



BPA Brown Bag I-937 Tacoma's Perspective

Presented to NW Utilities

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Tacoma Power Overview



- Approximately 160,000 accounts
- Service territory 180 square miles
- Generation capacity: 713 MW
- Tacoma Power owns & operates four hydro power projects
- Tacoma Power purchases significant portion of power from BPA

A New World: The Mandate Stemming from Passage of I-937



- The Washington Administrative Code 194-37
 - Beginning in 2010, Tacoma Power must be actively acquiring all cost-effective conservation
 - Estimates of achievable conservation must be developed and established as targets with methodology consistent with Power Council's
 - Targets are subject to public review as part of HB1010 integrated resource planning law and....
 - Verification by State Auditor
 - Targets will be the basis for measuring compliance with WAC 194-37
 - Failure to meet targets subject to monetary penalty of \$50/MWh for each MWh not achieved

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Assessment of the Mandate



- WAC identifies three methods to determine targets
 - Power Council’s Calculator (70) (4)
 - Modified Power Council’s Calculator (70) (5)
 - Utility self-assessment (70) (6)
- Tacoma Power currently believes the self-assessment approach is most defensible
 - Consistent with Power Council methodology and generic results
 - Based on end-use efficiencies and customer characteristics unique to Tacoma Power service territory
 - Uses reputable third-party analysis to prepare a conservation potential assessment (CPA)

Assessment of the Mandate (cont'd)



- Targets
 - Targets to be achieved are not unprecedented
 - Comprehensive nature of acquisition is unprecedented
 - Targets supported by Conservation Potential Assessment
- Funding
 - Direct expenses for Tacoma Power may be unprecedented
 - BPA financial assistance unknown after 2010
- Planning Horizon
 - Ramp up period is critical to long-term success under WAC
 - Compliance under WAC commences in 2010 but....
 - Tacoma Power only has two years to put plan of action in place

Initial I-937 Activity



- Completed a Conservation Potential Assessment Jan. 2007
- Participated in the I-937 CTED rulemaking
- Conducting an Integrated Resource Plan
- Projected budget needs for future years
- Identified programs needed to meet the anticipated conservation targets
 - In the process of shifting to conservation acquisition programs & increasing incentives

Initial I-937 Activity



- Conducted a review of “best practice” utility conservation programs
- Started the process to hire new staff to meet the targets (4 new staff within the past year)
- Launched Refrigerator Decommissioning Program
- Signed a Conservation Acquisition Agreement with BPA regarding federal customers
 - Fort Lewis
 - McChord Air Force Base
- Signed an agreement 2/08 with PECl to offer the Energy Smart Program (Grocer)

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2007 Conservation Potential Assessment 20-Year Economic Potential



Sector / Segment	Economic Potential (aMW)	Percent of Potential
Residential	42.3	40%
Existing Retrofit	33.4	
Existing Equipment Replacement	4.2	
New Construction and Equipment	4.7	
Commercial	34.6	33%
Existing Retrofit	24.6	
Existing Equipment Replacement	3.9	
New Construction and Equipment	6.1	
Industrial	22.5	21%
Military	5.8	6%
<i>Totals</i>	105.2	
<i>Percent of Baseline Forecast</i>	697.4	15.1%

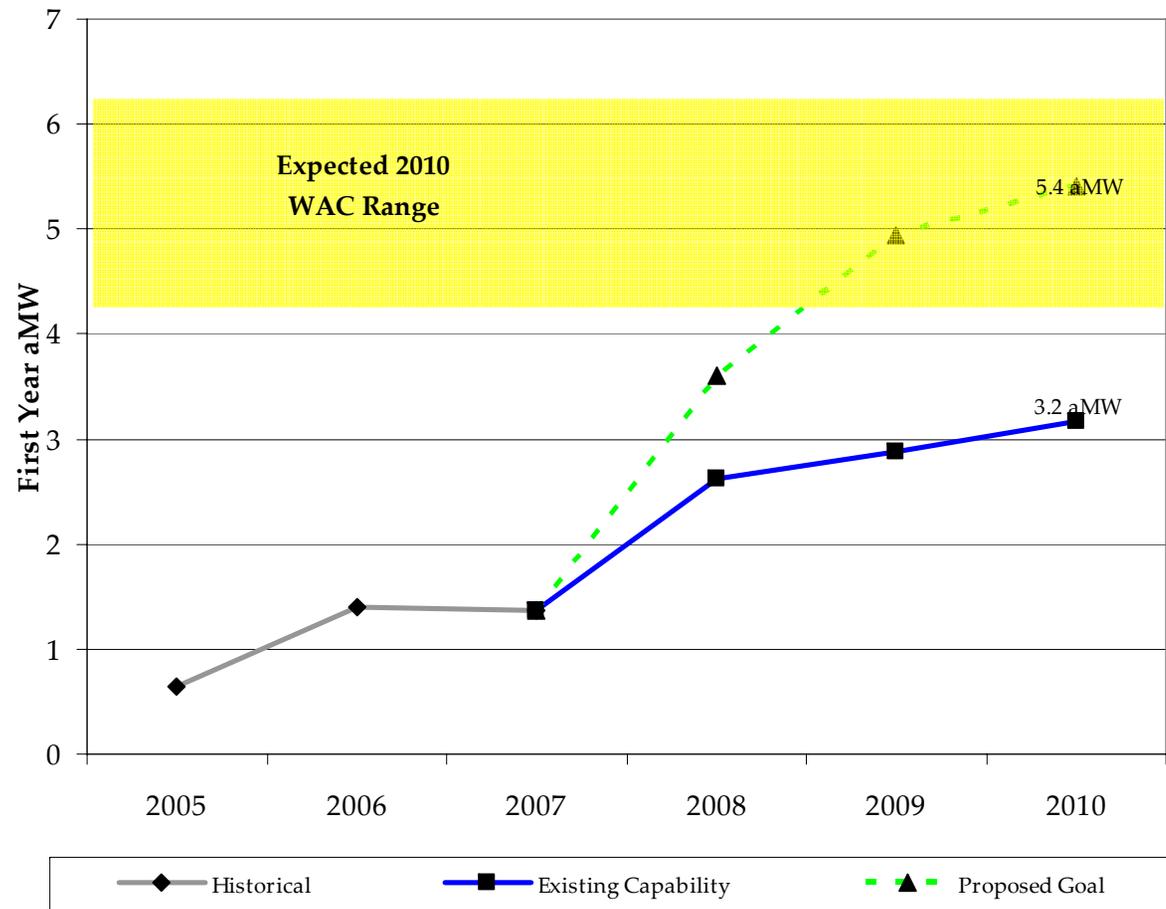
- Adjusted for programmatic costs, economic potential is 102 aMW
- Potential results may change with each new CPA
- This analysis is consistent with methodology used by the NWPCC

