

**Energy Efficiency
Bonneville Power Administration**

APPENDICES

**Energy Efficiency Plan
FY 2008-2009**

September 30, 2007

Energy Efficiency Vision

To ensure a more sustainable environment in the Pacific Northwest, the BPA Energy Efficiency organization is and will remain a premier provider and facilitator, catalyst and deliverer of electric energy savings and demand-side management.

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A: Sector Strategies- Fiscal Year 2008

General Strategy: Achieving BPA's target savings of 52 aMW a year means greater collaboration across the region, involving a wide range of market players. BPA will continue to build the regional infrastructure for accomplishing the conservation target, while also assisting the conservation efforts of customer utilities, trade allies, consultants and other energy service providers.

Sector Strategy Focus: BPA is committed to reaching an average annual savings of 52 MWs for FY08. Each of the BPA Energy Efficiency sectors - Agricultural, Commercial, Industrial and Residential - has identified priorities, key focus areas and savings targets for that time period. Quarterly reviews may lead to an adjustment in focus.

The BPA Energy Efficiency sector strategies will focus on four overarching themes for FY08, and the priorities for each sector reflect these goals:

- Improve energy efficiency marketing, to increase market penetration of existing programs and technologies, and to make new initiatives more effective.
- Streamline and simplify, so that more time is spent on program delivery than on administration.
- Increase the number of "boots on the ground" - that is, find ways to augment the limited availability of BPA and utility staff time by using programs such as Technical Service Providers (TSP).
- Expand the infrastructure for regional energy efficiency, as well as the number of available programs.

Residential Sector Strategy

Residential Sector FY 2008 Priorities

The following focus areas are critical to achievement of the FY08 Residential Sector contribution (28 aMW) to EE's conservation target:

- Continue primary focus on promotion of Compact Fluorescent Light (CFL) bulbs for residential lighting.

Compact fluorescent lights account for 23 aMW in the target. Lighting accounts for 11 aMW; market transformation accounts for the remaining 12 aMW.

Increasing use of CFLs for residential lighting is a multi-faceted effort that includes selling both standard twister style and specialty fluorescent bulbs at reduced prices in big box stores such as Wal-Mart and Home Depot, as well as in rural and non-traditional markets, such as non-chain hardware stores, grocery stores, pharmacies and department stores.

- Savings With a Twist (SWAT)

This promotion, which runs from September 2007 through November 2007, targets rural and non-traditional markets, promoting CFLs in stores that do not typically stock a large selection of fluorescent bulbs. It offers 18- to 24-watt twister style CFLs to consumers for \$.99 per bulb. The target: sell 2.5 million CFLs for a savings of 6 aMW. BPA's estimated direct cost is \$1.2 million. SWAT provides utilities with a low cost, low effort way to use Conservation Rate Credit funds for cost-effective conservation.

NEEA forecasts sales of 2.5 million CFLs for FY08, a 1.3 million bulb increase over FY07. The promotion will be assessed for level of success in early 2008. BPA's estimated direct cost: \$1.2 million. Utilities will pick up the \$3.75 million remainder.

- Change a Light (CAL), formerly Big Box

A manufacturer buy-down promotion targeting big box chain stores - Home Depot, Lowes, Wal-Mart, Costco - its intent is to increase the sale of specialty compact fluorescent lights, such as high heat reflector, encapsulated, dimmable and candelabra CFLs. It will reduce the cost to consumers of trying out the specialty bulbs. Standard twister style bulbs also may be included to increase volume. The target: sell 2 million CFLs for a savings of 4.5 aMW. Estimated direct cost for BPA is \$1.2 million

- CAL start is October 2007; the promotion will run through April 2008. From October through December, only specialty CFLs will be marked down, to avoid competition with SWAT. From January through April, twisters and specialty CFLs will be marked down, provided that analysis of the FY07 promotion shows incremental sales occurred.
- Portland Energy Conservation Inc. (PECI) will run the FY08 CAL promotion. Manufacturers have agreed to ship 2 million CFLs, an increase of .9 million over the FY07 allocation. The expected mix of products will be 50 percent twister, 50 percent specialty CFLs.
- By October, an analysis from PEGI is due that includes a determination of whether including twisters in the FY07 promotion led to additional compact fluorescent sales; the analysis must be completed before a decision can be made to include twister CFLs in the promotion's winter segment. A full assessment to determine the program's level of success will be done by July or August 2008.

- Additional Actions Under Consideration

- BPA should continue to do a specialty CFL promotion - for high-heat reflector bulbs, for example - regardless of whether the twister CFL market is considered to be transformed. Special emphasis may be warranted for high heat reflector bulbs that can be dimmed, if more products become available and pass testing.

- Utility CFL Distribution

- Utilities have used several avenues for distributing CFLs to their customers, from giving the bulbs away at annual meetings, making them available to customers who visit the utility offices, including them with energy audits and through direct mail. BPA assists utilities in setting up distribution methods. The target: 125,000 CFLs for a savings of 0.5 aMW (utility CRC funds - \$312,500).

- Increase number of heat pumps with Performance Tested Comfort Systems™ (PTCS) installations

- A third party contractor, hired by BPA, provides support for PTCS Commissioning, Controls and Duct Sealing. The contractor trains heat pump contractors regarding PTCS specifications, PTCS Commissioning, Controls and Duct Sealing.
- The contractor also performs quality control tests for all units claimed for credit and quality assurance site visits for 10 percent of the heat pump or duct sealing jobs claimed. The inspections ensure that claimed heat pumps meet the PTCS specifications; the effort generally raises standard practices among heat pump contractors. The conservation measures are eligible for Conservation Rate Credits. The program promotes a market shift to PTCS standards and practices.

- Marketing materials need to be developed for use by the utilities and contractors, explaining the value to consumers of PTCS Commissioning, Controls and Duct Sealing. Cost is \$375,000 for PTCS registry, training and quality assurance work and \$50,000 for PTCS marketing materials. HVAC savings target: 1.2 aMW.
- Continued restructuring of Heat Pump and Duct Sealing credits to better reflect the market
 - Add PTCS Commissioning and Controls for new heat pumps that exceed the Federal Minimum Standards (i.e., HSPF 7.7/SEER 13) to the BPA list of qualifying heat pump measures for both existing single family and single family new construction. Increase the PTCS Heat Pump credit/reimbursement by \$200 and increase the Duct Sealing credit/reimbursement for existing single family structures by \$100.
 - In FY08, the RTF must determine whether PTCS commissioning and controls is a cost-effective measure for new homes.
- Develop a TAN to assist smaller utilities

This will aid utilities in implementing programs or specific measures. One area to explore: creation of a Small Utility Residential (SUR) program, using third party/trade allies.
- Ductless Heat Pump Pilot Project

NEEA is designing a pilot program to promote ductless heat pumps, an effort that BPA will support. Details still are being worked out. Estimated cost to BPA is approximately \$3 million. Estimated energy savings has not been determined. Ductless heat pumps are a good solution for zonally heated homes for owners and renters who want air conditioning and are interested in reducing heating costs. In FY08, the RTF should develop estimates of unit costs and energy savings, while NEEA and BPA will develop and launch a Ductless Heat Pump Pilot Program. A regionwide ductless heat pump program, including credits, training, certification and quality assurance, is contemplated for FY09. The program would let utilities provide incentives to homeowners to convert zonally, as opposed to centrally, heated homes to heat pumps.
- Weatherization

Continue coordination with NEEA, Energy Trust of Oregon (ETO), and Oregon Department of Energy for ENERGY STAR new homes; Assess Oregon's residential code change, expected to go into effect in April 2008; and make any needed adjustments to BPA's ENERGY STAR New Homes credit/reimbursements, effective October 2008. Assist Oregon utilities in adapting to the new Oregon-specific ENERGY STAR standards.
- Explore ways to help utilities implement more residential conservation measures
 - Identify and recruit third party contractors/implementers. The term trade allies is being used here in a broad sense. Some utilities need help setting up and running entire conservation programs. Other utilities are looking for easy-to-implement, cost-effective measures.
- New measures, programs and third party contracts to consider.
 - Home Energy Rating System (HERS): Options should be researched to determine whether HERS fits into BPA's long-term strategy. The rating system has a long lead time and it is likely to be expensive.
 - Renter Occupied Housing Program: Need to develop a strategy and measures for this segment of the residential market.

- Refrigerator Decommissioning/Recycling: The Department of Energy is conducting a refrigerator recycling campaign this fall. The Environmental Protection Agency is conducting a refrigerator recycling campaign from May to July 2008. BPA will assist utilities interested in taking advantage of either of these opportunities.
- Duct Sealing Program: If adjustments to duct sealing credits/reimbursements fail to produce the desired results, BPA may need to establish a third party duct sealing program for smaller regional utilities.
- Low-Income Weatherization Action Plans
 - Two separate low-income weatherization action plans will be prepared and implemented in early FY08, one for states in the BPA service area and the other one for Indian tribes. The plans will include projected results, items to be delivered and target completion dates.
- Energy Efficiency Tribal Action Plan
 - Set to be finalized in fall 2007, it will be incorporated into the BPA Tribal Affairs Plan. Its draft elements include: tribal program strategies; writing, delivering and implementing all priority grants identified and approved by EE management; visiting tribal offices and attending tribal-sponsored events, as appropriate. Also involved: monitoring state low-income weatherization spending progress and, if appropriate, exploring whether states should release excess tribal set-aside funds or general low-income weatherization funds for use by tribal weatherization programs. Management will receive quarterly reports on 2008 accomplishments, as well as a final report at the end of the fiscal year.
 - BPA Tribal Affairs and Energy Efficiency have developed a set of funding principles to guide BPA in tribal low-income weatherization funding decisions for FY08-09 and beyond. Acceptable funding activities include:
 1. Household energy use training consistent with DOE standards, or a similar, equivalent program, to be evaluated by BPA.
 2. Refrigerator replacement program consistent with DOE standards.
 3. Compact Fluorescent Light (CFL) program using the BPA/state program as a model. BPA will accept proposals from the tribes for different means of distributing the CFLs, but the lights must meet the standards set for the BPA/state program.
 4. A full service weatherization program, consistent with the U.S. DOE Weatherization Assistance Program for Low-Income Persons – Title 10 Part 440.
 5. A tribe may propose to offer some sort of an outreach program to identify tribal members who may be eligible for weatherization; the tribe also would assist tribal members in completing the program eligibility process, in cooperation with the local services agency, to complete weatherization.
 6. A tribe may offer to implement energy efficiency measures for low-income tribal members, other than those available in the BPA/state Program. The services must meet the definition of cost-effective as defined in the U.S. DOE Weatherization Assistance Program for Low-Income Persons – Title 10 Part 440.
 7. BPA reserves the rights to accept or reject any proposal. BPA will provide a detailed explanation in writing for any rejected proposal.

- Energy Efficiency State Low-Income Weatherization Action Plan
 - The draft elements of the FY08 EE State Action Plan include continued development of low-income weatherization agreements; ongoing coordination that makes clear the differences between the BPA residential Conservation Rate Credit program and the BPA low-income weatherization program. Work with states to accomplish proportional spending for the fiscal year, and periodic communication with BPA EE Representatives, Power Account Executives, Public Affairs, EE management and Customer Account Executives.
 - The new FY07-09 cooperative agreements with the states will maintain the traditional low-income weatherization program.

