

# Electric Chillers Application

FY19 July 1, 2018 – June 30, 2019



## MEASURE DESCRIPTION



*Electric chiller incentives are available for the installation of qualified, energy efficient water or air cooled units. These prescriptive incentives are available for electric chillers used for comfort cooling. Electric chillers used for process cooling should pursue incentives through the Custom application (pre-approval required). Both equipment replacement and new construction projects are eligible to apply. Incentive rates are pre-determined based on the size and efficiency of new equipment. Pre-approval is not required prior to installation however, applications must be submitted within 1 year of material purchase to remain eligible for the incentive.*

## APPLICATION INSTRUCTIONS

1. **New to SmartStart?** Download the [SmartStart Program Guide](#) or contact us at (866) NJSMART with questions.
2. Pre-approval is not required for Electric Chiller applications for comfort cooling only, however customers may submit applications prior to installation to receive an incentive commitment letter. Applicants choosing to install prior to program pre-approval do so at their own risk. Electric chillers used for non-comfort cooling (manufacturing, process use, etc.) must pursue incentives through the Custom application (pre-approval required). If the proposed new chiller equipment is serving a mix of comfort and non-cooling use, please contact the program for further guidance.
3. Ensure that the facility is eligible for participation in the program by reviewing a recent electric utility bill to confirm that Societal Benefits Charges are paid to an investor-owned utility under a commercial rate code.
4. Review all measure requirements to confirm that equipment you are purchasing meets efficiency requirements and is eligible for an incentive. If you need assistance with development of a scope of work or do not know what type of equipment you need, consult the [Trade Ally List](#) to find a contractor who can assist you.
5. Complete the Electric Chillers application and incentive worksheet.
6. Submit the signed, completed form along with all supporting documentation listed in the Application Checklist to the program for review and pre-approval through one of the methods below. An electronic version of this application is available through the online application portal.
7. We will review the submittal for completeness and contact you and your contractor via email to retrieve any missing information or documentation.
8. An approval letter will be emailed to you and your contractor indicating the approval date and estimated incentive amount set aside for your project.

Online application portal: [njcleanenergy.com/forms](http://njcleanenergy.com/forms)

Email for new application submissions only. Call (866) NJSMART with questions. [NJApps@njcleanenergy.com](mailto:NJApps@njcleanenergy.com)

Mail: New Jersey's Clean Energy Program  
c/o TRC Energy Services  
900 Route 9 North  
Suite 404  
Woodbridge, NJ 07095

Fax: (732) 855-0422

## APPLICATION CHECKLIST

The following documentation must be attached to all completed, signed applications:

Excel [Electric Chiller incentive worksheet](#) as provided on the NJ Clean Energy SmartStart program website.

**Manufacturer's specification sheets and performance documentation/technical data sheet** for each proposed electric chiller.

The manufacturer's performance documentation must clearly show the type of unit (air or water-cooled, constant or variable speed), rated tons and performance (kW/Ton or EER) per AHRI conditions.

**A complete copy (all pages) of a recent electric utility bill** for the account number listed on the application showing payment of the Societal Benefits Charge (SBC).

For new construction projects where a utility account has not yet been established, the utility bill is not required with the initial application submission, however the customer will be required to submit a utility bill prior to incentive payment.

**If your project is already complete, please include the following additional documentation for approval and payment. Please note, a post inspection may be required prior to incentive being processed:**

- Material invoice**
  - The invoice should include the model number of the equipment installed, quantity, and unit price.
  - Equipment may be purchased up to one year prior to TRC's receipt of the application. Sufficient documentation must be submitted with the material invoice demonstrating the date of equipment purchase, such as a purchase order, if it is not clear on the material invoice.
- Labor Invoice**
  - Labor/installation price must be listed separately from material price.
  - For projects installed by in-house staff for which there is no invoice, provide a signed letter on customer letterhead clearly indicating the start and end dates of the self-installation.
- Tax Clearance Certificate obtained from NJ Division of Taxation**
  - Instructions on applying for the certificate can be found at [www.NJCleanEnergy.com/TCC](http://www.NJCleanEnergy.com/TCC).
  - No incentive will be paid without receipt of a valid Tax Clearance Certificate. Certificates are valid for 180 days and must be valid on the date TRC signs off on the incentive. The name of the customer and tax ID number appearing on the tax clearance must align with the customer name listed on the provided utility bill and application.

