

Industrial Systems

ASSISTANCE PROGRAM FOR ENERGY EFFICIENCY PROJECTS

PARTICIPANT'S GUIDE

Prescriptive Measures

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Overview of the Industrial Systems Program

An energy efficiency culture affects all aspects of corporate life. Supported by an overall vision, it goes beyond improving the efficiency of procedures, systems, equipment or processes. It involves a series of practices that all members of an organization are encouraged to adopt, and which quickly become habit, within a framework informed by standards and electricity consumption data.

Hydro-Québec offers a number of services, including considerable financial assistance under its Industrial Systems Program, to help industrial customers make energy efficiency part of their corporate culture.

Here is an overview of the Program's multiple components:

Assistance for Analysis

These components are used to determine energy efficiency measures concerning both operation and investment projects with the installation of efficient electrical equipment.

- **Electricity Consumption Analysis**

Customers may obtain financial assistance to perform an analysis of their electricity consumption. Eligible types of analysis include design review, analysis of electricity consumption in existing facilities, and control systems and process optimization. An electricity management system diagnostic analysis is also available for eligible customers.

- **Electricity Management Systems**

Customers may obtain financial assistance to purchase and install continuous measurement equipment and implement an electricity management system aimed at continuous improvement, in compliance with ISO 50001 standards. ISO 50001 certification is however not a requirement under this component.

Assistance for Investments

These components are used for investment projects to implement efficient electrical equipment.

- **Retrofit**

Customers may obtain financial assistance for projects designed to reduce specific electricity consumption—while maintaining or increasing production volume—as part of a plant modernization or retrofit project.

- **New Plant, Expansion or Addition of Production Lines**

Customers may obtain financial assistance for projects designed to reduce specific electricity consumption when expanding a plant, adding production lines or building a new plant.

- **Prescriptive Measures**

Customers may obtain financial assistance for projects involving the implementation of certain predetermined energy efficiency measures relating to lighting, variable-frequency drives rated between 1 and 200 hp (for ventilation systems and centrifugal fluid pumps), air compressors, water chillers with a capacity of up to 200 tons of refrigeration, and industrial refrigeration units. Choosing equipment that is more energy-efficient, as opposed to standard or regulation equipment, leads to higher levels of energy efficiency. The amount of financial assistance for each eligible measure on a project is automatically calculated using tools provided by Hydro-Québec.

Each component has its own *Participant's Guide* that sets out its specific terms and conditions.

| ASSISTANCE FOR ANALYSIS | ASSISTANCE FOR INVESTMENTS |
|---|---|
| <p>ELECTRICITY CONSUMPTION ANALYSIS</p> <p>Examples: design review, analysis of consumption in existing facilities, control system and process optimization, and diagnostic analysis</p> | <p>RETROFIT</p> |
| <p>ELECTRICITY MANAGEMENT SYSTEMS</p> | <p>NEW PLANT, EXPANSION OR ADDITION OF PRODUCTION LINES</p> |
| | <p>PRESCRIPTIVE MEASURES</p> <p>Compressed air, lighting, variable-frequency drives (VFDs), water chillers and industrial refrigeration</p> |

Presentation of the project under the appropriate component

Once Hydro-Québec has provided preliminary approval for a project under a given component, participants cannot request to have their project reviewed under another component in the Program. Furthermore, Hydro-Québec reserves the right to determine the appropriate components for all submitted projects.

Technology and Business Demonstration project submission

On May 1, 2015, the Technology Demonstration component was removed from the Industrial Systems Program to be replaced by the new activity, Technology and Business Demonstration.

For more information about the new activity and about how to submit a demonstration project (www.hydroquebec.com/business/energy-efficiency/programs/technology-business-demonstration).

Scope of the Participant's Guide

This guide explains the Industrial Systems Program's objectives, eligibility criteria, procedures and special requirements. However, all new terms or conditions announced in the Program newsletter take precedence over those described in this document. The newsletters can be found on the Industrial Systems Program Web site, at www.hydroquebec.com/industrial.

Prescriptive Measures Component – Description

Hydro-Québec's Industrial Systems Program offers financial assistance to industrial customers located in Québec for projects designed to reduce their electricity consumption.

This *Participant's Guide* explains the specific objectives, services, eligibility criteria, procedures and requirements for the Program's Prescriptive Measures component.

This component is for projects involving the implementation of certain types of energy efficiency measures applicable to equipment, systems and processes in industrial buildings.

More specifically, it offers a set of automated calculation tools for the different types of eligible measures (classified by the following types of usage)*:

- Lighting
- Compressed air
- Variable-frequency drives (VFDs of 1 to 200 hp) for ventilation systems and centrifugal fluid pumps
- Water chillers (with a capacity of up to 200 tons of refrigeration)
- Industrial refrigeration

If the measures you wish to implement are covered by the calculation tools required by this component, you must submit your project under this component (see section 3 of this guide for details on these tools).

You must present the measures associated with each type of usage (for a single system) in a separate project, where appropriate.

Separate requests for payment of financial assistance are required for each type of measure.

- * If you wish to submit measures relating to lighting, VFDs, compressed air, water chilling or industrial refrigeration that are not included in the Prescriptive Measures component, you may do so under another component of the Industrial Systems Program, assuming your project fulfills all of the eligibility criteria for that component.

For more information about our energy efficiency programs and other services, visit our Web site, www.hydroquebec.com/business.

Glossary

The following definitions are specific to the Prescriptive Measures Component of the Industrial Systems Program.

| | |
|---|---|
| additional costs | Difference between baseline scenario costs and those associated with the high-efficiency scenario, which take into account the implementation of electricity-saving measures. Note: The term “differential costs” is also used in this guide. |
| baseline or baseline scenario | Scenario used as a baseline to calculate financial assistance (costs and eligible electricity savings). Note: This component uses standard efficiency or regulated efficiency currently in effect as a baseline. |
| energy efficiency measure | Measure implemented in order to improve the energy efficiency of equipment, systems or buildings and reduce their specific electricity consumption. |
| energy-efficient | Term used to describe any system, equipment or building that saves energy. |
| industrial lighting application (PEI) | Application provided by Hydro-Québec for calculating the amount of financial support to be granted for all eligible measures relating to lighting under the Prescriptive Measures component. |
| industrial site | Site with one or more buildings, including annexes, intended for the production of goods and operated by a single business customer. |
| industrial systems application (PROSI) | Application provided by Hydro-Québec for calculating the amount of financial support to be granted for all eligible measures relating to variable-frequency drives, compressed air, and water chilling under the Prescriptive Measures component. |
| Industrial Systems Program | Program composed of five components to assist eligible customers who wish to implement energy efficiency projects in an industrial building.* Note: This guide also uses the abbreviated form “ Program .” *The eligibility of an industrial building is determined by its NAICS code. As a general rule, eligible buildings under the Program have a goods-producing NAICS code. |
| participant | Eligible business customer that successfully enrolls in the Industrial Systems Program |

| | |
|--|---|
| Participant's Guide | <p>Document presenting the general conditions and requirements of the Industrial Systems Program, plus objectives, services, eligibility criteria, terms and requirements specific to the Prescriptive Measures component.</p> <p>Note: The terms and conditions applicable to your project are those of the <i>Participant's Guide</i> in effect when you submit your project proposal form.</p> |
| prescriptive measures | <p>Measures for which the calculation of electricity savings (kWh) and eligible costs are based on predefined data (lighting fixtures, air compressors, variable-frequency drives (VFDs) and water chillers). In the case of industrial refrigeration measures, eligible costs are calculated on the basis of the total project costs provided by the participant using a rule defined in the Refrigeration application.</p> <p>Note: This guide also uses the abbreviated form "measure."</p> |
| Prescriptive Measures component | <p>Prescriptive Measures portion of the Industrial Systems Program.</p> <p>Note: This guide also uses the abbreviated form "component."</p> |
| prescriptive measures project | <p>Project intended to reduce an industrial company's specific electricity consumption and completed as part of the Prescriptive Measures component of the Industrial Systems Program.</p> <p>Note: This guide also uses the abbreviated form "project."</p> |
| Refrigeration application | <p>Application provided by Hydro-Québec for calculating the amount of financial support to be granted for all eligible measures relating to industrial refrigeration under the Prescriptive Measures component.</p> |
| regulated efficiency | <p>Efficiency prescribed by regulation for equipment.</p> <p>Note: May be used as a baseline or reference to calculate eligible electricity savings under this component.</p> |
| service contract | <p>Agreement entered into between two parties for electricity service and delivery.</p> |
| standard efficiency | <p>Efficiency of unregulated equipment as generally accepted by the industry.</p> <p>Note: May be used as a baseline or reference to calculate eligible electricity savings under this component.</p> |
| total costs | <p>All costs related to carrying out a project.</p> |

Section 1. Conditions and Undertakings

This section presents the general conditions and undertakings common to all components of the Industrial Systems Program, including those particular to the Prescriptive Measures component.

1.1. Hydro-Québec's exclusive rights regarding the Program and the Prescriptive Measures component

Under the terms of the projects conducted with its business customers, Hydro-Québec reserves the exclusive right to:

- amend or terminate the Program at any time without notice;
- interpret Program terms, conditions and requirements;
- determine the eligibility of any customer, project, building or energy efficiency measure under the Program;
- reject any proposal or project if it does not meet Program criteria, or if the budget for the Program has been spent;
- request changes or clarifications to the proposal or project;
- verify whether the anticipated electricity savings from a project that received financial assistance are still being achieved or whether the components implemented as part of energy efficiency measures are still in operation. If the electricity savings are no longer being achieved, or if the components are no longer in operation in the five years following payment of the financial assistance, Hydro-Québec may request repayment of the financial assistance, prorated to the number of weeks the electricity savings are not achieved or project components are not in operation, based on a 60-month period starting on the date of payment of the financial assistance.

