## **Appliance Swapping Program**

**Proposed Action:** Appliance Swapping Program. Develop a Pay-As-You-Save Program under the Conservation and Load Management Fund to replace old appliances in the residential sector with new Energy Star Appliances. Appliances to be covered include Energy Star Tumble Clothes Washer, Energy Star Refrigerator, Energy Star Room A/C (6500 BTU), and Energy Star Dish Washer.

## Results Of Assessments For 2010, 2020 And Beyond (Where Applicable):

The appliance swapping program is estimated to reduce GHG emissions of:

2010: 0.016 MMTCO<sub>2</sub>e 2020: 0.020 MMTCO<sub>2</sub>e

The GHG savings were estimated by multiplying the incremental electricity savings of new Energy Star Units compared to old units by the number of units replaced each year by the marginal CO<sub>2</sub> emission factor for regional electricity grid. Assumptions are shown in the following table.

	Savings Compared to Older Unit (kWh/yr/unit)	Number of units replaced annually (units)	Lifetime [1]
Energy Star Tumble	281	3,000	14
Clothes Washer			
Energy Star Refrigerator	1,200	3,000	15
Energy Star Room A/C (6500 BTU)	100	3,000	10
Energy Star Dish Washer	186	3,000	10

Source: Savings estimates from DPUC, Number of units replaced estimated Note [1]: It was assumed that savings would only be generated during the first seven years of the equipment life.

The appliance swapping program will reduce indirect emissions from electricity consumption. The estimated savings and costs are as follows:

	2010	2020
Direct Emissions Reductions (MMTCO2e)	NA	NA
Indirect Emissions Reductions* (MMTCO2e)	0.016	0.020
<b>Total Emission Reductions (MMTCO2e)</b>	0.016	0.020

Note: Estimates of Indirect emission reductions (due to decreased electricity consumption from the electricity grid) are based on the marginal grid emission factor for

NEPOOL region. See EE Model Run for the interactive effects of all electricity demand side measures.

NA: Not Applicable

Levelized annual costs were estimated to be  $-94 \ \text{ft CO}_2$ . This estimate is based on the incremental cost of the equipment and the cost savings associated with reduced electricity consumption.

While not quantified this measure will also reduce the emissions for hydroflourocarbons (HFCs) and chloroflourocarbons (CFCs) leaked into the atmosphere from refrigerators and A/C units.

## **Stakeholder Views:**

The Stakeholders agreed to this recommendation through unanimous consent.

## **Public Views:**

<TBD>