

JT 1.5 Exhibit 3

EXHIBIT :: PROGRAM COST RECOVERY 2009-04-27+PK's
COMMENTS

MEI Program Cost Recovery

Date Prepared: April 20, 2009

MEI programs

- ◆ At this time, funds collected via the proposed MEI Cost Recovery are intended to be used to support the delivery of multi-fuel energy conservation programs and renewable energy development. Three programs will be included for FY 2009/2010 at an estimated total cost of approximately \$150 million.
- ◆ The programs are: PowerHouse, Home Energy Savings Program, and the Ontario Solar Thermal Heating Incentive Program. All these programs affect both electricity and natural gas users, as well as users of other fuels.
 - ⇒ **PowerHouse** offers a low or zero interest loan to residential applicants to purchase and install one of four conservation measures: a ground source heat pump, a solar photo-voltaic panel, a solar thermal panel, microwind.
 - ⇒ **The Home Energy Savings Program (HESP)** provides incentives to residential homeowners to carry out conservation measures at home. The program subsidizes a home energy audit for 50% of the cost of the audit, up to \$150. The program then pays retrofit grant to homeowners who completes energy retrofits recommended through the audit. The retrofit grant is matched by the federal government's eco-energy program; thus, every federal dollar in benefits to the participant is matched by the province with another dollar of benefit to the participant.
 - ⇒ **The Ontario Solar Thermal Heating Initiative (OSTHI)** program similarly subsidizes the installation of large (commercial) solar air and solar water roofs. The first are generally used to substitute natural gas heating in warehouses, barns, etc; while the solar water is used to pre-heat water.

Timeline

June 30

October 1

January 1

Assessments for Electricity and NG

Regulation Approved June 30 every year:

- Total Amount to be collected from Natural Gas and Electricity for the FY
- Two assessment dates (October 1 and February 1) from Natural Gas and from Electricity
- Each assessment for 50% of the annual assessment of the utility
- Methods: a. Board and IESO (for Tx connected) to work out the electricity assessments; Board to work out the Natural Gas assessments. b. Both are volumetric in basis (cubic m or kwh).
Volumetric assessment based on 12 months period ended last December 31.
- Assessments include method of payment: directly to Consolidated Revenue Fund, electronic bank transfer instructions

Cost Recovery: Principles and Rules

- ◆ Principles and Rules created based on what data is available to be used
- ◆ When the energy retrofit measure reduces the consumption of only one fuel:
 - ↳ allocate the full cost to that fuel. For example:
 - If energy retrofit measures displace/reduce electricity consumption only
→ 100% cost assigned to **Electricity**
 - If energy retrofit measures displace/reduce natural gas consumption only
→ 100% cost assigned to **Natural Gas**
 - If energy retrofit measures displace/reduce the consumption of other fuels only
→ 100% cost assigned to **Other**
- ◆ When the energy retrofit measure reduces the consumption of several fuels or reduces the consumption of some fuels and increases the consumption of other fuels:
 - ↳ If the measure affects the building envelope (insulation, doors, windows, etc): allocate 90%/10% cost to fuel displaced-electricity
 - ↳ If the measure does not affect the building envelope (ground source heat pump): allocate the cost to the displaced fuel
 - ↳ Always allocate the furnace DC motor cost to **Electricity**

Cost Recovery – Estimated Breakdown by Program

Program	Natural Gas		Electricity		Other		Total
OSTHI (Ontario Solar-Thermal Heating Incentive)							
PowerHouse							
OHESP (Ontario Home Energy Savings Program)	\$104M	71%	\$29M	20%	\$13M	9%	\$146M
Total							

Cost Recovery Example: Ontario Solar Thermal Heating Incentive

◆ Sample Project 1:

- ↳ Solar Water Installation on Apartment Building
- ↳ Total System Cost: \$7,495.00; **Ontario Contribution: \$1,873.50**
- ↳ Displaced Energy: Electricity
 - Invoice split for NG – 0%; **Invoice split for Electricity – 100%**; Invoice Split for Taxes – 0%

◆ Sample Project 2:

