

# Pay-for-performance Guidelines

## 1. Purpose of guidelines

The purposes of these guidelines are to:

- provide an overview of the pay-for-performance funding mechanism and the process for electing to receive pay-for-performance funding;
- explain how pay-for-performance rates can be established;
- discuss the allocation of risk between local distribution companies and the IESO with respect to this funding mechanism; and
- explain how rates for existing province-wide Programs were established.

All capitalized terms not defined in these Pay-for-performance Guidelines have the definitions given to them in the Energy Conservation Agreement between the LDC and the IESO.

## 2. Overview

### Description of pay-for-performance funding

Pay-for-performance is one of the funding mechanisms available to local distribution companies under their respective Energy Conservation Agreements (with the other funding mechanism being full cost recovery funding).

The Minister's direction to the OPA (as predecessor to the IESO) of March 31, 2014 describes pay-for-performance funding as payment to “[d]istributors for the administration and implementation of...programs corresponding to the proportion of target allocated to the pay for performance mechanism based on a pre-specified value for each verified kilowatt hour of electricity savings achieved.”

As set out in the Section 4.3 of the Energy Conservation Agreement and further detailed in the Pay-for-performance Rules, payments will be made on net, verified electricity savings measured in kWh, after evaluation.

## Objectives

The pay-for-performance funding mechanism has the following key objectives:

- provide local distribution companies with an alternative funding mechanism that shifts compensation risk to the distribution company and in exchange provides a potential premium on compensation as compared to full cost recovery funding, as illustrated below:



- continue to provide value to rate payers; and
- develop the market for alternative funding mechanisms.

### 3. Choosing pay-for-performance

Local distribution companies may elect to receive pay-for-performance funding for any province-wide, regional or local Program that includes a pay-for-performance funding option in the applicable Program Rules. The election is made as part of the CDM Plan.

As set out in Section 4.3 of the Energy Conservation Agreement, there are three options for pay-for-performance:

- a single payment following initial verification (and any subsequent verification required under an EM&V plan, if applicable) of the net electricity savings measured in kWh (“**Option 1**”);
- five annual payments following the annual verifications of actual net electricity savings measured in kWh (“**Option 2**”); or
- a number of periodic payments specified in the Program Rules following the verification of actual net electricity savings at the same frequency as the periodic payments (“**Option 3**”).

For a given Program, rates for Option 1, Option 2 and Option 3 may differ to reflect the different risk profiles of these options. When electing to receive pay-for-performance funding, a local distribution company must also specify whether it wishes to be funded under Option 1, Option 2 or Option 3. A local distribution company may elect either pay-for-performance funding or full cost recovery funding, but not both, for any given Program.

## 4. Switching between funding mechanisms

For any given Program, a local distribution company may switch funding mechanisms only once (i.e., either from full cost recovery to pay-for-performance or from pay-for-performance to full cost recovery). Once a switch is made, the local distribution company is not permitted to switch back to its initial funding mechanism.

Similarly, for any given Program, a local distribution company is permitted one change between its initial choice of Option 1, Option 2 or Option 3 and a new choice of these three options. Once a switch is made, the local distribution company is not permitted to switch back to its initial choice.

Where any of the above changes are made, the Project start date will determine which funding mechanism and, for P4P, which option applies to the Project.

Local distribution companies should be aware of the potential administrative complexity of switching between funding mechanisms. In particular a local distribution company that switches between funding mechanisms will need to have adequate records to be able to distinguish, on a Project by Project basis, between expenses that are incurred as Eligible Expenses for the purposes of full cost recovery and those that are incurred in respect of pay-for-performance programs. For example, if an individual is dedicated to one Program that experiences a switch of funding mechanism, that individual's time may end up divided between Projects that receive full cost recovery funding and those that receive pay-for-performance funding. Only the cost of that individual that is attributable to time spent on full cost recovery projects will constitute an Eligible Expense for the purposes of full cost recovery funding. Please refer to the following example for clarification on how to treat the accounting of costs with regards to transition in funding mechanisms:

### Example

LDC A offers Retrofit under full cost recovery from January 1, 2016 to April 1, 2016. LDC A chooses to switch to pay-for-performance from April 1, 2016 onwards.