Table A-1: Residential Sector Quarterly Implementation Goals

Initiative	Q1	Q2	Q3	Q4
Change A Light (i.e., Big Box) funded through CRC	Based on PECEI analysis of market effect by including twisters in FY07 Big Box Promotion		~Evaluate Big Box. ~Plan & Budget for FY09 Activities	Launch FY09 Promotion
Savings with a Twist (Non-traditional Markets) funded through CRC		Evaluate SWAT, determine if SWAT should promote Specialty CFLs in FY09	Plan & Budget for FY09 Activities.	Launch FY09 Specialty CFL Promotion, if determined desirable.
Utility CFL Programs funded through CRC	Assist Utilities as needed.		Evaluate utility efforts	
HVAC funded through CRC	~Create Marketing Materials. ~Meet with utilities to assess HP issues	Determine modifications needed to HP structure and credits.		~Begin evaluation of success of Duct Sealing and Heat Pump credit increases. ~Plan & Budget for FY09 Activities.
Appliances, weatherization & misc. funded through CRC	No actions needed	No actions needed	No actions needed	No actions needed
Market Transformation	No actions needed	No actions needed	No actions needed	No actions needed
Ductless Heat Pump Pilot	TBD	TBD	TBD	TBD
Trade Ally Network	TBD	TBD	TBD	TBD

Low-Income Weatherization Action Plans

In early FY08, two separate Low-Income Weatherization Action Plans will be prepared and implemented. One will be for the tribes, the other will be for the states. These Action Plans will identify expected results, deliverables, and target completion dates.

EE Tribal Action Plan

The EE Tribal Action Plan will be finalized in fall 2007 and will be incorporated into the BPA Tribal Affairs plan. The draft elements of the FY 2008 EE Tribal Action Plan are:

- Develop tribal program strategies
- Write, deliver and implement all priority grants identified and approved by EE management
- Visit tribal offices and attend tribal sponsored events as appropriate
- Monitor state LIWx spending progress and explore (if appropriate) state releasing excess Tribal Set Aside Funds or general LIWx funds for use by tribal LIWx programs
- Provide management with quarterly reports on FY08 accomplishments and a final report at end of the fiscal year

EE and BPA Tribal Affairs have developed a set of “Funding Principles” to guide BPA in tribal LIWx funding decisions for FY08-09 (and years beyond) as follows:

Acceptable Funding Activities

The proposal may offer any or all of the following:

- Household Energy Use Training consistent with DOE standards, or propose a similar or equivalent program, which BPA will evaluate.
- Refrigerator Replacement Program consistent with DOE standards.
- Compact Fluorescent Light Program using the BPA/State Program as a model. BPA will accept proposals from the tribes for different means of distributing the CFLs, but the lights must meet the standards set for the BPA/State program.
- A full service weatherization program, consistent with the U.S. DOE Weatherization Assistance Program for Low-Income Persons – Title 10 Part 440.
- The tribe may propose to offer an outreach program or other related services where the tribe would identify tribal members who may be eligible for weatherization and where the tribe would also assist tribal members through the program eligibility process in cooperation with the local services agency to complete weatherization installations.
- The tribe may propose to implement for other (than those available in the BPA/State Program) low-income services or installation for energy efficiency measures for low-income tribal members. Such services must meet the definition of cost-effective as defined in the U.S. DOE Weatherization Assistance Program for Low-Income Persons – Title 10 Part 440.
- BPA reserves the rights to accept or reject any proposal. BPA will provide in writing a detailed explanation for any rejected proposal.

EE State LIWx Action Plan

The draft elements of the FY08 EE State Action Plan are:

- Continue to develop LIWx agreements
- Coordinate and make clear the differences between the BPA Residential CRC Program and the BPA LIWx Program
- Work with all states to accomplish proportional fiscal year spending
- Periodic communications with EERs, AEs, CAEs, Public Affairs and EE management

The new FY07-09 Cooperative Agreements with the states will maintain the traditional LIWx program with a budget of \$4.5 million per year.

Commercial Sector Strategy

Commercial Sector FY08 Priorities

The following focus areas are critical to achievement of the FY08 Commercial Sector contribution (13 aMW) to EE's conservation target:

- Increase market penetration of existing program offerings.
 - C&I LO - Increasing the penetration of high efficiency lighting in commercial facilities will continue to be the highest priority in FY08. This will be accomplished by: (1) establishing the C&I Lighting Trade Ally Network (TAN); (2) helping utilities develop and launch commercial lighting programs using the lighting roadmap and other resources and (3) advanced field training for utility staff and trade ally training.
 - Energy Smart Program (aka "Energy Smart Grocer Program) - Will shift from marketing/infrastructure development to full-scale regional implementation in FY08.
 - Federal Program - Will continue to provide significant aMW deliveries in FY08, primarily through large-scale deliveries through federal direct-served customers and other federal agencies throughout the region.
- Expand the number of third parties offering commercial programs
 - Energy Smart Program, C&IL TAN and Lodging Initiative will each include a third party/direct acquisition (turnkey) component.
- Expand commercial program portfolio with at least three new offerings
 - Energy Smart Design Commercial New Construction Prescriptive Package (ESD CNC Rx) - The first CNC Rx offering for Small Offices is planned for roll out on October 1, 2007. Additional package offerings for other building prototypes (retail, schools, multifamily and warehouses, etc.) will be added no later than FY09.
 - 80+ Power Supply for Desktops - Collaborate with NEEA to provide additional funding (as needed) to incentivize incremental regional shipments of qualifying units.
 - Lodging Initiative - Collaborate with ETO to extend this program into adjoining BPA utility service areas in Oregon.

(**Note:** Additional initiatives and deemed measures (e.g., additional CNC Rx packages for retail, schools, etc. and restaurant equipment) may be added to the FY08 EE Commercial program portfolio, subject to: (1) RTF acceptance of provisional deeming approaches; (2) success in expediting RTF vetting process and (3) EE relative priorities.)

Infrastructure Needs to Support Commercial Sector Priorities for FY08

- **Develop viable direct acquisition options utilities will support** (EE Program policies, finance/accounting policies, CRC reimbursement mechanisms, direct acquisition "process mechanics," EE contract templates, etc.)
- **Increase use of deemed values and calculators** (in lieu of M&V and individual custom project determinations) for Commercial Sector measures (e.g., CNC Small Office Package, ES Grocer and BPA-ETO Lodging Initiative).
- **Increase pool of qualified energy efficiency professionals** (Establish 12 new Master Agreements for Commercial TSP by 9/30/07)

- **Expand the use of third parties through TSP enhancements** to access Commercial Technical Service Providers under new Master Agreements for the Commercial TSP.
- **Enhance and expand utility/vendor/end-user/Trade Ally C&I Lighting training, education and marketing efforts** through advanced utility field training on C&I LO, use of C&I LO roadmap and Lighting Design Lab “state of art” energy efficient lighting curriculum.
- **Develop regional EE infrastructure for commercial program delivery** through regional collaboratives (e.g., CNC Regional Strategy Group, Trade Ally associations and other forums).
- **Leverage limited resources** by increasing collaboration with other regional stakeholders (NEEA, ETO, etc.) and by outsourcing.
- **Collaborate with EE Marketing and Planning** for refining of Commercial Sector market segmentation, analyzing conservation potential and more effective integration of Customer Action Plan information.

New Programs/Initiatives under Consideration

The following listing, in order of priority, includes (but is not limited to) potential programs/initiatives under active consideration at the present time. If initial findings (based on field studies, market research, RTF sub-committee work, etc.) indicate the program concepts are viable, then each initiative will be individually evaluated utilizing the New Initiatives Template.

- ESD CNC Rx Packages (for retail, schools, multifamily, warehouses, etc.)
- Rooftop HVAC (new/retrofit and retro commissioning)
- Food Service Equipment measures
- Office Servers and Plug Load opportunities
- ENERGY STAR Vending Machines

Table A-2: Commercial Sector Quarterly Implementation Goals

Existing Program Offerings	Q1	Q2	Q3	Q4
C/I Lighting Offer (C&I LO)	~Continue advanced utility field training ~Coordinate utility field training materials with C&I TAN training ~Targeted lighting audits	~Ongoing training tailored to individual utility needs ~Targeted lighting audits	~Ongoing training tailored to individual utility needs ~Targeted lighting audits	Seek input from utilities on FY09 program refinements in order to streamline offering and increase regional continuity
C/I Trade Ally Network (C&I TAN)	~Finalize Trade Ally participation agreements and marketing materials ~Finalize Strategic Elements – Position, Brand, Messaging ~Develop communication tools (hotline, e-mail, Web site, newsletter, database, etc.) ~ Develop training/recruitment materials & events & begin workshops	~Best Practices Training offered to Trade Allies ~Ongoing coordination with Trade Allies and Utilities ~Develop newsletters and web based communication tools ~Meet with major distributors, lighting contractors and select manufacturers	~Continue TAN training and coordination with TA's and utilities to offer workshops ~Implement TAN communication tools developed in Q2	Solicit input from TAs for FY09 C&I LO program refinements in order to streamline offering and increase regional continuity
Energy Smart Program	~Continue marketing to remaining unsigned public utilities ~Complete RTF actions on VSD, ECM and LED measures ~ES Web site goes "Live" ~Continue audits and measure installations	~Complete marketing to remaining unsigned public utilities ~Initiate RTF actions on door closure and gasket deemed savings ~Complete oversight visits ~Continue audits and measure installations	~Continue audits and measure installations ~Finalize decisions on door closure and gasket deemed savings	~Continue audits and measure installations ~Market potential new measures to participating utilities and end-users
Federal	~Continue implementation of existing projects. ~Continue new project development on existing accounts (Navy, FAFB). ~Begin marketing for new federal accounts (VA, BOR, etc.)	~Ongoing Project implementation ~Follow-up on all project opportunities identified in Q1	~Ongoing Project implementation ~Continue to follow-up on all Q1 & Q2 opportunities.	Follow-up continues for all active Q1, Q2 and Q3 project opportunities.

New Program Offerings	Q1	Q2	Q3	Q4
Commercial New Construction (CNC) Energy Smart Design (ESD) ~Small Office	~10/3 Brown Bag sessions with utilities to explain and market ESD -Office package ~Finalize program theory, evaluation plan and case studies ~Begin development of new Prescriptive Paths for other building prototypes ~Coordinate with NEEA for leverage w/marketing and outreach efforts	~Develop non-monetary rewards and a Web site to promote Energy Smart Design -Small Office ~Outreach to BOMA, IREM, NAIOP, ASHRAE, US GBC, ENERGY STAR	~Continue developing new prescriptive paths for other end-use facilities, retail, schools, public assembly and warehouses ~Develop case studies	~Market and promote new offerings ~Finalize ribbon cutting event with Steve Wright for Inland Power & Light's new HQ
Rooftop HVAC	Evaluate results from initial field testing	Share results of initial field tests with RTF	Conduct additional field testing and evaluate results	Decide whether program offering is viable, coordinate w/RTF & USB
Lodging Initiative (with ETO)	Collaborate with ETO, adjust offering as needed to reach publics. Develop Direct Acquisition delivery approach with ETO	Coordinate with ETO to finalize measures through RTF	Co-brand with ETO and co-market	Continue efforts from Q1, Q2 & Q3
Initiatives Under Development	Q1	Q2	Q3	Q4
ESD (CNC Rx) Additional Packages (retail, schools, etc.	Develop program theories and evaluation plans	Develop measure list and prototype models	Initiate discussions with RTF sub-committee	Design, produce and distribute marketing materials
Rooftop HVAC	Evaluate results from initial field testing	Share results of initial field tests with RTF	Conduct additional field testing and evaluate results	Decide whether program offering is viable, coordinate w/RTF & USB
Energy Star Vending Machines	Continue work with RTF on additional Program Design and marketing research to determine if refurbishing option is feasible	Engage regional and national collaboratives outside the NW to gauge interest in participation if there is a viable refurbishing option	Ongoing	Ongoing
~Food Service Equipment ~Office Servers/Plug Load Opportunities ~Multifamily	Initiate work with EE Planning to gauge conservation potential for various equipment/technologies	If potential exists, work with RTF to determine which measures are viable	Continue efforts initiated in Q1 & Q2	Secure RTF recommendations, establish WTP and design FY09 program offering

Industrial Sector Strategy

Industrial Sector FY08 Priorities

The following focus areas are critical to achievement of the FY08 Industrial Sector contribution (10 aMW) to EE's conservation target:

- Commercial and Industrial Lighting Trade Ally Network (C&IL TAN)

BPA will continue its efforts to increase industrial lighting efficiency through commercial and industrial lighting offers. BPA also will use the services of the Commercial and Industrial TAN administrator in the effort.