**General Requirements:**

- Incentives are provided for electric chillers providing comfort cooling only. Electric chillers proposed for non-comfort cooling applications (manufacturing, process use, etc) should pursue incentives through the Custom application. If an electric chiller serves both non-comfort and comfort cooling needs, please contact a program representative for further guidance.
- **For existing buildings**, constant speed chillers (Path A) must meet or exceed the ASHRAE Standard 90.1-2013 IPLV efficiency to qualify for the incentive program and will receive an incentive based on meeting or exceeding the Program Incentive Minimum full load efficiency. Variable speed chillers (Path B) must meet or exceed the ASHRAE Standard 90.1-2013 full load efficiency to qualify for the program and will receive an incentive based on meeting or exceeding the Program Incentive Minimum IPLV efficiency.
- **For new construction projects**, proposed equipment must exceed minimum program efficiency requirements for Path A (constant speed) IPLV and Path B (variable speed) Full Load.

**Incentive Calculation: Please use the Excel-based [Electric Chillers incentive worksheet](#) to calculate the estimated project incentive.**

- Units are eligible for the Base \$/ton incentive by meeting both the incentive program minimum and qualifying efficiency levels listed in the table below for Path A (constant speed chillers) or Path B (variable speed chillers).
- An additional \$/ton Performance incentive applies for each 0.1 EER above the Incentive Minimum EER or for each 0.01 kW/ton below the Incentive Minimum kW/ton. The performance incentive rate in column C of the Equipment Information table should be calculated by:
  - Water Cooled Chiller Performance Incentive \$/ton = (minimum kW/ton – installed unit kW/ton) \* (Performance \$/ton)/0.01
  - Air Cooled Chiller Performance Incentive \$/ton = (installed unit EER - min EER) \* (Performance \$/ton)/0.1

**Air-Cooled Electric Chillers**

1. The incentive for air-cooled chillers is based on the unit's compressor kW per capacity (tons) at AHRI conditions

**Water-Cooled Electric Chillers**

2. All water cooled chillers must be submitted at AHRI conditions of:
  - a. Evaporator - 54 °F entering water temperature (EWT) and 44 °F leaving water temperature (LWT)
  - b. Condenser - 85 °F EWT and 95 °F LWT
3. For water cooled centrifugal chillers that are designed to operate at other than the AHRI standard conditions the procedure in ASHRAE Standard 90.1-2013, Section 6.4.1.2.1 can be used by the applicant to adjust the manufacturer's published efficiency at non-AHRI conditions to the efficiency at AHRI standard conditions. The applicant will need to provide the manufacturer's non-AHRI ratings as well as the calculations for the chiller efficiency at AHRI conditions.

# Electric Chillers Application

FY19 July 1, 2018 – June 30, 2019



Minimum Qualifying Efficiency Levels										
Type	Capacity	Measure ID (Constant / Variable)	Path A (Constant Speed)		Path B (Variable Speed)		Path A (Constant Speed)		Path B (Variable Speed)	
			Incentive Minimum Full Load kW/ton	Qualifying IPLV kW/ton	Qualifying Full Load kW/ton	Incentive Minimum IPLV kW/ton	Incentive Minimum Full Load EER	Qualifying IPLV EER	Qualifying Full Load EER	Incentive Minimum IPLV EER
Air Cooled	tons < 150	CHILL1/ CHILL2					10.3	13.7	9.7	16.12
Air Cooled	tons ≥ 150	CHILL3/ CHILL4					10.3	14	9.7	16.42
Water Cooled, Positive Displacement	tons < 75	CHILL5/ CHILL6	0.735	0.6	0.78	0.49				
Water Cooled, Positive Displacement	75 ≤ tons < 150	CHILL7/ CHILL8	0.706	0.56	0.75	0.48				
Water Cooled, Positive Displacement	150 ≤ tons < 300	CHILL9/ CHILL10	0.647	0.54	0.68	0.431				
Water Cooled, Positive Displacement	300 ≤ tons < 600	CHILL11/ CHILL12	0.598	0.52	0.625	0.402				
Water Cooled, Positive Displacement	tons ≥ 600	CHILL13/ CHILL14	0.549	0.5	0.585	0.372				
Water Cooled, Centrifugal	tons < 150	CHILL15/ CHILL16	0.598	0.55	0.695	0.431				
Water Cooled, Centrifugal	150 ≤ tons < 300	CHILL17/ CHILL18	0.598	0.55	0.635	0.392				
Water Cooled, Centrifugal	300 ≤ tons < 400	CHILL19/ CHILL20	0.549	0.52	0.595	0.382				
Water Cooled, Centrifugal	400 ≤ tons < 600	CHILL21/ CHILL22	0.549	0.5	0.585	0.372				
Water Cooled, Centrifugal	tons ≥ 600	CHILL23/ CHILL24	0.549	0.5	0.585	0.372				

