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SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT

VALLEY INVESTMENT INITIATIVE – PROGRAM EXPANSION AND MODIFICATION

Tennessee Valley Authority Power Service Area

PREPARED BY:
TENNESSEE VALLEY AUTHORITY

APRIL 2010

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TENNESSEE VALLEY AUTHORITY SERVICE AREA

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The Proposed Decision and Need

Tennessee Valley Authority (TVA) is proposing to expand and modify its Valley Investment Initiative for Existing and Expanding Customers (VIIE) Program to enhance its value as a recruitment tool. This program, established in 2008, is designed to increase the number and quality of jobs in the Valley and to benefitting the power system through smarter energy use. The VIIE Program recognizes and rewards desirable corporate behaviors such as investment, higher wages, and energy efficiency to slow load growth. The potential environmental impacts of the program were described in an environmental assessment (EA) and a finding of no significant impact (FONSI) (TVA 2008, hereafter referred to as VIIE EA). The VIIE EA and FONSI addressed the initial offering of the Valley Investment Initiative (VII) Program to certain classes of existing TVA power customers. This supplemental EA addresses the proposed expansion and modification of the VIIE Program.

As conceived, the program was to be offered first to existing customers and then to new customers. The VIIE EA focused on existing and expanding customers and noted that when a program for new customers was designed, the potential environmental impacts of additional classes of participants would be addressed. The proposed expanded program would eliminate the distinction between new and existing customers, creating a unified VII offered to two general types of customers: (1) those who have meaningful baseline data in categories such as plant book value, demand, energy, number of employees, etc., and (2) those without meaningful baseline data. All participants would be subject to the same matrix-based calculation of awards as customers under the current VIIE Program.

In conjunction with the proposed program expansion, TVA would terminate the Enhanced Growth Credit (EGC) Program. Initially offered in 1994, the EGC Program provided an economic development incentive by applying substantial credits on the firm power bills of qualifying businesses that brought new load to the TVA power system. The VII Program would replace EGC as TVA's primary economic development incentive for both new and existing customers. About half of the EGC participants have been new customers.

TVA is proposing to end the EGC Program and expand the existing VIIE Program in order to manage TVA's economic incentives better through targeted programs and direct budgeting methods and to recruit new customers that benefit the Tennessee Valley economy and the TVA power system. TVA is supplementing the VIIE EA to address the environmental effects of changes to the program and expansion to include new customers as well as the effects of terminating the EGC Program.

Background

In October 2008, the TVA Board of Directors approved the VIIE to allocate TVA's economic development resources more efficiently, in an accountable and targeted manner. In July 2009 and April 2010, modifications to the criteria and parameters of the program were made in order to meet the program objectives (Attachments 1 and 2). Under the VIIE, customer-specific incentives are calculated based upon a qualifying customer's projections in a number of economic and power system categories including capital investment, jobs, wages, load factors, and energy efficiency. The projection-based awards are paid as monthly credits on the customer's power bill and adjusted over time depending on the customer's actual performance and revised projections, if any. This quantitative and accountable method of allocating and delivering TVA's economic development resources is preferable to the historical model of embedding economic development incentives in rate products, which did not necessarily align with economic and power system benefits.

When the VIIE Program for existing and expanding directly served and distributor-served customers was established in October 2008, TVA committed to further develop the Program as a recruitment incentive and consider expanding the VIIE Program to include new customers. At that time, TVA also decided that the expanded VII would replace the EGC program, TVA's primary remaining rate product with embedded economic development incentives. EGC was designed to reward electrical load growth. The VII Program recognizes and rewards, through economic incentives, desirable corporate behavior such as continued capital investment in the Valley, employment of workers with above-average wages, energy-efficient operations, and load characteristics that complement the TVA system.

Other Environmental Reviews and Documentation

"Notice of Determinations on the PURPA Standards Set Forth in the Energy Independence and Security Act of 2007," 75 *Federal Register* 181 (4 January 2010).

Staff Report on Preliminary Recommendations on the Four PURPA Standards Under Section 111(d) of the Public Utility Regulatory Policies Act, Pursuant to the Energy Independence and Security Act of 2007, TVA, June 2009.

Adoption of PURPA Standards for Energy Conservation and Efficiency, TVA 2007.

Energy Vision 2020 - Integrated Resource Plan and Final Programmatic Environmental Impact Statement and Record of Decision, TVA, December 1995.

Alternatives

The VIIE EA assessed a No Action and an Action Alternative. In this supplement, the Action Alternative is being expanded to include customers without meaningful baseline data (e.g., customers new to the Valley; customers projecting an increase Redacted in load and energy Redacted ; and customers with new qualifying facilities Redacted . The No Action Alternative would be to continue to offer the VII Program to existing and expanding customers and to continue the EGC Program. The effects of the No Action Alternative are assessed in the VIIE EA.