- Large Industrial On-Site Engineering Support

In FY07, BPA provided support for several on-site engineers at large industrial plants. One example: BPA participated in a joint demonstration with the Industrial Efficiency Alliance (IEA), which operates under the umbrella of NEEA, to share the cost of an engineer who worked on continuous energy management at Grays Harbor Paper. BPA also hired an engineer to work one day a week at NORPAC, a pulp and paper company, to help implement an energy efficiency project. BPA staff engineers were assigned to work two days a week at targeted large industrial facilities. BPA will assess this approach to determine whether it will be used again.

- Administer, Implement and Enhance Technical Service Provider (TSP) Program

BPA in early 2005 established a Technical Service Provider program to supplement the work of BPA engineers with technical service engineers who have specialized expertise in industrial energy efficiency. In late FY06, BPA contracted with a third party to conduct a TSP evaluation; in early FY07, BPA began implementing the evaluation's key recommendations in order to improve and enhance the program.

For FY08, the goal is to expand and enhance operation and efficiency of the Industrial TSP program so that it provides effective technical services to utilities selecting the \$.12/kWh incentive option.

- Regional and National Collaborations

BPA, utilities and the Northwest Energy Efficiency Alliance (NEEA) often are involved with the same industrial plants, so that collaboration on the Continuous Energy Improvement Strategy can be vital. Continuous Energy also involves acquisition projects, also important to the link with the energy alliance. Collaboration means that BPA does not duplicate elements such as training or the industrial assessment tool offered by EnVinta 1 to 5.

To support the goals of both BPA and NEEA, the two agencies provide technical training and workshops, participate in joint account planning, co-sponsor industrial demonstrations and co-host utility and stakeholder workshops. BPA also will conduct joint marketing case studies with NEEA.

The focus on food processing and pulp and paper will continue. BPA will provide information and make contacts at the annual meetings of trade groups such as the Northwest Food Processors Association and the Technical Association for the Pulp and Paper Industry.

Regional collaborations include the Industrial Energy Alliance, Energy Trust of Oregon, Washington State University, PacifiCorp, and other utilities. National collaborations include a number of industrial organizations, including DOE Best Practices, Compressed Air Challenge, the Hydraulics Institute, the energy-efficiency non-profit Consortium for Energy Efficiency (CEE), the pulp and paper organization Technical Association of the Pulp and Paper Industry (TAPPI), and the Northwest Food Processors Association.

- Deployment of Compressed Air Road Map

Developed in FY06, the Compressed Air Road Map was created to help utilities find energy savings in compressed air systems; it is a tool that organizes all the components needed to run a compressed air system efficiently. BPA recently established a pilot project at Cowlitz PUD, aimed at identifying and improving the efficiency of industrial compressed air systems in Cowlitz's service territory. The program includes information on where training is available, why it is needed and its value for facilities that use compressed air. There are financial incentives, in the form of a rebate, available from the utility and technical assistance from a consultant who is a CA Technical Service Provider.

In mid-FY08, BPA will evaluate the value of the Cowlitz effort to determine if it should be offered to more utilities. BPA also is collaborating with a sub-group of BPA's Utility Sounding Board (USB), which includes the Energy Trust of Oregon, PSE and PacifiCorp, to consider the potential for a regional Small Compressed Air approach. This would help simplify approaches for trade allies. BPA and the IEA working group are researching approaches to achieve compressed air demand-side kWh savings.

- Technical Service Provider Mining Enhancement (new initiative)

A technical service contractor would be hired to work with targeted utilities; the consultant(s) would aid utilities that have limited or no industrial energy staff in doing outreach and marketing to industries, as well as implementing projects or programs.

- Industrial Section of Energy Efficiency Marketing Plan

Many of the major themes in the Summit Blue marketing report should be deployed for the Industrial Sector. The themes include continued use of trade allies for TSPs, compressed air, C& I LO TAN; efforts for a large utility approach, such as a coalition in the Seattle metro area, and a continued niche market approach for industrial applications regarding small compressed air and wastewater treatment.

Other themes to be adopted: continued use of the BPA USB for Industrial Sector ideas, feedback and review, as well as the continued use of both BPA and contracted engineering expertise as a strong tactic for industrial acquisition.

The successes of the industrial sector should be promoted. Marketing should prepare a FY08 Industrial Sector Marketing Strategy containing, as an example, three case studies and a PR campaign. As the Summit Blue marketing plan is implemented, other actions will be identified.

- Create and Implement a Wastewater Action Plan

The BPA pool of TSP consultants now includes a wastewater expert; BPA hired Itron to provide information and recommendations on wastewater best practices. BPA will execute the action plan from the report.

Table A-3: Industrial Sector Quarterly Implementation Goals

Measure/Initiative	Q1	Q2	Q3	Q4
Commercial & Industrial Lighting Trade Ally Network Development	See specific milestones and actions in the commercial sector strategy.			
Large Industrial On-site Engineering Support	Assess Grays Harbor Paper and Ocean Spray cranberry processing plant for renewal with industry cost share.	TBD based on outcome of QTR 1		
Administer, Implement and Enhance Technical Service Program Web site, contracting process	(a) Research audit best practices for cost share 50/50. (b) Analyze audit conversion rates for industrial and other sectors. Analyze utility in-house engineer cost (100 %) vs. utility outsource (d) Analyze overhead costs associated with industrial programs.	TBD based on outcome of QTR 1		
Regional Collaborations (IEA, ETO, PacifiCorp, other utilities)	*Effort specific			
Deployment of Compressed Air Roadmap	*See Marketing Plan			
<i>Small Compressed Air</i>	Working with Regional SCA Air Task Force, determine elements that may be adopted.	Create business plan to include positions required and costs for implementing		

Agricultural Sector Strategy

Agricultural Sector FY08 Priorities

The following focus areas are critical to achievement of the FY08 Agricultural Sector contribution (6 aMW) to EE's conservation target:

- Operate, expand and enhance the Agricultural Sector by utilizing Technical Service Providers for testing pump loads and motors. Use TSPs to perform technical field work; develop an evaluation report of pump testing versus implementation. Pre-screening is a prerequisite to pump testing.
- Market Scientific Irrigation Scheduling (SIS)
- Develop flyers, brochures and case studies which provide information to customers as well as expanding the market for SIS. (Any new contracts will extend into the next rate period.). On average, using SIS can cut water usage by 10 percent, which directly relates to the energy used to operate a pump. A contractor hired by BPA assists with SIS.

- Transformer De-energization - On a seasonal basis, de-energize transformers connected to irrigation pumps to minimize line losses, and power usage, from winter to spring when the pumps are not in use. BPA assists utilities in paying for crews that do the de-energization.
- Work with irrigation districts to develop SIS case study (new initiative)
- Collaborate with affected utilities in areas of mutual interest. Expand irrigation district participation beyond southern Idaho. Use TSPs or third party contractors to do technical field work. Explore direct load control options for large reserve power irrigation loads. Collaborate with affected utilities in areas of mutual interest.
- Irrigation system control - collaborate with USDA and third party contractors for training in irrigation system control.
- USDA incentives - Develop formal intra-agency agreement to market programs to non-traditional areas, including golf courses, wineries, commercial nurseries and greenhouses.
- Integrated Risk Management Plan - A portion of the potential savings from the risk management plan can be attributed to the irrigated agriculture sector. The savings will be identified.
- Dairy industry - Continue to market and explore pertinent projects, including variable frequency drives, irrigation controls for stock pastures, pumping load controls and management.

Existing initiatives

- Irrigated Agriculture Standard Offer—continue to market to all utility customers
- Continue technical support for custom proposals and measurement and verification plans.
- Continue deployment of Scientific Irrigation Scheduling.
- Continue pump testing throughout the region. Use TSPs/ contractors to oversee and market pump testing and other technical matters.
- Co-sponsor agricultural demonstrations.
- Develop an Irrigated Agriculture Sounding Board
- Co-host utility and stakeholder workshops
- Work with Slice/Block utilities through the EE Representatives. Encourage use of Conservation Rate Credits for the agricultural sector.
- Continue regional and national agricultural collaborations, including but not limited to, NEEA and PNGC Power. Expand involvement with irrigation districts, link incentives with USDA program, offer technical training and assistance for irrigators, consider a pilot to study irrigation control opportunities and evaluate demand control programs.

Table A-4: Agricultural Sector Quarterly Implementation Goals

Measure	Q1	Q2	Q3	Q4
Scientific Irrigation Scheduling	Clarify PTR issues Assist Falls Irrigation District/US BOR with case study Text for SIS brochure	New SIS projects for interested new customers Text/photos to Public Affairs.	Distribute brochures	
Irrigation Hardware	Text for case study	Text/photos to Public Affairs.	Distribute brochures	
Transformer De-energization	New project proposals for interested customers			
Pump Testing variable frequency drives	Evaluate Pump Testing effectiveness Text for case studies	Text/photos to Public Affairs.	Distribute brochures	
Irrigation Districts	Additional District Master Agreements	In-field project evaluation	Design of initial project	
Irrigation System Control	USDA/OSU Training option evaluation and implementation	Oversight		
USDA Collaboration/Joint BPA/USDA marketing brochure which outlines program options	Outline cooperative agreement Text for brochure by USDA	Finalize agreement Text/photos to Public Affairs.		

B. Market Transformation

BPA provides support to the NEEA for market transformation. Market transformation changes markets to accelerate the adoption of energy efficient products and services. The FY 2008 market transformation progress indicators for each sector are described below, followed by a more general overview of regional market transformation for the 2007-2009 period.

Residential Sector – NEEA’s 2008 Progress Indicators

ENERGY STAR Homes Northwest

In the new construction market, the approach will focus on recruiting new builders through normal market channels by encouraging greater engagement from major builder trade allies, such as HVAC contractors and verifiers. In addition, more emphasis will be placed on engaging the lighting and HVAC supply channels to support ENERGY STAR Homes. The 2008 indicator of progress is to attain an 11 percent market share or 7,400 homes are certified ENERGY STAR Northwest.

