## **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		
	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		
Electric	11413111331011	Transmission System Losses	Yes	Yes	Benefit from reduced transmission volumes.		
Utility System		Distribution Costs	Yes	Yes	Benefit from reduced distribution peak from lower consumption		
Impacts	Distribution	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		
		Financial Incentives	Yes	Yes	Utility rebates for appliances		
	General	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	Not applicable – electric only measure						
Impacts		Measure Costs	Yes	Yes	Customer share of measure cost		
Host Customer Energy Impacts	Host Customer	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
		Water	Yes	Yes	Benefit for rebates specific to clothes washers creating reduction in water consumption
		Asset value	N/A	N/A	Not applicable
Host	Non-low income	Productivity	Yes	Yes	Benefit from reduced operations and maintenance expenses. Proxy % used to represent increase.
Customer		Economic well-being	N/A	N/A	Not applicable
NEIS		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

Energy Generation   Yes   Yes   Impact of load shifting on energy generation		Category	Impact	Included in BCA	Monetized in BCA	Notes		
Environmental Compliance   Yes   Yes   Potential benefit if off-peak tied to lower carbon generation or increased renewable generation.			Energy Generation	Yes	Yes			
Generation   Gen			Capacity	Yes	Yes	Benefit of reduced peak		
Clean Energy Compliance   N/A   N/A   Not applicable - load shifting only		Generation	Environmental Compliance	Yes	Yes	lower carbon generation or increased		
Market Price Effects   Yes   Yes   Consumption				N/A	N/A	Not applicable – load shifting only		
Program Administration   Program Administration   Costs   Program Administration   Costs   Program Administration   Program Administration   Traiffs   Credit and Collection Costs   N/A   N/A   Not applicable   Program Injaces   Program Injaces			Market Price Effects	Yes	Yes	-		
Transmission    Transmission   Transmission   Transmission   Transmission System   Yes   Yes   Peak from lower consumption   Transmission System   Yes   Yes   Peak from reduced transmission volume at peak			Ancillary Services	Yes	Yes			
Transmission System   Yes   Yes   Benefit from reduced transmission   Ves		Transmission	Transmission Capacity	Yes	Yes			
Distribution   Dist	Flectric	Transmission	•	Yes	Yes			
Distribution   Distribution   Distribution   Distribution Voltage   N/A   N/A   Could be modest benefit but excluded because not material	Utility	Distribution	Distribution Costs	Yes	Yes			
Distribution System Losses   Yes   Yes   Volume at peak	-		Distribution Voltage	N/A	N/A			
Program Administration   Yes   Yes   Utility cost to administer program			Distribution System Losses	Yes	Yes			
Costs   Tes   Tes   Utility Cost to administer program			Financial Incentives	Yes	Yes	Utility rebate to participants		
General   General   Incentives   N/A   N		General		Yes	Yes	Utility cost to administer program		
General  Tariffs  N/A  N/A  Not applicable  Credit and Collection Costs  N/A  N/A  Not applicable  Could address through proxy or qualitatively  Reliability  N/A  Not applicable  Resilience  N/A  Not applicable  Resilience  N/A  Not applicable  Resilience  Not applicable – electric only measure  Not applicable  Not applicable  Not applicable  Risk  N/A  N/A  Not applicable			1	N/A	N/A			
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 Other Fuel Impacts  Host Customer Energy Impacts  Risk Yes No Could address through proxy or qualitatively N/A N/A N/A Not applicable  Not applicable – electric only measure  Not applicable – electric only measure  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				N/A	N/A			
Risk Yes No qualitatively Reliability N/A N/A Not applicable  Resilience N/A N/A Not applicable  Resilience N/A N/A Not applicable  Not applicable – electric only measure  Impacts  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			Credit and Collection Costs	N/A	N/A	Not applicable		
Reliability Resilience N/A N/A Not applicable  Gas Utility System Impacts Other Fuel Impacts  Not applicable – electric only measure			Risk	Yes	No	<b>5</b> . ,		
Not applicable – electric only measure			Reliability	N/A	N/A	Not applicable		
Not applicable – electric only measure    Not applicable – electric only measure			Resilience	N/A	N/A	Not applicable		
Not applicable – electric only measure       Host Customer Energy Impacts     Host Customer     Host Customer     Measure Costs     N/A     N/A     N/A     Not customer cost       Interconnection Fees     N/M     N/M     N/M     Not applicable       Risk     N/A     N/A     N/A     Not applicable	System							
Measure Costs   N/A   N/A   No customer cost								
Host Customer Energy Impacts  Transaction Costs N/M N/M Not material  Interconnection Fees N/A N/A Not applicable  Risk N/A N/A Not applicable		Not applicable – electric only measure						
Customer Energy Impacts  Host Customer Risk  N/A N/A Not applicable  Risk  N/A N/A Not applicable	Host Customer Energy		Measure Costs	N/A	N/A	No customer cost		
Energy Impacts Customer Customer Risk N/A N/A Not applicable Risk N/A N/A Not applicable			Transaction Costs	N/M	N/M	Not material		
Impacts Risk N/A N/A Not applicable			Interconnection Fees	N/A	N/A	Not applicable		
			Risk					
			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
		Water	N/A	N/A	Not applicable
		Asset value	N/A	N/A	Not applicable
		Productivity	N/A	N/A	Not applicable
114	Non-low	Economic well-being	N/A	N/A	Not applicable
Host Customer	income	Comfort	N/A	N/A	Not applicable
NEIs		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