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Memorandum

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Cc: Graham Smith, Manager, Program Delivery
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From: Stephen Lachan, Program Advisor, Low Income

Date: June 18, 2017

Re: Save on Energy Home Assistance Program & the Affordability Fund Trust: challenges for customers and risks to electricity system value

In August 2017, the IESO was issued a Directive to design, fund, and deliver conservation programming targeted to low income electricity customers province wide, beginning in January 2018. Around the same time, the Fair Hydro Act introduced the Affordability Fund Trust (AFT) programming stream – a program designed to provide an offering similar to the IESO's low income Home Assistance Program (HAP) for non-low income customers that may be struggling with their electricity costs. The AFT's *Declaration of Trust* was explicit that the AFT is unable to service low income HAP-eligible customers.

As the IESO approached identifying and implementing program tweaks to HAP, the IESO's program delivery team participated in numerous discussions with the AFT's program design team in late 2017 related to the expected market potential for the centrally-managed HAP, and the resulting impact on the AFT target market. The AFT Board of Directors, comprised of LDCs, Ministry Staff, and a community partner expressed concern with their achievable potential being eroded due to HAP program tweaks implemented by the IESO. These discussions culminated with a clarifying meeting with the Deputy Energy Minister in December 2017, with the HAP tweaks proceeding to implementation as planned.

Following the release of the IESO's HAP program delivery Request for Proposals in late 2017, the HAP program delivery team has convened regular meetings with the Affordability Fund Trust in an effort to foster effective coordination between the two programs' roll-out and program delivery activities. The discussions have focused primarily sharing of information, discussion of best-practices for coordination, and identifying and addressing potential issues that may arise during program delivery.

Both the AFT and HAP teams are in agreement that program delivery should maintain a customer focus to ensure coherence of energy conservation and energy support programs marketed to customers. However, following the launch of both programs, **a problematic measure-offering disparity has emerged in which the AFT is offering Air Source Heat Pumps (ASHP) and and HAP is not, resulting in higher income customers having access to a more expansive measure-offering than low-income HAP-eligible customers.**

In addition, at the time of this memo some LDCs are advertising offering Ground Source Heat Pump measures (average cost of $30,000) through the AFT, and others are considering the inclusion of other 'big-ticket' appliances such as washers, dryers, and stoves –which have limited ability to deliver impactful electricity/ cost savings due to the intermittent nature of their use.

A summary of the program offerings, and their key differences, is summarized below:

	AFT	**HAP**

Program Offering	• Three tiers of program offering (depending on customer's level of affordability need)
	  ○ Level 1: Energy Saving kit ("Basic Measures") mailed to customers
	  ○ Level 2: In-home Energy Audit and assessment of appliances (Fridge, freezer, AC, potential of other lower-savings appliance measures (Washers, Dryers, Stoves)**
	  ○ Level 3*: Insulation, Heat Pumps**
		• In-home Energy Audit and assessment for all participants
		• Basic measures installed and appliance measures assessed during the audit; with possible replacement of fridge, freezer, window AC, and dehumidifier measures offered
		• Assessment for weatherization measures performed during the initial audit*

Measure-inclusion criteria	Unclear	Evidence-based impact assessment

Programming Objectives	To improve participants' electricity affordability	To deliver persistent energy savings, and in turn cost-savings to customers through the professional installation of no-cost efficiency measures, while providing measurable benefits to the Ontario system and value to ratepayers
Delivery/ Administration Model	• LDC led delivery with multiple service providers • Delivery and customer support facilitated in part by central services (administered by Hydro One) • Governance by AFT Board of Directors	• Centrally Managed with opportunities for LDC involvement • One service provider delivering province wide
Number of core administrative (ie. non-outsourced) FTE resources	Estimated: ~10-15 Centrally ~10-15 among LDCs	~5
Gas Utility Collaboration?	No	IESO Central Service Provider cross promotes and co-delivers HAP with DSM programming to eligible customers. IESO will be exploring a single-window codelivred program through HAP program design activities set to commence in the latter half of 2018
Consistent offering province-wide	No, LDC-delivered with regional variances in administration and measure-offering	Yes, single service provider which leverages both central services and local resources across the province
Estimated Budget	$100,000,000	$ 30,000,000/yr
Estimated Participation	50,000	17,000/yr
Evaluation activities and metrics	None/TBD	Cost Effectiveness protocols

*Electrically heated customers only

** source of measure-offering disparity

Though the IESO would ideally like to match the programs' measure offerings, preliminary pilot findings suggest that provision of *no-cost* ASHPs may not consistently deliver meaningful savings relative to their cost ($5,000-$10,000 on average); customers must retain their existing heating systems (due to limitations with ASHP heating ability in extreme cold) and thus run the risk of having both systems operating at the same time. This is supported by IESO evaluation results related to ASHP rebate program piloted by a large LDC. Further, ASHPs may contribute to added costs to customers for cooling, and from a system perspective may add to peak summer load.

