2017 Chiller Incentive



| | Section A: CUST | OMER INFORMATIO | N | | | | |
|--|---|---|---|--|---------------------------|--------------------------|--|
| Customer Name | Electric Account | Number | Rate | | Application Number | | |
| Facility Address | City | | State | | Zip Code | | |
| Service Location Identification | I | Email | | | | | |
| Mailing Address (if different from above) | City | City | | State | Zip Code | | |
| Contact Person/Title | Telephone Numb | per | Incorporated? (Check one) Yes No Exempt | | | | |
| Please Assign Payment to Contractor. Customer Signature: | Additional Inform | ation | Incentive Payment Preference (Check one.) Check Bill Credit Pay Contractor | | | | |
| | Section B: CONTR | ACTOR INFORMATI | ON | | | | |
| Contractor Name | Name | | Contact Person/Title (Print) | | Contact Person Signature | | |
| Mailing Address | | | City | | Zip Code | | |
| Email | Telephone Number | Additional Information | rmation | | Incorporated? (Check one) | | |
| | Section C: DOC | UMENT APPROVAL | S | | | | |
| PRE-INSTALLATION INSPECTION Utility Signature | | Date | | | | | |
| PRE-APPROVAL OFFER | | | | | | | |
| Technical Review - Utility Signature | Date | | | | | | |
| Utility Signature | Date | Amount of Incentive Offer (| Offer Valid Through: | | | | |
| By signing and dating below, customer accepts to Commission order, customers also agree that the energy efficiency project. This agreement is consystem Benefits Charge. The Incentive, in conju | e utility alone may capture a tingent upon continued appl | II kW and kWh savings an roval and authorization by | d any ISO-NE the Commiss | E capacity paid to the control of th | payments r | esulting from this | |
| Customer Signature: | | Date: | | | | | |
| POST-INSTALLATION INSPECTION | | | | | | | |
| Utility Signature | | Date | Total Pr | oject Cost (\$ | S) A | Amount of Incentive (\$) | |
| Customer Signature | | Date | | | | | |
| MANAGEMENT APPROVAL | | | | | | | |
| Utility Signature | | Date | | | | | |

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| NE&C CHILLER INCENTIVE WORKSHEET | | | | | | | | | | |
|---|---|--------------------|----------------------------|---------------------------------------|--------------------------------|--|---------------------------------------|--------------------------|--|--|
| Eligibility Requirements | | Proposed Equipment | | Rebates | | | | | | |
| Unit Size ARI Net Tons (A) | Minimum Performance Requirements, FL or IPLV (B) | Net Tons (C) | Proposed Efficiency (D) | Base Incentive (per ton) (E) | Base Incentive Total (F) | Performance Incentive per ton (Max of 2 times base rebate) (G) | Performance Incentive Total (H) | Total Incentive (F+H) | | |
| Air Cooled Chillers | | | | | | | | | | |
| < 150 tons | EER: FL: 10.52 IPLV: 13.75 | | | \$20.00 | \$ | \$3.25 | \$ | \$ | | |
| <u>> 150 tons</u> | FL: 10.52 IPLV: 14.03 | | | \$20.00 | \$ | \$3.25 | \$ | \$ | | |
| Water Cooled Chillers-Rotary Screw & Scroll | | | | | | | | | | |
| < 75 tons | kW/ton: FL: 0.702 IPLV: 0.540 | | | \$13.00 | \$ | \$3.00 | \$ | \$ | | |
| >_75 and < 150 tons | FL: 0.698 IPLV: 0.527 | | | \$11.00 | \$ | \$2.50 | \$ | \$ | | |
| ≥ 150 and < 300 tons | FL: 0.612 IPLV: 0.486 | | | \$18.00 | \$ | \$3.00 | \$ | \$ | | |
| <u>></u> 300 tons | FL: 0.588 IPLV: 0.441 | | | \$18.00 | \$ | \$3.00 | \$ | \$ | | |
| Water Cooled Chillers- | Centrifugal | | | | | | | | | |
| < 150 tons | kW/ton: FL: 0.571 IPLV: 0.405 | | | \$20.00 | \$ | \$3.50 | \$ | \$ | | |
| <u>></u> 150 and < 300 tons | FL: 0.518 IPLV: 0.360 | | | \$17.00 | \$ | \$1.25 | \$ | \$ | | |
| ≥ 300 and < 600 tons | FL: 0.513 IPLV: 0.360 | | | \$10.00 | \$ | \$1.75 | \$ | \$ | | |
| <u>></u> 600 tons | FL: 0.513 IPLV: 0.360 | | | \$10.00 | \$ | \$1.75 | \$ | \$ | | |

Incentive Calculations:

NOTES

- Incentive is available only for <u>comfort cooling applications</u> operating for min. 800 equivalent full load hours (EFLH) or 1500 run hours. Process chillers or chillers equipped with variable speed drives must be evaluated as a Custom Incentive.
- 2. Proposed comfort cooling chiller shall meet or exceed the FL or IPLV efficiencies as listed in above table (B).
- 3. Chiller equipment efficiency criteria are based on ARI Standard 550/590-98 at ARI standard conditions (see note 6) using a non-CFC refrigerant. Attach copy of manufacturer's performance sheet showing both Full Load (FL) and Integrated Part Load Value (IPLV) efficiencies (KW/ton). Air cooled chiller efficiencies shall include condenser fan energy consumption. Tons should be ARI net capacity, not gross capacity. Incentives for chillers shall be calculated using FL (Full Load) and IPLV (Integrated Part Load Value) efficiency ratings.
- 4. The total Incentive (I) for air cooled chiller projects with efficiencies based on EER is calculated as follows:
 F = base incentive (C x E) and H = performance incentive (using either FL or IPLV EER): (D-B) x 10 x C x G (performance incentive is for each 0.1 EER point above minimum criteria and may not exceed twice the base incentive)
- 5. The total incentive (I) for water cooled chiller projects with efficiencies based on kW / ton is calculated as follows: F = base incentive (C x E) and H = performance incentive (using FL or IPLV kW/ ton):): (B-D) x 100 x C x G (performance incentive is for each 0.01 KW/ton below maximum criteria and may not exceed twice the base incentive)
- 6. All water-cooled chillers shall incorporate condenser water reset strategy.
- 7. ARI Chiller standard 550/590-98 conditions are as follows:
 - 44° F leaving chiller water,
 - 2.4 GPM / ton,
 - 95° F entering condenser air temperature (air cooled only),
 - 85° F entering condenser water temperature (water cooled only),
 - 3.0 GPM / ton condenser water flow rate (water cooled only)
- 8. Water cooled chillers must be equipped with condenser water reset strategy.

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