

# Commercial & Industrial Retrofit 2021 Compressed Air Incentive



## Section A: CUSTOMER INFORMATION

Customer Name	Electric Account Number	Rate	Application Number
Facility Address	City	State	Zip Code
Service Location Identification	Email		
Mailing Address (if different from above)	City	State	Zip Code
Contact Person/Title	Telephone Number	Incorporated? (Check one.) <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Exempt	
Please Assign Payment to Contractor. Customer Signature:	Additional Information	Incentive Payment Preference (Check one.) <input type="checkbox"/> Pay Customer <input type="checkbox"/> Pay Contractor	

## Section B: CONTRACTOR INFORMATION

Contractor Name	Contact Person/Title (Print)	Contact Person Signature	
Mailing Address	City	State	Zip Code
Email	Telephone Number	Additional Information	Incorporated? (Check one.) <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Exempt

## Section C: DOCUMENT APPROVALS

### PRE-INSTALLATION INSPECTION

Utility Signature	Date
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### 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 this Incentive offer and agrees to the Utility Terms and Conditions available from your Utility. Pursuant to a Commission order, customers also agree that the utility alone may capture all kW and kWh savings and any ISO-NE capacity payments resulting from this energy efficiency project. This agreement is contingent upon continued approval and authorization by the Commission to recover said amounts from the System Benefits Charge. The Incentive, in conjunction with all other sources of funding, cannot exceed the total project cost.

Customer Signature: \_\_\_\_\_ Date: \_\_\_\_\_

### POST-INSTALLATION INSPECTION

Utility Signature	Date	Total Project Cost (\$)	Amount of Incentive (\$)
Customer Signature	Date		

### MANAGEMENT APPROVAL

Utility Signature	Date
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# RETROFIT COMPRESSED AIR INCENTIVE WORKSHEET

## Air Compressor Incentive Calculation

Item	Compressor Horsepower (A)	Compressor CFM	Annual Hours of Operation	Compressor Control Code <sup>1</sup>	Additional Storage (Yes or No)	Incentive (\$) per HP <sup>2</sup> (B)	Air Compressor Incentive (\$) (A X B)
Ex.	25	110	2,950	VSD	Y	\$200	25 X \$200 = \$5,000
1							

Note: Vendor quote or proposal required for Incentive.

## Additional Primary Storage Incentive Calculation- see Table 1 (only applicable if storage code above = "Y")

Item	*Minimum Storage Required (gallons) (A)	Maximum Storage Eligible (gallons) (B)	Existing Storage (gallons) (C)	Minimum New Storage Required (gallons) (D) = A - C	Maximum New Storage Eligible (gallons) (E) = B - C	**Storage to be installed (gallons) (F)	Storage Incentive F x \$2.75 (not to exceed E)
Ex.	220	330	100	120	230	275	230 x \$2.75 = \$633
1							

\*System must meet Minimum Storage (A) to be eligible for Compressor Incentive

\*\*Storage capacity over Maximum Storage (E) is not eligible for Storage Incentive

**Total Incentive**

### <sup>1</sup> Compressor Control Codes & Storage Requirements

Compressor Type	Control Code	# Minimum Gallons per CFM	## Maximum Gallons per CFM
Variable Speed Drive	VSD	2	3

### <sup>2</sup> High Efficiency Air Compressor Incentive per HP

Incentive Per Horsepower	15 to 24	25 to 49	50 to 75
VSD	\$170	\$200	\$180

# Minimum Gallons per CFM recommended by the Compressed Air Challenge

## This is the maximum gallons eligible for incentives.

Installed capacity may be larger.