- ↳ Solar Air Installation on Farm Building
- ↳ Total System Cost: \$214,262.19; **Ontario Contribution: \$53,565.55**
- ↳ Displaced Energy: Natural Gas
 - **Invoice split for NG – 100%**; Invoice split for Electricity – 0%; Invoice Split for Taxes – 0%

◆ Sample Project 3:

- ↳ Solar Air Installation on Farm Building
- ↳ Total System Cost: \$321,942.65; **Ontario Contribution: \$80,000.00**
- ↳ Displaced Energy: Propane
 - Invoice split for NG – 0%; Invoice split for Electricity – 0%; **Invoice Split for Taxes – 100%**

Cost Recovery Example: PowerHouse

◆ Sample Project 1:

- ↳ Solar Water Installation
- ↳ Total System Cost: \$7,500.00; **Ontario Contribution: \$875.00***
- ↳ Displaced Energy: Natural Gas
 - **Invoice split for NG – 100%**; Invoice split for Electricity – 0%; Invoice Split for Taxes – 0%

◆ Sample Project 2:

- ↳ Solar PV Installation
- ↳ Total System Cost: \$30,000.00; **Ontario Contribution: \$4,750.00***
- ↳ Displaced Energy: Electricity
 - Invoice split for NG – 100%; **Invoice split for Electricity – 100%**; Invoice Split for Taxes – 0%

◆ Sample Project 3:

- ↳ Wind Turbine Installation
- ↳ Total System Cost: \$30,000.00; **Ontario Contribution: \$4,750.00***
- ↳ Displaced Energy: Electricity
 - Invoice split for NG – 0%; **Invoice split for Electricity – 100%**; Invoice Split for Taxes – 0%

* estimated

Cost Recovery Example: PowerHouse (contd.)

◆ Sample Project 4:

- ↳ Geothermal Installation (house with central air conditioning)
- ↳ Total System Cost: \$25,000.00 **Ontario Contribution: \$3,750.00***
- ↳ Displaced Energy: Natural Gas (heating); Electricity (cooling)
 - **Invoice split for NG – 90%; Invoice split for Electricity – 10%; Invoice Split for Taxes – 0%**

◆ Sample Project 5:

- ↳ Geothermal Installation (house with no central air conditioning)
- ↳ Total System Cost: \$25,000.00 **Ontario Contribution: \$3,750.00***
- ↳ Displaced Energy: Natural Gas (heating)
 - **Invoice split for NG – 100%; Invoice split for Electricity – 0%; Invoice Split for Taxes – 0%**

◆ Sample Project 6:

- ↳ Geothermal Installation (house with central air conditioning)
- ↳ Total System Cost: \$25,000.00 **Ontario Contribution: \$3,750.00***
- ↳ Displaced Energy: Heating Oil (heating); Electricity (cooling)
 - Invoice split for NG – 0%; **Invoice split for Electricity – 10%; Invoice Split for Taxes – 90%**

* estimated

Cost Recovery Example: OHESP

♦ Sample Project 1

Displaced Energy: Natural Gas (heating); Electricity (cooling)

Retrofit	Air Sealing	Central AC	ESTAR Doors
Ont. Contribution	\$150.00	\$200.00	\$90.00
Split (%)	NG - 90; Elec - 10	Elec - 100	NG - 90; Elec - 10
Split (\$)	NG - \$135; Elec - \$15	Elec - \$200	NG - \$81; Elec - \$9

Total: Ontario Contribution: \$440; **SBC: Natural Gas: \$216; Electricity: \$224**

♦ Sample Project 2

Displaced Energy: Oil (heating); Electricity (cooling)

Retrofit	Air Sealing	Central AC	ESTAR Doors	Attic Insulation
Ont. Contribution	\$150.00	\$200.00	\$90.00	\$300.00
Split (%)	Taxes - 90; Elec - 10	Elec - 100	Taxes - 90; Elec - 10	Taxes - 90; Elec - 10
Split (\$)	Taxes - \$135; Elec - \$15	Elec - \$200	Taxes - \$81; Elec - \$9	Taxes - \$270; Elec - \$30

Total: Ontario Contribution: \$740; **SBC: Taxes: \$486; Electricity: \$254**