

# **PRODUCTION EFFICIENCY PROGRAM: END-OF-FIRST-YEAR PROGRESS EVALUATION**

## **EXECUTIVE SUMMARY**

The Energy Trust of Oregon, Inc., was incorporated as an Oregon nonprofit public benefit corporation in March 2001, to fulfill a mandate to invest “public purposes funding” for new energy conservation and related activities in Oregon. It receives funding from a three-percent public purpose charge to the rates of the two investor-owned utilities in the state. The Energy Trust has responsibility to report to the Oregon Public Utilities Commission (OPUC) on how it is spending its funding and what it achieves. This is the first process evaluation of the Production Efficiency program, which began operation in May 2003. The program goal is to acquire large volumes of electric savings at modest cost from a wide variety of efficiency strategies by providing positive financial, energy and related benefits for participating businesses and institutions with industrial processes. In addition, the program seeks to acquire savings from efficient municipal water and wastewater works.

This report provides an assessment of the program approximately six months after its launch, with the intent of facilitating continuous improvement. The Energy Trust hired the team of Research Into Action, Inc. and MetaResource Group to conduct the process evaluation. For the evaluation, the team interviewed seven Energy Trust and program management contractor (PMC) staff, staff of all four program delivery contractors (PDCs), staff of six of the thirteen allied technical contractors (ATACs) involved in 2003 program activities, the Executive Director of Industrial Customers of Northwest Utilities, and 31 program participants from 28 organizations with industrial processes.

## **SUMMARY OF FINDINGS**

The Energy Trust signed a contract with Aspen Systems to serve as the PMC for the Production Efficiency program. The PMC’s program staff includes one dedicated Technical Manager, and three staff (the Program Manager, Operations Manager, and Administrative Coordinator) who support both the Production Efficiency and Building Efficiency programs.

By October 2003, the PMC had designed the program, incentives, procedures, participation forms, tracking systems and incentive payment processes. The PMC also had issued two RFPs to solicit bids from firms to serve as PDCs and ATACs, had selected qualifying firms, and contracted with all four PDCs and fourteen ATACs. The PMC identified the first Production Efficiency projects in August 2003; by October 2003, the program was in full swing.

By the end of 2003, the Production Efficiency program had attained customer commitments for projects estimated to acquire 104 million kWh in savings, over half of its cumulative 2003-2004 goal. In addition, four participants had installed projects and 124 projects had been identified (but not necessarily committed to) at 78 firms. The PMC paid ATACs \$1,000,000 to conduct the technical studies that identified these projects, which had associated estimated incentives of \$13,800,000.

The success of the program in terms of volume of participation far outstripped the expectations of Energy Trust and PMC staff. All interview contacts identified the program design and its implementation through the Technical Manager, the PDCs and the ATACs as working well overall.

Regarding program design, interview contacts value its goals of achieving industrial production efficiencies, energy savings and non-energy benefits, as well as its simplicity, its ability to accept large projects, the incentive level and its non-negotiability, and studies which are free to customers who go on to implement recommendations.

Helpful to program implementation, the PMC Technical Manager, the PDCs and the ATACs all have experience working with and marketing to the industrial sector. Program staff and contractors bring trusted relationships and successful track records to their work for the program; to promote Production Efficiency, the Technical Manager, PDCs, and ATACs called on many customers with whom they had previously worked. The PDCs report good working relationships with utility account executives.

Interviewed participants expressed high satisfaction with the program and with the services they received from its staff and contractors. In fact, participants identified the high quality of program representatives as a significant program asset. Participants report that the people they worked with were helpful, knowledgeable, dedicated and enthusiastic. Participants appreciated having the PDC available to help them go through the process. Several participants volunteered that the program was much more responsive to them than they had previously experienced in efficiency programs run by the utilities or by the state.

Of surveyed participants, 41% had not previously participated in a utility efficiency program. These program newcomers accounted for 7% of the savings estimated for the surveyed participants. Most of the issues or problems identified by interview contacts stem from, or were exacerbated by, the volume of participation.

