1. INTRODUCTION

The Energy Trust of Oregon (Energy Trust) contracted with Research Into Action, Inc. and its subcontractors Feldman Management Consulting, Nexus Market Research, Inc. and Quantec, LLC to conduct an inventory of best practices for energy efficiency organizations and energy efficiency programs.

Key to this study is the idea of best practice. The purpose of the best practices research, according to the Energy Trust, was "to identify innovative program and administrative approaches that merit further investigation, adaptation or emulation by the Energy Trust."

Our approach to this project was to draw directly on our own extensive experience with a variety of energy organizations and the energy efficiency community to identify key informants who can in turn identify exemplary organizations and programs and to identify additional organizations that have developed excellent programs or administrative procedures.

In conducting the inventory, we considered two factors to be of utmost importance in selecting organizations from which to draw best practice examples. These are:

1. That the programs and administrative procedures we select had been nominated by key informants as worthy of consideration as best practices, and

2. That the examples are potentially transferable to the Energy Trust.

These two factors led us to use a methodology based on nominations by key informants. This introduction discusses our methodology for conducting the inventory and provides an outline of the report.

METHODOLOGY

We initiated the project in late May 2002. The first step was to work with the Energy Trust staff to identify a list of key informants in the energy efficiency industry. The Research Into Action team contacted each of the key informants and asked them a series of questions to identify best practices in organizations and

energy efficiency programs. (See Appendix A for list of key informants and list of questions.)

Following the completion of interviews with key informants, we compiled a list of programs and organizational practices. We reviewed this list with staff at the Energy Trust and identified the programs that should be pursued with a detailed interview and preparation of a summary of the program or practice. A copy of the questions used for programs and for organizations is provided in Appendix B.

Following the interview, we prepared a summary of each practice or program and submitted that to the interviewee to ensure accuracy. We then submitted the summary to Energy Trust staff, who provided comments and questions. The final versions were then prepared.

Table 1 displays the programs that were nominated and the subsequent status of that program. In some cases, programs were dropped as a result of the interview with the program or organization contact. A brief explanation for why they were dropped is provided in the comment column.

Table 1

NOMINATED ORGANIZATIONAL PRACTICES AND ENERGY EFFICIENCY PROGRAMS

PAGE	*ORGANIZATION* AND PROGRAM OR PRACTICES	STATUS*	COMMENT
	ORGANIZATION PRACTICES		
11	*Efficiency Vermont:* Communications, Organization Structure, Performance Metrics, Subcontracting	X	
16	*Efficiency Vermont:* Measure Screening	X	
17	*National Grid:* Program Delivery	X	
21	*New South Wales Sustainable Energy Development Authority:* Organization Structure	X	
NA	*New York State Research and Development Authority:* Organization Structure	NC	
24	*Northwest Energy Efficiency Alliance:* Project Contracting, Project Screening	X	
31	*Northwest Energy Efficiency Alliance And Northeast Energy Efficiency Partnership:* Circuit Riders	X	

PAGE	*ORGANIZATION* AND PROGRAM OR PRACTICES	STATUS*	COMMENT
			Continued
NA	*Northeast Energy Efficiency Partnership:* Organization Structure	Dropped	Energy Trust staff has high familiarity with NEEP
34	*Pew Charitable Trusts:* Non-Profit Staffing	X	
37	*Southern California Edison:* Contracting Procedures	X	
40	*Wisconsin Energy Conservation Corporation:* Circuit Riders	X	
43	*Wisconsin Energy Conservation Corporation:* Organization, Program screening, Staffing Ratio	X	
	RESIDENTIAL ENERGY EFFICIENCY PROGRAMS		
49	*Benton County PUD:* Dipstick Weatherization Program	X	
NA	*California Power Authority:* loans	Dropped	No deal with Fannie Mae has been made
53	*Efficiency Vermont:* Lighting and Appliance Rebates	X	
56	*Efficiency Vermont:* Residential High Use Program	X	
59	*Energy Efficiency Homes Midwest:* ENERGY STAR® Homes Program	X	
63	*National Grid:* Appliance Management Program	X	
67	*National Grid:* EnergyWise Program	X	
71	*New Jersey Utilities:* Residential HVAC Program	X	
NA	*New York State Research and Development Authority:* Home Performance	NC	
76	*Northeast Utilities:* Lighting Catalog	X	
NA	*Northwest Energy Efficiency Alliance:* Clothes Washer & Appliances, Manufactured Housing, Residential Lighting, Windows	Dropped	Market transformation programs, Trust staff plans to coordinate with Alliance as appropriate
80	*Sacramento Municipal Utility District:* Residential Loan Services	X	