ENERGY STAR Consumer Products

NEEA’s market approach has been focused on improving retail distribution in the smaller markets by expanding product availability and affordability into non-big box stores, primarily small hardware, grocery, and drug retailers. NEEA expects that the 2008 indicators of progress in consumer products including reaching 9.8 million CFL sales in region and 500,000 CFL sales increase in Idaho and Montana will be exceeded. Due to the momentum in the CFL sales market, NEEA is reviewing the need for continued investment in this market and if there are other markets for investment including ductless heat pumps, heat pump water heaters and solid-state lighting.

Commercial Sector – NEEA’s 2008 Progress Indicators

Hospitals & Healthcare

- Continue to assist five or more hospitals in developing and implementing Strategic Energy Management Plans (SEMPs), including Providence, PeaceHealth, Legacy, St. Lukes, St. Als, Swedish, UW Medical Center and KRMC

Grocery

- Continue to change energy related business practices with three or more regional grocery chains, including Lamb’s Thriftway and Town & Country
- Continue to train refrigeration contractors, such as Key Mechanical, to support better grocery store refrigeration system operating performance

Office Real Estate

- Work with two or more office real estate companies to change energy related business practices using a portfolio-level approach to addressing energy efficiency within all real estate business transactions
- Continue to deliver Building Owners and Managers Association’s (BOMA) building energy efficiency program (BEEP) in partnership with local BOMA chapters and utilities/public benefits administrators

Design & Construction

- Continue to implement firm focus business relationships with four or five high priority Northwest design and construction firms
- Conduct broad based education and training activities in the market in conjunction with AIA, utilities/public benefits administrators and others

Building Operations

- Continue to implement firm focus business relationships with four or five high priority Northwest building O&M service providers
- Identify and initiate a market based strategy for conducting education and training activities on better building operating performance in partnership with others

Industrial Sector - NEEA's 2008 Progress Indicators

Pulp and Paper

- In coordination with and support from their serving utilities, an additional two mills are at "engaged" or "practicing" status with corporate energy business practices

Food Processing

- In coordination with and support from their serving utilities, an additional 10 percent of large food processing firms are at "engaged" or "practicing" status with corporate energy business practices

Market Transformation – General Overview for FY 2007-2009

BPA provides support to the NEEA for market transformation. Market transformation changes markets to accelerate the adoption of energy efficient products and services. Following is an overview of regional market transformation efforts by sector.

Residential Sector

Northwest ENERGY STAR[®] is the branding platform for the region's residential market transformation initiative. The two main elements of the initiative are ENERGY STAR Consumer Products and ENERGY STAR Homes Northwest. ENERGY STAR Consumer Products aggregates the Northwest's market power to encourage market actors, including national appliance and lighting manufacturers and the region's retailers, to make and sell higher efficiency appliances and lighting products. By aggregating the power and influence of the Northwest marketplace, ENERGY STAR Consumer Products has been, and will continue to be, an effective mechanism for increasing the market share of qualified products in the region.

ENERGY STAR Homes Northwest targets homebuilders to encourage them to construct new houses to the Northwest specification for ENERGY STAR homes. By offering a regional specification, large homebuilders that work in multiple utility service territories have one easy option when choosing to build efficiently.

NEEA Goals (2009):

- Reach 14 percent market share for ENERGY STAR residential single-family new construction
- CFL sales grow to 10.8 million by 2009; this represents an increase of 1 million per year
- 50 percent of ENERGY STAR clothes washers sold in the Northwest are MEF 1.8 and above.

Commercial Sector

BetterBricks is the branding platform for NEEA-funded market transformation initiatives in the commercial sector. BetterBricks focuses on changing energy-related business decision-making practices within the healthcare, grocery and office real estate markets. The initiative also works with trade allies to develop and offer new energy-efficient products and services within the design and construction and building operations markets.

NEEA Goals:

- Make energy efficiency an integral part of business decision-making. Within targeted vertical markets, change energy-related business practices to achieve energy efficiency in design and construction and in building and facility operations. Create natural market demand for related trade ally products and services. Transform trade ally products and service offerings within the crosscutting design and construction and building operations markets to deliver high performance (energy efficient) buildings. Align trade ally business resources and build market capabilities to meet and increase market demand.

Industrial Sector

The Industrial Efficiency Alliance (IEA) focuses on making energy efficiency an integral part of both corporate and plant business practices within the pulp and paper and food processing markets. Simultaneously, the initiative works with trade allies in pump, compressed air, refrigeration, and motor markets to offer new energy-efficient products and services in order to meet this market demand.

NEEA Goals:

- Make energy efficiency an integral part of business decision-making. Within targeted vertical markets change energy related business practices to achieve energy efficiency in systems design, and system operations and maintenance. Create natural market demand for related trade ally products and services.
- Transform trade ally products and service offerings within the crosscutting markets to deliver energy optimized systems and service solutions. Align trade ally business resources and build market capabilities to meet and increase market demand.

C. Conservation Targets FY 2007-2009

Table C-1 shows the major measure technologies within each sector, based on the Council Plan and EE analysis. Lighting comprises the largest share of sector savings in the residential and commercial sectors. Additional tables in this section provide further details about the conservation measures in the Council Plan.

Table C-1: Measure Breakouts of BPA's Share of Council Targets

	Annual Savings (aMW/year)	Share of Sector Savings
Residential	11.4	100%
Lighting	6.6	58%
Weatherization	2.6	22%
Heat Pumps, air-source	1.2	11%
Appliances	0.5	4%
Other	0.5	5%
Commercial	12.5	100%
Lighting	3.6	29%
HVAC	2.9	24%
Computer Power Mgmt	1.9	15%
New Construction/Lost Opports	1.4	11%
Grocery Refrigeration	1.0	8%
Other	1.6	13%
Industrial	13.0	100%
Process	7.8	60%
Compressed Air	2.6	20%
Lighting	2.6	20%
Agricultural	4.0	100%
SIS	2.4	60%
Fittings	1.6	40%
Other	1.0	100%
Other (new)	1.0	100%
Grand Total	42	100%
Excludes naturally occurring and market transformation		
Source: Fifth Power Plan and EE Analysis		

Programmatic Funding Goals - Background

During 2004 and 2005, EE undertook an extensive public process to design the framework for BPA's Post-2006 Conservation Programs. A Conservation Workgroup of over 70 customers and stakeholders participated in this process. Although there was not consensus, the recommendation from this workgroup was that BPA should budget \$80M/year to achieve the

52 aMW target (which equates to \$1.5M/aMW). This \$80 million would include a portfolio of funding mechanisms: a 0.5-mill/kilowatt-hour (kWh) rate credit, bilateral and third party contract structures to achieve conservation that is not evenly spread throughout the region and to achieve conservation from hard-to-reach markets. The \$80 million would also include \$1M/year for evaluation and regional infrastructure.

During the second phase of the Conservation Workgroup process (spring and summer of 2005), BPA worked closely with a subcommittee of the Workgroup to develop recommended reimbursement levels for market sectors sufficient to move the market and still keep the overall BPA reimbursement at the budgeted \$1.5M/aMW.

The 42-aMW target involves a shift in sector emphasis. More savings are targeted in the Industrial Sector for Post-2006 (13 aMW/year) than BPA achieved during the FY 2001-2006 period (4 aMW/year). Similarly, the Agricultural Sector target will be 4 aMW/year in contrast to less than 1 aMW/year achieved in the past. Within sectors, the mix of measures has also changed due to lower costs and available new technologies. The following pie charts compare the future and past portfolios of measures in the Residential and Commercial Sectors (excluding savings from market transformation and building codes).

D. Conservation Technologies – Residential & Commercial

The following tables (D-1, D-2, D-3 and D-4) show BPA’s share of the Council Plan, broken out on an annual basis by technology for the Residential and Commercial sectors. The Council Plan has no technological breakout for the Industrial and Agriculture Sectors.

Table D-1: BPA’s Post-2006 Targets

BPA'S POST-2006 TARGETS (Excludes Naturally Occurring Conservation and Market Transformation)			
Residential			
aMW/year	Lost Opportunity	Retrofit	Comment
Heat Pump Conversions	0.4		SEER 14, HPSF 8.5 w/PTCS
Heat Pump Upgrades	0.4		SEER 14, HPSF 8.5 w/PTCS
PTCS Duct Sealing		0.2	hard sell even w/incentives
PTCS Duct Sealing and System Commissioning		0.1	hard sell even w/incentives
PTCS Duct Sealing, Commissioning and Controls		0.2	hard sell even w/incentives
Energy Star - Manufactured Homes	0.1		requires heat pump
Energy Star - Multifamily Homes	0.00		
Energy Star - Single Family Homes	0.0		new program for 1st 5 years
Weatherization - Manufactured		0.5	
Weatherization - Multifamily		0.7	Nat. Occ mostly windows, but wgt'd by KWH contribution
Weatherization - Single Family		0.9	Nat. Occ mostly windows, but wgt'd by KWH contribution
CFLs		6.6	
Refrigerators	0.0		
Clothes Washers	0.4		MEF 1.8 and above
Dishwashers	0.0		
Efficient Water Heater Tanks	0.5		.93 tanks
Heat Pump Water Heaters	0.0		
Hot Water Heat Recovery	0.0		new technologies
Total	2.0	9.3	
Source: Fifth Power Plan and BPA Energy Efficiency			

Table D-2: BPA's Post-2006 Targets

Commercial			
aMW/year	Lost Opportunity	Retrofit	Comment
Efficient AC/DC Power Converters	0.1		changes in China will help
Integrated Building Design	0.3		
Lighting Equipment	0.6	3.2	high performance T-8's w/ballasts
Packaged Refrigeration Equipment	0.2		CEE Tier II, not well represented in Mkt
Low-Pressure Distribution	0.0		
Skylight Day Lighting	0.0		
Premium Fume Hood	0.0		
Municipal Sewage Treatment	0.1	0.3	See Alliance results
Roof Insulation	0.1		
Premium HVAC Equipment 0	0.1		
Electrically Commutated Fan Motors	0.0		
Controls Commissioning	0.0		
Variable Speed Chillers	0.0		
High-Performance Glass	0.0		Total increased from 0.1 to 0.4, per C Grist
Perimeter Day Lighting	0.00		
Evaporative Assist Cooling	0.0		New measure -- untested in mkt.
Small HVAC Optimization & Repair		1.9	
Network Computer Power Management 24 Yes Expand Expand		1.9	
LED Exit Signs		0.2	
Large HVAC Optimization & Repair		1.1	
Grocery Refrigeration Upgrade		1.0	
Municipal Water Supply		0.5	See Alliance results
Office Plug Load Sensor		0.3	
LED Traffic Lights		0.2	what's left is resistant
High-Performance Glass		0.1	
Adjustable Speed Drives		0.1	adopted for non-energy benefits
Spray Washer		0.3	new technology, but could be code in future
Total	1.4	11.1	

Source: Fifth Power Plan and BPA Energy Efficiency

Table D-3 provides more details from the Power Plan about how BPA's Commercial Sector targets can be allocated across commercial building types. This disaggregation by building type (retrofit and lost opportunities) should be viewed as a general, nonbinding guide (see the Council caveats following the table), that nonetheless improves understanding of the nature of Commercial Sector savings.

