



Memorandum from the Office of the Inspector General

February 18, 2010

Kenneth R. Breeden, OCP 1F-NST

FINAL REPORT – AUDIT 2009-12296 – REVIEW OF GREEN POWER MARKETING

To facilitate public understanding of TVA's efforts to promote the use of green power in the Tennessee Valley, we reviewed the Green Power Switch® program. Specifically, we reviewed the program to determine whether (1) the methods used by TVA to market the program disclosed that green power goes into the general power mix and (2) revenue from the program exceeded related marketing expenses. In summary, while not all advertising materials reviewed directly stated that green power is part of TVA's power mix, they did direct consumers to information disclosing that the green power goes into the general power mix. In addition, for fiscal years (FY) 2007 and 2008, the revenue generated from the Green Power Switch® program exceeded the related marketing expenses.

BACKGROUND

TVA's Green Power Switch® program was established in April 2000 to promote renewable energy resources. TVA and participating local public power companies, working with input from the environmental community, created the program to produce electricity from renewable sources and add it to the Tennessee Valley's power mix. Green power is an energy source produced from a subset of renewable resources, such as solar, wind, geothermal, biomass, and low-impact hydropower.

Certification Program Seeks to Ensure Green Power Produced or Purchased by TVA Meets Green Power Switch® Program Demand

TVA's Green Power Switch® program is Green-e certified, which is a renewable electricity certification program administered by the Center for Resource Solutions (CRS). The program is Green-e certified annually based on TVA's generation and sales of renewable energy. The CRS annual verification process requires that participants in the Green-e certification program reconcile renewable electricity sales with renewable purchases and/or generation to verify that they have purchased and/or generated enough renewable energy to meet its customers' demand for each specific renewable energy product. The Office of the Inspector General has conducted the annual certification audit since 2003.

As shown in Table 1, in FYs 2007 and 2008, TVA produced or procured more green power than it sold through the Green Power Switch® program.

Green Power Switch® Program Green Power Sales Compared to Green Power Produced/Procured FYs 2007 and 2008		
	FY 2007	FY 2008
Green Power Switch® MWh sold	74,523	84,445
Green Power MWh produced or procured	120,511	121,262
Difference	45,988	36,817

Source: MWh sold information provided by TVA's Customer Resources group. Table 1
MWh produced or procured information from certifications submitted to the CRS.

Under the program, green power is marketed to consumers in 150-kilowatt-hour block increments (about 12 percent of a typical household's monthly energy use) through TVA's distributors or the Green Power Switch® Web site. Each block purchased adds a \$4 premium to the customer's monthly power bill. TVA primarily markets this program online by including general information about the program and a link to the advertising Web pages. In addition, presentations, brochures, and radio, newspaper, and magazine advertisements are also used to communicate the program to the general public.

FINDINGS

Our review found that (1) revenues for FYs 2007 and 2008 exceeded related marketing expenses, and (2) marketing of the Green Power Switch® program adequately disclosed that green power purchased goes into the general power mix.

Revenues for FYs 2007 and 2008 Covered Marketing Expenses

As previously stated, green power is marketed to consumers in 150-kilowatt-hour block increments and adds a \$4 premium to each participant's monthly power bill. The \$4 premium was originally based on market-driven rates, based on what other utilities were charging in 2000. In 2002, TVA performed an analysis of the costs associated with the program to determine whether the current \$4 surcharge was adequate to recover the difference between program revenue and the cost of resources and management, calculated on a net present value basis through 2020. Costs used in the calculation included costs of marketing the program and the costs associated with acquiring equipment and producing and/or procuring green energy. This evaluation projected that the surcharge was sufficient to recover all actual and expected costs as of 2002. The surcharge has remained unchanged since inception of the program.

We obtained the revenue generated from Green Power Switch® program sales for FYs 2007 and 2008 from TVA's Customer Resource personnel and determined that program revenues exceeded the related recorded marketing expenses for the period. These expenses do not include renewable energy production cost or any indirect costs associated with the program.