LDC A should provide a full accounting of costs incurred under full cost recovery.

- If LDC A had two staff members dedicated to Retrofit, and their total annual salary was \$150,000, then \$37,500 (3/12 of annual salary) should be allocated to full cost recovery. The remainder can be claimed as an Eligible Expense under pay-for-performance.
- If LDC A had bought \$3,000 worth of office equipment for Retrofit program delivery for the full year, then \$750 should be allocated to full cost recovery, using appropriate accounting guidelines for depreciation expenses. The remainder can be claimed as an Eligible Expense under pay-for-performance.

- If LDC A has seen three efficiency projects through to completion, and four other projects have already started by April 1, 2016, then the savings and associated Eligible Expenses for those seven projects should be allocated to full cost recovery. Any savings and associated Eligible Expenses from projects started after April 1, 2016 should be allocated to pay-for-performance.

## 5. Establishing pay-for-performance rates

Pay-for-performance rates are subject to the approval of the IESO in accordance with the Pay-for-performance Rules. The following section provides guidance on how the IESO will evaluate proposed rates.

### Basis of rate design

Pay-for-performance rates are established so as to ensure that the Program is cost effective and that the local distribution companies receive a fair internal rate of return (“**IRR**”).

Each pay-for-performance rate is constrained by two requirements:

- a cost effectiveness threshold that must be met (the PAC test requirement); and
- the premium that the local distribution company is permitted to receive on forecasted LDC expenditure (the IRR requirement).

Where the two requirements yield different pay-for-performance rates, the lower rate must be used.

Refer to the pay-for-performance Rules for specific PAC test thresholds and IRR limits that apply when determining pay-for-performance rates.

For clarity, the PAC test thresholds and IRR limits are used for the purposes of the rate design.

A local distribution company that delivers a Program that is more cost effective or that achieves an IRR less than the limit will only be entitled to the rate as set, and not to any additional payment for having performed better than the minimum levels required by the PAC test thresholds and IRR limits.

If a local distribution company is found to have exceeded the IRR threshold over the course of the term of the Energy Conservation Agreement, which the IESO will determine based on information reported by the local distribution company pursuant to section 7.1(a) of the Pay-for-performance Rules, the local distribution company will be required to reimburse the IESO for any amount that exceeds the IRR limit. In other words, to the extent that such IRR requirements have been exceeded, the LDC will reimburse to the IESO an amount sufficient to result in the IRR requirements being met. Please see the example in Section 6.

## Calculation of IRR

The IRR on an investment or project is the annualized effective compound rate of return that makes the net present value (“NPV”) of all cash flows (both positive and negative) from a particular investment equal to zero. Put simply, the IRR is the rate at which an investment breaks even.

IRR calculations are commonly used to evaluate the desirability of investments or projects. The term “internal” refers to the fact that its calculation does not incorporate external factors (e.g., the interest rate or inflation).

The IRR of a proposed pay-for-performance rate will be assessed by determining the rate of return that results in an NPV of zero for all applicable cash flows that relate to the Program for which the LDC is seeking pay-for-performance funding.

IRR will be assessed across the life of the applicable Program. It may therefore be the case that applicable cash flows occur in different years. A detailed cash flow analysis is therefore required as part of the business case for a proposed pay-for-performance rate.

## Sample calculation

The following example illustrates the analysis of a proposed Program:

An LDC runs an office lighting P4P program. It enrolls a customer willing to change out lights at an incentive rate of \$0.15/kWh. The project delivers 100,000 net kWh per year. The costs are as follows:

Activity	Cost	Time Incurred
Incentive	\$15,000	Year 1
M&V Plan	\$1,000	Year 1
Sales	\$500	Year 1
Other Administration	\$500	Year 1
Reporting Costs	\$750	Year 2
<b>Total</b>	<b>\$17,750</b>	

Assume that the PAC test threshold will not be exceeded.