1.2. Hydro-Québec's undertakings

Hydro-Québec undertakes to pay out the amount of financial assistance stated in the *Versement de l'appui financier et des taxes* [financial assistance and tax payment] letter, provided that the project presented is complete and meets all Program criteria.

Should Hydro-Québec end the Industrial Systems Program, it will only review, on the date the Program is ended, eligible projects for which:

- an initial contract to complete the work has been signed with a third party (copy of contract required)
- or
- a first equipment order has been placed (purchase order or invoice indicating order date required).

Payment of the financial assistance is conditional on the participant's compliance with the terms of the Program.

However, Hydro-Québec cannot be held liable for:

- any damage or harm of any nature whatsoever arising from the Program
- any error, omission or failure to achieve electricity savings as a result of carrying out the proposed project or, if applicable, using tools required under the Program.

1.3. Participant's undertakings

1.3.1. Industrial Systems Program – General Conditions and Undertakings

As the participant, you:

- are responsible for your entire energy efficiency project, including selecting and implementing energy efficiency measures, setting your electricity and cost savings objectives and calculating the electricity savings achieved;
- remain solely responsible to Hydro-Québec for the quality and results of the project, irrespective of any other parties that may have been involved;
- agree to abide by all terms and conditions stated in this *Participant's Guide*; in particular, to meet the deadlines for project completion and for any measurements required, and to provide all requested deliverables within the prescribed time frames;
- are entirely responsible for staying abreast of updates to the terms and conditions of the Program, and therefore agree to regularly check the Program Web site and sign up for the Program newsletter at www.hydroquebec.com/industrial;
- agree that Hydro-Québec may, at any time during regular business hours, verify that the energy efficiency project has been completed in its entirety, including—depending upon the project type—implementation of energy efficiency measures, equipment installation and start-up, and the completion of any required measurements, and that it has been carried out in accordance with the requirements set out in the agreement, as well as with the terms and conditions of the Participant's Guide and the Program;
- agree to use the money paid out by Hydro-Québec solely for project execution and to repay Hydro-Québec all amounts received and not used for that purpose. You acknowledge that Hydro-Québec is entitled to verify how any amount paid as financial assistance was spent;
- agree that Hydro-Québec may obtain copies of supporting documents and general vouchers relating to the project;
- undertake to make these documents or vouchers available to an auditor appointed by Hydro-Québec, during regular business hours, on at least 24 hours' notice, for up to five years from the payment of financial assistance;
- are responsible for implementing the project and liable for any damage of any kind, suffered by any person, resulting from the project. You agree to take up at your cost the defense of Hydro-Québec, its directors, officers, employees, subcontractors and assigns in all disputes, claims or legal proceedings pertaining directly or indirectly to the project in question;
- undertake to mention in media releases or advertising materials concerning the project that you have received financial support from Hydro-Québec; however, at no time will you suggest or imply that Hydro-Québec recommends any product, process, or industry provider whatsoever;
- acknowledge that any false statement, whether intentional or unintentional, may:
 - result in the cancellation or adjustment of any financial assistance granted under the Program or, if applicable, repayment of amounts received;
 - result in your disqualification from the Program;
- undertake to ensure that your electrical installation continues to meet the distributor's conditions of service and is used and maintained in such a way that it does not cause system disturbances. Since these disturbances (voltage and current fluctuations, flicker, harmonics, etc.) can be caused

by many devices associated with energy efficiency measures (electronic ballasts, variable-frequency drives), additional protection equipment must occasionally be installed as part of an energy efficiency project.

1.3.2. Prescriptive Measures Component – General Conditions and Undertakings

As the participant, you:

- have the obligation and responsibility to remain informed of the terms and conditions that apply to your project and, consequently, to visit the Program Web site to verify if any changes have been made to the Prescriptive Measures component;
- acknowledge that Hydro-Québec can modify, without notice, the *Participant's Guide* and calculation tools;
- may not submit the same energy efficiency measure under a different component of the Industrial Systems Program or another Hydro-Québec program in order to obtain further financial assistance for its implementation;
- must declare to Hydro-Québec all sources of financial assistance and all amounts you have either received or requested for your submitted prescriptive measures project;
- must pay at least 25% of the eligible costs (see subsection 2.7) of the prescriptive measures project, irrespective of all sources of financial assistance and amounts;
- must maintain the project components in good working order for a period of five years from the date of payment of the financial assistance.

Hydro-Québec reserves the right to decrease the amount of financial assistance granted to a project under the Program if other organizations introduce new programs similar to Hydro-Québec's from which you benefit for the same prescriptive measures project.

All equipment or systems must be commissioned and in operation before the financial assistance is paid.

No work may be undertaken (see paragraph 1.1, subsection 4.3 of the *Participant's Guide*) before you submit the project outline form (*Document d'avant-projet*).

If you fail to respect all of the requirements specified in this guide, Hydro-Québec may terminate the financial assistance for the project and demand repayment of the financial assistance you have already received.

1.3.3. Environmental requirements

As the participant, you:

- shall comply with all laws and regulations governing environmental protection in Québec:
 - shall take all necessary measures to prevent, control or eliminate any contamination or damage to the environment and any degradation in the quality of soil, woodlands, farmlands, waterways, lakes, wetlands or the air, or any danger to wildlife (terrestrial, avian or aquatic);
 - shall obtain all permits, certificates, licenses and authorizations and pay any fees required by law to implement the energy efficiency measures for which financial assistance has been provided;
- shall be responsible for the management, handling, storage, transportation and disposal of hazardous waste generated, in compliance with legislation in effect:
 - shall transport hazardous waste to a site or company authorized to receive such waste.

1.4. Specific financial assistance conditions

Submitting the project outline form (*Document d'avant-projet*) is not equivalent to submitting a prescriptive measures project and does not create any sort of binding commitment between you and Hydro-Québec. Hydro-Québec is therefore under no obligation to grant financial assistance to a participant who simply submits a project outline form.

Financial assistance is granted when:

- the prescriptive measures project is completed in accordance with Program terms;
- you submit the financial assistance payment request in accordance with Program requirements, accompanied by all required supporting documents;
- the Program budget is not exhausted.

The terms and conditions applicable to the payment of financial assistance for a completed prescriptive measures project are those of the Participant's Guide in effect on the date the work begins (as defined in step 1 of section 4.3 of this guide). You must also always use the most recent version of the calculation tool required, that is, the one in effect on the date the work begins.

1.5. Compensation

Hydro-Québec may deduct from the financial assistance any amount owed to it by you or your partners, associates, shareholders and subsidiaries. This compensation is effected by operation of law in favor of Hydro-Québec only.

1.6. Financial position and operating capacity

You must guarantee the completion of the project to the satisfaction of Hydro-Québec and operate the project components for at least five years from the date of payment of the financial assistance.

If Hydro-Québec considers that your financial position or long-term capacity to operate the project components is insufficient to guarantee the completion of the project or the operation of the project components for at least five years from the date of payment of the financial assistance, Hydro-Québec may, at its sole discretion:

- a) refuse to pay you any financial assistance; or,
- b) if the financial assistance has already been paid out, require repayment, prorated to the number of weeks the project components are not in operation or fail to meet Program requirements, based on a 60-month period starting on the date of payment of the financial assistance; or,
- c) if the financial assistance has not yet been paid out, require a financial guarantee equal to the total amount; or,
- d) if the financial assistance has already been paid out, require a financial guarantee equal to the amount paid, prorated to the number of weeks the project components are not in operation or fail to meet Program requirements, based on a 60-month period starting on the date of payment of the financial assistance.

Where a financial guarantee is required, it shall take the form of an irrevocable and unconditional letter of credit issued by a financial institution that fully meets Hydro-Québec requirements at all times. For these purposes, the financial institution issuing the letter of credit must:

- be a Canadian financial institution or foreign institution with a Canadian branch;
- have a minimum of \$10 billion in assets;

- maintain a credit rating of at least A- (S&P), A3 (Moody's) or A low (DBRS) at all times. Hydro-Québec will not accept a letter of credit issued by a financial institution that has been placed on credit watch with a negative outlook, even if its credit rating meets this minimum standard. If all the credit rating agencies do not grant equivalent credit ratings to the financial institution, the lowest credit rating shall be considered.

The financial guarantee shall be based on the template provided by Hydro-Québec at the time it is requested and must be approved by Hydro-Québec prior to being officially issued.

The financial guarantee shall remain in effect and be renewed, if applicable, until the end of the five-year period starting on the date of payment of the financial assistance. However, with the consent of Hydro-Québec, the amount of the guarantee may be reduced annually, prorated to the number of weeks the project components are in operation and meet Program requirements, based on a 60-month period starting on the date of payment of the financial assistance.

Hydro-Québec may exercise the financial guarantees it holds if:

- you fail to repay, within 30 days of Hydro-Québec's request, the financial assistance, prorated to the number of weeks during which the project components are not in operation or fail to meet Program requirements, based on a 60-month period starting on the date of payment of the financial assistance;
- you fail to provide or renew a financial guarantee within five business days of Hydro-Québec's request.

1.7. Confidentiality

You agree that it is necessary to disclose to Hydro-Québec confidential information (be it in writing, verbally or visually)—including, without limiting the generality of the foregoing, data, formulas, processes, models, photographs, plans, drawings, specifications, reports, studies and ideas—and Hydro-Québec undertakes to keep such information confidential.

However, the following information is not considered confidential:

- Your name, the cost of the project, the amount of financial assistance granted, the energy efficiency measures recommended and their field of application (described in general terms), and the subsequent electricity savings;
- Any information that was in the public domain at the time of disclosure;
- Any information that, after being disclosed, entered the public domain through no action on the part of Hydro-Québec;
- Any information that Hydro-Québec can prove it had in its possession before it was disclosed;
- Any information disclosed to Hydro-Québec without restriction by a third party legitimately entitled to disclose it.