With respect to ASHPs, there may be a higher likelihood of savings if there is sufficient participant engagement and education (ie. to minimize the likelihood that customers will run both heating systems concurrently when not necessary); however it is not clear how this can be effectively facilitated by the programming model without resulting in further costs. Regarding the other unaligned measures (GSHPs, washers, dryers, stoves), there minimal evidence that these measures offer sufficient electricity-savings to justify their costs and thus are appropriate to be provided at no-cost within a province-wide conservation program.

Effective collaboration between the AFT and HAP delivery teams with respect to customer communications may help minimize customer escalations related to the HAP and AFT programming variances; however, the disparity cannot be addressed through communications alone. Further, the AFT and LDCs are actively marketing the Program and its full suite of measures, creating confusion and hostility among low-income (HAP-eligible) customers who contact the AFT only to learn they are not eligible and must go through HAP. Low income customers, understandably, have expressed confusion as to why they are unable to access the significantly costlier measures marketed through the AFT as a result of having too low of income.

In light of this, the IESO has identified the following potential recommendations, broken up by expected future prospects of the AFT (ie. whether it is expected to continue or whether it is expected to be removed from the market by government)

Expected AFT Continuation

1. ***Amend AFT legislation to allow the AFT to only fund HAP-equivalent measures***

Who does it involve? Government (MOE)

What would be the impact? Logical measure alignment across program streams; Potential customer/partner/ LDC push-back (resulting from a contracted measure offering);

When could this take effect? ~Q4 2018.

2. ***Allow the AFT to service HAP customers for incremental measures (eg. Heat Pumps) once they complete HAP***

Who does it involve? Government (MOE); AFT and IESO

What would be the impact? Allows HAP measures to be provided with funding incremental to current Conservation First Framework budgets and without rate-base EE requirements or system considerations; allows LDCs and the AFT to continue to offer programming

When could this take effect? ~ Q4 2018.

3. ***Introduce a HAP ASHP offering on a pilot/trial basis***

- could involve a customer-led ASHP grant program that leverages H&C contractor network; would not necessarily have to be an offering under HAP (ie. could be a stand-alone pilot through which HAP participants can be funnelled)
- could allow the IESO to further investigate the impact of the Heat Pump measure in the market

Who does it involve? IESO Program Design Team

What would be the impact? Aligns measure offering and enables analysis of impacts of no-cost ASHP measure provision for motivated and engaged HAP participants

When could this take effect? Q3/Q4 (Pending commitment from Program Design team)

Expected AFT removal from market

1. ***Remove AFT from Market – retain HAP as is and reallocate remaining funding to HAP or Indigenous Conservation Programming***
    - HAP eligibility could also be expanded to allow those with higher incomes to be serviced

Commented [SL1]: As mentioned:

If LDCs wish to continue to support non low-income customers could they do so through their CFF performance incentive payments? My understanding is that these funds are not OEB-regulated, and likely non-committed , so this would be a good opportunity for LDCs to demonstrate that their intentions are indeed as they say they are (i.e. to better service and provide support to vulnerable customers) and would provide them an opportunity to prioritize customer support over executive bonuses.

It would also extract further cost efficiencies which the incoming government has identified as a priority.

Could be something we suggest.

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- Prioritizes evidence-supported programming to deliver impact to vulnerable customers and populations in a cost-efficient manner

Who does it involve? Government (MOE)

What would be the impact? Potential customer/partner/ LDC push-back (resulting from removing AFT from market); improved efficiencies, programming consistencies, and cost-effectiveness through centrally-managed program model; would ensure all programming activities are evaluated using energy-efficiency cost effectiveness protocols (allowing the actual impact of programming to be determined)

When could this take effect? ~Q4 2018.