### **Option 1 pay-for-performance rate**

For an IRR of 12%, the one-time payment in Year 2 (after the savings have been verified) has to be \$19,750 to cover the expenditure of \$17,750 over the two years. This leads to a rate of \$0.1975/kWh. In this case, the LDC profit is \$2,000.

### **Option 2 pay-for-performance rate**

For an IRR of 20%, the five annual payments started in Year 2 (after the savings have been verified) have to be \$5,850 each (total: \$29,250) to cover the expenditure of \$17,750 over the two years. This leads to a rate of \$0.0585/kWh. In this case, the LDC profit is \$11,500.

## **Custom rate calculator**

The IESO has developed a custom rate calculator that enables a local distribution company to estimate a pay-for-performance rate that will meet the PAC test requirement and IRR requirement described above. The calculator uses the following inputs:

- electricity savings by delivery year;
- expenditures that will be incurred to achieve the electricity savings by delivery year;
- end use(s) (e.g. lighting, HVAC or other end uses) contributing to electricity savings, used to determine applicable load profile(s) in the cost effectiveness calculator; and
- persistence of electricity savings, defined as expected measure life in years (based on the then-current Measures and Assumptions List published by the IESO).

The calculator uses these inputs to determine the maximum allowable rate under the PAC test requirement and the maximum allowable rate under the IRR requirement. The calculator then displays the lower of these two rates.

The custom rate calculator has been developed for residential and non-residential Programs. If a local distribution company designs a Program around an end use load profile or persistence value that is not contained within the custom rate calculator, the local distribution company can request that the IESO run a custom rate simulation. To perform a custom rate simulation, the IESO requires the load profile by seasonal time period or the “8760”, along with the assumed persistence of electricity savings (which in all cases must extend until at least December 31, 2020, as required under the Energy Conservation Agreement.). The IESO will use reasonable efforts to produce the model within five business days of receiving a complete request from a local distribution company. Alternatively, the local distribution company can run its own custom simulation and include the results in the business case for review and approval.

## Financing costs

Financing costs are considered Eligible Expenses for the purposes of establishing pay-for-performance rates when a local distribution company has to pay a Participant Incentive before receiving the corresponding pay-for-performance payment for the IESO. It is expected that local distribution companies only utilize a reasonable cost of financing when forecasting financing costs.

The local distribution company must estimate financing costs in advance when developing custom pay-for-performance rates and must report actual financing costs as part of the reporting required under section 7.1(a) of the Pay-for-performance Rules. The local distribution company will not have an opportunity to adjust any pay-for-performance rate retroactively (or otherwise receive additional payments from the IESO) if financing costs prove higher than expected. However, the IESO always retains the right to require reimbursements if the IRR requirement is exceeded (as explained in the discussion of the basis of rate design above).

A sample calculation for determining financing costs is listed below:

Financing rate: 3.00% p.a.

Participant Incentive payment (Principal): \$30,000

Participant Incentive payment date: March 1, 2015

Pay-for-performance payment from IESO date: September 1, 2015

Principal + Interest Amount = \$30,452.84\*

\* This amount is obtained by converting the annual financing rate to the equivalent daily or monthly rate, and then determining the total principal and interest amount based on the term of the advance. In this case, the advance is made for six months, and the equivalent monthly rate is 0.25%.

Financing Cost: \$30,452.82 - \$30,000 = \$452.82

## Tax or Payments in-lieu costs

Tax payments or payments-in-lieu (“**PILs**”) on pay-for-performance income are considered Eligible Expenses for the purposes of establishing pay-for-performance rates. Similar to financing costs, all tax or PILS costs must be estimated in advance by the local distribution company when developing custom pay-for-performance rates. The local distribution company will not have an opportunity to adjust any pay-for-performance rate retroactively (or otherwise receive additional payments from the IESO) if tax or PILS costs prove higher than expected. However, the IESO always retains the right to require reimbursements if the IRR requirement is exceeded (as explained in the discussion of the basis of rate design above).