PAGE	*ORGANIZATION* AND PROGRAM OR PRACTICES	STATUS*	COMMENT
NA	*Southern California Edison:* Refrigerator Recycling	NC	
			Continued
84	*Tacoma Utilities:* Residential Weatherization	X	
88	*Wisconsin:* High Efficiency Furnace Program	X	
92	*Wisconsin Energy Conservation Corporation:* ENERGY STAR® Homes	X	
NA	*Wisconsin Energy Conservation Corporation:* Lighting and Appliance	NC	
	COMMERCIAL AND INDUSTRIAL ENERGY EFFICIENCY PROGRAMS		
100	*Ameren:* Commercial End-Use Audit Program	X	
105	*California:* California Efficiency Express Program	X	
NA	*Efficiency Vermont:* Small commercial	Dropped	No targeted small commercial program
109	*Energy Center of Wisconsin:* Daylighting	X	
NA	*EU:* European Revolving Loan	Dropped	Primarily a government policy
NA	*EU:* Loan guarantees to private lenders--European models	Dropped	Primarily a government policy
114	*National Grid:* Chiller Program	X	
118	*National Grid:* Commissioning	X	
NA	*National Grid:* Compressed Air Challenge	Dropped	Similar to Sacramento Municipal Utility District Compressed Air Challenge
121	*National Grid:* Design 2000	X	
126	*National Grid:* Industrial Technical Assistance	X	
174	*Netherlands:* Long Term Agreements with Industrial Firms	X	
130	*New York State Research and Development Authority:* Flex Tech Program	X	

PAGE	*ORGANIZATION* AND PROGRAM OR PRACTICES	STATUS*	COMMENT
NA	*New York State Research and Development Authority:* Motors Frequent Purchaser	NC	
			Continued
135	*Northeast Energy Efficiency Partnership:* Cool Choice – Commercial HVAC	X	
139	*Northeast Utilities:* Commercial Retrofit RFP Program	X	
143	*Northeast Utilities:* Energy Conscious Construction	X	
146	*Northeast Utilities:* Industrial Consulting Services	X	
150	*Northeast Utilities:* Small Business Program	X	
NA	*Northwest Energy Efficiency Alliance:* Commissioning, Microelectronics	Dropped	Market transformation programs, Trust staff plans to coordinate with Alliance as appropriate
NA	*NSTAR:* Commissioning	Dropped	National Grid Commissioning viewed as better
153	*Oakland:* Energy Efficiency Design Assistance	X	
NA	*PacifiCorp:* Energy FinAnswer	Dropped	Energy Trust had prior knowledge of program
157	*Sacramento Municipal Utility District:* Compressed Air Services	X	
160	*Southern California Edison:* HVAC Modeling Tools	X	
161	*Southern California Edison:* Quotas for Motors	X	
179	*United Kingdom:* Energy Efficiency Best Practice Programme	X	
NA	*United Kingdom:* Making a Corporate Commitment Campaign	Dropped	Primarily a government policy
165	*Xcel Energy:* Colorado Custom Efficiency Program	X	
169	*Xcel Energy:* Minnesota Custom Efficiency Program	X	