## Incentive Rates

Type	Capacity	Measure ID (Constant / Variable)	Existing Buildings				New Construction			
			Constant Speed		Variable Speed		Constant Speed		Variable Speed	
			Base \$/ton	Performance* \$/ton	Base \$/ton	Performance* \$/ton	Base \$/ton	Performance* \$/ton	Base \$/ton	Performance* \$/ton
Air Cooled	tons < 150	CHILL1/ CHILL2	\$20.00	\$3.50	\$90.00	\$4.00	\$10.00	\$3.50	\$45.00	\$4.00
Air Cooled	tons ≥ 150	CHILL3/ CHILL4	\$20.00	\$2.75	\$92.00	\$4.00	\$10.00	\$2.75	\$46.00	\$4.00
Water Cooled, Positive Displacement	tons < 75	CHILL5/ CHILL6	\$13.00	\$2.25	\$40.00	\$2.50	\$6.50	\$2.25	\$20.00	\$2.50
Water Cooled, Positive Displacement	75 ≤ tons < 150	CHILL7/ CHILL8	\$20.00	\$2.00	\$43.00	\$2.00	\$10.00	\$2.00	\$21.50	\$2.00
Water Cooled, Positive Displacement	150 ≤ tons < 300	CHILL9/ CHILL10	\$17.00	\$2.00	\$43.00	\$2.00	\$8.50	\$2.00	\$21.50	\$2.00
Water Cooled, Positive Displacement	300 ≤ tons < 600	CHILL11/CHILL12	\$15.00	\$2.25	\$37.00	\$2.00	\$7.50	\$2.25	\$18.50	\$2.00
Water Cooled, Positive Displacement	tons ≥ 600	CHILL13/CHILL14	\$30.00	\$2.00	\$44.00	\$2.00	\$15.00	\$2.00	\$22.00	\$2.00
Water Cooled, Centrifugal	tons < 150	CHILL15/CHILL16	\$24.00	\$2.25	\$24.00	\$2.75	\$12.00	\$2.25	\$12.00	\$2.75
Water Cooled, Centrifugal	150 ≤ tons < 300	CHILL17/CHILL18	\$10.00	\$2.00	\$30.00	\$2.50	\$5.00	\$2.00	\$15.00	\$2.50
Water Cooled, Centrifugal	300 ≤ tons < 400	CHILL19/CHILL20	\$8.00	\$2.00	\$20.00	\$2.00	\$4.00	\$2.00	\$10.00	\$2.00
Water Cooled, Centrifugal	400 ≤ tons < 600	CHILL21/CHILL22	\$8.00	\$2.00	\$25.00	\$2.00	\$4.00	\$2.00	\$12.50	\$2.00
Water Cooled, Centrifugal	tons ≥ 600	CHILL23/CHILL24	\$8.00	\$2.00	\$25.00	\$2.00	\$4.00	\$2.00	\$12.50	\$2.00

\* Performance Incentives apply for each 0.1 EER above the Incentive Minimum EER or for each 0.01 kW/ton below the Incentive Minimum kW/ton.