There are two elements to tax payments for local distribution companies to consider:

- The first element is forecasting the amount of tax payments based on the net income derived from the pay-for-performance Program as considered in isolation from the rest of the local distribution company's business. This forecast will be used when developing custom pay-for-performance rates.
- The second element concerns calculating the actual incremental tax payments resulting from the pay-for-performance Program as considered in the larger context of the local distribution company's financial performance. The local distribution company will be required to provide these actual amounts as part of its reporting under section 7.1(a) of the Pay-for-performance Rules, which the IESO will then consider when confirming that the IRR and PAC requirements were actually met.

The manner in which these two elements are calculated is described below.

### Forecasting tax payments in isolation

When a local distribution company is forecasting tax payments, it should use the prevailing corporate tax rate.

Here is a sample calculation for forecasting tax payments:

Year	Expenses	Performance Payments*	Net Income	Forecasted Tax Payment**
1	\$20,000.00	\$45,000.00	\$25,000.00	\$3,750.00
2	\$25,000.00	\$56,250.00	\$31,250.00	\$4,687.50
3	\$15,000.00	\$33,750.00	\$18,750.00	\$2,812.50

\* Forecasted tax payments should be determined based on a costs incurred revenue recognition basis

\*\* Based on a sample 15% tax rate

### Calculating actual tax payments in context

It is understood that local distribution companies will not pay tax or PILs on performance payments in isolation. The net income derived from pay for performance will be aggregated with the net income from the local distribution company's other activities and a single payment will be issued. Therefore, in order to determine the impact of the payment, a "with and without" calculation will be performed.

Here is a sample calculation for actual tax payments:

Year	Actual Tax Payment With performance payment net income included	Tax Payment Without performance payment net income included	Actual Tax Payment for IRR Calculation
1	\$60,000.00	\$55,000.00	\$5,000.00
2	\$40,000.00	\$38,000.00	\$2,000.00
3	\$55,000.00	\$48,000.00	\$7,000.00

## 6. Understanding the risks of pay-for-performance

As detailed below, pay-for-performance funding has three key sources of potential financial risk:

- rate variance
- performance variance
- limited budget

### Rate variance

#### Description of potential risk

As indicated above, pay-for-performance rates are established in part with reference to a PAC test requirement that ensures cost effectiveness. A higher PAC test score allows for a higher pay-for-performance rate. However, the outcome of the PAC test is particularly sensitive to assumptions about the persistence of electricity savings and the load profile. The longer the persistence of the savings, the more cost effective the savings are and the higher the rate that can be paid. The load profile of a measure can significantly impact the PAC test score, which is calculated by sorting electricity savings into the load profile seasonal time period buckets, and multiplying them by avoided costs (listed in the *IESO CDM EE Cost Effectiveness Guide (March 2015)*). Two measures may produce the exact same quantity of electricity savings, but one measure will have a higher PAC test score than the other, because its load profile maps more closely to periods when avoided costs are higher, as may be amended by the IESO with notice to the LDC. For example, an air conditioning measure that saves 100 kWh will likely have a higher PAC than an exterior lighting measure that saves the same amount.

#### Allocation of risk

The IESO bears the near term risk of accepting assumptions about persistence and load profile that result in a pay-for-performance rate that is too high. As set out in the Pay-for-performance

Rules, the IESO commits to paying at an established pay-for-performance rate until that rate is updated by way of a Rule change approved in accordance with the Energy Conservation Agreement. Even when a rate is updated, the IESO will continue to apply the old rate for Projects and Measures that were committed prior to the change in rates. Refer to the Pay-for-performance Rules for details regarding how a local distribution company can evidence that a Project or Measure is committed.