PDCs and ATACs view the PMC as understaffed. They reported feeling many times that the PMC Technical Manager was unable to respond adequately to their requests for guidance. In addition to the technical review of the 79 studies conducted by PDCs through their ATAC staff, and oversight of all 175 studies done in support of the 124 identified projects, the Technical Manager also selected an ATAC to conduct each study, negotiated the study scope and cost with the ATAC, provided overall supervision to the staff of four PDCs and 13 ATACs, approved PDC and ATAC invoices, and met with senior management staff of a number of firms considering large projects. Given this list of responsibilities, it is perhaps not surprising that contacts described the Technical Manager as “high energy,” “dedicated to the program’s success,” someone who “gets the job done,” and one of the program’s assets, while being overworked.

The time-limited incentive kicker that was offered during the first six months of the program stimulated participation (by all accounts) and further taxed PMC resources while the program was still in development. In particular, the kicker came before the PMC had established technical guidelines to direct technical analyses and reports, or established a format for the PDCs to report project status. (Early in 2004, subsequent to the interviews conducted for this evaluation, the PMC began the establishment of technical guidelines.)

Some issues identified by contacts do not relate to the PMC’s staffing resources and relate instead to the program design. One of these issues is the concern expressed by both PDCs and ATACs that ATACs are disadvantaged with respect to PDCs that are also ATACs in terms of working with

customers. As a second issue, multiple contacts identified the lack of a final savings-verification audit for installed projects as a program weakness.

Other identified issues arise from tensions inherent among the multiple program goals and features. For example, Energy Trust and PMC program staff and contractors are wondering whether the Energy Trust places greater value on the goal of attaining large quantities of cost-effective energy savings or on the goal of serving smaller or under-served customers. Although both goals can be furthered, when resources are scarce, staff and contractors must decide which objective to pursue.

As another example, the Energy Trust launched the Production Efficiency program before it was fully developed. In order to quickly acquire large quantities of energy savings, with lower administrative costs, it hired a PMC instead of managing the program with in-house staff.

At the same time, the Energy Trust is committed to an open decision-making process involving the public, which for any issue unfolds over months, often three or more. Yet in order to implement a program that is not fully developed, and to do so with the high-intensity effort necessary to achieve ambitious goals, the PMC needs rapid-fire decision support from the Energy Trust. The Energy Trust Program Manager, charged with moving the program forward to attain the goals, sometimes improvises interim decisions that are later revised. Other times, the Program Manager simply postpones decision-making, awaiting the organization's process to play out. In such cases, the PMC's ongoing program implementation activity *de facto* creates interim program policies and methods that are subject to change as the Energy Trust's decision process slowly moves forward. Most affected by delays are contracts, written communications about the program and policy decisions.

This program decision process has the effect of undermining the authority of the Energy Trust Program Manager and the PMC as they represent the program to customers. It also undermines program stability, as contractors and customers receive changing messages about what can and cannot happen under the program, and about how activities must happen. Ultimately, it inhibits the program's ability to serve customers, impedes the acquisition of energy savings and increases program administrative costs.

## CONCLUSIONS

### **1. The Production Efficiency program is working well.**

The Production Efficiency program is working well in terms of number of customers brought into the program, magnitude of energy savings, types of projects and the project development process, which uses short, focused technical studies. Many customers and contractors believe the Production Efficiency program differs in a number of respects from its predecessors and believe these differences have contributed to its success.

### **2. The success of the Production Efficiency program derives in part from the quality of the staff and contractors delivering it.**

The professional reputations of program staff and contractors benefit the program, as do staff and contractors' extensive networks of relationships with firms in the industrial sector, which they pursue to encourage customer participation.

**3. Program procedures have several times undermined customer-ATAC relationships.**

The RFP for ATACs specified that ATACs were expected to market the program. Yet all four interviewed ATACs who had worked to interest customers in the program and then referred the customers to a PDC had lost at least one customer in the process. At stake for the ATAC is not simply the facility study to be conducted, but the ongoing relationship with a customer that might lead to numerous jobs over time. At stake for the Production Efficiency program is the loss of marketing opportunities and resources to the extent that ATACs hesitate to bring customers to the program.