Acquisition Ramps in Perspective



Two paths considered

- **Existing Capability**
Use existing staff & new program designs
- **Proposed Goal**
Increase budget with new program designs



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Program Development Considerations



- Guiding principles for program design:
 - Meet customer needs
 - Develop programs to meet conservation goals
 - Meet cost effectiveness tests
 - Be consistent with neighbor utilities PSE, SCL and SnoPUD
 - Maximize trade allies as appropriate
- Challenges to overcome
 - Infrastructure to deliver conservation
 - Competition for trade allies and equipment
 - Competition for qualified staff
 - Local economy may impact conservation results
 - Customer and contractor acceptance of new technologies and programs

Planned Residential Programs



- Energy Efficient Showerheads & Aerators
- Modified Weatherization – SF, MF
- Expanded High Efficiency Heat Pump Program
- Energy Star Washwise
- Lighting Program, Fixtures and CFLs
- High Efficiency Water Heaters Program
- New Construction – SF, MF, Mixed Use

Planned Commercial & Industrial Programs



- Expanded Bright Rebates Program (lighting)
- New Construction Program
- Efficiency Options Program (custom projects)
- Equipment Rebates Program (VFDs, motors, HVAC)
- Building Retro-Commissioning Program
- Resource Conservation Manager Program

Recently approved programs:

- Energy Smart Grocer Program
- Fort Lewis & McChord Conservation Project

Conservation Program Priorities



- Strategically roll out new conservation programs
 - Seek budget authorization and approval
- Recruit and hire additional staff as needed
- Involve customers and key trade allies in the program development and refinement
- Make program participation streamlined and hassle free
- Coordinate with Puget Sound area utilities to provide consistent offerings & processes
- Create programs that provide operational flexibility to meet targets

Conservation Program Priorities (cont'd)



- Develop a marketing and communications plan for the conservation programs by sector
 - Capitalize on similar themes & issues such as climate change initiatives and sustainability programs if effective based on area-wide research
 - Develop and implement specific marketing plans for individual programs
- Maximize BPA funding and program opportunities
- Optimize debt financing given competing needs within Tacoma Power?
- Evaluate the impacts and processes of programs
- Update the conservation potential assessment every two years

Conservation Program Challenges



- Customer Perspectives
 - Identifying and utilizing marketing themes, approaches that are appealing to each market
 - Overcoming market barriers such as tenant-landlord issues
 - Establishing market intelligence and program familiarity that enables intervention at the optimal point
 - Balancing M&V of programs and projects while minimizing customer disruption
 - Keep the customer's experience with you positive
 - Balancing conservation program delivery by third parties contractors versus utilizing in-house staff

Conservation Program Challenges (cont'd)



- Sustaining programs from year to year which meet the targets
 - Managing participation levels (energy savings) for programs given the ramp up of neighboring utilities (example – showerheads)
 - Optimizing incentive levels to meet objectives
 - DON'T go for just the low hanging, low cost conservation
 - DO try to acquire all the conservation potential in a facility
 - DO aim above your target and hope that you hit it
 - Carry forward within a biennium
 - No Carry forward between bienniums
 - Timing of an accomplishment; year during which either the measures was installed or the utility paid for it. (80) (3)
 - Pay attention to more stringent local codes or service standards (80) (5)

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