

## **FINDING OF NO SIGNIFICANT IMPACT** **TENNESSEE VALLEY AUTHORITY** **Public Utility Regulatory Policy Act Standards**

In response to the Public Utility Regulatory Policy Act (PURPA) of 1978, as amended by the Energy Policy Act of 2005 (EPAAct), TVA has considered adopting five standards that are designed to increase energy conservation and efficiency. The standards are described as Smart Metering, Net Metering, Fuel Diversity, Fossil Fuel Generation Efficiency and Interconnection. TVA must decide whether or not to adopt the standards, and if so, with or without modifications. The Environmental Assessment (EA) tiers from TVA's Final Environmental Impact Statement (EIS), Integrated Resource Plan (IRP)-Energy Vision 2020 (TVA, 1995) which evaluated a large number of energy resource options. In other environmental reviews, TVA has assessed the potential impacts of various renewable energy resources and distributed generating systems.

TVA considered two alternatives, No Action and Action. After reviewing the PURPA Standards, TVA determined that existing processes and programs address three of the standards—fuel diversity, fossil fuel efficiency, and interconnection. Under the No Action Alternative TVA is proposing to adopt these standards with no changes to current operations. Under the Action Alternative, in addition to adopting the three aforementioned standards, TVA would also adopt the smart metering and net metering standards. Under the modified version of the Smart Metering standard that TVA staff recommends for adoption, TVA would initiate a rate change process in accordance with the provisions of its wholesale power contract with the distributors of TVA to assess the feasibility of implementing seasonal and/or time-of-use pricing in combination with the advance of technological capabilities for certain customers. TVA would use its current Generation Partners pilot program as the model for the Net Metering standard. Participants would be limited to small renewable producers of electricity. The Action Alternative is preferred.

The adoption of the Smart Metering standard is expected to result in changes in the timing and demand for electricity. The adoption of the Net Metering standard is expected to encourage new generation by others. Potential environmental effects from these changes could include impacts to regional socio-economics and air quality (due to changes in the timing and makeup of air emissions in the Tennessee Valley region. Analysis estimated a shifting in electricity use from peak to off-peak hours (an initial overall 2.5 percent reduction in TVA's summer power peak) and a reduction in total energy use as a result of implementing Smart Metering. Net metering would have only a very small, indirect effect on energy use. Energy savings from smart metering would result in cost savings to consumers and/or TVA. Overall savings to average customers, no more than 1.4 percent of their annual electric bill, would be beneficial but insignificant. However, the largest commercial and industrial customers could benefit substantially resulting in increased profit margins. Although these savings would translate to lower revenues to TVA, the losses would be offset by savings in generation costs and/or purchased power. Net metering would have a very small beneficial socioeconomic effect. The impacts to air quality for both smart metering and net metering would be very small and insignificant.

TVA would work with its distributors over the next several years to implement the standards in an adaptive manner. As long as any adaptations continue to fall within the scope of this EA, additional environmental review is not anticipated. Based on the analysis in the attached TVA-

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prepared EA, we conclude that implementation of the action alternative would not be a major federal action significantly affecting the environment. Accordingly, an EIS is not required.

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