**WORKPAPER DISPOSITION FOR**

**Refrigerator and Freezer Recycling**

**California Public Utilities Commission, Energy Division**

March 1, 2013

Refer to Table 1 for a list of currently submitted IOU workpapers that cover refrigerator recycling.

Table 1 – Refrigerator and Freezer Recycling

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| --- | --- | --- |
| **Workpaper ID** | **Workpaper Title** | **Date** |
| **SCE** |  |  |
| SCE13AP007 | Recycling of Appliances Preventing Continued Use | 5/24/2012 |
| **PG&E** |  |  |
| PGECOAPP119 | Refrigerator or Freezer Recycling | 6/25/2012 |

**Workpaper Disposition:**

**2013-2014 Disposition Summary**

PG&E’s workpaper uses all DEER values and is mainly developed to link all DEER values together including savings, NTG, EUL and cost values. PG&E’s workpaper is approved as submitted. SCE’s workpaper, in addition to linking DEER values together, includes the following additional measures:

1. Retailer collection of appliances: The retailer who sells a new appliance will collect the replaced appliance from the customer. This method assumes a 9% higher savings for each collected appliance.
2. DEER nonresidential building types: Savings values for appliances collected from DEER nonresidential building types have different savings values, based on the DEER lighting interactive effects values.

**SCE Retailer Solution**

SCE has proposed a delivery mechanism whereby the appliance retailer is incented to collect the old appliance. SCE proposed greater savings for this collection method with the following justification:

*For the “retailer” solution codes (i.e. AP-NEW01 and AP-NEW02), the energy savings and demand reduction values of the READi outputs for standard refrigerator and freezer recycling were increased by 9%. This is because the SCE Retail Appliance Recycling Program Trial showed that the refrigerators and freezers recycled through the retail program consume on average 9% more than those recycled through the ARP [A]. To approximate these savings, the 9% increase was applied to the whole building values rather than the direct end use then apply interactive effects. The interactive effects used would either be CFL or Non-CFL lighting approximations. A closer representation would be the actual ARP results with interactive effects applied, recognizing there is a small (< 1%) error when applying the 9% to the interactive effects as well.*

The savings values for the retailer solution are not approved for the following reasons:

1. Unit Energy Consumption (UEC) values for collected appliances contained in DEER are based on the 0608 Residential Retrofit evaluation and include all methods of collection including retailer collection of replaced appliances. Separating out one particular collection method where collected appliances have higher UECs, will in turn, lower the overall UECs of appliances collected using other methods. The workpaper does not consider this effect and uses the DEER UEC for appliances collected using other methods. In order to approve the retailer solution, the UECs for collected appliances need to be recalculated, with the retailer collected appliances being in their own category.
2. The retailer solution does not consider the possibility of lower net-to-gross ratio. The Residential Retrofit evaluation identified “removal by dealer” as the most likely free-rider scenario for primary refrigerators in SCE’s service territory[[1]](#footnote-1). It is likely that the NTG for the retailer solution is lower than the overall NTG identified in the report and incorporated into DEER.

Proposed savings values for the retailer solution are not approved. Instead the retailer solution shall use the DEER savings values without modification.

1. Residential Retrofit High Impact Measure Evaluation Report, CPUC, February 8, 1010, Table 131 [↑](#footnote-ref-1)