The IESO may adjust rates upward or downward by way of Rule changes approved in accordance with the Energy Conservation Agreement. Rate increases could be required if, for example, local distribution company expenditures are found to be higher than forecasted (which decreases IRR), the PAC test benefit is higher than anticipated, or savings persist longer than anticipated. Rate decreases may be required if, for example, local distribution company expenditures are found to be lower than forecasted (which increases IRR), the PAC test benefit is lower than anticipated, or savings persist for less time than anticipated. While the IESO will be evaluating existing rates using data that is submitted quarterly by the local distribution companies, it does not anticipate adjusting pay-for-performance rates more frequently than once a year. However, the IESO reserves the right to adjust pay-for performance rates more frequently than once per year, as may be required in the IESO's determination.

As per the Rules, the only situation where there will be a required reimbursement of performance payments from the LDC to the IESO is if the IRR threshold of 12% or 20% is breached. This calculation will be done at the end of the program term, or at the end of the term for the ECA.

Please see below for an example of the reimbursement calculation:

*Assume an LDC delivers a Program over a term of four years.*

Year	P4P Rate (\$/kWh)	Net, Verified Savings (kWh)	P4P Revenue (\$)*	P4P Expenses (\$)*
1	\$ 0.20 / kWh	50,000 kWh		\$ 8,200
2	\$ 0.20 / kWh	80,000 kWh	\$ 10,000	\$ 11,000
3	\$ 0.21 / kWh*	100,000 kWh	\$ 16,000	\$ 12,500
4	\$ 0.18 / kWh*	90,000 kWh	\$ 21,000	\$ 14,000
5			\$ 16,200	

\*Assume expenses are paid during year, and revenue is paid at the start of the next year

#### IRR Calculation:

Year	Net Cash Flow
1	-\$8,200
2	-\$1,000
3	\$3,500
4	\$7,000
5	\$16,200

Current IRR without adjustments: 38%

To get the IRR back to 12% over the term of the program, the last P4P payment needs to be reduced from \$16,200 to \$2,000, which amounts to a reimbursement of \$14,200.

Year	Net Cash Flow
1	-\$8,200
2	-\$1,000
3	\$3,500
4	\$7,000
5	\$2,000*

\*Reimbursement of \$14,200 to get IRR of 12%

## Performance variance

### Description of potential risk

Performance, in terms of delivery of electricity savings, is determined by two factors:

- volume of Participants, Measures and Projects; and
- input electricity savings assumptions.

Greater electricity savings will result from a larger-than-anticipated volume of Participants, Measures or Projects. Similarly, greater electricity savings will result if Measures and Projects produce larger-than-anticipated electricity savings. The converse is also true in both cases.

### Allocation of risk

The LDC bears the financial risk for the performance variance. Rates will not be adjusted retrospectively to mitigate the impact of deviations from assumptions about volume of Participants, Measures and Projects or per-Project electricity savings.

## Limited budget

### Description of potential risk

Local distribution companies each receive an overall CDM Plan Budget to achieve their CDM Plan Target through Programs that receive either full cost recovery funding or pay-for-performance funding. If there is greater-than-anticipated participation in a Program that receives pay-for-performance funding, a local distribution company may entirely deplete the portion of its CDM Plan Budget that has been allocated to pay-for-performance Programs and then begin depleting the remaining portion of the CDM Plan Budget that has been allocated to full cost recovery Programs.

The local distribution company will not receive more funding in such circumstances. Rather it would have to submit a revised CDM Plan for approval by the IESO that reallocates part of the CDM Plan Budget away from full cost recovery funding to pay-for-performance funding.

Consider the following example:

The LDC's total CDM Plan Budget is \$1.5 million and the LDC has allocated that CDM Plan Budget as follows in its CDM Plan:

- \$0.5 million to pay-for-performance Programs; and
- \$1.0 million to full cost recovery Programs.