Table D-3: BPA's Post-2006 Targets

Disaggregation of BPA's Commercial Targets by Building Type (Excludes Naturally Occurring Conservation and Market Transformation)

Annual aMW for Target Period 2005-2009 Annual by Bldg Type	Office			Retail				School		Wareho use	Grocery		Resta	Lodgin g	Health		Other	Total
	Large Off	Mediu m Off	Small Off	Big Box	Small Box	High End	Anchor	K-12	Univer sity	Wareho use	Super marke t	Mini Mart	Resta rant	Lodgin g	Hospita l	Other Health	Other	
Measure Bundle - LOST OPPORTUNITIES																		
Efficient AC/DC Power Converters	#N/A																	0.4
Integrated Building Design	0.03	0.01	0.00	0.03	0.01	0.00	0.00	0.01	0.02	0.04	0.00	0.00	0.00	0.00	0.01	0.03	0.06	0.3
Lighting Equipment	0.03	0.02	0.03	0.09	0.06	0.04	0.01	0.02	0.00	0.09	0.01	0.01	0.01	0.01	0.01	0.01	0.13	0.6
Packaged Refrigeration Equipment	#N/A																	0.2
Low-Pressure Distribution	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
Skylight Day Lighting	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
Premium Fume Hood	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.0
Municipal Sewage Treatment	#N/A																	0.1
Roof Insulation	0.00	0.00	0.00	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.1
Premium HVAC Equipment	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.1
Electrically Commutated Fan Motors	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.0
Controls Commissioning	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
Variable Speed Chillers	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
High-Performance Glass	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
Perimeter Day Lighting	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
Evaporative Assist Cooling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
Total	0.1	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.3	2
	0.2			0.3				0.1		0.1	0.0		0.0	0.0	0.0	0.1	0.0	0.3

Annual aMW for Target Period 2005-2009 Annual by Bldg Type	Office			Retail				School		Wareho use	Grocery		Resta	Lodgin g	Health		Other	Total
	Large Off	Mediu m Off	Small Off	Big Box	Small Box	High End	Anchor	K-12	Univer sity	Wareho use	Super marke t	Mini Mart	Resta rant	Lodgin g	Hospita l	Other Health	Other	
Measure Bundle - RETROFIT																		
Lighting Equipment	0.33	0.20	0.28	0.28	0.40	0.06	0.07	0.18	0.07	0.23	0.11	0.04	0.07	0.19	0.08	0.17	0.48	3.3
Small HVAC Optimization & Repair	0.08	0.12	0.14	0.19	0.28	0.10	0.10	0.02	0.05	0.03	0.00	0.00	0.07	0.08	0.01	0.09	0.14	1.5
Network Computer Power Management	#N/A																	1.8
Municipal Sewage Treatment	#N/A																	0.5
LED Exit Signs	#N/A																	1.0
Large HVAC Optimization & Repair	0.29	0.05	0.01	0.01	0.02	0.00	0.08	0.09	0.09	0.00	0.01	0.00	0.00	0.10	0.09	0.09	0.16	1.1
Grocery Refrigeration Upgrade	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.79	0.20	0.00	0.00	0.00	0.00	0.00	1.0
Municipal Water Supply	#REF!																	0.6
Office Plug Load Sensor	0.15	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.3
Pre-Rinse Spray Wash	#N/A																	0.3
LED Traffic Lights	#N/A																	0.2
High-Performance Glass	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.1
Adjustable Speed Drives	0.04	0.02	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.1
Total	0.9	0.6	0.4	0.5	0.7	0.2	0.3	0.3	0.2	0.3	0.9	0.2	0.1	0.4	0.2	0.4	0.8	12
	1.9			1.6				0.5		0.3	1.1		0.1	0.4	0.6		0.8	

Source: Fifth Power Plan and EE

The breakdown of commercial targets by building type is accompanied by the following caveats, provided by Charlie Grist of the Council (personal communication, October 24, 2005).

Caveats:

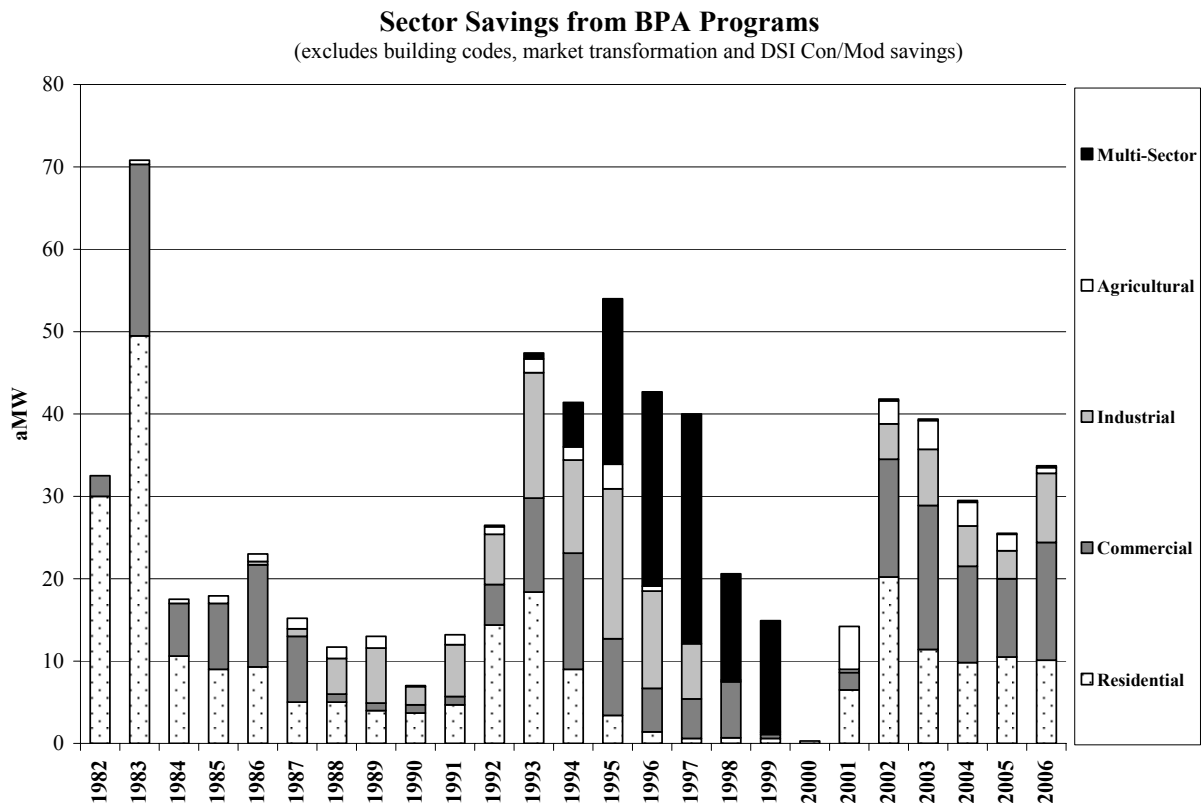
- These estimates should be considered a rough guide to where the cost-effective conservation potential exists. The attached estimates are based on medium case forecasts for floor space by building type, the Council's assumed ramp-up rate for lost-opportunity conservation measures and estimates for discretionary conservation by business type based on a simple share down of 2025 conservation potential by business type. In all cases, targeted savings potential by building type is arbitrarily based on the relative proportion of long-term savings potential in each type;
- The bulk of the near-term targets are discretionary (non lost-opportunity) measures. That means there is a lot of programmatic discretion with regard to how to meet the target. The Power Plan does not prescribe the mix of programs to fulfill the near-term targets. For example, similar lighting potential exists in retail and in office, but that does not preclude the near-term targets from being met by lighting savings programs that focus on retail buildings now and offices later;
- The Power Plan commercial-sector analysis does a reasonable gross-level analysis of measure savings potential by building type. But the conservation assessment analysis was created primarily to develop supply curves of savings available at various costs. A secondary interest driving the analysis was to identify in what business and building types the measures occur. For some measure bundles, like variable speed drives for example, savings were assigned to a limited suite of building types as conservatism. In practice, the measure will occur in all building types;
- Building type level data are probably best for the largest measure bundle, which is lighting. This is because we have the best input data for lighting including lighting power density and lighting equipment type by building type and vintage cohort. For other measures, building type input information is less available, less detailed and less reliable. So splits of savings by building type for non-lighting measures have less confidence around them. Much of the input data come from the Commercial Building Stock Assessment (CBSA), which was done in 2001; and
- Three factors influence the savings splits by business type. These are, for each business type, the floor space, the applicability of the suite of measures and the savings per measure. Office, retail, school and warehouse represent about 60 percent of the floor area. Another 20 percent of the floor area is categorized as "other." So those categories show most of the savings. But school and warehouse are relatively low electric intensity reducing somewhat the potential savings there. And in some types, like schools, we have evidence from the CBSA that some measures are already at high levels of saturation and thus remaining conservation potential is less.

E: Historical Accomplishments and Future Targets

This section of the Appendix provides a closer examination of BPA's past accomplishments and future conservation targets.

Figure E-1 shows BPA's programmatic savings by sector, from 1982 through 2006, for a cumulative total of 688 aMW. Building codes (188.5 aMW, cumulative), Market Transformation (87.0 aMW, cumulative), and Direct Service Industries (DSI) Conservation/Modernization (Con/Mod) program accomplishments (95.9 aMW) are excluded from this graph. The Multi-Sector savings include billing credits, BPA system efficiencies, and other cross-sector programs. The Agriculture savings include irrigation scheduling, which has a one-year measure life. (Note: 2006 savings are preliminary estimates).

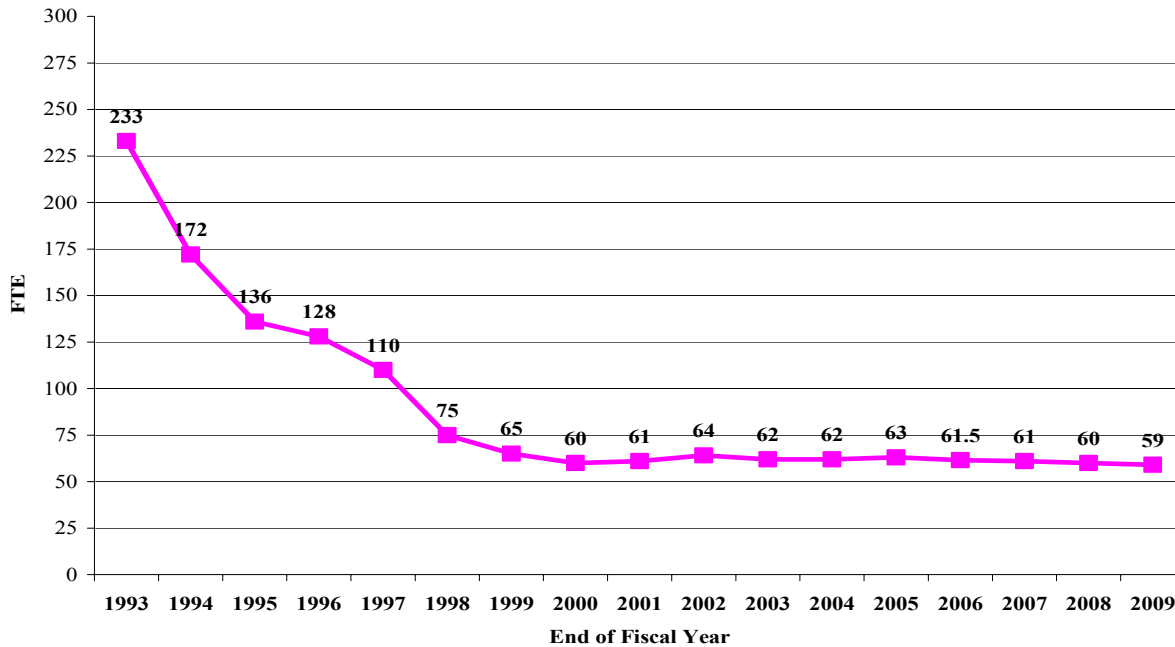
Figure E-1: Sector Savings from BPA Programs



Source: 2006 RED Book and EE database

Figure E-2 shows the variation in BPA conservation staffing, from a high of 333 FTE in FY 1993 to about 63 FTE now and 59 FTE by FY 2009.