## Notes

1. These Prescriptive Incentives apply to single, oil flooded compressed air systems only. Multiple and /or oil free air compressor systems may be eligible for a Custom Incentive but must pass a benefit-cost test.
2. These Prescriptive Incentives apply to air compressors with nameplate ratings  $\geq 15$  HP and  $\leq 75$  HP. Air compressors  $> 75$  HP may be eligible for a Custom Incentive. Air compressors rated in kW shall be converted to HP as follows:  $kW / 0.746 = HP$
3. The rated HP of the replacement air compressor shall not exceed the existing air compressor rated HP by more than 10%. Existing compressors replaced with a new, larger compressor ( $> 10\%+/-$ ) will be reviewed under the New Equipment & Construction Program
4. These Prescriptive Incentives apply to variable speed control (VSD) compressors.
5. These Prescriptive Incentives apply to air compressors with an operating pressure of 145 psi or below. Compressors with higher operating pressures may be eligible for a Custom Incentive.
6. Minimum air storage requirements as specified in the Compressed Air Incentive form must be met and may include existing air storage to meet the requirement.
7. Air compressor must operate a minimum of 2,000 hours a year.
8. Air compressors with VSDs must have as a minimum a 3% impedance series reactor in its AC power input connection.

# 2020 Compressed Air Commercial & Industrial Retrofit

## ***Instructions for completing the Retrofit COMPRESSED AIR Incentive Worksheet***

### **General Notes:**

1. A vendor proposal is required for an Incentive and must include the Compressed Air Plant Proposal Information found on page three in these instructions.
2. The Compressed Air Incentive must be completed and the Incentive approved prior to purchasing and installing the equipment.
3. Compressors under 15 HP are not eligible for Incentives.
4. Compressors over 75 HP are not eligible for a prescriptive Incentive but may be eligible for a Custom Incentive.
5. Invoices will be required for payment of Incentives.
6. The Incentive, in conjunction with all other sources of funding, cannot exceed the total project cost.

### **Eligibility Requirements:**

To be eligible for Incentives, the equipment must meet the following requirements:

#### **Compressors**

1. Nameplate horsepower of compressors must be equal to or greater than 15 HP and less than or equal to 75HP. Compressors with manufacturers ratings only in kilowatts will be assumed to have horsepower ratings equal to Compressor *kW* rating (motor only) / 0.746.
2. Existing compressor being replaced must use modulating control. Compressors with other control methods must use the Custom Incentive process.
3. Prescriptive Incentives are only applicable to **single compressor systems**. Multiple compressor systems of any size that serve a common distribution system may submit applications as a Custom Incentive. Projects that have multiple and comprehensive measures shall be processed as a Custom Incentive.
4. Prescriptive Incentives are only applicable to compressors with an operating pressure of 145 psi or below. Compressors with higher operating pressures shall be processed as a Custom Incentive.
5. Prescriptive Incentives are only applicable to oil flooded Rotary Screw Compressors. Other compressor types may be eligible for an Incentive as a Custom Incentive project.
6. Compressor control shall be Variable Speed Drive (VSD).
7. Compressors must operate a minimum of 2000 hours a year.
8. Air compressors with VSDs must have as a minimum a 3% impedance series reactor in its AC power input connection.

#### **Storage**

1. Primary storage is required on all compressors receiving incentives.
2. Incentives are only available for air storage tank(s) in association with new compressor equipment installations.

#### **Dryers**

1. New dryers being installed are not eligible for Incentives.

# 2020 Compressed Air Commercial & Industrial Retrofit

## Calculation of Incentives

1. Refer to the back side of the Incentive application entitled “**Retrofit Compressed Air Incentive Worksheet**” to determine the following incentives as applicable:

### Air Compressor Incentive

1. Enter air compressor nominal horsepower (from manufacturer’s data) in column (A).
2. Enter the air compressor capacity (acfm) (manufacturers rating at the actual compressor operating pressure.)
3. Enter the compressor control code found in Table “**1Compressor Control Codes & Storage Requirements.**”
4. Enter if additional storage is to be provided (yes or no).
5. Enter Incentive (\$) per HP in column (B) found in Table “**2 High Efficiency Air Compressor Incentive per HP.**”
6. To calculate the air compressor Incentives multiply the Compressor Horsepower from column (A) by the Incentive per HP from column (B).

