

ARCI Appliance Recycling Canada Inc.

Peter H. O'Dell
Assistant Board Secretary
Ontario Energy Board
P.O. Box 2319
26th Floor, 2300 Yonge Street
Toronto, ON M4P 1E4

July 19, 2005

Dear Mr. O'Dell,

ARCI is a Canadian company that was established in response to the urgent announcement of an initiative last year, by the Premier and Energy Minister of Ontario, to reduce electricity consumption by 5% or 1350 MW per day by 2007. Each of them identified a "beer fridge" bounty program as an integral part of this government strategy

Since California, in the past twenty years, has reduced peak demand by 10,000 MV through effective demand side management, we researched the state's energy conservation initiatives and determined that the Residential Appliance Recycling Program (refrigerators) is the largest of the California PUC's 103 residential demand mitigation programs, receiving more than 7% of the \$278 million annual budget. Next to CFL lighting, the RARP program is the most cost effective rated at a Total Resource Cost of 6.57 and a Program Administrator (Utility) Cost of 2.69.

We established a liaison with JACO Environmental of Snohomish, Washington, the leading operator of refrigerator demand side programs in the U.S western states. This relationship enables us to transfer, for immediate scalable implementation, the experience and technology of California's proven programs. In discussions with the Energy Minister and his Parliamentary Assistant, Donna Cansfield they have expressed their desire to see a comprehensive province-wide refrigerator recycling program implemented as soon as this fall.

ARCI supports Canada's commitment to the Kyoto accord and the UNEP's Montreal Protocol which necessarily includes environmental issues of refrigerator recycling. We have established that the collection and environmentally responsible recycling of a single RARP program typical refrigerator has a Kyoto and Montreal Protocol value equivalent to taking two cars off the road for one year. CFC-11 and 12, PCB's, and mercury components of refrigerators must be handled in a legal and socially responsible manner. California deals effectively and legally with these issues without compromising the demand reduction value of the RARP program. Our American sister firm, JACO Environmental has demonstrated leadership in environmental responsibility by participating on a UNEP task force on Foam (CFC-11) End of Life Issues and received last year's EPA's International Ozone Protection Award.

We strongly urge the OEB to ensure that any program involving the collection and dismantling of refrigerators (and other appliances) take into consideration the environmental issues.

ARCI, through Phil Sisson of Sisson and Associates (see note**), hereby provides its comments regarding the draft "Guide to Total Resource Cost Analysis" based on JACO Environmental's extensive

experience implementing refrigerator recycling programs for electric utility companies in the western U.S. (e.g., at Pacific Gas and Electric in California; at Utah Power and Light in Utah).

As a result of this program experience, JACO Environmental has worked extensively on matters of program design, cost-effectiveness, and reporting, and wishes to provide the OEB with key insights regarding the draft Guide.

ARCI's comments are indexed by Guide page number references, and are arranged sequentially. General comments regarding the Guide then follow.

In addition to our comments on the guide we will forward to the Energy Board, c/o Stephen McComb, a cost effectiveness model detailing the values of a typical refrigerator recycling program applied to Ontario. We will also forward the details of a Program Administrator (Utility) Cost outline, an important complimentary tool to the TRC test for evaluating demand side conservation programs.

ARCI looks forward to working with the OEB in the course of the development of the final version of the Guide.

Sincerely,

Art Eggleton

Partner, ARCI, Appliance Recycling Canada, Inc.

cc: The Honourable Dwight Duncan, Minister of Energy

The Honourable Donna Cansfield, Parliamentary Assistant to the Minister of Energy

Peter Love, Chief Conservation Officer, Ontario Power Authority

** Note: Phil Sisson of Sisson and Associates, Raphael, California, is a senior EM&V consultant with more than 20 years experience in the North American Electricity Market. His clients include, among others, the major Utilities in California and JACO Environmental.

ARCI COMMENTS ON THE OEB's DRAFT

"GUIDE TO TOTAL RESOURCE COST ANALYSIS" (dated July 6, 2005)

- Pages 3-14 (regarding Section I re the Model): is an official, tangible "model" (e.g., in Excel) forthcoming from the OEB? Or is the expectation that the distribution utilities (and others, as needed) will each develop their own models?
- Page 3, footnote 4: mention is made of the 1987 California Standard Practice Manual. Please note that this particular document was updated/corrected in 1988, and again in 2001. We are happy to provide an updated version to the OEB in electronic format if desired.
- Page 5, footnote 6: the OEB-approved discount rate is to be an after-tax cost of capital. Pragmatically, that value will be a "real world" nominal dollar value that is reflective of inflation expectations. Note, however, that the avoided costs in the Navigant study are in real C\$ terms (specifically, in 2005 C\$). Hence for a logically consistent economic analysis, 1) avoided costs should be expressed in nominal dollar terms, or 2) the discount rate should have the inflation component backed out of it.
- Page 7, Section 1.2.1 reference to the Navigant study's Table 21: we note that the Table 21 time series of avoided costs is the data set that does not include avoided "environmental damage" C\$ values. In contrast, Navigant study Table 23 *does* include such data. In light of national obligations associated with the Kyoto treaty, we find it odd that OEB does not wish to consider TRC Test results either with the avoided environmental damage values included, or at least "both ways", and we urge the OEB to evaluate CDM programs accordingly. We note that California Public Utilities Commission and Energy Trust of Oregon regulatory bodies – not bound by the Kyoto treaty – *always* evaluate CDM programs including dollar values associated with avoided "environmental damage."
- Page 7, Section 1.2.1 reference is made to Attachment B: the correct term appears to be Appendix B.
- Page 7, Section 1.2.1 reference to "distribution system avoided capacity costs": is the OEB referring to values seen in the two example worksheets in Appendix B (i.e., \$6.50/kW beginning in year 4 (2009))?
- Page 7, Section 1.2.2: in the two example worksheets in Appendix B, energy savings (i.e., kWh and kW) start by being defined at the end user level (see Table A values). Table A values are then increased by 4% to account for average distribution system losses (see Table B values). Instead, why not increase avoided costs by 4% to keep energy savings metrics specified at the end user level (as is done in most U.S. jurisdictions running CDM programs)?
- Page 8: this particular discussion focuses entirely on "normal replacements." The Guide would be well served by extending the narrative to include modeling treatment of "early replacement" situations (since some CDM programs may implicitly or explicitly target such behavior). There are pragmatic implications for the energy savings, measure costs, and measure life assumptions used in the cost-effectiveness analyses (relative to normal replacement situations).
- General: the Guide does not appear to include any discussion of a Program Administrator Cost Test (in California and elsewhere, also formerly known as the Utility Cost Test). This situation strikes us as odd, given that 1) the data requirements are extremely similar to the TRC Test data

- requirements, and 2) inclusion of such information would facilitate comparison of CDM program attributes with conventional supply side resources.

- General – regarding the July 6, 2005 Excel file of CDM measure attributes (e.g., savings, costs, life, free rider attributes) accompanying the Guide: are such data *required* to be used in OEB filings regarding cost-effectiveness analyses, or only if better, well-substantiated data aren't readily available? ARCI notes, for example, that the information sources for refrigerator and freezer recycling measures are well over 10 years old (and probably could be improved upon through reliance on more recent, formal EM&V study data from elsewhere in Canada and/or the United States).