Comparison of Green Power Switch® Program's Revenue and Expense		
	FY 2007	FY 2008
Revenue	\$1,887,181	\$2,160,011
Expenses	1,540,542	786,642
Difference	\$ 346,639	\$1,373,369

Table 2

Marketing of the Program Includes Disclosure That Green Power Goes Into the Power Mix

Green power purchased or procured by TVA under the Green Power Switch® program is added to the power mix and does not flow directly to consumers who sign up for the program. Our review demonstrates that this fact is adequately disclosed in the marketing materials we reviewed and was generally understood by the 17 Green Power Switch® participants we surveyed.

TVA markets this program online and through presentations, brochures, and radio, newspaper, and magazine advertisements. TVA distributors also market the program directly to their customers.

We reviewed 50 advertising items for clarity in explaining that the renewable energy purchased by distributors and their residential customers is added to the power mix but not directly routed to those paying for the kilowatt-hour blocks. We found:

- Three items contained language explaining that renewable energy produced is added to the power mix and is not directly routed to the program participant.
- Six items contained a statement that renewable energy produced is added to the power mix.
- Forty-one items contained no language explaining that renewable energy produced is added to the power mix or not directly routed to the program participants.
- While not all advertising materials directly stated that green power is part of TVA's power mix, they all did direct consumers to learn more about the program from TVA's Green Power Switch® Web site. The Web site states that green power is added to TVA's power mix. In addition, some marketing materials refer consumers to their distributor for additional information.

While reviewing the marketing of the program, we also looked for disclosures pertaining to what the \$4 surcharge covered. The marketing materials reviewed did not specifically state what types of expenses are covered by the \$4 surcharge. However, as previously noted, the marketing materials direct the consumer to TVA's Green Power Switch® Web site, which states:

The green power you pay for will be added to TVA's electric system as part of the Valley's total power mix. Why does green power cost more? Because although renewable resources like sunlight and wind are free, the technology for capturing their energy is still more expensive than traditional power generation methods. By choosing to pay a little more for Green Power Switch, you help advance the technology and increase the amount of electricity generated from cleaner sources.

We surveyed 17 Green Power Switch® participants from selected East Tennessee distributors to determine what they believed the \$4 surcharge was intended to be used for. Those customers stated that they believed the \$4 surcharge was being used to cover (1) marketing expenses, (2) the incremental cost of green power production, (3) the cost of purchasing equipment for producing green power, or (4) a combination of those answers.

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This report is for your information, and no further action is required. Information contained in this report is subject to public disclosure. Please advise us of any sensitive information that you recommend be withheld. The attachment includes our objective, scope, and methodology.

If you have any questions, please contact T. Mike Blair, Senior Auditor, at (865) 633-7327 or Lisa H. Hammer, Director, Financial and Operational Audits, at (865) 633-7342. We appreciate the courtesy and cooperation received from your staff during the review.



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Attachment
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OIG File No. 2009-12296

OBJECTIVE, SCOPE, AND METHODOLOGY

The objective of our review was to determine whether (1) the methods used by TVA to market the program disclosed that green power goes into the general power mix and (2) revenue from the program exceeded related marketing expenses. Our scope included revenue and expense for fiscal years (FY) 2007 and 2008 and current marketing materials. To achieve our objectives, we:

- Reviewed the marketing and promotional materials used by TVA to determine (1) the level of disclosure regarding how power generated by the program is incorporated into the general power mix and (2) whether such materials indicate the program's power generation is not delivered directly to the program participants.
- Reviewed the Green Power Switch® program marketing training manual for one TVA distributor.
- Observed a presentation of the Green Power Switch® program to an outside organization.
- Reviewed three external Microsoft PowerPoint presentation materials to determine information being presented at public forums.
- Obtained revenue and expense information for FYs 2007 and 2008 associated with the Green Power Switch® program to determine the amount of revenue and expense.
- Interviewed 17 green power customers to determine their perception of the \$4 surcharge.

This audit was conducted in accordance with generally accepted government auditing standards for performance audits. Although we did not test for compliance with applicable laws and regulations, nothing came to our attention during the audit that indicated noncompliance with laws and regulations.