Any disclosure to the public or to a third party of your confidential information shall be the subject of a written agreement.

You agree to authorize the disclosure of confidential information provided that such disclosure does not adversely affect your competitive position. Consequently, Hydro-Québec undertakes to consult you prior to disseminating any information (other than that necessary for Program follow-up) that could adversely affect your competitive position.

1.8. Cessation of participant's business activities

Should you partially or completely cease business activities in the buildings targeted by the project, Hydro-Québec may:

- if the financial assistance has not yet been paid out, refuse to pay it; or,
- if the financial assistance has already been paid out, require repayment, prorated to the number of weeks the project components are not in operation or fail to meet Program requirements, based on a **60-month** period starting on the date of payment of the financial assistance.

1.9. Tax implications

This section sums up the main tax implications of the Program. It is included for reference only.

Payments by Hydro-Québec under the Program are normally subject to the goods and services tax (GST) and the Québec sales tax (QST), unless the participant's organization does not conduct business activities under the terms of these tax regimes. As a result, you must first produce an invoice that includes those taxes before Hydro-Québec can make a payment under the Program.

For income tax purposes, the financial assistance granted under the Program is an inducement that should, depending on your case, reduce the cost of property or capital expenditure, reduce the amount of outlay or expense, or count as income. Unless your organization is exempt from paying tax, Hydro-Québec will issue a *Relevé 27 – Paiements du gouvernement* [government payment information] slip, as required by the *Québec Taxation Act*, as a record of the financial assistance paid.

The section on invoicing of financial assistance provides further details to help ensure that all tax requirements are met.

However, you should consult a tax advisor or the tax authorities, if necessary. Determining the full extent of income and other tax implications is your sole responsibility. Hydro-Québec cannot be held responsible for participants who incorrectly determine their tax status, as applicable taxation usually depends on the specific situation of each participant.

Section 2. Prescriptive Measures Component – Eligibility

Customers wishing to obtain financial assistance for an analysis project under the Prescriptive Measures component of the Industrial Systems Program must meet all the terms, conditions and requirements in this Participant's Guide.

2.1. Eligible customers

Any individuals or legal entities that own, operate or occupy one or more of the sites eligible under the Prescriptive Measures component (see subsection 2.2) and meet all of the other eligibility criteria described in this section are eligible for this component.

Notwithstanding the foregoing, Hydro-Québec reserves the right to reject an eligible customer's project if:

- the customer or one of its partners, associates, shareholders or subsidiaries owes any amount to Hydro-Québec; or
 - the customer is unable to demonstrate to Hydro-Québec's satisfaction that its financial position or long-term operating capacity is sufficient to guarantee completion of the project or operation of the project components for a period of at least five years from the date of payment of the financial assistance.*
- * Nonetheless, Hydro-Québec may approve such a customer's project if the customer provides a financial guarantee equal to the amount initially indicated on the request for payment of financial assistance, at the start of the financial assistance procedure. Where a financial guarantee is required, it shall take the form of an irrevocable and unconditional letter of credit issued by a financial institution that fully meets Hydro-Québec's requirements at all times, as detailed in Financial position and operating capacity (see Industrial Systems Program – General Terms and Undertakings).

2.2. Eligible buildings

The Prescriptive Measures component of the Industrial Systems Program is intended for all eligible **industrial** buildings. As a general rule, the building where the project is to be carried out must have a goods-producing NAICS code (see appendix 1 for more details and exceptions).

An **eligible building** must use electricity to manufacture, assemble or process goods or foodstuffs, to extract raw materials, or to handle or transport materials. Exceptionally, buildings that are used primarily for commercial, institutional or agricultural¹ purposes may be eligible for their industrial activities.

In addition, the facility or building where the prescriptive measures project is to be carried out must be **located in Québec**. The project must take place on a single industrial site.

¹ As a result, agricultural buildings subject to Rate D service contracts are eligible if they meet the other eligibility criteria in the Program.

2.2.1. Details concerning industrial buildings connected to the Hydro-Québec grid

- Only buildings subject to an electricity rate approved by the Régie de l'énergie (such as general rates L, M, G or G-9) are eligible.
- In calculating financial assistance, the only electricity savings and eligible costs taken into consideration are those related to equipment, systems or processes whose consumption is subject to an electricity rate regulated and approved by the Régie de l'énergie.

2.2.2. Specific terms for off-grid and municipal systems

- Special terms and conditions apply to buildings connected to certain off-grid systems (see appendix 2).
- The list of eligible municipal systems is given in appendix 3.

2.2.3. Specific terms for projects involving several buildings

A project carried out in several buildings can be included in a single request for payment of financial assistance provided all the measures:

- involve a single usage (lighting, compressed air, etc.);
- are implemented in a single industrial site operated by a single company.

2.3. Eligible prescriptive measures projects

To qualify, a prescriptive measures project must:

- consist of eligible measures—namely, measures covered by the calculation tools (see section 3 of this *Participant's Guide*) required under the Prescriptive Measures component—that will result in:
 - financial assistance of at least \$4,000 for industrial refrigeration measures;
 - financial assistance of at least \$2,500 for all other eligible types of measures (after submitting your project outline form [*Document d'avant-projet*]) (see step 1, subsection 4.3);
- consist of an eligible measure or a set of eligible measures for the **same type of usage**² to be **implemented in a single building or on a single industrial site**, and for which no prior request for financial assistance has been submitted to Hydro-Québec;
- cover **only new** equipment:
 - whose electricity consumption is modified (increased or decreased) by the implementation of the energy efficiency measures covered by the required tool;
 - that is installed to reduce the electricity consumption of the building, processes, systems or equipment;
 - that requires capital expenditure and investment in equipment;
 - that is more energy-efficient than the predefined baseline, which exceeds the efficiency of standard or regulation equipment;
 - that has been certified or approved by recognized independent industry authorities, or is recognized by Hydro-Québec.

² Exceptionally, pumping and ventilation systems may be presented as a single project.

Both existing and new facilities (including expansions) are eligible for the Program. You can apply only once under the Program for a given system unless the technological aspects of the measure proposed have changed since your initial application. In such a case, the new project must not take into account the eligible costs and electricity savings already included in the calculations for the first application.

Here are a few examples of eligible types of projects:

- Retrofit, with production volume maintained or increased
- New plant, expansion of existing plant, or added production lines
- Replacement of existing equipment with more efficient equipment
- Installation of new equipment with the aim of reducing the specific electricity consumption of existing processes
- Replacement of equipment with high-efficiency models for maintenance purposes

Several projects carried out over an extended period of time for a single type of usage may be grouped together on the same form in the calculation tool specified under this component (see section 3 of this *Participant's Guide*) so as to reach the required minimum. However, these projects must be carried out at the same address (except in the cases described in subsection 2.5) and must satisfy all Program conditions (including the requirement that they be submitted to Hydro-Québec only after completion).

- See Appendix 4 of this guide for the specific terms and conditions for each usage.

2.4. Ineligible projects

The following types of prescriptive measures projects are not eligible:

- Energy source conversions or substitutions
- Power generation projects
- Projects carried out for the sole purpose of achieving compliance with Québec or Canadian laws, regulations or standards
- Projects that may have a negative impact on health, safety or the environment
- Projects involving equipment that is less efficient than the industry standard or the generally recognized standard
- Projects or subprojects not involving any equipment purchase or installation costs related to energy efficiency measures
- Projects or subprojects involving auxiliary equipment that is associated with a measure in the Prescriptive Measures calculation tools but that is not taken into account by those tools (see section 3). For example, sequencers are not eligible, even if they are connected to one or more air compressors rated 200 hp or less.

2.5. Exception: Special requirements for drinking-water treatment plants, wastewater treatment plants and pumping stations operated by the same municipality

For the purposes of the Program, **drinking-water and wastewater treatment plants and pumping stations** operated by the same municipality are considered to be a single facility.

Therefore, for a given measure, systems of the same type in more than one facility may be presented as a single project.

In such a case, you must enter the addresses of all relevant facilities in the section 2 (page 4) of your project outline form (*Document d'avant-projet*, see subsection 4.3, step 1) under the “*Description du projet*” heading, as the “*Coordonnées de lieu de réalisation du projet*” section on page 3 contains only one address field.

When submitting your request for financial assistance (see step 2 of the step-by-step procedure for obtaining financial assistance, described in detail in section 4), you must also enter these addresses in the Project description section on the Project tab of the required calculation tool (see section 4 of this guide for details regarding this tool).

2.6. Eligible electricity savings

Eligible savings are estimated on the basis of predefined data in the required calculation tool. The eligible electricity savings attributable to the measures are based on predetermined baseline scenarios—more specifically, on average adjusted consumption data previously established by Hydro-Québec using standard or regulation equipment.

2.7. Eligible costs

Eligible costs are estimated on the basis of predefined data in the required calculation tool (see subsection 3.2 for details regarding this tool). As a general rule,³ these costs are equivalent to the average additional (differential) costs of highly energy-efficient equipment compared to the costs of standard equipment or those prescribed by regulation. For replacements, eligible costs are generally equivalent to total purchase and installation costs.

³ Exceptionally, eligible costs for industrial refrigeration measures are calculated based on the total project costs provided by the participant using a rule defined in the Refrigeration application

Section 3. Prescriptive Measures Component – Financial Assistance

3.1. Principles

Our financial assistance is designed to support you when you take the **extra step** of opting for industrial equipment, systems and processes that provide **superior electrical energy efficiency**; in other words, when you:

install high-efficiency electrical equipment, systems or processes, or replace standard or regulation electrical equipment, systems or processes with more energy-efficient versions.

The goal is to **achieve better energy efficiency than with standard or regulation equipment.**

Since the Industrial Systems Program budget is limited, Hydro-Québec will allocate the financial assistance amount at the time proposals are received on a first-come, first-served basis.