PAGE	*ORGANIZATION* AND PROGRAM OR PRACTICES	STATUS*	COMMENT
	MISCELLANEOUS ENERGY EFFICIENCY PROGRAMS		
184	*California:* Flex Your Power Campaign	X	
			Continued
NA	*Efficiency Vermont:* Dairy	Dropped	Herd size not comparable to Oregon
188	*Energy Center of Wisconsin:* Education and Training	X	
NA	*Northern States Power:* Dairy Programs	Dropped	No current program
NA	*Southern California Edison:* Hydraulic Services	Dropped	Program 50 years old
NA	*Wisconsin Focus on Energy:* Dairy	NC	

* *NC= pending review by interviewee; X=completed and included in report*

The programs and practices with an "NC" listing in Table 1 were nominated, but due to limited resources or difficulty in reaching the contact and completing the interviews, these summaries were not completed. Each of these might still provide valuable information to the Energy Trust, but would require additional resources to complete.

Our key informants nominated over 70 programs. Through discussions with Trust staff we subsequently reduced these to the 62 programs or practices to target that are included in this table.[1]

The Research Into Action team proceeded to contact representatives for each of the 62 programs and to conduct structured interviews in order to compile the information requested by the Energy Trust. At the conclusion of this process we were able to complete summaries on 45 programs or administrative practices.

Three areas dominate the best practice inventory: the Northeast United States including New England, New York and New Jersey (with 26 nominations),

[1] In some cases, single organizations were nominated for multiple best organizational practices so that a single summary was prepared with multiple practices. Where organizations had multiple programs, we prepared a summary on each program and did not combine these.

Wisconsin (8 nominations) and California (9 nominations). We also received six nominations for international organizations or programs, but only three were completed as the other three turned out to be driven largely by government policy and were not transferable to the Energy Trust. The Northwest has three nominations included in the study. We received several additional nominations, especially about the Northwest Energy Efficiency Alliance; however, due to the close working relationship between the Energy Trust and the Alliance, these additional nominations were viewed as unnecessary to pursue.

It is important to note that there is no way to ascertain whether these are the best practices that are possible in each of these program and organizational areas. Certainly the respect that energy efficiency experts hold for these programs and organizations suggests that they are best practices, but it was clear from our discussions with program and organization staff that opportunities still exist to improve and enhance programs and practices. At the same time it is also possible for a simple change in management or regulatory policy to eliminate the aspects the nominators consider to be best practice, as we found in at least four cases.[2]

It is also important to recognize that none of these programs started out as best practice programs; all took time to evolve to their current state. Our research showed that many of these programs have been operated for many years, and have been changed multiple times in the pursuit of improvement. Process evaluations, market research and impact evaluation results have shaped many of the programs. At the same time, efforts by program staff to work with contractors and trade allies have also tended to change the programs to be more effective. Ultimately, a program must be designed to respond to the current conditions, and, as some of the interviewees noted, having good staff or contractors is what really makes the difference.

Our findings are consistent with findings reported by Hans Nilsson and Clas-Otto Wene in their study for the International Energy Agency on best practices of energy efficiency programs that follow the technology deployment approach, more familiar as market transformation in the United States.[3] Their study reports that, "Truly successful programs have been developed over a long period, combine several policy issues (i.e. are coherent), use feedback mechanisms to reflect on their results... and are demand driven...." They also note that an important finding, and one we hope

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2 California Efficiency Express; Benton County PUD Dipstick Weatherization; Ameren Commercial End-Use Audit; and Xcel Energy Minnesota Custom Efficiency Program.

3 Nillson, Hans and Clas-Otto Wene. (2002) *Best Practices in Technology Deployment Policies*. In proceedings of the 2002 ACEEE Summer Study on Energy Efficiency in Buildings. pps. 9.289-9.300

the Energy Trust considers in reviewing these best practices and considering how to transfer them to Oregon, is that "energy-efficiency programs are highly contextual and cannot easily be transferred among countries and/or sectors.."

REPORT FORMAT

The sections that follow this introduction review first the organizational practices, then the residential programs, followed by commercial and industrial programs and lastly the miscellaneous programs.