

**Response of  
Interstate Power and Light Company  
to  
OFFICE OF CONSUMER ADVOCATE  
Data Request No. 43**

Docket Number: EEP-08-1  
Date of Request: July 3, 2008  
Response Due: July 11, 2008  
Information Requested By: Jennifer Easler  
Date Responded: July 11, 2008  
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Subject: Appliance Recycling – Savings Calculation

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- A. How are savings being calculated?
- B. Are savings claims different for each appliance type?
- C. What are the assumptions; for example what proportion of appliances would continue to run without the program?
- D. Are savings due to the recycling of materials factored in?
- E. Is the kWh savings net of the new appliance that will be purchased to replace the old one or is it gross savings from eliminating the old appliance?

**Response**

- A. The savings for the units are based on the assumption that an old refrigerator unit uses approximately three times the amount of energy as a commercially available refrigerator, while an old room air conditioner uses approximately 50 percent more than a standard unit.
- B. The assumption is that recycling an old refrigerator/freezer saves 1,300 kWh on average. This value was based on the Joint Utility Assessment and IPL's 2005 KEMA evaluation and is a composite of the savings potential from three different scenarios that depend on whether there are one or two refrigerators (main and backup) in the home and whether a new refrigerator is purchased:
  - (1) A backup refrigerator is eliminated through the IPL program. No new purchase.

- (2) A new refrigerator is purchased, the former main refrigerator becomes the backup and the former backup is eliminated through the IPL program.
- (3) A new refrigerator is purchased, there is no backup refrigerator and the former main (and single) refrigerator is eliminated via the IPL program.

In each case the savings are different.

The savings for an old room air conditioning unit is 834 kWh. This estimate is based on IPL's 2005 KEMA evaluation, as this measure was not examined in the Joint Utility Assessment.

- C. There is no explicit assumption about whether the equipment will be replaced. For cost-effectiveness purposes, the measure life is assumed to be half that of a new piece of equipment, assuming the old equipment would have stopped functioning sooner than a new appliance.
- D. No, savings due to the recycling materials are not factored in.
- E. See response to Part B above.