SmartStart Buildings Program  
**Electric Chillers Application**  
FY19 July 1, 2018 – June 30, 2019



For Office Use Only

Date: \_\_\_\_\_ App #: \_\_\_\_\_

**CUSTOMER INFORMATION**

_____ Company Name as listed on utility bill		_____ Formal Legal Name of Company listed on utility bill			
_____ Company Type	_____ Federal Tax ID #	_____ State Tax ID # (if different)			
_____ Customer Contact Name	_____ Customer Contact Title	_____ Customer Phone Number			
_____ Customer Mailing Address	_____ Suite/Apt#	_____ City	_____ State	_____ ZIP	
_____ Customer Contact Email Address		_____ How did you hear about the program?		_____ <a href="#">NAICS Code</a>	

**FACILITY AND PROJECT INFORMATION**

_____ Facility Address	_____ City	_____ State	_____ ZIP	
_____ Electric Utility Serving Facility	_____ Electric Account Number			
_____ Facility Type	_____ Anticipated Installation Start Date			
_____ Site Contact for Inspection Scheduling (Name/Title)*	_____ Site Contact Phone			
_____ Site Contact Email Address				

*\*On-site contact will be notified via email of any proposed inspection date/time.*

**CONTRACTOR/VENDOR INFORMATION**

_____ Contractor Company Name		_____ Contact Person Name and Title			
_____ Email Address		_____ Phone Number			
_____ Contractor Mailing Address	_____ Apt/Suite #	_____ City	_____ State	_____ ZIP	

## PAYEE INFORMATION

Payee Company Name _____		Contact Name and Title _____		
Email Address _____		Phone Number _____		
Incentive Check Mailing Address _____	Apt/Suite # _____	City _____	State _____	ZIP _____
Payee Federal Tax ID _____				

## ESIP DECLARATION

Check this box if an Energy Savings Improvement Program (ESIP) is a source of funding. ESIP allows government agencies to pay for energy related improvements using the value of the resulting energy savings.

## CUSTOMER AUTHORIZATION AND SIGNATURE

I agree to the terms and conditions of the SmartStart Buildings Program and the Specific Program Requirements for this measure.

I agree that this document and all notices and disclosures made or given relating to this document may be created, executed, delivered and retained electronically and that the electronic signatures appearing on this document and any related documents shall have the same legal effect for all purposes as a handwritten signature.

The information, statements, and documents I have provided in and with this document are true and accurate to the best of my knowledge. I am aware that if any of them are willfully false, I am subject to punishment.

If applicable, I authorize payment of the incentive to the third party listed in the Payee Information field of this application.

Customer Signature _____	Date _____
Printed Name _____	Title _____

# NJ SmartStart Buildings® Program Terms and Conditions FY2019 (July 1, 2018 – June 30, 2019)

## Eligibility

1. This application package must be received by the Program Manager on or before June 30, 2019 in order to be eligible for the fiscal year program (July 1, 2018 - June 30, 2019) incentives. All participating customers are required to submit the most current application form. All submissions will be reviewed based on the current program requirements and incentive levels approved by the Board of Public Utilities.
2. Program Incentives are available to non-residential retail electric and/or gas service participating customers of a New Jersey Utilities. A participating customer must pay Societal Benefits Charges under a New Jersey Utility account serving the fuel type (electric or gas) applicable to the specific Energy-Efficient Measure. Participating customers who have not contributed to the Societal Benefits Charge of the applicable New Jersey Utility are not eligible for incentives offered through this program. New Jersey Utilities include Atlantic City Electric, Jersey Central Power & Light, Rockland Electric Company, New Jersey Natural Gas, Elizabethtown Gas, PSE&G and South Jersey Gas.
3. Each utility account requires a complete, separate application. Projects for the same utility account and the same technology being done at the same time should be submitted on one application.
4. For all Prescriptive measures with the exception of Prescriptive & Performance Lighting, Lighting Controls and Custom measures, pre-approval is not required prior to installation, however any participating customer and/or agent who purchases and installs equipment without Program Manager approval does so at his/her own risk.
5. For completed projects that do not require program pre-approval (excluding Prescriptive Lighting, Prescriptive Lighting Controls, Performance Lighting and Custom Measures) the application must be submitted to the Program Manager within 12 months of equipment purchase. Sufficient documentation must be provided confirming the date of equipment purchase (material invoice, purchase order, etc.).
6. In order to be eligible for program incentives, a participating customer, or an agent (contractor/vendor) authorized by a participating customer, must submit a properly completed application package that is signed by the participating customer. A complete application package should include all documentation listed in the checklist section of the application.
7. Project invoices submitted after installation should list both the labor and material costs separately. The invoice should include a description of the equipment installed, quantity, and unit price. For projects that are self-installed by the participating customer, a signed letter on participating customer letterhead may be provided in lieu of a labor invoice attesting to the start and end dates of the self-installation.
8. Energy-Efficient Measures must be installed in buildings located within a New Jersey Utilities' service territory and designated on the participating customer's incentive application.
9. Program Incentives are available for qualified Energy-Efficient Measures as listed and described in the Program materials and incentive applications.
10. The participating customer must ultimately own the equipment through an up-front purchase. Equipment procured by participating customers through another program offered by New Jersey's Clean Energy Program or the New Jersey Utilities, as applicable, are not eligible for incentives through this program.
11. Incomplete application submissions, applications requiring inspections and unanticipated periods of high volume may cause processing delays.