3.2. Tools for calculating electricity savings and financial assistance

This subsection presents the calculation tools required by Hydro-Québec for each usage associated with the eligible measures implemented or each eligible system presented.

- You must use the specific calculation tool for the type of usage in question (lighting, compressed air, etc.) if the measure you plan to implement is included in one of the calculation tools prescribed by Hydro-Québec.
- The specific measures for each type of usage (for a single system) must be presented in a separate project, where appropriate.
- When submitting a new application, you must use the most recent versions of the tool. They are available for download at www.hydroquebec.com/industrial.

3.2.1. Industrial systems application (PROSI)

The **industrial systems application (PROSI)** is required by Hydro-Québec for calculating eligible financial assistance and electricity savings based on the type of measure (classified according to the following types of usage):

- Compressed air
- Water chillers (with a capacity of up to 200 tons of refrigeration)
- Variable-frequency drives (VFDs of 1 to 200 hp) for ventilation systems and centrifugal fluid pumps

PROSI includes three calculation forms—one for each of these types of usage.

Once you have chosen a type of usage for a project, you no longer have access to the other types, given that the measures associated with each type of usage must be submitted as a separate project.

PROSI also features an online help system.

3.2.2. Industrial lighting application (PEI)

The **industrial lighting application (PEI)** is required by Hydro-Québec for calculating eligible financial assistance and electricity savings for projects involving lighting measures.

Additional information is also available in the PEI's methodology guide (in French only).

3.2.3. Refrigeration application

The Refrigeration application is required by Hydro-Québec for calculating eligible financial assistance and electricity savings for industrial refrigeration projects.

It has a step-by-step user's guide, which can also be downloaded from www.hydroquebec.com/industrial.

To learn more about eligible measures and these tools, see appendix 4 (Terms and Conditions for Use of Tools Required under the Prescriptive Measures component).

3.3. Calculating financial assistance

3.3.1. Eligible savings and costs calculation rule

The following calculation rule applies to all prescriptive measures projects submitted to Hydro-Québec. It is built into Hydro-Québec's required calculation tools.

Financial assistance is calculated automatically based on the data you enter and is equivalent to the lower of the following amounts:

- Eligible savings in kWh x 15¢/kW
- Percentage of eligible costs (varying according to the prescriptive measure)

3.3.2. Financial assistance thresholds by usage type

Each project must entitle you to the minimum financial assistance threshold based on the usage type. The current thresholds are specified in section 2.3 of this guide.

Section 4. Prescriptive Measures Component – Procedure

The Program consists of five main steps (a detailed description follows).

Step 1 – Submit project outline form

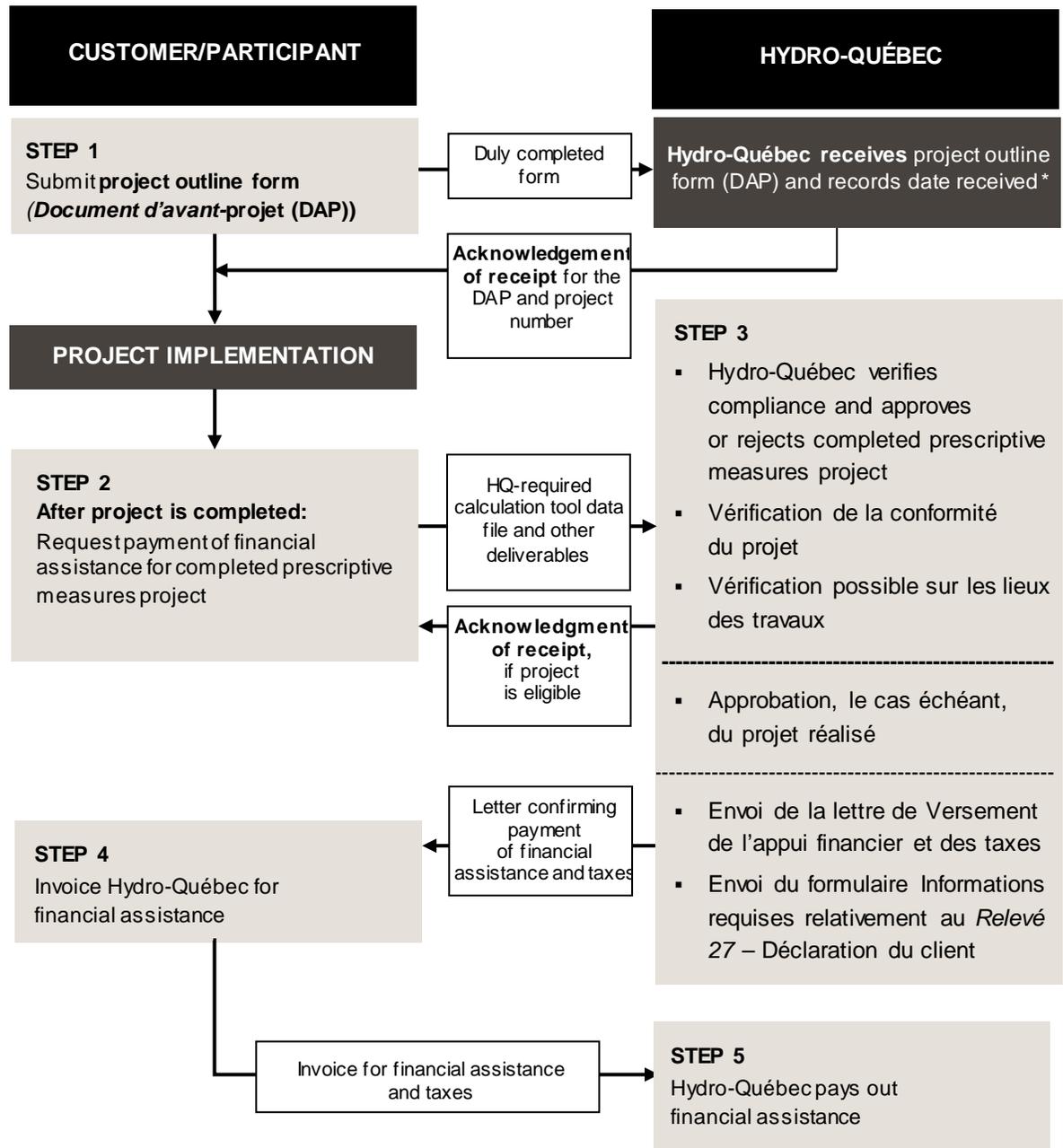
Step 2 – Request payment of financial assistance for completed prescriptive measures project

Step 3 – Hydro-Québec verifies compliance and approves or rejects completed prescriptive measures project

Step 4 – Invoice Hydro-Québec for financial assistance

Step 5 – Hydro-Québec pays out financial assistance

4.1. Step-by-step procedure for obtaining financial assistance



* Hydro-Québec reserves the right to request revisions.

4.2. General instructions

4.2.1. Application processing times

A Hydro-Québec representative may contact you at any time during the application process to request further details about your proposal. Hydro-Québec reserves the right to stop processing your application and close the file if it does not receive a satisfactory response to its request within two months. In such a case, Hydro-Québec will notify you in writing of its intention prior to closing your file.

The time required to process your application, and consequently to pay out the financial assistance, depends on the complexity, completeness and quality of the proposal submitted, as well as how quickly you provide all the required deliverables.

4.2.2. Participant's Guide – Applicable terms and conditions

The terms and conditions applicable to your prescriptive measures project are those of the *Participant's Guide* in effect on the date the work begins. The prescriptive measures project is submitted to Hydro-Québec, along with all required deliverables, once all the work associated with the eligible measures has been completed. You must always use the most recent version of the calculation tool required, that is, the one in effect on the date the work begins.

4.3. Step-by-step procedure for obtaining financial assistance

Step 1 – Submit project outline form (*Document d'avant-projet*)

Essential step before starting work*

Documents required at step 1

| All prescriptive measures project types | Notes |
|--|--|
| Document d'avant-projet [project outline form] | You must submit a project outline form to Hydro-Québec before submitting a prescriptive measures project. |

1.1 Special requirements for the project outline form

- Before starting work on the project,* you must fill out the project outline form (*Document d'avant projet*), available at www.hydroquebec.com/industrial (see subsection 2.2 below), in order to submit your prescriptive measures project under this component.

*A prescriptive measures project must start on either one of the following:

- The date the equipment is first ordered (purchase order or invoice showing date ordered) for eligible energy efficiency measures

or

- The date the first contract was signed with a third party respecting work on eligible energy efficiency measures

- The project outline form must contain a brief description of the measures involved in your request for financial assistance under the program.

- A separate project outline form must be completed for the specific measures for each type of usage (lighting, compressed air, etc.). All forms must be submitted before the work begins.
- If measures are added or withdrawn during the project, the form remains valid, provided that the usage type remains unchanged. A new form is therefore not required.

1.2 Submit the project outline form

- You must submit the duly completed project outline form to **PGEE_SI_Mesuresprescriptives@hydro.qc.ca**. You can then begin the related work and prepare the necessary documents for the eligible energy efficiency measures.

1.3 Hydro-Québec receives the project outline form

- **Hydro-Québec records the date on which it received your form** and issues an acknowledgment of receipt containing the reference number assigned to your project. You must indicate this number in all future communication with Hydro-Québec regarding the project.
- Submitting the project outline form does not create a commitment of any kind and is not equivalent to submitting a project. Hydro-Québec is under no obligation to grant financial assistance for a project presented in the form. A project is deemed submitted when Hydro-Québec receives the duly completed data file generated by the required calculation tool⁴ (see Step 2).