The expanded and modified program would operate in all respects like the VIIE approved by the TVA Board of Directors in October 2008 and subsequently modified except as follows:

A. Minimum Qualifications:
   1. A customer must project and make total capital investment of at least $2.5 million over a five-year evaluation period, investing at least $500,000 per

year. This differs from customers with baseline data, who must project and make total capital investment of at least 25 percent of plant book value.

2. A customer must hire and employ at least 25 new full-time equivalents (FTEs) throughout the evaluation period. This differs from customers with baseline data, who must have had at least 25 FTEs in each of the previous 12 months.

B. Matrix Categories and Point Allocation:

1. Matrix points will be allocated and awarded based on Redacted the projected total capital investment. Redacted

2. Matrix points will be allocated and awarded based on the Redacted number of projected FTEs to be hired and employed. Redacted

3. Matrix points will be allocated and awarded based on the projected average wage Redacted

4. Matrix points are awarded based upon a customer's commitment to develop, implement, measure, and verify an energy-management plan at its Valley facility. Redacted

The following changes proposed under the Action Alternative would apply to all VII Program participants:

C. Annual base charges will be calculated by applying demand (kilowatt) and energy (kilowatt-hour) data and projects Redacted . Annual base changes were previously calculated by summing historical demand charges, fuel cost adjustment-excluded energy charges, and customer charges.

D. Redacted

E. Minimum qualifications, matrix categories, point allocations, and award calculations for new customers will be adjusted to account for their lack of baseline data.

The Action Alternative also includes termination of the EGC Program effective 90 days after the implementation of the expanded and modified VII Program.

Affected Environment, Evaluation of Impacts, and Comparison

The VIIE EA assessed potential program impacts on socioeconomic resources and air quality. The potential for additional socioeconomic effects is described below. TVA has determined that impacts to air quality from the current proposed action would not be materially different from those described in the VIIE EA, which identified the potential for minor and insignificant impacts to air quality that would be well within the normal operating variability exhibited for the TVA power system on a year-to-year basis. On the whole, there would be a small positive effect on air quality from the proposed program modification because the EGC Program rewarded load growth, whereas the VII Program rewards energy efficiency and nonpeak usage.

Proposed changes in the VII Program are described above under the Alternatives section. These changes would more directly address changes to the regional economy and the TVA power system than does the current program. The revised VII Program would operate in most respects like the current program, continuing to target economic growth and energy-use behaviors including energy efficiency and time of use. It would better support TVA's goal to reduce peak-load requirements and to change end users' load patterns in a manner that is cost effective, as discussed in 75 *Federal Register* 181 (2010 January 4).

From October 2009 through March 2010, the VII Program provided proposals to 77 existing customers, of which 29 (about one-third) had submitted applications. Similarly, in fiscal year 2009, 31 new customers that would have satisfied the proposed VII eligibility requirements were offered EGC incentives, and 11 of those became EGC participants. Given the current economic downturn and higher EGC enrollment in prior years, TVA anticipates a higher participation rate among existing and new customers when the economy improves. Based on this historical experience with the VIIE and EGC programs, TVA estimates that about 150 to 180 VII proposals would be made each year, with approximately 75 to 90 of these accepted into the program, of which 25 to 30 would be new customers in the Valley. This is slightly fewer new customers than the EGC Program has typically enrolled recruited annually. Accepted customers participate in the program for five years, and the total participation in any given year is expected to peak at 350 to 450 participants. This number is only a moderate increase over the number that would be likely under the current VIIE and EGC programs.

These proposed changes in the program would result in only small impacts on the regional economy. Some of the firms likely would have qualified for the EGC Program. Others might have located in the region without the programs. Therefore, impacts would be similar to those attributable to the current VIIE Program (TVA 2008). This program would be one of many factors affecting location decisions. Overall, these economic impacts would be positive, but very small. Total increases in employment and income, including indirect and induced increases, would be widely distributed across the various sectors of the economy, with no significant increases in any sector.

Meeting peak-load demand on the TVA system can require use of the most expensive generating facilities (natural gas-fired generators) or the purchase of power from other systems. Therefore, to the extent that this program lowers peak demands, these more expensive sources would be used less, resulting in a small, but not significant, decrease in total TVA expenses. If the program were to expand in the future, impacts might become large enough to avoid the costs and other effects of constructing new peaking facilities.

Location decisions of firms are based on many factors, of which this program would be one. However, the effect on location decisions would be, at most, only slightly more than under the current programs. If the VII Program is the decisive factor in attracting firms, there would be some construction and operational impacts related to the program. Such impacts would be scattered within the region, and potential locations cannot be foreseen at this time. However, they would include positive impacts to the local economy. The program is not expected to be a decisive factor in most location decisions; it is likely that most firms locating in the region would have done so under the existing program. Therefore, any construction-related impacts of this program would be small to very small. If multiple firms locate in the region due to the program, they are likely to be scattered in various locations around the region. Therefore, any cumulative effects of this program over time would be very small.