**4. PDCs and ATACs request greater technical guidance.**

The PDCs and ATACs request greater technical guidance than was forthcoming from the PMC Technical Manager. They would like guidance on the assumptions that underlie project benefits and costs, such as measure lives, customer energy costs and non-energy benefits.

**5. The Energy Trust's decision-making and contracting processes do not keep pace with the needs of the program and result in the undermining of program staff authority and program stability.**

The Energy Trust's decision-making, legal and contracting processes move slowly, while the Production Efficiency program—launched as a concept not fully fleshed out—acquired over 100,000,000 kWh in savings within six months of its start. In the absence of final decisions produced by the formal processes, the Energy Trust Program Manager kept the program moving by improvising decisions and revising them as the formal process brought new views to light. As a consequence of this ad hoc approach, the authority of the Energy Trust and PMC program managers to implement the Production Efficiency program is weakened, contractors experience program instability, and the program is vulnerable to customers being adversely affected by the ongoing changes.

**6. Program contractors report they are struggling to make appropriate decisions in the absence of clear direction from the Energy Trust regarding the numerous program goals and distinguishing features that are in tension with each other.**

Production Efficiency program goals and features are in tension with each other and the Energy Trust has yet to provide its contractors with clear guidance for negotiating the conflicts. One example of this are the goals to acquire a large quantity of cost-effective savings and to serve smaller and under-served customers; the latter sector has smaller, less cost-effective savings and reaching them requires higher marketing and administrative expenditures than needed for other customers. Another example: rapid, low-cost program delivery requires that projects be identified as efficiently and inexpensively as possible, whereas high confidence in program savings requires high analytical precision in identifying projects and verifying the performance of installed equipment, both of which are expensive and time consuming. Program contractors report they are struggling to make appropriate decisions in the absence of clear direction from the Energy Trust.

## RECOMMENDATIONS

- 1. Congratulate program staff and contractors for a job well done.**
- 2. Clarify for ATACs the current process for selecting an ATAC for a project. Continue to investigate the experiences of ATACs in marketing the program and bringing customers in.**

Clarify and communicate to ATACs how the decision is made to award a project to an ATAC. Assess, during the program's second year, the number of customers ATACs believe they have brought to the

program and lost. For each claim, investigate the ATAC's support for the claim and the circumstances from the perspectives of the PDC and PMC.

**3. Provide increased technical guidance for PDCs and ATACs.**

Work with PDCs to establish additional technical parameters and guidelines for evaluating project costs and benefits. The parameters and guidelines will need to balance consistency with flexibility, as each industrial production process is unique.

**4. Conduct a preliminary investigation of program impacts.**

The Energy Trust should evaluate the first one or two dozen projects to be completed by the program to ensure that the data necessary to support a comprehensive impact evaluation are available. The investigation should address the desirability of activities to be conducted at the completion of the project, such as project commissioning and final savings verification audit.

**5. Seek ways to expedite contracts, communications with the market and program policy decisions.**

The Energy Trust is committed to its open decision-making process, yet it needs to recognize that the current approach of postponing decisions or making ad hoc judgments to fill the void during process development is detrimental to the program. The Energy Trust needs to develop a decision support system that will meet the program's need for rapid response times for contracts, market communications and policies.

**6. Prepare for potential participants written materials detailing the steps for program participation.**

Prepare a brochure describing the steps for program participation, or perhaps a FAQ (frequently asked questions) leaflet. The information could identify the forms in use and the turn-around time the customer might expect for activities conducted by ATACs and PDCs.

**7. Give clear guidance to contractors as to how to pursue conflicting objectives.**

Were program budgets and timeframes infinitely expandable, the Energy Trust would not need to set priorities among the program objectives. However, contractors are asking what customers they should be seeking, whether they should pursue very large projects, what level of technical rigor they should be ensuring, and so on. The Energy Trust needs to recognize the tensions within the innovative Production Efficiency program—recognizing, too, that the program breaks new ground (according to many contacts)—and that the program's ultimate success hinges on the clarity of the instructions that the program's many competent contractors receive. The Energy Trust should actively debate the implications of program features that are in tension with each other and give clear guidance to contractors on how to prioritize efforts when the contractors are faced with tough decisions.