Step 2 – Request payment of financial assistance for completed prescriptive measures project

2.1 Preparing the request for payment

Once the work has been completed, you must submit a request for payment of financial assistance, including the final version of the data file from the required calculation tool,⁵ as well as the required documents, according to the terms and conditions in effect at the time of submission. At that time, you become a Program participant.

To facilitate the processing of your project under this component, be sure to use the version of PROSI, PEI, or the Refrigeration tool that is in effect on the date the work begins.

The tables on the following pages outline the main deliverables you must submit by type of usage. Note that the data file from the required calculation tool must be accompanied by a duly completed copy of the Confirmation of completed project and request for payment of financial assistance form, signed by an authorized individual. You can download this document from **www.hydroquebec.com/industrial**.

Failure to submit any of the required documents or files might cause a delay in the processing of the project by Hydro-Québec. Hydro-Québec reserves the right to refuse any nonprobative supporting document.

You must meet all Program requirements. **In addition to the documents described in section 2.2 (below), Hydro-Québec may request any other deliverables it deems necessary.**

4 File with a .vap extension, generated by PROSI; an .hqpei extension, generated by PEI; or an .hqvpr extension, generated by the Refrigeration tool.

5 File with a .vap extension, generated by PROSI; an .hqpei extension, generated by PEI; or an .hqvpr extension, generated by the Refrigeration tool.

2.2 Deliverables required for payment of financial assistance

| For all projects presented | |
|---|--|
| Confirmation of completed project and request for payment of financial assistance form | Once the project has been completed, you must fill out and sign the Confirmation of completed project and request for payment of financial assistance form. This document is available for download at www.hydroquebec.com/industrial . |
| Proof of the date on which the work began | The following documents are accepted: <ul style="list-style-type: none"> ▪ Copy of the first equipment work order related to eligible energy efficiency measures; ▪ Copy of the first invoice indicating the date of the equipment order related to eligible energy efficiency measures; ▪ Copy of the first contract signed with a third party for work regarding eligible energy efficiency measures. |
| Data file from the required calculation tool | Notes: Draft working files, which have an .iap (PROSI) or .hqpr (Refrigeration application) file extension, will not be accepted. You must submit all other required documents, along with the final version of the data file from the calculation tool prescribed for the type of usage associated with the measures you are submitting. |

| By type of usage based on the measures submitted | | | |
|--|---|------------------------------|---|
| Technical requirements | Lighting <ul style="list-style-type: none"> ▪ Data sheets for the main components including: <table border="1" data-bbox="683 1178 1360 1455"> <tr> <td>Lighting fixture data sheets</td> </tr> <tr> <td> <ul style="list-style-type: none"> ▪ Manufacturer ▪ Model number (DesignLights Consortium™ list or the ENERGY STAR® list) ▪ Total power ▪ Luminous flux </td> </tr> </table> <p>Note: See appendix 4 for the specific technical requirements for LED lighting projects.</p> | Lighting fixture data sheets | <ul style="list-style-type: none"> ▪ Manufacturer ▪ Model number (DesignLights Consortium™ list or the ENERGY STAR® list) ▪ Total power ▪ Luminous flux |
| | Lighting fixture data sheets | | |
| <ul style="list-style-type: none"> ▪ Manufacturer ▪ Model number (DesignLights Consortium™ list or the ENERGY STAR® list) ▪ Total power ▪ Luminous flux | | | |
| Compressed air <ul style="list-style-type: none"> ▪ For all compressor systems: data sheets for the main components, including efficiency data or selection worksheets Note: Data sheets must include all data shown in the data sheet templates produced by the Compressed Air & Gas Institute (CAGI). These templates can be downloaded from www.cagi.org/performance-verification/data-sheets.aspx. ▪ For compressor systems rated between 75 and 200 hp: compressed-air system verification report (air audit) | | | |

| | |
|--|---|
| | <p>Variable-frequency drives (VFDs)</p> <ul style="list-style-type: none"> Data sheets for the main components, including efficiency data or selection worksheets |
| | <p>Water chillers</p> <ul style="list-style-type: none"> Data sheets for the main components, including efficiency data or selection worksheets |
| | <p>Industrial refrigeration</p> <ul style="list-style-type: none"> See section 5 of the <i>Guide méthodologique et technique pour la préparation de projets en réfrigération à basse et à moyenne température</i> [procedural and technical guide to preparing low-and medium-temperature refrigeration projects], downloadable from www.hydroquebec.com/industrial |

2.3 Submitting the request for payment

You must follow the instructions below when submitting your request for payment. **You must provide all required project-related documents and information.**

| General instructions – All documents | Exceptions – When digital documents cannot be produced |
|--|---|
| <p>You must submit all required documents to PGEE_SI_Mesuresprescriptives@hydro.qc.ca, except for your invoice for financial assistance and taxes, which is to be submitted to BureauEE.Affaires@hydro.qc.ca.</p> <p>You must include your project reference number in all your correspondence with Hydro-Québec.</p> <p>You will receive this number when Hydro-Québec acknowledges receipt of your project outline form.</p> | <p>Printed documents must be faxed to 1 866 303-5562.</p> <p>All faxed documents must be identified with the reference number assigned to your prescriptive measures project.</p> |

Step 3 – Hydro-Québec verifies compliance and approves or rejects completed prescriptive measures project

Once Hydro-Québec has received your request for payment of financial assistance, it will input your prescriptive measures project into its systems, send you an acknowledgement of receipt, verify the compliance of the project and submitted documents, and approve the project if accepted.

Hydro-Québec may visit the site at which the measures have been implemented to inspect the project and ensure the work has been carried out as specified. In such a case, you will receive two business days' notice.

Hydro-Québec reserves the right to adjust or cancel the financial assistance granted to the project if it finds that the work has not been carried out as specified in the request for payment.

Step 4 – Invoice Hydro-Québec for financial assistance

Documents required at step 4 (for Hydro-Québec to pay financial assistance)

| All prescriptive measures projects | Note |
|---|--|
| <ul style="list-style-type: none">Your invoice for financial assistance and taxes | You must send your invoice within 30 days of receiving the Versement de l'appui financier et des taxes [financial assistance and tax payment] letter. |

Financial assistance provided under the Program is subject to the goods and services tax (GST) and Québec sales tax (QST) except in specific cases. You must first issue an **original** invoice indicating the amounts of each of these taxes, and submit it to Hydro-Québec.

The invoice must also provide all the information stipulated by tax regulations, including GST and QST registration numbers, if applicable.

To help you produce the invoice, Hydro-Québec will send you a letter specifying the information required under the Program and the amount of the financial assistance. Once you have put together all the required information, you must issue an invoice through your accounting system.

If you do not need to collect GST and QST, you must indicate “Taxes not applicable” on your invoice.

You must send your invoice to Hydro-Québec **within 30 days of being informed of the payment amount**.

Finally, unless your organization is exempt from paying tax, Hydro-Québec will issue a Relevé 27 – Paiements du gouvernement [government payment information] slip, as required by the Québec Taxation Act, as a record of the financial assistance paid. Determining the full extent of income and other tax implications is your sole responsibility (see subsection 1.7).

Step 5 – Hydro-Québec pays out financial assistance

Upon receiving your **original** invoice, Hydro-Québec will pay out the approved amount.

Payment will be issued within 45 days of receiving your supporting documents (provided they meet the requirements).

Hydro-Québec reserves the right to refuse to pay out the financial assistance, in whole or in part, should your prescriptive measures project fail to meet Program requirements.

Appendix 1 Activity Sectors Eligible for the Industrial Systems Program According to the North American Industry Classification System (NAICS codes)

Guidelines

Statistics Canada uses the **North American Industry Classification System (NAICS)** to classify Canadian industries according to economic sector. Every business has its own **NAICS code** based on the economic activity carried out in its building.

Hydro-Québec uses this code to determine whether projects submitted to the Industrial Systems Program and Buildings Program for business customers (commercial, institutional and industrial) are eligible).

Hydro-Québec's energy efficiency programs are intended for customers in the service-providing and goods-producing categories of this classification system.

General rules for project allocation under the Industrial Systems Program

In the vast majority of cases, to be eligible for all of the components of the Industrial Systems Program, the building where the project will be implemented must have a NAICS code in one of the following goods-producing economic sectors. An eligible building must use electricity to manufacture, assemble or process goods or foodstuffs, extract raw materials, or handle or transport materials. **Exceptionally, buildings that are used primarily for commercial, institutional or agricultural purposes may be eligible for industrial activities (see examples of exceptions below).**

Goods-Producing Industries

11 – Agriculture, Forestry, Fishing and Hunting

21 – Mining and Oil and Gas Extraction

31 – Manufacturing; 32 – Manufacturing; 33 – Manufacturing

Exceptions

The table below lists examples of the most common exceptions. It is not an exhaustive list.

If you are unsure about the eligibility of your project, please contact your **Hydro-Québec representative or Soutien aux clients et aux partenaires** [the customer and partner support center] at 1 877 817-1433.

Examples of exception cases

| | |
|--|--|
| <p>Projects involving buildings used to produce goods with the following NAICS codes <u>are not eligible</u> under the Industrial Systems Program.⁶</p> | <p>Projects involving buildings used to provide services⁷ with the following NAICS codes <u>must be submitted</u> under the Industrial Systems Program.</p> |
| <p>115000 – Support Activities for Agriculture and Forestry All projects in this subsector.</p> <p>213000 – Support Activities for Mining and Oil and Gas Extraction All projects in this subsector.</p> | <p>71392 – Skiing Facilities Only projects involving the following:</p> <ul style="list-style-type: none"> ▪ Snow-making equipment ▪ Ski lifts <p>Industrial applications specific to these subsectors:</p> <p>221310 – Canal, Irrigation 221320 – Sewage Treatment Facilities 486000 – Pipeline Transportation 493120 – Refrigerated Warehousing and Storage 562000 – Waste Management and Remediation Services</p> <p>Note: All other subsectors beginning with 22 – Utilities, 48-49 – Transportation and Warehousing, and 56 – Administrative and Support, Waste Management and Remediation Services are eligible for Hydro-Québec’s Buildings Program.⁸</p> <p>All other industrial applications of a commercial or institutional building</p> <p>As a rule, and except for the cases listed above, all projects that are carried out in a building used to produce services, but which concern an industrial activity conducted in that building, must be submitted under the Industrial Systems Program.</p> |

⁶ These buildings may qualify for the Buildings Program if they meet its conditions. For details, see www.hydroquebec.com/business/energy-efficiency/programs/buildings-program.