The proposed program expansion would increase the number of eligible participants in VII. However, as stated earlier, the total number of new recruits in the program is likely to be slightly less, but within the range expected, than the current EGC Program. Redacted Therefore, the impact on electricity sales, employment, and earnings would be similar to those evaluated for the current program. For the current VIIE/EGC programs, an estimated 5 percent of the workforce in the region, accounting for almost 6 percent of total earnings, is employed by eligible customers. These numbers could be slightly higher for the proposed program. However, due to overall budgetary constraints, the program size and impact are expected to be similar to that of the existing programs combined. Therefore, the program is expected to affect less than 1 percent of the workforce in the region and about 1.4 percent of TVA's power load.

In general, the Action Alternative should benefit the regional economy by promoting higher-wage jobs, job retention, and reinvestment. The proposed program provides inducement for positive impacts on regional employment and earnings, coupled with incentives to reduce peaks in electricity consumption and to invest in energy efficiency. The magnitude of these impacts, including reductions in energy costs, would depend on the specific actions taken. However, the impact to the economy of the region and the nation would be small to very small, but positive overall in the Valley as well as relative to the No Action Alternative.

Commitments

No mitigation or environmental commitments have been identified as necessary for the implementation of this program.

Preferred Alternative

TVA's preferred alternative is the Action Alternative.

TVA Preparers

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Position:	Contract Economist
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References

"Notice of Determinations on the PURPA Standards Set Forth in the Energy Independence and Security Act of 2007." *Federal Register* 75:181 (4 January 2010).

Tennessee Valley Authority. 1995. *Energy Vision 2020 - Integrated Resource Plan and Final Programmatic Environmental Impact Statement and Record of Decision*.

______. 2007. *Adoption of PURPA Standards for Energy Conservation and Efficiency.*

———. 2008. *Valley Investment Initiative for Existing and Expanding Customers, Tennessee Valley Authority Service Area, Final Environmental Assessment and Finding of No Significant Impact.*

———. 2009. *Staff Report on Preliminary Recommendations on the Four PURPA Standards Under Section 111(d) of the Public Utility Regulatory Policies Act, Pursuant to the Energy Independence and Security Act of 2007*.

Attachments

1. Valley Investment Initiative - Existing Customers, Community Relations and Energy Efficiency (CREE) Review and Report Items, July 28, 2009

2. Program Modifications Reviewed by and Reported to CREE on April 1, 2010 (Board Action Not Required)

Attachment 1

Valley Investment Initiative - Existing Customers
CREE Review and Report Items
July 28, 2009

CREE Review Items

a. Program Factor: The Program Factor is a budget control device: both a percentage by which every VII-E award will be multiplied and a dollar cap on the maximum annual award available to any particular customer. Presented for review is an initial Program Factor ceiling Redacted The actual FY 2010 Program Factor will be set by management beneath that ceiling once the Board approves the VII-E budget.

b. Payment Schedule Options: The original Board memo contemplated the payment of VII-E awards on a declining schedule over eight years. The payment period has been shortened to five years and a customer may now choose between Redacted payment schedules to fit its business plans. The net present values of total awards to be paid on these five-year schedules are within +/-1.2% of the net present value of the total award that would have been paid under the original eight-year declining payment schedule.

c. Redacted

d. Enhanced Growth Credit (EGC): EGC customers may apply for VII-E awards subject to certain limitations, rather than flatly prohibiting EGC customers from participating in VII-E. The limitations ensure customers will not "double-dip," *i.e.*, receive simultaneous benefits from both programs for the same conduct.

e. Redacted

CREE Report Items

a. Capital Investment: Cumulative total minimums of 8, 11, and 14% in Evaluation Period Years 2-4, respectively.

b. Award Amount Controls

   i. Base Award may not exceed Estimated Award offered in TVA commitment letter to customer.
   ii. Base Award limited so aggregate amount of awards over the term of the VII Participation Agreement shall not exceed a Customer's Total Capital Investment.

Redacted

c. Multiple award stacking methodology: *Redacted*

d. “Plant” definition flexibility: *Redacted*

e. “Financially sound” requirement fleshed out to include factors like compliance with power contract performance assurance.

f. VII Committee (which considers requested exceptions to excluded NAICS codes) will be comprised of five members from TVA Customer Resources (i) Economic Development, (ii) Customer Service, and (iii) Industrial Marketing organizations.

Attachment 2

Program Modifications Reviewed by and Reported to CREE on April 1, 2010 (Board Action Not Required)

Changes Reviewed by CREE	Changes Reported to CREE
– Annual Base Charges modification to level incentive playing field between distributors with different retail rates. – *Redacted*	– Redistribution of capital investment matrix points. – Extending availability of wage matrix points. – Analyzing parent-entity to determine “Financial Viability.”