

Appendix 3: Example Applications of WA Test

Example 1: Energy Efficiency

Program: Residential Appliance Rebate Program – electric only, non-low-income

Description: Utility provides point-of-sale rebate for high efficiency electric appliances

	Category	Impact	Included in BCA	Monetized in BCA	Notes
Electric Utility System Impacts	Generation	Energy Generation	Yes	Yes	Benefit of reduced electricity generation
		Capacity	Yes	Yes	Benefit to degree savings are coincident with peak
		Environmental Compliance	Yes	Yes	Benefit because measures reduce electricity generation
		Renewable Portfolio or Clean Energy Compliance	Yes	Yes	Benefit because measures reduce electricity generation
		Market Price Effects	Yes	Yes	Benefit from reduction in electricity consumption
		Ancillary Services	N/M	N/M	Could be modest benefit but excluded because not material
	Transmission	Transmission Capacity	Yes	Yes	Benefit from reduced transmission peak from lower consumption
		Transmission System Losses	Yes	Yes	Benefit from reduced transmission volumes.
	Distribution	Distribution Costs	Yes	Yes	Benefit from reduced distribution peak from lower consumption
		Distribution Voltage	N/M	N/M	Could be modest benefit but excluded because not material
		Distribution System Losses	Yes	Yes	Benefit from reduced distribution volumes
	General	Financial Incentives	Yes	Yes	Utility rebates for appliances
		Program Administration Costs	Yes	Yes	Utility cost to administer program
		Utility Performance Incentives	Yes	Yes	Cost of financial incentives
		Distributed Generation Tariffs	N/A	N/A	Not applicable
		Credit and Collection Costs	Yes	Yes	Benefit of reduced
		Risk	Yes	No	Addressed qualitatively
		Reliability	Yes	No	Addressed qualitatively
	Resilience	N/A	N/A	Not applicable	
	Gas Utility System Impacts	Not applicable – electric only measure			
Other Fuel Impacts	Not applicable – electric only measure				
Host Customer Energy Impacts	Host Customer	Measure Costs	Yes	Yes	Customer share of measure cost
		Transaction Costs	N/A	N/A	Point of sale rebate does not require incremental time to customer
		Interconnection Fees	N/A	N/A	Not applicable
		Risk	Yes	No	Addressed qualitatively

	Category	Impact	Included in BCA	Monetized in BCA	Notes
		Reliability	N/A	N/A	Not applicable
		Resilience	N/A	N/A	Not applicable
		Other Fuels	N/A	N/A	Not applicable
		Tax incentives	N/A	N/A	Not applicable
Host Customer NEIs	Non-low income	Water	Yes	Yes	Benefit for rebates specific to clothes washers creating reduction in water consumption
		Asset value	N/A	N/A	Not applicable
		Productivity	Yes	Yes	Benefit from reduced operations and maintenance expenses. Proxy % used to represent increase.
		Economic well-being	N/A	N/A	Not applicable
		Comfort	N/A	N/A	Not applicable
		Health & safety	N/A	N/A	Not applicable
		Empowerment & control	N/A	N/A	Not applicable
	Satisfaction & pride	N/A	N/A	Not applicable	
	Low-Income	Low-Income NEIs	N/A	N/A	Not applicable – non-low-income program
Societal Impacts	Societal	GHG Emissions	Yes	Yes	Benefit from reduced energy generation
		Other Environmental	N/A	N/A	Not applicable
		Public Health	No	No	No – benefit of reduced criteria air pollutants already included in Utility System Impacts.
		Economic and Jobs	N/A	N/A	Addressed separately
		Resilience	N/A	N/A	Not applicable
		Energy Security	N/A	N/A	Not applicable

Example 2: Electric Transportation

Program: Residential Off-Peak Charging Program

Description: Utility provides rebate to encourage off-peak charging

	Category	Impact	Included in BCA	Monetized in BCA	Notes
Electric Utility System Impacts	Generation	Energy Generation	Yes	Yes	Impact of load shifting on energy generation
		Capacity	Yes	Yes	Benefit of reduced peak
		Environmental Compliance	Yes	Yes	Potential benefit if off-peak tied to lower carbon generation or increased renewable generation.
		Renewable Portfolio or Clean Energy Compliance	N/A	N/A	Not applicable – load shifting only
		Market Price Effects	Yes	Yes	Benefit from reduction in peak consumption
		Ancillary Services	Yes	Yes	Benefit due to load reduction during peak hours
	Transmission	Transmission Capacity	Yes	Yes	Benefit from reduced transmission peak from lower consumption
		Transmission System Losses	Yes	Yes	Benefit from reduced transmission volume at peak
	Distribution	Distribution Costs	Yes	Yes	Benefit from reduced distribution peak from lower consumption
		Distribution Voltage	N/A	N/A	Could be modest benefit but excluded because not material
		Distribution System Losses	Yes	Yes	Benefit from reduced distribution volume at peak
	General	Financial Incentives	Yes	Yes	Utility rebate to participants
		Program Administration Costs	Yes	Yes	Utility cost to administer program
		Utility Performance Incentives	N/A	N/A	Not applicable – no utility incentive in place
		Distributed Generation Tariffs	N/A	N/A	Not applicable
		Credit and Collection Costs	N/A	N/A	Not applicable
		Risk	Yes	No	Could address through proxy or qualitatively
		Reliability	N/A	N/A	Not applicable
		Resilience	N/A	N/A	Not applicable
	Gas Utility System Impacts	Not applicable – electric only measure			
Other Fuel Impacts	Not applicable – electric only measure				
Host Customer Energy Impacts	Host Customer	Measure Costs	N/A	N/A	No customer cost
		Transaction Costs	N/M	N/M	Not material
		Interconnection Fees	N/A	N/A	Not applicable
		Risk	N/A	N/A	Not applicable
		Reliability	N/A	N/A	Not applicable

	Category	Impact	Included in BCA	Monetized in BCA	Notes
		Resilience	N/A	N/A	Not applicable
		Other Fuels	N/A	N/A	Not applicable
		Tax incentives	N/A	N/A	Not applicable
Host Customer NEIs	Non-low income	Water	N/A	N/A	Not applicable
		Asset value	N/A	N/A	Not applicable
		Productivity	N/A	N/A	Not applicable
		Economic well-being	N/A	N/A	Not applicable
		Comfort	N/A	N/A	Not applicable
		Health & safety	N/A	N/A	Not applicable
		Empowerment & control	N/A	N/A	Not applicable
	Satisfaction & pride	N/A	N/A	Not applicable	
	Low-Income	Low-Income NEIs	N/A	N/A	Not applicable – non-low-income program
Societal Impacts	Societal	GHG Emissions	Yes	Yes	Potential benefit if off-peak tied to lower carbon generation or increased renewable generation.
		Other Environmental	N/A	N/A	Not applicable
		Public Health	No	No	No – benefit of reduced criteria air pollutants already included in Utility System Impacts.
		Economic and Jobs	No	No	Addressed separately
		Resilience	N/A	N/A	Not applicable
		Energy Security	N/A	N/A	Not applicable