## Incentive Amounts

1. Program Incentives will not exceed:
  - a. the approved Program Incentive amount, or
  - b. total project cost of the Energy-Efficient Measure, whichever is less, excluding NJ state sales tax as determined by the Program Manager. Project costs include the expenses directly associated with the Energy-Efficient Measure.
2. Products offered at no direct cost to the participating customer are ineligible.
3. Program Incentives are limited to \$500,000 per utility account in a fiscal year.

## Inspections

1. The Program Manager reserves the right to conduct a pre-inspection of the facility prior to the installation of equipment for Prescriptive Lighting, Performance Lighting, Lighting Controls and Custom Measures applications. Pre-inspections will be performed prior to the issuance of the approval letter. Work must not begin prior to formal program approval.
2. All projects are subject to post-inspection to confirm equipment installation prior to payment.
3. The Program Manager reserves the right to verify sales transactions and to have reasonable access to Participating Customer's facility to inspect pre-existing product or equipment (if applicable) and the Energy-Efficient Measures installed under this Program, prior to issuing incentives or at a later time.
4. The applicant allows reasonable access to the property to inspect the installation and performance of the technologies and installations that are eligible for incentives under the guidelines of New Jersey's Clean Energy Program.



## Tax Clearance Certificate Requirements

1. Participating customers must provide a Tax Clearance Form (entitled "Business Assistance or Incentive Clearance Certificate") for Board of Public Utilities use.
2. The name of the customer listed on the certificate must match the participating customer name listed on the utility bill and the application.
3. The participating customer tax ID listed on the application must agree with the tax ID listed on the Certificate.
4. Certificates are valid for 180 days and must be valid on the date the Program Manager signs off on the incentive.

## Deficient Applications

1. If an application package is incomplete, information is missing or deemed insufficient, a deficiency notice will be sent to the participating customer requesting additional information via e-mail. The information or documentation requested on the letter must be received by the Program Manager within 30 days of the date of the request. If additional deficiencies are still noted, there will be up to two additional notifications issued with the same time frames.
2. If a participating customer fails to respond to a deficiency request within 30 days or exceeds the three attempts provided, the application will be cancelled. If a project is cancelled, participating customers may re-apply under the program incentives and requirements in place at that time.

## Expirations

1. Pre-approved projects are given a one year approval in which the proposed measure is to be installed and operational. When a project has expired the participating customer will have 30 days to either submit a request for an extension OR submit final project paperwork. If no response is received within 30 days of expiration, the project will be cancelled.
2. Extension requests must be in writing from the participating customer and include the circumstances that led to the extension request, and the percentage of the project completed.
3. Extension requests may be granted for a period no longer than six (6) months. The Program Manager may provide up to two, six month extensions from the original approval expiration date.
4. Upon expiration, if the project has not started and the participating customer is still interested in installing the equipment, the existing application will be cancelled and a new application package must be submitted, which will be reviewed under the program incentives and requirements in place at that time.

## Change in participating customer name/payee after pre-approval

To initiate a change to the participating customer name or payee on a pre-approved application, the following documentation must be provided:

1. A signed letter on participating customer letterhead authorizing the change
2. A new signed application reflecting the updated participating customer or payee name
3. For name change - a utility bill in the name of the new participating customer

All name changes requests are subject to Program Manager approval. Certain requests may require additional information to be submitted as defined by the Program Manager.