### Additional Primary Storage Incentive

1. In column A, calculate the “Minimum Storage Required” (gals) by multiplying the “Minimum Gallons per CFM” for the compressor type found in “**1Compressor Control Codes & Storage Requirements.**” Table by the cfm noted in the Compressor Incentive Calculation.
2. In column B, calculate the “Maximum Storage Eligible” (gals) by multiplying the “Maximum Gallons per CFM” for the compressor type found in “**1Compressor Control Codes & Storage Requirements.**” Table by the cfm noted in the “Compressor Incentive Calculation”.
3. In column C enter any existing storage (gals).
4. In column D, calculate the “Minimum New Storage Required” (gals) by subtracting the “Minimum Storage Required”, column A from the “Existing Storage”, column C.
5. In column E, calculate the “Maximum New Storage Eligible” (gals) by subtracting the “Maximum Storage Eligible”, column B from the “Existing Storage”, column C.
6. In column F, enter the “Storage to be installed” (gals).
7. To calculate the Storage Incentive multiply the “Storage to be installed”, column F by \$2.75/gal. Note that the gallons stated in “Storage to be installed”, column F can not exceed the “Maximum New Storage Eligible”, column E.

### Total Retrofit Compressed Air Incentive

1. Calculate the total Incentive by summing the Air Compressor and Storage Incentives.

### Post-Installation:

#### **Utility Representative must verify that:**

1. The single compressor has been installed and operating as follows:
  - a. System operating pressure \_\_\_\_\_ psi
  - b. Original primary storage capacity \_\_\_\_\_ gallons
  - c. Additional primary storage capacity \_\_\_\_\_ gallons
  - d. Total primary storage capacity \_\_\_\_\_ gallons
  - e. Final gallons per compressor CFM \_\_\_\_\_
  - f. Verify compressor manufacturer, compressor model, horsepower, and rated CFM
2. The compressor matches the Compressor Incentive Application information. If the equipment has changed from what was approved for the initial Incentive offer, the substituted equipment specifications must be submitted and reviewed by the utility to verify compliance with technical requirements and approved before an Incentive is considered.
3. The invoice or proof of payment has been submitted.
4. The Utility Representative & Customer have signed & dated the post installation inspection block on the Incentive form

# 2020 Compressed Air Commercial & Industrial Retrofit

## COMPRESSED AIR PLANT PROPOSAL INFORMATION

The following information shall be included in the proposal requesting an Incentive. Please describe the major components of the existing compressor and compressed air system.

Existing Compressor Description (Manufacturer & Model)	Rated HP & cfm	Operating Pressure (psi)	Control Type	Hours/Wk	Annual Hours	Loading Hours/Wk (% CFM)
Ex: Gardner Denver Modulating 50 HP Model: #ABCDEF	50hp 220CFM	110 psi	Mod	100 hrs	5,200 hrs/yr	10hr@90% 30hr@30% 50hr@60%
1.						
2.						

Proposed Compressor Description (Manufacturer & Model)	Rated HP & acfm	Operating Pressure (psi)	Control Type	Hours/Wk	Annual Hours	Loading Hours/Wk (% CFM)
Ex: Gardner Denver Modulating 50 HP Model: #ABCDEF	50hp 220CFM	110 psi	VSD	100 hrs	5,200 hrs/yr	10hr@90% 30hr@30% 50hr@60%
1.						

The following information shall also be included in the proposal:

### Compressor

How many shifts \_\_\_\_\_ and how does production vary? \_\_\_\_\_

What is the current system pressure at the furthest point from the compressor? \_\_\_\_\_ psi

What is the minimum pressure required for proper equipment operation? \_\_\_\_\_ psi

Any significant operational problems

- Inadequate pressure Yes  No
- Moisture or air quality Yes  No
- Production problems due to pressure fluctuations Yes  No
- Other \_\_\_\_\_

Compressor Age \_\_\_\_\_

Compressor Cooling Medium (air, chilled water) \_\_\_\_\_

### **Leak Identification and Remediation**

Date of Last Leak Survey if Any \_\_\_\_\_

Survey Provider and Survey Type (eg ultrasonic) \_\_\_\_\_

Estimate Leak Level from Survey \_\_\_\_\_

Follow-up Leak Remediation Efforts \_\_\_\_\_

For Compressed Air Challenge technical and training information please visit <http://www.knowpressure.org>.