Figure E-2: BPA Staffing for Conservation Related Activities



Legacy Savings, FY 1982-2000

- The highest annual savings occurred in the early 1980s when 71 aMW were delivered in one year.
- Cumulatively, BPA achieved 508 aMW from 1982 to 2000, excluding Market Transformation, which was another 9 aMW.
- Additional savings beyond the 508 aMW were achieved through building code improvements, 1982-2000, as follows:
 - Residential, 112 aMW
 - Commercial, 43 aMW

Post-Legacy Savings, FY 2001–2006

- Because of the 2000-2001 energy crisis, BPA started the ConAug and C&RD programs eight months earlier than the planned FY 2002 launch date. EE exceeded the 220 aMW target for the rate period ending in FY 2006. The savings, including the “catch-up,” are approximately 240 aMW.
- The sector savings through 2006 (excluding Market Transformation) are shown in table E-1 and figure E-3.
- Table E-1 reveals a significant shift in sector emphasis for the Post-2006 period. There is greater emphasis on industrial and agricultural savings than in the past. For instance, the industrial share of total savings will double in percentage terms from the current 16 percent of all savings to 31 percent in the Post-2006 period.

Table E-1: Comparison of Past Sector Shares with Post-2006 Shares

	Past Accomplishments				Targets	
	Legacy FY 82-00		Post-Legacy FY 01-06		Post-2006 (FY 07-09)	
	19-Yr aMW	%	6-Yr aMW	%	3-Yr aMW	%
Residential	180	35%	69	41%	34	27%
Commercial	119	23%	67	40%	39	31%
Industrial	91	18%	26	16%	39	31%
Agricultural	15	3%	5	3%	12	9%
Multi-Sector	104	20%	1	1%	2	2%
Total	508	100%	168	100%	127	100%

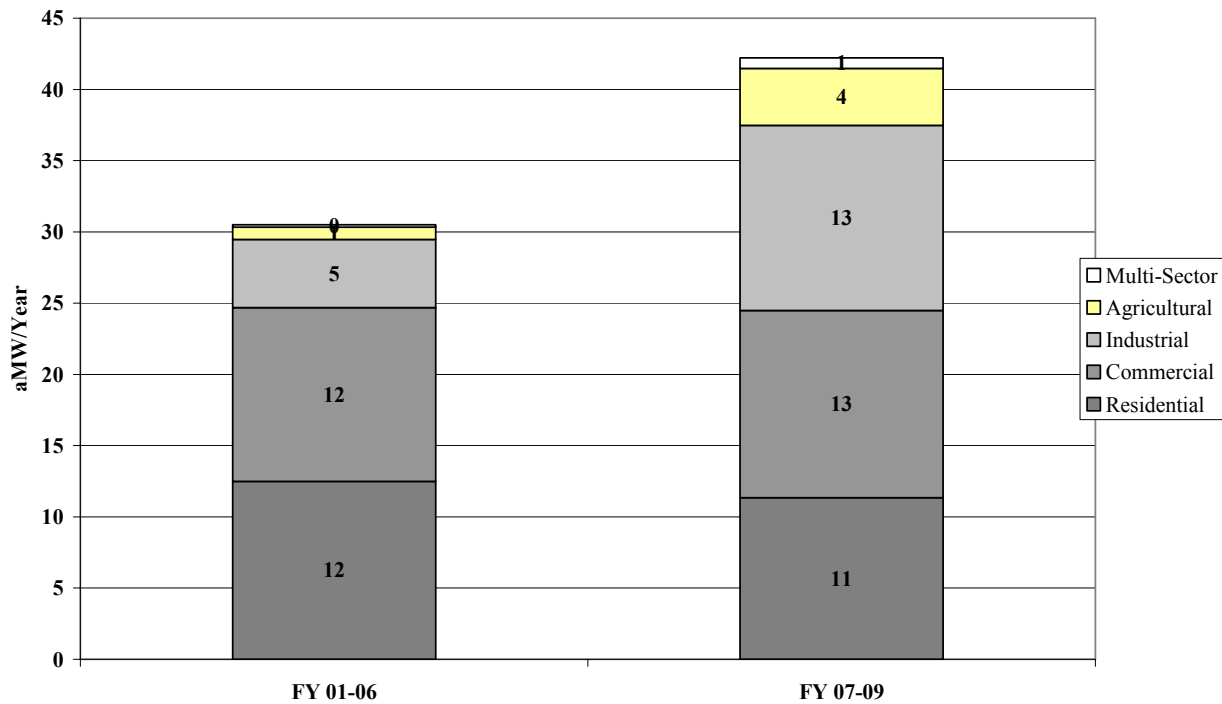
Excludes Building Codes, Market Transformation, DSI Con/Mod

Source: 2006 Red Book, EE database, and the Council's 5th Power Plan

Figure E-3 depicts the much greater emphasis on industrial and agricultural savings than in the past.

Figure E-3: Comparing Sector Savings (aMW/Year)

Comparing Sector Savings, aMW/Year
(Source: 2006 Red Book, EE database, and Council's Fifth Power Plan)



In absolute terms, the industrial sector target will rise by nearly three-fold from the recent historical average of 5 aMW/year to 13 aMW/year during the FY 2007-2009 period. This 13-aMW target falls well within the range of prior industrial savings achieved during the mid-1990s. During the four-year period, 1993 to 1996, BPA achieved an average of 14 aMW/year in the industrial sector (excluding the DSIs), with a high of 18 aMW achieved in 1995. (Source: 2005 RED Book).

The following tables provide a more detailed breakdown of historical sector savings. In the residential sector, nearly half the savings were from weatherization. Lighting was the second largest area of residential savings. In the commercial sector, weatherization and lighting were also the two largest categories.

Table E-2: BPA's Residential Savings (1980-2006)

BPA's Residential Savings, 1980-2006	
Measure Type	aMW
Water Flow Restrictors	14.1
Ducts	0.7
Appliances	5.6
Weatherization	120.0
Lighting	36.5
HVAC	0.8
Heat Pump	8.2
Low Income	0.2
Manufactured Homes	13.0
Multi-Family	8.6
Code	15.9
Single Family	0.1
Hot Water	24.7
Super Good Cents	9.6
Other	0.9
Total	258.9
Source: EE database	

Table E-3: BPA's Commercial Savings (1980-2006)

BPA's Commercial Savings, 1980-2006	
Measure Type	aMW
HVAC	5.7
Compressors	2.3
Pumps	0.3
Weatherization	37.3
Lighting	37.7
Appliances	0.1
Equipment	0.6
Exit Signs	0.2
Heat Pumps	0.4
Code	42.3
Motors	2.0
Photo Voltaic	0.0
Water Restrictors	0.0
Street/Traffic Lights	0.5
Hot Water	0.5
Vending Miser	1.5
Other	8.7
Total	140.2
Source: EE database	

Table E-4: BPA's Agriculture Savings (1980-2006)

BPA's Agriculture Savings, 1980-2006	
Measure	aMW
Hardware Retrofit	14.7
Heat Exchanger	0.0
Irrigated Agriculture	0.3
Irrigation	2.2
Irrigation Scheduling	12.5
Miscellaneous	0.0
Motors	0.0
Variable Speed Drive (VSD) motor	0.6
Other	0.3
Total	30.7
Source: EE database	

F. Process for Proposed New Programs/Initiatives

EE PHASE 1 PRE-SCREENING

Initiative Title:

Submitted by:

Date:

What is this initiative?

Purpose?

What is the initiative objective/BPA Strategic Objective?

What is BPA's cost and for what?

Can this initiative be accomplished within the Post 2006 Rates and Structures guidelines? How?

Is this a cost-share proposal? If so, explain briefly.

What internal staffing is required, and for how long?

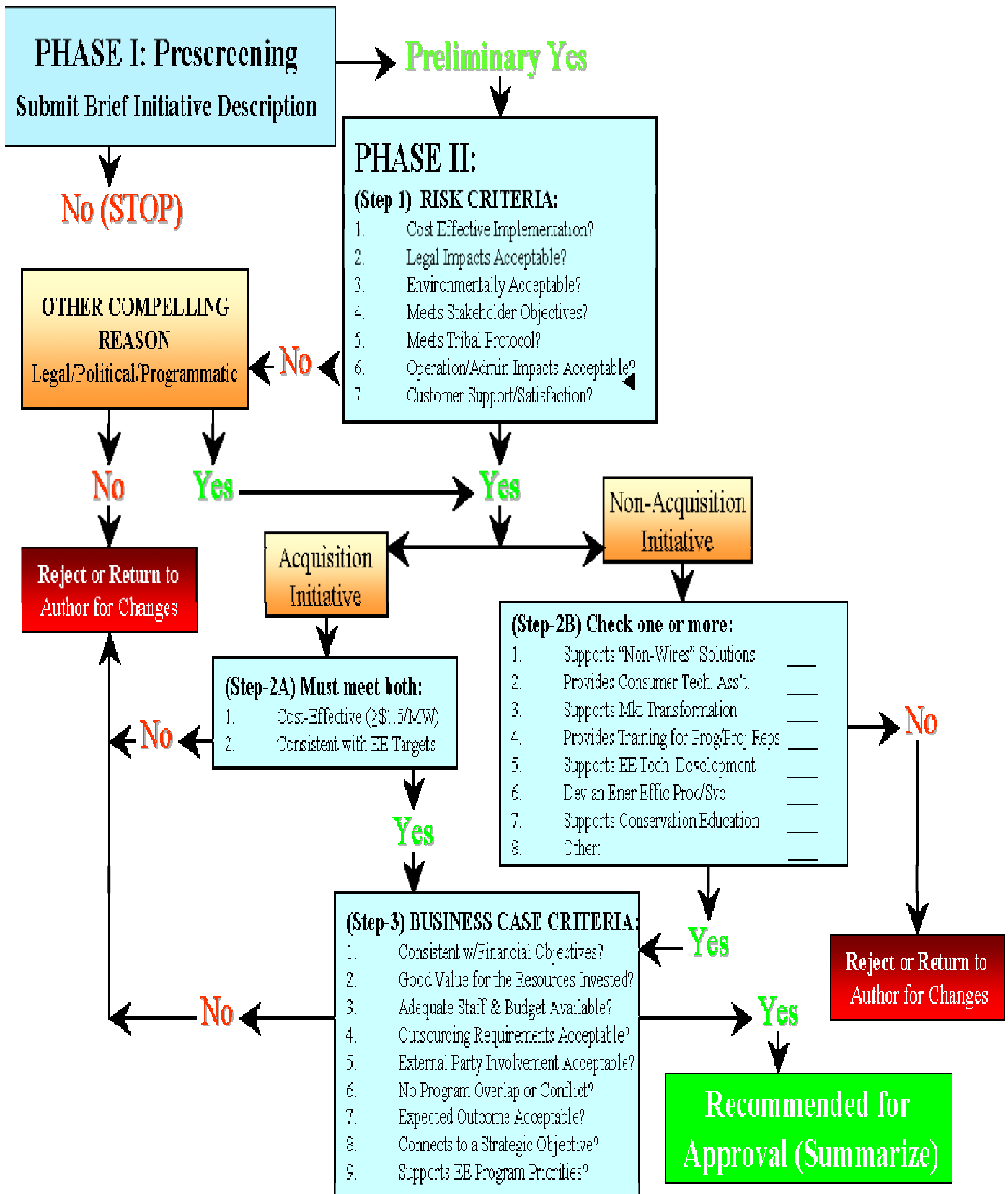
Are there legal, financial, political, environmental, or other risks?