## Tax Liability

The Program Manager will not be responsible for any tax liability that may be imposed on any participating customer as a result of the payment of Program Incentives. All Participating Customers must supply their federal tax identification number or social security number to the Program Manager on the application form in order to receive a Program Incentive.

## Prevailing Wage

Projects with a contract threshold of \$15,444 are required to pay no less than prevailing wage rate to workers employed in the performance of any construction undertaken in connection with Board of Public Utilities financial assistance, or undertaken to fulfill any condition of receiving Board of Public Utilities financial assistance, including the performance of any contract to construct, renovate or otherwise prepare a facility, the operations of which are necessary for the receipt of Board of Public Utilities financial assistance. By submitting an application, or accepting program incentives, applicant agrees to adhere to New Jersey Prevailing Wage requirements, as applicable.

## Endorsement

The Program Manager and Administrator do not endorse, support or recommend any particular manufacturer, product or system design in promoting this Program.

## Warranties

THE PROGRAM MANAGER AND ADMINISTRATOR DO NOT WARRANT THE PERFORMANCE OF INSTALLED EQUIPMENT, AND/OR SERVICES RENDERED AS PART OF THIS PROGRAM, EITHER EXPRESSLY OR IMPLICITLY. NO WARRANTIES OR REPRESENTATIONS OF ANY KIND, WHETHER STATUTORY, EXPRESSED, OR IMPLIED, INCLUDING, WITHOUT LIMITATIONS, WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE REGARDING EQUIPMENT OR SERVICES PROVIDED BY A MANUFACTURER OR VENDOR. CONTACT YOUR VENDOR/SERVICES PROVIDER FOR DETAILS REGARDING PERFORMANCE AND WARRANTIES.

## Limitation of Liability

By virtue of participating in this Program, Participating Customers agree to waive any and all claims or damages against the Program Manager or the Administrator, except the receipt of the Program Incentive. Participating Customers agree that the Program Manager's and Administrator's liability, in connection with this Program, is limited to paying the Program Incentive specified. Under no circumstances shall the Program Manager, its representatives, or subcontractors, or the Administrator, be liable for any lost profits, special, punitive, consequential or incidental damages or for any other damages or claims connected with or resulting from participation in this Program. Further, any liability attributed to the Program Manager under this Program shall be individual, and not joint and/or several.

## Termination

The New Jersey Board of Public Utilities reserves the right to extend, modify (this includes modification of Program Incentive levels) or terminate this Program without prior or further notice.

## Participating Customer's Certification

Participating Customer certifies that he/she purchased and installed the equipment listed in their application at their defined New Jersey location. Participating Customer agrees that all information is true and that he/she has conformed to all of the Program and equipment requirements listed in the application.

## Acknowledgement

The applicant gives the Program Manager permission to share records with the New Jersey Board of Public Utilities, and contractors it selects to manage, coordinate or evaluate the New Jersey SmartStart Buildings Program including the release of electric and natural gas utility billing information, as well as make available to the public non-sensitive information.

## Definitions:

Energy-Efficient Measures – Any device eligible to receive a Program Incentive payment through the NJ Clean Energy Commercial and Industrial Program (New Jersey SmartStart Buildings).

New Jersey Utilities – The regulated electric and/or gas utilities in the State of New Jersey:

1. Atlantic City Electric
2. Jersey Central Power & Light
3. Rockland Electric Company
4. New Jersey Natural Gas
5. Elizabethtown Gas
6. PSE&G
7. South Jersey Gas

Administrator – New Jersey Board of Public Utilities, Office of Clean Energy.

Participating Customers – Those non-residential electric and/or gas service customers of the New Jersey Utilities who participate in this Program.

Product Installation or Equipment Installation – Installation of the Energy-Efficient Measures.

Program – The Commercial and Industrial Energy-Efficient Construction Program (New Jersey SmartStart Buildings) offered herein by the New Jersey Board of Public Utilities, Office of Clean Energy pursuant to state regulatory approval under the New Jersey Electric Discount and Energy Competition Act, NJS 48:3-49, et seq.

Program Incentives – Refers to the amount or level of incentive that the Program provides to Participating Customers pursuant to the Program offered herein (see description under "Incentive Amount" heading).

Program Manager – TRC Energy Services.