## NHSaves@work Rebate Program New Hampshire Electric Co-op Terms and Conditions

### 2020 Energy Solutions Commercial, Industrial, and Municipal Programs

New Hampshire Electric Cooperative (NHEC): TERMS & CONDITIONS

- 1. Member Eligibility** – Energy Saving rebates/incentives are available to all non-residential NHEC members.
- Small Commercial, Industrial, and Municipal: Monthly energy demand of less than 200 kilowatts (kW).
  - Large Commercial, Industrial, and Municipal: Monthly energy demand of 200 kW or greater 3 months in rolling 12 months.
  - New Construction and Renovation: Available to all non-residential NHEC accounts.

- 2. Energy Efficiency Measures (“measures”) Eligibility** –
- Only measures that are approved prior to purchase of equipment and its installation will be considered for rebate/incentive.
  - NHEC will only approve measures that pass the cost/benefit ratio for effective energy efficiency potential.
  - Any measure installed prior to the issuance of NHEC’s written authorization will be deemed an unauthorized installation, and NHEC will have no obligation to pay rebates/incentives for those measures.

- 3. Pre-Approval and Pre-Installation** – Pre-approval from NHEC is required for all projects. NHEC is not bound to pay any rebates/incentives without a pre-approval of the measures proposed by the member.
- The member needs to supply the following for a project to be reviewed for pre-approval:
    - Completed and signed program “Application” to include all worksheets and all supporting documentation
    - Completed and signed program “Terms & Conditions”
    - Detailed proposal of the scope of work to be performed to include cost, description of equipment being installed
    - Specification sheets on equipment to be installed
    - Specification on existing equipment for retrofit projects
    - Projected energy savings from project with savings calculations
  - Projects must pass a cost-benefit analysis to qualify (internal NHEC algorithm is used), and/or meet specific program requirements as specified on the program application (ie. Minimum watts saved, equipment certification, etc)
  - A pre-inspection of the member’s facilities may be required as part of the pre-approval process.

- 4. Cost of Equipment** – Prior to NHEC’s post inspection verification of member’s installation and at any other time upon NHEC’s request, the members shall supply copies of all invoices (including all materials, part numbers and descriptions, freight or shipping, labor, and equipment discounts) reflecting the costs of purchasing and installing the measures. The invoices shall include a breakdown of all measures purchased for

installation under this contract. In addition, NHEC may request any other reasonable documentation or verification of the cost to the member of purchasing and installing the measure. For custom measures NHEC reserves the right to use the member’s reasonable costs in order to determine the correct rebate/incentive amount.

- 5. Post-Installation Verification** – A post inspection of the project is required before any rebates/incentives will be paid to the member. If NHEC determines that the measures were not installed in a manner that is consistent with the pre-approval, the purpose of achieving energy savings as proposed, or if the installation was not consistent with generally accepted good engineering practices and construction industry standards, NHEC may require changes before making any payments. NHEC will not pay rebates/incentives until it has been verified that the member has received, as appropriate, final drawings, operation and maintenance manuals, and operator training, if applicable.

- 6. Rebates/Incentives** –NHEC will pay rebates/incentives to eligible members for the installation of qualifying measures and for site-specific measures that are pre-approved. NHEC is not obligated to pre-approve any application for a rebate/incentive that may result in exceeding the regulatory imposed budget for the program. NHEC reserves the right to stop pre-approving measures at any time without notice.

### 7. Rebate/Incentive Payments

- General
  - Before pre-approving any rebate/incentive amounts requested by the Member, NHEC reserves the right to adjust and/or negotiate the rebate/incentive amount.
  - Once a rebate amount is pre-approved, NHEC will pay no more than the lesser of the:
    - cost of purchasing and installing the measure,
    - recalculated rebate/incentive based on the actual installation,
    - pre-approved rebate/incentive amount.
  - NHEC reserves the right to lower the rebate/incentive amount if the quantity and/or cost of measures actually installed by the Member differs from the pre-approved amounts.
  - Notwithstanding any other provision of these Terms and Conditions, the NHEC reserves the right to seek a refund for rebates/incentives paid if, at any time, it learns that the agreed to measures were not actually and/or properly installed or have subsequently been disconnected.