Stakeholder involvement/support?

Delivery mechanism?

Key Evaluation Criteria?

The following flowchart describes the elements of Phase 2 of the New Proposal Screening process.



G: Conservation Reports

The EE Database and the Council's PTR system will be the sources for much of the data used to create various internal reports. Other data and reports will come directly from program managers and/or Contracting Officer's Technical Representatives (COTR). Although every attempt has been made to anticipate future reporting needs, there will be many reports and analyses done on an ad hoc basis. EE's information needs will continually evolve over time.

Table G-1 summarizes the frequency of the reports.

Table G-1: Frequency of Conservation Reports

Report	Monthly	Quarterly	Bi-Annual	Annual
Monthly Savings Report	X			
Contracts Signed/Pending	X			
Sector Reports	X			
CST/EER Activities		X		
Existing Programs/Initiatives		X		
CRC Savings			X	
NEEA			X	
FTE Report			X	
Evaluations			X	
Low Income Weatherization				X
RED Book				X

Monthly Reports

Monthly Savings Report

Purpose: To track progress toward fiscal year targets.

Description: Conservation achievements (aMW) aggregated for each program initiative and sectors. The CRC savings portion will be available bi-annually only.

Sources: This report will rely on data in the PTR system and EE Database.

Recipients: Energy Efficiency Management Team (EEMT).

Prepared by: Kevin O'Sullivan.

Signed and Pending Contracts (CAA)

Purpose: To track the number of projects signed and pending.

Description: This tracks the signed and pending bilateral contracts by program initiative, dollars and aMW.

Source: COTRs, tracking spreadsheets, PTR database.

Recipients: EEMT.

Prepared by: EERs and COTRs.

Sector Reports

Purpose: Updates on Sector Strategies, Plans, and Activities (Residential, Commercial, Industrial, and Irrigation)

Recipients: Planning, EEMT, Sector Leads.

Source: EE Database and PTR system.

Prepared by: Sector Leads and Kevin O’Sullivan

Quarterly Reports

Customer Service Team/EER Activities

Purpose: To track progress toward Program Marketing’s planned activities and targets.

Description: Detailed tracking of targeted activities (critical path, Balanced Score Card, and other), including due dates and accomplishments.

Sources: EERs.

Recipients: Program Marketing; EEMT.

Prepared by: EERs.

Existing Programs and Initiatives

In-depth reports may be needed for each of the following or any new programs or initiatives that arise. These would be prepared by COTRs and/or Program Managers.

- Residential Loan Program
- Grocery Store
- Savings with a Twist

Bi-Annual Reports

CRC and HWM Savings

Purpose: Activity Updates; customer spending. Will include spending on renewables.

Description: Utilities are required to report their CRC/HWM activities semi-annually. The CRC/HWM savings will be reported in the Monthly Savings Report when the information becomes available. The CRC/HWM Report will go into greater depth than the Monthly Savings Report.

Sources: PTR system and EE Database.

Recipients: Planning and EEMT.

Prepared by: Kevin O’Sullivan and Grant Vincent.

NEEA

Purpose: Progress report on BPA’s share of NEEA’s savings.

Description: Details of NEEA’s Market Transformation accomplishments.

Source: NEEA.

Recipients: EEMT.

Prepared by: Kevin O'Sullivan.

FTE Report

Purpose: To track FTE resources allocated to various EE activities.

Description: This data will be matched up with program activities.

Sources: Time sheets and Phyllis Chamberlain.

Recipients: Planning and EEMT.

Prepared by: Phyllis Chamberlain.

Evaluations

Purpose: Evaluations of initiative performance and market penetration studies.

Description: Provides details of any studies done of program and measure performance. Will be reported as evaluations and market research projects are completed.

Sources: Consultants and engineers.

Recipients: EEMT.

Prepared by: Bruce Cody and Lauren Gage.

Annual Reports

BPA Low Income Weatherization

Purpose: Activity report to track progress toward fiscal year targets.

Description: Dollars and aMW by state and by program.

Sources: COTRs, PTR system.

Recipients: EEMT.

Prepared by: Mark Ebberts.

RED Book

Purpose: To track historical conservation. This is a derivative report based on the data in the EE Database. It's disseminated publicly.

Due Date: March, yearly.

Sources: EE Database and PTR system.

Recipients: Internal and external.

Prepared by: Grant Vincent.

The following are samples of the Monthly Savings Report and the Sector Report.

Monthly Savings Report - Sample

Conservation Savings by BPA Funding Sources				
Installed Savings as of September 5, 2007	FY 2007 (aMW)	FY 2008 (aMW)	FY 2009 (aMW)	Total All FY's (aMW)
I. CONSERVATION ACQUISITION AGREEMENTS (CAA)				
A. Utility Programs				
Residential Standard Offer	0.056			
C&I Standard Offer	0.443			
C&I Lighting Offer	0.139			
IRAG Standard Offer	0.047			
Non-Standard Offers	0.000			
ConAug - C&I Standard	0.109			
ConAug - ESO Plus C&I Lighting	0.000			
ConAug - IRLC	1.178			
Utility Programs Subtotal	1.972			
B. Regionwide Programs (3rd Party)				
1) CFL/TFL Regional Program	0.000			
2) Energy Smart Grocers	0.000			
3) Water/Waste Water (BacGen)	0.000			
Regionwide Program Subtotal	0.000			
C. Federal Programs				
1) Lighting	0.000			
2) Non-Standard Offers	2.398			
Federal Program Subtotal	2.398			
I. CAA - TOTAL	4.37			
II. OTHER PROGRAMS				
A. Conservation Rate Credit (CRC) ¹	12.31			
B. BPA-funded Market Transformation ¹	14.67			
C. Low Income Weatherization (States) ²	0.28			
D. Fed'l Reimbursable (non-bilateral)	0.08			
E. ConAug	2.13			
II. OTHER PROGRAMS - TOTAL	29.47			
III. MISCELLANEOUS				
A. CAA Savings Reported, Pending Approval	1.15			
B. CRC Savings Reported, Pending Approval	3.99			
C. BPA Direct Funding (SWAT & Big Box)	2.12			

Sector Savings - Sample

Sector Savings by Selected Categories - aMW								
Installed Savings as of September 5, 2007	Funding Source						FY 2007	
	CAA	CRC	BPA Direct	ConAug	C&RD	Utility HWM	Year to Date	EE Target
SECTOR SAVINGS (AMW)								
Residential								
Lighting	0.082	1.292		0.002		0.107	1.483	10.4
Weatherization	0.052	0.379		0.005		0.008	0.445	1.0
HVAC	0.008	0.182		0.023		0.001	0.214	1.2
Appliances	0.007	0.456		0.000		0.053	0.516	0.4
Other	0.015	0.040		0.000		0.000	0.055	
CRC, estimated		3.78					3.78	
NEEA		0.66	13.28				13.94	8.0
Residential Total	0.164	6.79	13.28	0.030		0.17	20.43	21.0
Commercial								
Lighting (C&ILO/deemed)	0.782	0.823		0.113		0.426	2.143	6.0
Energy Smart Grocer Program							0.000	1.0
New Construction Program							0.000	1.0
Federal ¹	2.477			0.238		0.24	2.957	3.0
Other Retrofit	0.341	0.016		0.058		0.104	0.519	2.0
Targeted Initiatives/Misc							0.000	3.5
CRC, estimated		1.15					1.155	
NEEA		0.04	0.835				0.876	0.5
Commercial Total	3.60	2.04	0.83	0.41		0.77	7.65	17.0
Industrial								
Process	0.105	0.019					0.124	4.2
Compressed Air	0.257	0.178					0.435	2.0
Lighting	0.161	0.002					0.163	2.0
Wastewater/Municipal Water							0.000	0.3
Other	0.114	0.011		0.016		0.009	0.151	
CRC, estimated		0.45					0.450	
NEEA		0.03	0.550				0.577	1.5
Industrial Total	0.64	0.69	0.55	0.02		0.01	1.90	10.0
Agricultural								
SIS		1.057					1.057	1.0
Fittings/Hardware	0.025	0.170		0.023			0.218	0.8
Transformer De-energization							0.000	0.8
Pumps and Motors	0.022	0.116		0.043			0.181	1.0
Other		0.002					0.002	0.4
CRC, estimated		1.46					1.458	
NEEA			0.00				0.000	
Agricultural Total	0.05	2.80	0.00	0.07		0.00	2.92	4.0
TOTAL - ALL SECTORS	4.4	12.3	14.7	0.5		1.0	32.9	52
Savings Reported, Pending Approval	1.1	4.0				1.4	6.5	
Other Substantiated Savings			2.1		2.1		4.2	
GRAND TOTAL	5.6	16.3	16.8	0.5	2.1	2.4	43.6	52

Sector Report - Sample
FINAL
Monthly EE Sector Briefings

Month Reporting: _____

Sector Name: _____ Sector Team Lead: _____

2007 Total EE aMW Sector Target _____

2007 CAA aMW Target _____

2007 CRC aMW Target _____

Total aMW Booked for This Month _____

CAA aMW Booked _____

CRC aMW Booked _____

Total aMW Booked Year to Date _____

Total CAA aMW Booked _____

Total CRC aMW Booked _____

Outstanding Accomplishments This Month:

Outstanding Issues This Month:

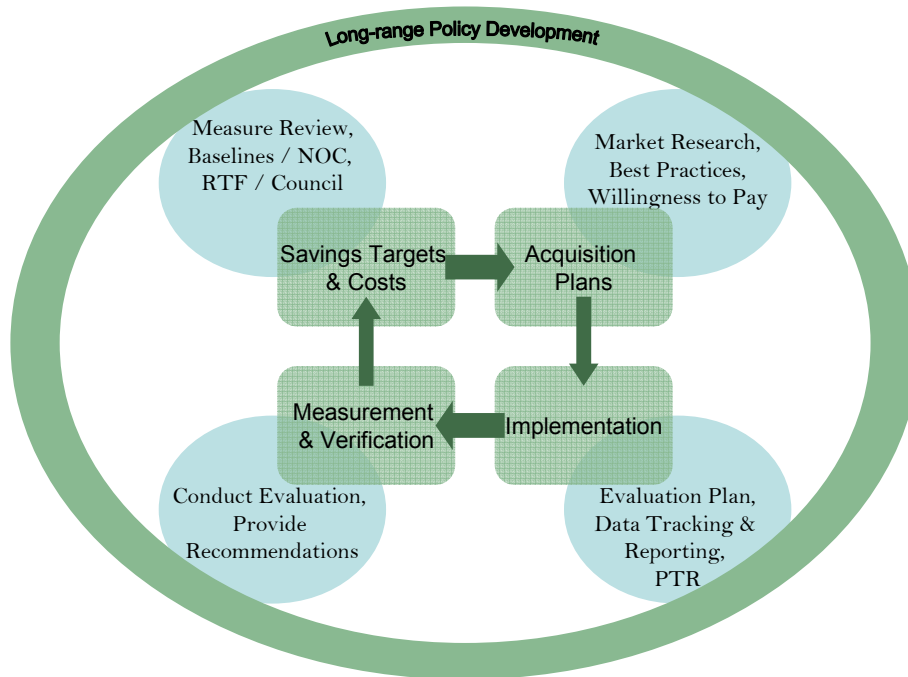
How Can the EEMT Help?