⁷ In most cases, a building project submitted by a customer with a NAICS code in one of the service sectors is eligible for Hydro-Québec’s Buildings Program. For details, see www.hydroquebec.com/business/energy-efficiency/programs/buildings-program.

⁸ To learn more about the service-providing NAICS codes eligible for Hydro-Québec’s Buildings Program, see the Participant’s Guides at www.hydroquebec.com/business/energy-efficiency/programs/buildings-program.

Customer involved in multiple activities

If an administrative space or another space with a service-providing NAICS code is located in the same building as an industrial space with a goods-producing NAICS code, the following rule applies:

- All projects involving this type of building must be submitted under the Industrial Systems Program, unless they include one or more energy efficiency measures to be implemented **exclusively** in the administrative space (or another space with a service-producing NAICS code).

However, if the administrative space (or another space with a service-providing NAICS code) is located in a separate building from the plant, all projects involving this building must be submitted under the Buildings Program, even if the building in question is connected by a walkway to the plant or if the two buildings are located on the same site.

Note: If your project involves a multiple-use building, please contact **Hydro-Québec** to ensure that you are submitting your project to the appropriate program.

Obtaining an NAICS code

To obtain the official NAICS code of the building where your project will be carried out, you must send an official request to Statistics Canada and submit a formal letter (on company letterhead) with the following information: company number, name and full address, and signature of an authorized person (owner, president or chief executive officer).

For more information, visit the Statistics Canada Web site at www.statcan.gc.ca, e-mail infostats@statcan.gc.ca or call **1 800 263-1136**.

Hydro-Québec reserves the right to ask you to produce the official document you received from the Business Register Division.

Appendix 2 Specific Terms and Conditions for Certain Off-Grid Systems

This Appendix describes the specific terms and conditions that apply to some off-grid systems. Projects involving off-grid systems must also comply with the general terms and conditions of the component.

Villages connected to off-grid systems

Côte-Nord (Lac-Robertson generating station)

- Blanc-Sablon, Chevery, Harrington Harbour, La Tabatière, Lourdes-de-Blanc-Sablon, Middle Bay, Mutton Bay, Rivière-Saint-Paul, Tête-à-la-Baleine, Côte-Nord-du-Golfe-Saint-Laurent, Gros-Mécatina, Bonne-Espérance and Pakuashipi

Côte-Nord (Menihék generating station)

- Schefferville, Matimekosh, Lac-John and La Romaine

Gaspésie—Îles-de-la-Madeleine

- Les Îles-de-la-Madeleine (Fatima, Grande-Entrée, Grosse-Île, Havre-aux-Maisons, Havre-Aubert, Étang-du-Nord, Cap-aux-Meules and L'île-d'Entrée)

Nunavik

- Akulivik, Aupaluk, Inukjuak, Iujivik, Kangiqsualujuaq, Kangiqsujuaq, Kangirsuk, Kuujuaq, Kuujuarapik, Whapmagoostui, Puvimittuq, Quaqtaq, Salluit, Tasiujaq and Umiujaq

Haute-Mauricie

- Obedjiwan and Clova

Île d'Anticosti

- Port-Menier

Specific conditions

- Any measure that helps reduce oil consumption in a building or process connected to an off-grid system is recognized in calculating financial assistance and the eligible energy savings. Oil consumption savings will be expressed in equivalent kilowatthours (ekWh) according to the equipment's output on the date you submit the project outline form (*Document d'avant-projet*). For this purpose, 1 ekWh has the same value as 1 kWh.

Ineligible measures

- All conversions from one source of energy to another are excluded.

Calculating financial assistance

- Here are the conversion factors for liters of oil to equivalent kilowatthours:
 - **Projects for existing buildings:** 7.5118 ekWh/L, the equivalent of an oil heating system operating at 70% efficiency
 - **Projects for new buildings:** 8.5849 ekWh/L, the equivalent of an oil heating system operating at 80% efficiency

Appendix 3 Municipal and Cooperative Systems

Coopérative Régionale d'Électricité de St-Jean-Baptiste de Rouville

3113, rue Principale Saint-Jean-Baptiste-de-Rouville (Québec) J0L 2B0

www.coopsjb.com

Hydro Westmount

995, rue Glen, Westmount (Québec) H3Z 2L8

www.hydrowestmount.ca

Service électrique de la Ville d'Alma

900, avenue Bombardier Nord, Alma (Québec) G8B 7A1

www.ville.alma.qc.ca

Division de l'électricité de la Ville d'Amos

182, 1^{re} Rue Est, Amos (Québec) J9T 2G1

www.ville.amos.qc.ca

Service électrique de la Ville de Baie-Comeau

Service à la clientèle, 5, avenue William-Dobell, Baie-Comeau (Québec) G4Z 1T6

www.ville.baie-comeau.qc.ca

Hydro-Coaticook

77, avenue de la Gravière, Coaticook (Québec) J1A 3E5

www.ville.coaticook.qc.ca

Hydro-Joliette

Édifice Maurice-Lévesque (garage municipal), 85, rue P.-H.-Desrosiers, Joliette (Québec) J6E 6H2

www.ville.joliette.qc.ca

Hydro-Magog

520, rue Saint-Luc, Magog (Québec) J1X 2X1

www.ville.magog.qc.ca

Hydro-Jonquière (Ville de Saguenay)

1710, rue Sainte-Famille, C. P. 2000, Jonquière (Québec) G7X 7W7

www.ville.saguenay.qc.ca

Hydro-Sherbrooke

1800, rue Roy, C. P. 610, Sherbrooke (Québec) J1K 1B6

www.ville.sherbrooke.qc.ca

Appendix 4 Terms and Conditions for Use of Tools Required Under the Prescriptive Measures Component

This appendix describes the terms and conditions for eligible measure types covered by the Prescriptive Measures component based on the intended usage:

- Compressed air
- Lighting
- Variable-frequency drives (VFDs)
- Water chillers
- Industrial refrigeration

Projects submitted using tools required by the Prescriptive Measures component must comply with all of its other terms and conditions.

- Energy efficiency measures for variable-frequency drives, air compression and water chilling are submitted using the **industrial systems application, PROSI**. For more information on how to complete PROSI forms, refer to the accompanying online help.
- Energy efficiency measures for lighting are submitted using the **industrial lighting application, PEI**. For more information on the procedure to follow, refer to the accompanying online help.
- Energy efficiency measures for industrial refrigeration are submitted using the **Refrigeration application**. For more information about how to use it, refer to *Guide méthodologique et technique pour la préparation de projets en réfrigération à basse et à moyenne température* [procedural and technical guide to preparing low- and medium-temperature refrigeration projects].
- These calculation tools, along with the procedural guide, can be downloaded from **www.hydroquebec.com/industrial**.

4.1. Energy efficiency measures in the industrial systems application (PROSI)

Compressed air

Eligible measures

- The six eligible measures are:
 1. Replacement of one or more compressors with a variable-speed compressor rated between 75 hp and 200 hp*
 2. Replacement of one or more compressors with a variable-speed compressor rated 75 hp or less*
 - * If the compressor is combined with one or more fixed-speed compressors (any rating), this measure remains eligible; however, only the electricity savings produced by the variable-speed compressor are considered in the financial assistance calculations.
 - If the compressor rating exceeds 200 hp, your project may be eligible for the Retrofit component or the New Plant, Expansion or Addition of Production Lines component.
 3. Replacement of one or more dryers with a more efficient refrigerated air dryer (cycling or with a variable-speed or thermal mass refrigeration compressor)

4. Replacement of one or more dryers with a more efficient desiccant air dryer (equipped with a heating element or blower purge)
5. Replacement of solenoid drain valves with zero-air-loss drain valves
6. Increased compressed-air storage capacity

Ineligible measures

- Measures associated with zero-loss drain valves are not eligible.

Variable-frequency drives (VFDs)

Eligible projects and measures

- The form applies solely to:
 - VFDs rated 1 to 200 hp
 - measures applied to ventilation systems and centrifugal fluid pumps (water, glycol, etc.)
- Your project may include several VFDs with different power ratings.
- Projects involving the installation of a new VFD are eligible:
 - **New facility** (*including expansion*): Installation of a VFD on a system not currently controlled by a VFD.
- The VFD must run for at least 2,000 hours a year, offer sufficient load variability to generate electricity savings, and allow for remote control by an automated system so that motor operation can be modulated. The number of operating hours in excess of the 2,000-hour minimum will have no bearing on the amount of financial assistance granted.

Ineligible measures

Measures involving the following are not eligible:

- Replacement of a VFD on a system already controlled by a VFD
- A VFD used as a starter or to correct the power factor of a piece of equipment
- A VFD installed as backup equipment or kept in the company's inventory
- Replacement of a DC (direct-current) VFD by an AC (alternating-current) VFD)

Calculating financial assistance

- Financial assistance is calculated according to a predefined scale based on the VFD rating level (in hp and kW).
- If the exact power rating of a VFD is not indicated on the form and does not exceed 200 hp, select the next lower level. If it does exceed 200 hp, your project may be eligible under the Retrofit component or the New Plant, Expansion or Addition of Production Lines component.
- Use the lesser of the two power ratings, either for the VFD or for the motor that it controls.