- Maximum Amount  
There may be a maximum dollar amount of the rebate/incentive. There is no guarantee that the Member will receive the maximum amount. Check with your utility representative. The following is the method used to calculate the maximum rebate/incentive:
  - Small Commercial, Industrial, and Municipal – The rebates/incentives for approved measures for Small accounts (< 200 kW) will be up to 50% of the installed cost.
  - Large Commercial, Industrial, and Municipal –The rebates/incentives for approved measures for Large accounts (200 kW or greater) will be prescriptive rebates/incentives or custom rebates/incentives designed to cover up to 35% of equipment and installation costs or a buy-down of the project to a one-year payback, whichever is less.



# 2020 COMMERCIAL & INDUSTRIAL INCENTIVE TERMS & CONDITIONS

(iii) New Construction and Renovation - The rebates/incentives apply to all non-residential accounts. Rebates/incentives may be prescriptive or custom designed to cover 75% of the incremental difference in the cost of purchasing standard equipment vs. purchasing an energy efficient equivalent or a buy-down of the project to a one-year payback, whichever is less.

## 8. Date of Rebate/Incentive Payments

- a. Existing Structures – NHEC expects to make rebate/incentive payments within sixty (60) days of completion of satisfactory post-installation verification and verification of installation costs in accordance with the specifications.
- b. New Construction – NHEC expects to pay the rebates/incentives within sixty (60) days after all of the following conditions are met:
  - (i) construction of the member's facility is completed;
  - (ii) member has received an occupancy permit;
  - (iii) NHEC has verified costs and satisfactory installation of the measures in accordance with the specifications.
- c. Payment to Contractor - NHEC reserves the right to withhold payment of rebate/incentive to member until full payment is made to the contractor to contractor's satisfaction.

**9. Balance Due** - In the event that the Member has any outstanding balances due and owing to NHEC, the rebate/incentive payment may be withheld at NHEC's option, and used to offset such outstanding debt(s).

**10. Payments Not Assignable to Contractors** – NHEC will not pay contractors unless NHEC approves in advance such arrangement.

**11. Relationship of Contractor with Member and NHEC** – Contractors have no obligation to NHEC and NHEC assumes no liability for Contractors work, workmanship, damages, injuries, or any other harm caused directly or indirectly by Contractor. NHEC has no legal relationship with contractors. The legal relationship is between the contractor and the Member. NHEC may waive this provision regarding this project or on a specific project(s) at any time.

**12. Installation Schedule Requirements**– Measures must be installed within 90 days from the date of pre-approval, by the pre-approval expiration date listed on the application, or by the end of the current program year, whichever comes first. If the member is unable to meet this requirement, NHEC reserves the right to cancel the pre-approval offer.

**13. Monitoring** – NHEC reserves the right to perform site visits during the installation and post-installation monitoring of the installed measures to determine the actual kW and kWh reduction and energy savings.

**14. Limited Scope of Review** – The scope of review by NHEC of the design and installation of the measures is limited to determining whether program conditions have been met. It does not include any kind of safety review.

**15. Publicity of Member Participation** – Unless the member objects in writing at the time of submitting an application, NHEC may publicize the fact of the member's participation in the program, the results, the amount of rebates/incentives paid to the member, and any other information which reasonably relates to the member's participation.

**16. Limitation of Liability** – NHEC's liability under this contract will be limited to paying the rebates/incentives specified in the Agreement. NHEC and any of its affiliates shall not be liable to the member, contractor, or any third party for any consequential or incidental damages or for any damages, in tort (including negligence), caused by any activities associated with this Agreement or the program.

**17. Disclaimer of Warranties**–NHEC does not guarantee, or warrant any particular manufacturer or product. NHEC does not warrant the performance of installed equipment either expressly or implicitly. Members who install energy-efficient lighting measures are expected to replace any of the energy-efficient lights with lights of similar or superior energy savings efficiency, at their own expense, after the manufacturer's warranty period has expired.

**18. Member Must Pay All Taxes** – The benefits conferred upon the member may be taxable by federal, state and local government. NHEC will not be responsible for any tax liability imposed on the member as a result of the payment of rebates/incentives.

