

## AN EVALUATION OF A MULTI-UTILITY STUDENT SELF-AUDIT PROGRAM

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**The program evaluated** was "In Concert with the Environment®", a self-audit pilot program for student use in determining energy efficiency measures and actions for their homes. During the 1996-97 school year, a total of 3700 middle and high school students in Tennessee, Alabama, and Mississippi participated in the pilot program.

**Purpose of the Evaluation.** Both process and impact evaluations were undertaken in order to determine whether to expand the pilot program beyond the initial 6 participating municipalities and cooperatives to the other 153 TVA power distributors.

**Research Questions.** The evaluation research was designed to answer several questions in order to determine whether to go forward with full program implementation. In terms of program impacts, it was necessary to determine which of three program implementation plans was most effective: paper-and-pencil questionnaires, computerized self-administered questionnaires, or paper-and-pencil questionnaires accompanied by a kit of energy-saving devices. For the impact evaluation, program effects were assessed in three specific areas: demand-side management, beneficial electrification, and customer satisfaction.

**Research Design, Methodology, Statistical Techniques, Use of Results.** A number of components were incorporated into the design of the evaluation of "In Concert with the Environment®". There were written surveys of participating students and teachers which focused on the mechanics of program delivery. These were supplemented by a subsequent telephone survey of students and their parents which concerned program impacts, including implementation of energy-saving measures and customer satisfaction.

**Research Findings.** The results from all components of the evaluation were extremely positive. The written survey of students indicated a high level of satisfaction with the program, although it was most highly rated in schools where the pencil-and-paper version of the survey was accompanied by the kit of energy-saving devices for each participating student. Teachers were very positive about the program, and most wanted the opportunity to participate in subsequent years. In the telephone survey, both students and parents considered the program to be a valuable learning experience, and there were positive outcomes in terms of increased environmental awareness, implementation of energy efficiency measures, and customer loyalty.

**Problems Encountered During the Evaluation.** Although 605 students completed a telephone interview concerning the program, interviews were completed with the parents of only 478 of these students. The parents of the remaining 127 students said they were unfamiliar with the program and were accordingly not interviewed. In addition, another 71 interviews were completed with parents who agreed to permit their sons and daughters to participate in the study, but the student interview could not be completed within the available field period. However, the participation rate for the survey (90%) was sufficiently high to eliminate the possibility of any significant non-participant bias.