H: Evaluation and Planning: An Overview

BPA has a strategic objective to ensure the development of all cost-effective energy efficiency on the loads it serves. Figure H-1 shows a very simplified approach to conservation acquisition (in green boxes), including:

1. Regional energy **savings and load management targets** and the approximate costs are determined primarily by the Northwest Power and Conservation Council (Council) and the Regional Technical Forum (RTF). BPA determines its share of those regional targets and how to allocate those by sector.
2. **Acquisition plans** are developed by BPA to determine how to acquire the energy savings from targets that have been set.
3. **Implementation** of acquisition plans is conducted, reimbursements are paid and energy savings are acquired.
4. **Measurement and verification (M&V)** is completed and results are integrated into future program design.
5. Policy development and planning coordinates with regional stakeholders to develop **long-range policies** which provide a platform for effective conservation acquisition.

Figure H-1: Long-Range Policy Development



BPA recognizes the importance of planning and evaluating in its initiatives in order to develop successful acquisition strategies, improve the operations, discover and resolve barriers to success, and provide a rigorous accounting to policymakers about the actual accomplishments of the initiatives. The Planning and Evaluation department supports this process in various ways,

recognizing that the work overlaps and must be coordinated effectively with program implementation, engineering and contract management staff. This role is represented in the circles in Figure H-1, above.

1. **Savings Targets.** During the development of energy savings targets and cost effectiveness, Planning and Evaluation supports the Council and RTF with review of measures and costs, as well as supporting coordinated market research of baseline characteristics and estimation of naturally occurring conservation.
2. **Acquisition Plans.** As acquisition plans are developed by BPA sector teams, Planning and Evaluation supports this process with calculation of reimbursement levels, and market research, including best practices. Additionally, Planning and Evaluation manages and facilitates the Utility Sounding Board.
3. **Implementation.** Planning and Evaluation manages data tracking including energy efficiency databases and Redbook development. Early in the implementation process, Planning and Evaluation develops an evaluation plan, including a review of data tracking methods and reporting to ensure ease of future verification.
4. **Measurement & Verification.** During the M&V process, evaluation should conduct or sub-contract any process or impact evaluations, ensuring that results provide actionable recommendations which are incorporated into future acquisition plans.
5. **Long-range Policy Development.** On an ongoing basis, the Planning and Evaluation department coordinates with customers and other regional stakeholders to develop long-range regional policy, including participating in the Long-term Regional Dialogue and the high water mark (HWM) determination processes and rate cases, and provides support for the Regional EE Forum and load management policies.

Evaluation and Planning: FY 2008

This section provides an overview of the expected staff tasks and financial resources to be spent in FY 2008; the following section provides greater detail for specific elements.

Savings Targets

Staff: For the setting of targets and costs, Planning and Evaluation staff will participate in the following ongoing committees, including RTF and technical sub-committees, coordination with the Council for the development of the 6th power Plan, ETO Potential Advisory Committee, and NEEA Cost-effectiveness Committee. In FY 2008, Planning and Evaluation will co-fund and provide technical support for specific RTF research projects including roof-top HVAC and development of prescriptive commercial new construction packages. Additionally, staff will support and facilitate regional market characterization studies and determine an approach to estimate naturally occurring conservation (see below).

Financial: In FY 2008, BPA has budgeted funds for RTF contributions, estimation of baselines and naturally occurring conservation include market research of existing commercial buildings, residential new construction, and industrial.

Acquisition Plans

Staff: On an ongoing basis, the Planning and Evaluation department supports acquisition planning through developing the annual EE Energy Efficiency Plan, guiding the development of

sector strategies, determining BPA willingness-to-pay, assessing data on sector load growth forecasts and sub-sector loads, and managing the Utility Sounding Board process. To stay abreast of national and regional evaluation and planning research, staff will attend several conferences, participate in the CEE Evaluation Subcommittee, and develop a Regional Evaluator network. In FY 2008, Planning and Evaluation will be determining a CFL strategy over the next few years and conduct ad hoc best practices and market research.

Financial: For ad hoc planning initiatives, funding has been allocated in FY 2008.

Implementation

Staff: During program implementation, Planning and Evaluation staff will provide ongoing reporting and tracking, including PTR support, management of EE database and Redbook development. For FY 2008, specific activities include the development of evaluation plans for Commercial New Construction and EnergySmart Programs.

Financial: The primary financial outlay is for PTR system maintenance, training and additional development.

Measurement & Verification

Staff: In FY 2008, evaluations will be conducted in the following areas:

- Lighting Evaluation, process and impact
- Develop and conduct Industrial Impact Evaluation, impact
- Conduct evaluation of mini-split heat pumps
- Load management data analysis
- Assessment of TSP effectiveness
- Assessment of Irrigation Pump Testing effectiveness

Financial: Funds have been allocated for evaluations of Commercial/Industrial Lighting, Industrial, EnergySmart, Commercial New Construction, as well as miscellaneous evaluation activities.

Long-range Policies and Planning

Staff: In FY 2008, Planning and Evaluation staff will participate in the Long-term Regional Dialogue and the high water mark determination public processes and rate cases, and support the Regional EE Forum and load management policies.

Baselines and Naturally Occurring Conservation

In the Council's 5th Power Plan, savings targets include programmatic results as well as naturally occurring conservation, which have been estimated to annually be 52 and 4 aMW, respectively. Naturally occurring conservation is defined as the savings (by cost-effective measures) that would have occurred if the BPA programs had ended before the start of the Council's 5th Power Plan. This is measured by knowing the efficiency measures installed in regional buildings and facilities not attributable to BPA programs. The most direct measurement approach is to replicate original baseline research, such that BPA-attributed savings are those above the baseline, regardless of who paid for the measure. To determine the level of naturally occurring conservation, those measures claimed through acquisition programs, including the measured

market effects of NEEA programs will be subtracted. This difference is naturally occurring conservation.

Existing Commercial Buildings: Planning and Evaluation will work with NEEA to replicate and enlarge a study of energy efficiencies in existing buildings in a way that is comparable to the 2003 Non-residential Building Stock Assessment. This study will also meet the needs of the Council to formulate the 6th Power Plan, and will help NEEA estimate its effect on the market. Funding coordination is expected between BPA, the RTF, NEEA, and other utilities, including those Washington utilities affected by I-937 utilities.

Commercial New construction: NEEA has completed an assessment of commercial new construction. This will serve as a basis for the next Power Plan and NEEA's work in code development.

Residential Single-family (SF) and Multifamily (MF) new construction: NEEA is currently completing a residential new construction assessment.

Residential Existing: NEEA study was completed in 2005.

Industrial and Agriculture: There is a regional need for industrial and agriculture baseline assessments. Planning and Evaluation will work with the Council to determine best strategies for this market research.

Specific Measures: Large savings are expected in residential lighting; NEEA is tracking total volume of sales, and BPA will estimate regional naturally occurring conservation as the total sales volume, less program-acquisition bulbs. Other measures to utilize this strategy are efficient power supplies for computers and cordless phones, LED traffic lights, and water and wastewater treatment outside of BPA program reimbursements.

I. Energy Efficiency Initiative Plan Template

The template on the following page will be used for the planning and budgeting of each initiative.

**U.S. DEPARTMENT OF ENERGY
BONNEVILLE POWER ADMINISTRATION
ENERGY EFFICIENCY INITIATIVE PLAN
FY 2007**

1. DATE COMPLETED

2. INITIATIVE LEAD (*Name*)

2a. WORK ORDER NUMBER

2b. PHONE NUMBER

() -

2c. INITIATIVE NAME

2d. SECTOR

3. EE BALANCED SCORE CARD OBJ

3a. AGENCY BALANCED SCORE CARD OBJ. NO.

4. PURPOSE Why is EE doing this program? What are you trying to accomplish over the life of the program?

5. MARKET DESCRIPTION AND SIZE

For example, what is the total size of the market that EE will be targeting with this programmatic effort? What are the manufacturing and distribution channels? How many customer utilities? Total aMW energy usage? The total number of retail consumers? What is the current market penetration of the technology? Total potential and achievable aMW of savings potential?

6. TARGET MARKET

For example, how much of total market penetration does EE need to achieve the target energy savings, market transformation, or education/training objectives (*number of units, percent of total, aMW*)

7. PRIMARY DELIVERY MECHANISM (*Type of offer or umbrella contract, OR describe who will deliver the program*)

8. PARTICIPATION BARRIERS & BENEFITS (*Identify political, programmatic, regulatory, legal or financial obstacles that could detract from program success, situation and customer analysis, SWOT analysis (strengths, weaknesses, opportunities & threats)*)

U.S. DEPARTMENT OF ENERGY
BONNEVILLE POWER ADMINISTRATION
ENERGY EFFICIENCY INITIATIVE PLAN
FY 2007

9. PROGRAM STRATEGIES

What is your overall program strategy (For example, what will this program offer, who will make the offer to whom, how will it be packaged and promoted, leveraging opportunities, synergies with other programs).

10. PROGRAM GOALS OR DELIVERABLES FOR 2007

This may be list of hardware installation equipment/systems, energy education/training sessions, or other types of deliverables.

11. MARKETING AND COMMUNICATION PLAN

The who, what, when, where and how of what must be communicated; the audiences, messages, resource/tactics, materials, media, personal contacts, toolkits, etc. required.

12. INTERNAL COORDINATION AND SUPPORT REQUIRED

Which other BPA Organizations need to be involved in the planning, design, development and implementation stages of the program.

13. REGIONAL COORDINATION TO LEVERAGE RESOURCES:

Are there other organizations or agencies in the region with resources to offer in a collaborative effort with BPA?

14. EVALUATION PLAN: Describe how will we measure the success of your program.

14a. Baseline – What conditions exist prior to program implementation

14b. Impact – How will you measure the level of success

14c. What metrics should be used

**U.S. DEPARTMENT OF ENERGY
BONNEVILLE POWER ADMINISTRATION
ENERGY EFFICIENCY INITIATIVE PLAN
FY 2007**

15. 1 ST YEAR ESTIMATED FTE BY ORGANIZATION AND JOB TYPE		
FTE	ORG CODE	TYPE/NAME ADD column for "Role/Responsibility" for each person

16. PROJECT FINANCIAL COMMITMENT (FROM PN MANAGEMENT) Identify specific commitments that management has made to the project.

\$ _____ Time Period (i.e., 2007 through 2009)

17. ESTIMATED ANNUAL BUDGETS AND DELIVERABLES (Do not include internal staff costs)

FY	\$ Million	aMW	Other Category
FY 2007			
FY 2008			
FY 2009			
FY 2010			
FY 2011			

	\$MILLION	AMW
18. APPROVED BUDGET AND TARGET FOR CURRENT FY		
19. ACTUAL BUDGET SPENT AND AMW ACHIEVED INCEPTION TO 9/30/06		

20. KEY MILESTONES

DATE	MILESTONE DESCRIPTION, ACTION ITEMS

21. REFERENCES, LINKS & ATTACHMENTS