of usage levels, would be more than other households as a proportion of household income.

Under Alternatives C1, C2 and D, the average consumer (who uses about 1,250kWh monthly) would experience a $1 increase to their monthly electricity bill; the maximum increase in a consumer's monthly bill would be small, generally no more than $2. Because a significant portion of each monthly electricity bill would continue to be based on volumetric energy charges, residential customers would continue to benefit from taking actions to reduce their monthly electricity bills. Alternatives C1, C2, and D would likely have the beneficial effect of lowering households' bills in months of high usage (i.e., summer and winter), therefore helping to stabilize bills from fluctuations due to seasonal variation in weather. More stability is a benefit compared to less stability, all else equal. The greater stability of bills would be more beneficial for low-income households than other households, because higher peak bills due to season or weather are more likely to cause a problem in low-income households than for others.

While the exact changes in Standard Service customers' monthly bills would vary by LPC, TVA projects that the changes would likely be similar across the entire TVA service area. Because the impacts would be spread across all income and socioeconomic groups, no particular group bears a disproportionate share of the adverse effects. None of the alternatives would create environmental justice issues requiring mitigation, as no meaningful environmental or health effects would occur

TVA expects minor positive effects to large commercial customers and minor negative effects to Standard Service and large manufacturing customers under Alternatives B, C1, C2, and D. These four alternatives would lower rates for large commercial customers and make the rates more competitive. Rates for Standard Service and large manufacturing customers would increase, however, but still remain competitive. Combined, these changes are expected to have negligible to minor economic effects on the TVA service area, including negligible changes in revenue and employment for existing firms.

The proposed rate change would not affect the total revenue collected by TVA, but the allocation of revenues across customer classes and among LPCs would change slightly.

Although economic impacts may vary slightly among the alternatives, there would generally be no variation in impacts to the environment among the alternatives. TVA found that none of the alternative rate changes is substantive enough to result in market responses and customer behavior changes that would require TVA to modify its power generation operations or to alter its power generation and transmission systems. Thus, there would be no discernible impacts to air resources, water resources, land use, or waste production resulting from implementing the alternative rate changes. Because of the absence or limited magnitude of the direct and cumulative effects of the alternative rate structures, TVA expects that any induced environmental impacts would be indirect and essentially indiscernible for any of the alternatives. The comprehensive environmental regulatory programs that exist throughout all of the Valley states would further ensure that any resulting environmental impacts are minor. The potential for derivative secondary impacts to resources such as cultural resources, floodplains, biological resources, endangered species, or wetlands would accordingly be highly unlikely.

Cumulative impacts were also considered in the EA. As noted above, economic impacts could be experienced by consumers if TVA implements additional rate changes in the future to recover greater portions of its fixed costs. Should TVA implement additional rate changes in the future, the cumulative impacts of those changes may resemble the impacts analyzed in the review of Alternative D, which would implement a much greater fixed cost recovery than other alternatives and result in the greatest grid access charge and corresponding energy rate decrease.

In addition, TVA periodically increases its rates across the board to match revenue needs. Such rate adjustments are not intended to be revenue neutral. Rate adjustments would typically increase the monthly electricity bills of customers. The most recent adjustment was implemented by TVA in October 2017; the 1.5% increase was below the rate of inflation. Cumulatively, such adjustments would have adverse economic effects on customers for whom the proposed rate change would increase monthly bills; for those for whom the rate change would decrease monthly bills, the rate adjustments would reduce the beneficial effects of the rate change.

As noted above, TVA found very minor economic effects associated with implementation of Alternative D and found that there would be no or indiscernible environmental impacts. Potential future rate changes to recover fixed costs would most likely be minor and implemented gradually, when compared to Alternative D, thereby further minimizing the potential for effects. Generally, when a proposed action does not result in direct or indirect effects on a resource, there would be no cumulative impacts to that resource. In the EA, TVA found there would be no direct environmental impacts and that there would be indiscernible or no indirect environmental impacts associated with the rate change alternatives. Therefore, no cumulative impacts or only marginal cumulative impacts associated with the rate change alternatives are predicted.

Public and Intergovernmental Review

TVA initiated the rate change process by sending letters to all LPCs on August 9, 2017. This notification was made in accordance with the rate change provisions of the wholesale power contracts. After the letter was issued, TVA met with LPCs to endeavor to reach agreement on the proposal. These meetings aided in scoping issues and alternatives considered for this EA, and they provided important stakeholder input to the process. In March 2018, TVA issued the draft EA for public review and comment. TVA received 1,741 comment submissions from the public and other stakeholders. Responses to substantive comments are addressed in Appendix D. TVA used this input to complete the final EA. After the draft EA was issued and input from the public, LPCs, and directly served customers was considered, TVA identified Alternative C1 as its preferred alternative.

Mitigation

Due to the minor and insignificant impacts identified for the Alternatives, there are no TVA commitments or proposed mitigation measures identified for implementation. TVA notes that implementing guidelines under Alternatives C1, C2, and D were included in its proposal to limit negative economic impacts to customers, changes in energy use, and potential cost shifting.

Conclusion and Findings

Based on the findings in the EA, TVA concludes that implementing the preferred rate change alternative (Alternative C1) would not be a major federal action significantly affecting the environment. Accordingly, an environmental impact statement is not required.

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Date Signed