Water chillers

Eligible projects and measures

- The form is designed for self-contained water chillers with a maximum capacity of 200 tons of refrigeration.
- It applies only to measures relating to water-cooled chillers designed for constant-load applications.
- Your project may include several chillers with different power ratings.
- Projects involving the installation of a new water chiller are eligible:
 - **New facility (including expansion):** Addition of a new water-cooled chiller with or without natural cooling, or a variable-frequency drive (VFD) on the cooling-tower fan
- The efficiency of new self-contained water chillers must comply with the minimum requirements of CSA Standard C743-02.

Ineligible measures

Measures involving the following are not eligible:

- Replacement of an existing water-cooled chiller with or without natural cooling, or the VFD on the cooling-tower fan
- Variable-load applications, such as air-conditioning or cold-storage rooms
- Replacement equipment using CFCs (R11 and R12) or HCFCs (R22)
- Chiller installed as backup equipment or kept in the company's inventory
- Replacement or installation of air coolers or absorption coolers

Calculating financial assistance

- Financial assistance is calculated according to a predefined operating model based on the different parameters.

4.2. Measures in the industrial lighting application (PEI)

Eligible measures

Eligible energy efficiency measures for lighting must apply to new equipment to be installed as part of permanent lighting systems. The equipment must be used for general area lighting.

Only measures listed in the industrial lighting application are eligible. These measures differ based on the nature of the building included in the prescriptive measures project.

Types of eligible interventions:

- Installing new LED fixtures
- Converting existing light fixtures using LED retrofit kits
- Replacing fluorescent tubes with LED tubes
- Installing lighting control systems

LED lighting products must be approved by the DesignLights Consortium™ or certified by ENERGY STAR® to ensure a minimum energy efficiency gain in relation to the baseline for the purposes of the program.

Ineligible measures

For the sake of precision, the types of interventions and applications that are not eligible are presented below:

Types of ineligible interventions

- Installing new induction fixtures
- Replacing incandescent lamps with LED lamps
- Removing lighting fixtures
- Removing lamps
- Manual lighting controls
- Installing manual dimmers

Types of ineligible applications

- Exit signs
- Signs
- Lighting fixtures associated with processes
- Greenhouse lighting fixtures

Lighting projects related to processes or greenhouses are not eligible under the Prescriptive Measures component of the Industrial Systems Program. They must be submitted, where appropriate, under the Retrofit component or the New Plant, Expansion or Addition of Production Lines component.

Agricultural customers that submit eligible lighting projects must do so under the Efficient Farming Products Program described here: www.hydroquebec.com/business/energy-efficiency/programs/efficient-farming-products-program/.

Refer to the PEI methodology guide for more information on measure eligibility.

Rules for calculating eligible savings and financial assistance

- Eligible energy savings are based on maintaining the lighting level. The amount of financial assistance depends on the eligible energy savings calculated using the tool and cost benchmarks

4.3. Energy efficiency measures in the Refrigeration application

Industrial refrigeration

Eligible measures

- The 14 eligible measures are:
- Measure 1: Replacing liquid injection cooling with a thermosiphon
- Measure 2: Increasing intake temperature
- Measure 3: Decreasing nominal condensation temperature
- Measure 4: Converting a hydrofluorocarbon (HFC) system to ammonia
- Measure 5: Installing a more efficient compressor
- Measure 6: Implementing subcooling or adding an economizer
- Measure 8: Implementing floating head pressure

- Measure 10: Replacing thermostatic expansion valves with electronic valves on direct expansion (DX) systems
- Measure 11: Reducing defrosting time with sensors or other devices
- Measure 13: Adding speed controls to condenser fan motors
- Measure 14: Adding any type of load-based evaporator fan control
- Measure 20: Installing efficient lighting to reduce refrigeration load
- Measure 21: Implementing other measures to reduce refrigeration load
- Measure 22: Installing a VFD on secondary circuit pumps

Ineligible measures (not covered by Refrigeration application)

The following measures are **not covered** by the Refrigeration application:

- Natural chilling chamber or process cooling
- Heat recovery from refrigeration systems

Refrigeration measures not found in the Refrigeration application may be eligible for a project under the Retrofit component or the New Plant, Expansion or Addition of Production Lines component.

Calculating financial assistance

- The Refrigeration application calculates eligible consumption and electricity savings based on refrigeration loads (amount of heat required in refrigeration tons) of proposed efficient chilling chambers, processes and equipment.
- Eligible electricity savings correspond to the difference in consumption of an efficient refrigeration system in comparison to a standard-efficiency refrigeration system, as defined by pre-established parameters found in Hydro-Québec's baseline scenario. These baseline scenario parameters are integrated into the Refrigeration application.

Appendix 5 Prescriptive Measures Component of the Industrial Systems Program – Revision List

This version history is provided for reference only.

| Modified item | Effective date | Type | Description |
|--|----------------|--|---|
| <i>Participant's Guide</i> January 2011 Vol. 1, No. 1 | Jan. 4, 2011 | N/A | <u>Initial release of the terms and conditions for the six Industrial Systems Program components, subject to Régie de l'énergie approval.</u> |
| PROSI, version 2 | Feb. 25, 2011 | Tool updates | <ul style="list-style-type: none"> ▪ Adjustments to calculation parameters for T5HO lighting measure in version 2 of the industrial systems software (PROSI) |
| <i>Participant's Guide</i> May 2011 Vol. 1, No. 2 | May 10, 2011 | Program modifications Clarification and correction of existing terms and conditions | <ul style="list-style-type: none"> ▪ Following the Régie de l'énergie ruling on the 2011 budget for the new Industrial Systems Program, the following components were ended, retroactive to January 1, 2011: <ul style="list-style-type: none"> - Retrofit - Technology Demonstration - Continuous Measurement and Electricity Management ▪ Centrifugal chillers were included. |
| <i>Participant's Guide</i> November 2011 Vol. 1, No. 2 | Nov. 28, 2011 | Clarification and correction of existing terms and conditions | <ul style="list-style-type: none"> ▪ Participants may transfer their rights and obligations under the Program to a third party by signing a proxy for the implementation of their energy efficiency project (see Industrial Systems Program – General Conditions and Undertakings). ▪ Participants agree to make available to Hydro-Québec all supporting documents and any other elements relating to the completion of the project, for up to five years (rather than two years as stated in the previous version of the <i>Participant's Guide</i>) from the end of the contract or completion of the project, as applicable (see Industrial Systems Program – General Conditions and Undertakings). ▪ Participants agree to ensure that their electrical installation continues to meet the distributor's conditions of service and does not cause system disturbances (see Industrial Systems Program – General Conditions and Undertakings). ▪ The definitions of a number of terms were clarified (see the Glossary). ▪ Exceptionally, buildings subject to Rate D contracts are eligible provided they meet the eligibility criteria described in this <i>Participant's Guide</i>. This particularly affects primarily agricultural sites (see subsection 2.2). ▪ Only new equipment is eligible under this component (see subsection 2.2.2). ▪ To qualify, the project must result in: <ul style="list-style-type: none"> - Financial assistance of at least \$2,000, for lighting measures (replaces the minimum of 10,000 eligible kWh per year) - Financial assistance of at least \$5,000, for each of the other types of eligible measures (replaces the minimum of 25,000 eligible kWh per year). |

| Modified item | Effective date | Type | Description |
|---|----------------|--|---|
| | | | <p>(See subsection 2.2.2)</p> <ul style="list-style-type: none"> ▪ As a general rule, projects must include measures implemented in the same building. Exceptionally, drinking-water and wastewater treatment plants and pumping stations operated by the same municipality are considered to be a single facility (see subsection 2.5). ▪ Clarifications to the prerequisites for the deliverables required when requesting payment (heading 2.2, step 2 of subsection 4.3 of this <i>Participant's Guide</i>). ▪ Revisions to how projects submitted under the Program are allocated according to the North American Industry Classification System (NAICS codes) (see appendix 1 of this <i>Participant's Guide</i>). ▪ Clarification of requirements for eligible measures for the off-grid systems listed in Appendix 2 of this <i>Participant's Guide</i>. ▪ The terms and conditions applicable to the use of the forms included in the industrial systems software (PROSI)—Compressed Air, Lighting, Variable-Frequency Drives (VFDs) and Water Chillers—were specified in Appendix 4 of this <i>Participant's Guide</i>. |
| Program Web site | Dec. 9, 2011 | New tool | <ul style="list-style-type: none"> ▪ A new calculation tool, <i>Formulaire – Niches à porcelets</i> [Piglet nursery form], was put online for agricultural customers. |
| <i>Participant's Guide</i> April 2012 Vol. 2, No. 1 | April 2, 2012 | Program modifications Clarification and correction of existing terms and conditions | <ul style="list-style-type: none"> ▪ Following the Régie de l'énergie ruling on the 2012 budget, the Retrofit, Technology Demonstration, Continuous Measurement and Electricity Management components were reinstated. ▪ The general terms and undertakings of the Industrial Systems Program were modified, along with those for this component. ▪ Clarifications regarding industrial buildings connected to the Hydro-Québec grid (see subsection 2.2). ▪ Before the work is started, participants must present a separate project outline form (<i>Document d'avant-projet</i>) for each system type submitted under this component (see paragraph 1.1 of subsection 4.3). |