The pay-for-performance Programs are more successful than anticipated such that the LDC invoices the IESO for \$0.9 million of pay-for-performance funding. The result would be the following:

- the CDM Plan Budget that the LDC has allocated to pay-for-performance funding would be fully depleted; and
- the maximum amount that the IESO will fund in respect of full cost recovery claims will be reduced by \$0.4 million to \$0.6 million.

The LDC would have to resubmit an updated CDM Plan to reallocate its CDM Plan Budget accordingly, but its overall CDM Plan Budget would remain \$1.5 million.

Alternatively, the LDC may choose to exchange or trade a portion of its CDM target throughout the term of its Energy Conservation Agreement with another LDC (as set out in the Target Exchange guideline), enabling the LDC to take on more target (and budget) to achieve greater savings in their service territory

### **Allocation of risk**

The LDC bears the risk of managing its overall CDM Plan Budget and the allocation of that CDM Plan Budget between Programs that receive full cost recovery funding and Programs that receive pay-for-performance funding.

## **7. Development of existing pay-for-performance rates**

Pay-for-performance rates for existing province-wide Programs are listed in Exhibit A of the Pay-for-performance Rules.

The determination of these pay-for-performance rates involved three distinct steps:

- analyze 2011-2014 expenditures to determine historical expenditures for the Program and then add an additional amount to achieve 12% or 20% IRR;
- run cost effectiveness simulations to determine the cost effective rate for each Program using estimation of end use contribution; and

- compare the historical expenditure with the IRR adder to the cost effective rate to determine final rate.

The lower of the cost effective rate and the rate that achieves the target IRR was selected as the pay-for-performance rate for the Program. Where the pay-for-performance rate was capped by the PAC test requirement and was below historical program performance it was not included in the Rule as it was deemed unlikely that any LDC would elect to receive funding at this rate.

## 8. Changes to pay-for-performance rates

Any changes to rates specified in the Pay-for-performance Rules will be changed only in accordance with the process for amending Rules under the Energy Conservation Agreement. The IESO will review the rates specified in the Pay-for-performance Rules as needed but expects to review them annually, in which case it will endeavour to give notice of proposed changes by October 31, with such changes to be effective the following January 1.

## 9. EM&V and timing of funding

Consistent with Section 4.3 of the Energy Conservation Agreement, pay-for-performance funding will be based on net electricity savings, as determined through the EM&V process.

As set out in the Pay-for-performance Rules, a local distribution company will be eligible to invoice (or in the case of Option 2 and Option 3, begin invoicing) the IESO for pay-for-performance funding in respect of a Project at the end of the calendar quarter in which the electricity savings were verified. The following table provides a non-binding indication of the IESO's expected timeframes for evaluating Projects:

<b>Project Type</b>	<b>Measure Type</b>	<b>Key Variable</b>	<b>Length</b>
<b>Prescriptive</b>	Lighting	Baseline Equipment/ Operating hours	Within the quarter, based on evaluators M&V Plan
	Non-Lighting	Baseline Equipment/ Operating hours	Within 6 months, based on evaluators M&V Plan
<b>Engineered</b>	Lighting	Baseline Equipment/ Operating hours	Within the quarter, based on evaluators M&V Plan
	Non-Lighting	Baseline Equipment/ Operating hours	Within 6 months, based on evaluators M&V Plan
<b>Custom</b>	Lighting	Baseline Equipment/ Operating hours	Within 6 months, based on evaluators M&V Plan
	Non-Lighting	M&V Plan	As per M&V Plan
<b>Capital incentive</b>	All	M&V Plan	As per M&V Plan
<b>Behind the meter generation</b>	All	Operation	12 Months Monitoring Data
<b>Behaviour based</b>	All	Baseline	12-18 Months Monitoring
<b>Performance contract</b>	All	Baseline	12-24 Months Monitoring - Ongoing