**19. Contract Entitlement to Participate** – The program described in this application may be altered, suspended, or canceled by NHEC at any time and without prior notice. The member is not entitled to any program benefits or review of its application in such a circumstance. Entitlement to program participation can only occur after NHEC has signed a copy of the contract/Rebate Pre -Approval Agreement and granted pre-approval.

**20. Vendor Selection** – NHEC acknowledges that the member may select any non-participating vendor or contractor to perform the work specified by this contract. Notwithstanding the foregoing, the member acknowledges that NHEC has the right not to allow a vendor or contractor to participate in this program. If a member chooses a non-participating vendor or contractor it may affect the rebate/incentive level.

**21. Disposal of Equipment** – The member agrees, as a condition of participation in this program, at the members' cost, to the recycling of all fluorescent lamps, HID lamps, and PCB ballasts, in accordance with all laws, rules, and regulations of the state of NH, the local jurisdiction, and the government of the United States of America.

**22. Removed Equipment** - Member will not install any removed equipment in any facility owned or utilized by member or any other member within NHEC's service territory.



# 2020 COMMERCIAL & INDUSTRIAL INCENTIVE TERMS & CONDITIONS

**23. Disposal Of Removed Equipment** - Except for equipment listed in paragraph 21 and the disposal method described, member will remove and dispose of all other equipment at its own expense in accordance with all laws, rules, and regulations of the state of NH, the local jurisdiction, and the government of the United States of America.

**24. Review of Specifications, Submittals and Drawings** - The Member will provide NHEC with a copy of the specifications for the construction of the Facility that will be provided to the construction contractors. Such specifications must include the measures. NHEC may refuse to pay rebates/incentives if the specifications do not adequately provide for installation of the measures consistent with good engineering and energy-efficient design practices. Member will upon request by the NHEC provide a copy of the as-built drawings and equipment submittals for the facility. The NHEC may refuse to pay rebates/incentives if the final submittals and drawings do not adequately reflect the installation of the measures consistent with the original design intent as identified on the Member application and worksheets.

**25. Savings Warranty** - NHEC does not guarantee or warrant any energy savings. Factors that are impossible to predict, including but not limited to facility expansion, cutbacks, a change in hours of operation, an electric rate change or structure change, self-generation, weather changes, and/or other unanticipated causes all may impact the Member's future electrical energy use and cause actual savings to vary from estimated savings. Any and all guarantees and/or warranties are between the Member and the installer and/or the manufacturer of installed measures and/or equipment.

**26. Miscellaneous** - This contract is the entire agreement between the parties and supersedes all other communications and representations.

- a. The member acknowledges that the only individuals authorized to bind NHEC under this contract are the Energy Solutions Program Administrator, Manager or Vice-President of the Member Solutions Division, and the President/CEO of NHEC.
- b. Paragraph/Article headings are for the convenience of the parties only and are not to be construed as part of these Terms and Conditions.
- c. If either NHEC or the member desires to modify this contract, the modification must be in writing and signed by an authorized person of both parties in order for the modification to be enforceable.
- d. If any provision of the Terms and Conditions is deemed invalid by any court or administrative body having jurisdiction, such ruling shall not invalidate any other provision, and the remaining Terms and Conditions shall remain in full force and effect in accordance with their terms.
- e. The intent of NHEC in offering these programs is to help member business accounts save money on their electricity costs. The payback on your investment in energy saving measures has been calculated and estimated based on current electric rates and operating characteristics of the member's business.
- f. A waiver of any article or term in these Terms and Conditions by NHEC does not constitute a waiver of any other article or term and does not constitute a future waiver of the article or term that was originally waived.

By signing below, member agrees to the terms and conditions contained herein. Pursuant to a Commission order, member also agrees to forgo applying directly or indirectly for any ISO-NE capacity payments or environmental credits resulting from this energy efficiency project. This agreement is contingent upon continued approval and authorization by the Commission to recover said amounts from the System Benefits Charge.

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Signature of Member

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Date

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Print Name

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Print Organization Name