| Modified item | Effective date | Type | Description |
|---|----------------------|---|---|
| <p><i>Participant's Guide</i> April 2012 Vol. 2, No. 2</p> | <p>June 18, 2012</p> | <p>Clarification and correction of existing terms and conditions</p> <p>Tools updated</p> | <ul style="list-style-type: none"> ▪ If the measures to be implemented are included in PROSI, the project must be submitted under the Prescriptive Measures component, even if they are part of a set of interdependent energy efficiency measures, some of which would be eligible under another component of the Industrial Systems Program. ▪ A new version of the PROSI calculation tool, version 2.0.2, includes modifications for projects submitted under the Prescriptive Measures component of the Industrial Systems Program after June 18, 2012. These include an update to some of its reference parameters: <ul style="list-style-type: none"> - Water chillers: For installation of new chillers, the minimum performance coefficients in CSA standard C743-02 (2002) apply, and not the values in CSA C743-09 (2009). - Compressed air: For the measure to replace one or more compressors with a variable-speed compressor, the rating is now limited to 200 hp (previously 300 hp). - Variable-frequency drives (VFDs): The new cost references are taken into consideration in the new version of PROSI. |
| <p><i>Participant's Guide</i> November 2012 Vol. 2, No. 3</p> | <p>Nov. 5, 2012</p> | <p>Clarification and correction of existing terms and conditions</p> <p>New tool</p> <p>Tools updated</p> | <ul style="list-style-type: none"> ▪ The end-of-program terms were specified. ▪ Some general terms and undertakings were reviewed, including those on compensation and the participant's financial circumstances and operating capacity. In addition, the section regarding power of attorney was removed. ▪ Projects or parts of projects that include auxiliary equipment that is associated with a measure in the calculation tools but is not taken into account by those tools are not eligible. ▪ To be eligible, a project that includes compressed air measures must be entitled to financial assistance of at least \$4,000 (rather than more than \$5,000). ▪ Financial assistance cannot exceed \$500,000 per project. This maximum is cumulative from November 5, 2012 to December 31, 2015. ▪ Details were added regarding deliverables required for the request for payment. ▪ A participant must send an invoice with the duly completed and signed Informations requises relativement au Relevé 27 – Déclaration du client [information required for Relevé 27 – Customer declaration] form at most 30 days after receiving the Versement de l'appui financier et des taxes [financial assistance and tax payment] letter. ▪ A new calculation tool, the Refrigeration application (version 2.0), was made available for industrial refrigeration projects). ▪ The new version of PROSI 2.0.3 was put online. To better reflect market trends, some of the tool's reference parameters were updated. |

| Modified item | Effective date | Type | Description |
|--|-----------------------|--|---|
| <p><i>Participant's Guide</i> April 2013 Vol. 3, No. 1</p> | <p>April 22, 2013</p> | <p>Clarification and correction of existing terms and conditions</p> | <ul style="list-style-type: none"> ▪ From this point forward, infrared piglet warmer control projects must be submitted under the Efficient Farming Products Program. Consult the Program Web site at www.hydroquebec.com/business/energy-efficiency/programs/efficient-farming-products-program. ▪ Clarifications were made in the End of Industrial Systems Program section. ▪ Two conditions and undertakings specific to the participant were added to section 1.3. As the participant, you: <ul style="list-style-type: none"> - have the obligation and responsibility to stay informed about all terms related to your project and undertake to consult the Industrial Systems Program Web site on a regular basis to verify whether there have been any changes to the Prescriptive Measures component; - acknowledge that Hydro-Québec can modify, without notice, the <i>Participant's Guide</i> and calculation tools. ▪ Clarifications regarding the conditions of financial assistance were made in section 3.1. ▪ Appendix 1 (Activity Sectors Eligible for the Industrial Systems Program According to the North American Industry Classification System [NAICS codes]): The rule for administrative spaces or other spaces associated with a service-providing NAICS code located in the same building as a plant was modified. ▪ Clarification to appendix 4: Refrigeration measures not found in the Refrigeration application may be eligible for a project under the Retrofit component or the New Plant, Expansion or Addition of Production Lines component, provided the project meets the eligibility requirements of the component in question. |
| <p><i>Participant's Guide</i> July 2013 Vol. 3, No. 2</p> | <p>June 21, 2013</p> | <p>Clarification and correction of existing terms and conditions</p> | <ul style="list-style-type: none"> ▪ The terms respecting the maximum amount of financial assistance per project were updated as follows: <ul style="list-style-type: none"> - The maximum financial assistance for a project submitted using the Refrigeration application is \$500,000. - The maximum amount of financial assistance for all projects (lighting, compressed air, water chillers and variable-speed drives) submitted using PROSI for a given site is \$500,000. - These changes apply to all projects submitted after November 5, 2012. |

| Modified item | Effective date | Type | Description |
|--|----------------|---|---|
| | | | <ul style="list-style-type: none"> Participants are entirely responsible for remaining informed of updates to the terms and conditions of the Program, and therefore undertake to regularly check the Program Web site and sign up for the Program new sletter at www.hydroquebec.com/industrial (see Industrial Systems Program – General Terms and Undertakings). |
| - | May 1, 2015 | Program modifications | <ul style="list-style-type: none"> The Technology Demonstration component was withdrawn from the Industrial Systems Program and merged with IDEAS (assistance for technology demonstration and experimentation initiatives) and AVENUES (marketplace testing for energy-efficient technologies). The Continuous Measurement and Electricity Management component was renamed Electricity Management Systems. The terms and conditions for this component were updated and improved, as were the tools and documents required to become a participant. |
| <i>Participant's Guide</i> <i>May 2015</i> Vol. 5, No. 1 | May 1, 2015 | <p>Reorganization of the <i>Participant's Guide</i></p> <p>Clarification and correction of existing terms and conditions</p> <p>Modification of the submission process for deliverables</p> <p>New calculation tool</p> | <ul style="list-style-type: none"> The General Terms and Conditions section for the Industrial Systems Program and the Conditions and Undertakings section specific to the Prescriptive Measures component were merged (see section 1, Conditions and Undertakings) A section defining the scope of the <i>Participant's Guide</i> has been added. To be eligible, a project must result in financial assistance of at least \$2,500 (dropped from \$4,000) for measures relating to compressed air, lighting, VFDs and water chillers. No modification is made to the threshold required for industrial refrigeration measures: a project must always result in minimum financial assistance of \$5,000. The maximum financial assistance for a project submitted using the Refrigeration application is \$500,000. The maximum financial assistance for all projects (lighting, compressed air, water chillers and VFDs) at a single site, submitted using PROSI and PEI is \$500,000. These terms and conditions apply to all projects submitted as of May 1, 2015. <u>Modification and clarifications to Appendix 1:</u> <ul style="list-style-type: none"> Projects involving buildings with NAICS code 493120 – Refrigerated Warehousing and Storage must be submitted under the Industrial Systems Program. As a general rule, unless indicated in the exceptions contained in Appendix 1, all projects to be executed in a building used to provide services, but which concern an industrial activity conducted in that building must be submitted under the Industrial Systems Program. The file transfer module was discontinued. Component deliverables are now to be submitted to PGEE_SI_Mesuresprescriptives@hydro.qc.ca. As a result, the project outline form (<i>Document d'avant-projet</i>) was revised and the new version was made available at www.hydroquebec.com/industrial. All lighting measures eligible under the Prescriptive Measures component must be submitted using the industrial lighting application (PEI). This application replaces the Lighting form, previously included in PROSI, and the streamlined LED and induction lighting form. |

| Modified item | Effective date | Type | Description |
|--|----------------|--|---|
| | | <p>Updated tool</p> <p>New document template</p> <p>Removal of template</p> | <ul style="list-style-type: none"> ▪ The calculation tool in the industrial systems application (PROSI) was updated. ▪ Once the project has been completed, the participant must fill out and sign the Confirmation of completed project and request for payment of financial assistance form. This document is available for download from www.hydroquebec.com/industrial. ▪ The Informations requises relativement au <i>Relevé 27 – Déclaration du client</i> [information required for Relevé 27 – Customer declaration] form is no longer required and has been replaced by the Confirmation of completed project and request for payment of financial assistance form. |
| <i>Participant's Guide</i> Aug. 2015 Vol. 5, No. 2 | Aug. 21, 2015 | Deletion of a term or condition | Financial assistance received since 2003 under previous programs and from any investment assistance components of the program may henceforth total over \$8 M per industrial site or service contract. |
| <i>Participant's Guide</i> May 2016 Vol. 6, No. 1 | May 24, 2016 | <p>Updated tool</p> <p>Clarification and correction of existing terms and conditions</p> <p>New required deliverable</p> | <ul style="list-style-type: none"> ▪ The industrial lighting application (PEI) calculation tool has been updated. For instance, induction lighting measures are no longer eligible. ▪ There is no longer a maximum amount of financial assistance granted per project. ▪ For all projects presented under the component, the applicable terms and conditions are those of the Participant's Guide in effect on the date the work begins (and no longer on the date on which the completed project is submitted to Hydro-Québec). The version of the required calculation tool in effect at that date must be used. ▪ The participant must pay at least 25% of the eligible costs (see subsection 2.7) of the prescriptive measures project, irrespective of all sources of financial assistance and amounts. ▪ In light of the above change, all requests for payment of financial assistance must be accompanied by a supporting document indicating the date on which the work began. In addition, purchase invoices as well as installation invoices or proof of installation are no longer required. |

Appendix 6 To Contact Us

Should you have any questions regarding terms and conditions that are not covered in this *Participant's Guide* or on the Program's Web site, www.hydroquebec.com/industrial, please contact your **Hydro-Québec representative** or:

For further information or help regarding the following subjects:

- Eligibility
- Program terms and conditions
- Confirmation of the eligibility of a measure or a calculation method
- Project and financial assistance follow-up
- Eligible costs
- Preparation of the project
- User code requests – Prescriptive Measures component
- File number requests
- Issues in using and understanding the calculation tools required for the Prescriptive Measures component
- Other

Soutien aux clients et partenaires
[customer and partner support]

1 877 817-1433

For online technical support:

- Downloading and installing the calculation tools required for the Prescriptive Measures component
- Finding your file number
- Submitting your project report

Soutien technique Internet –
Clientèle d'affaires [online technical
support – business customers]

1 888 858-7927