

## Qualification Guide for Prescriptive Compressed Air Incentives

January 5, 2004

Qualifies	Does not Qualify
<b>Air Compressors</b>	
<p><b>Must meet <u>all</u> of the following criteria</b></p> <ol style="list-style-type: none"> <li>1. Rotary screw compressors from <math>\geq 15</math> to <math>&lt; 75</math> Hp or from 11 to 56 kW for machines with metric ratings.</li> <li>2. Proposed compressor must be the only machine that supplies the compressed air to the distribution system that it serves. A back-up machine is allowed, if it only runs while the proposed machine is being serviced.</li> <li>3. Oil lubricated /oil flooded machines</li> <li>4. One of the following types of control:               <ol style="list-style-type: none"> <li>a. Load/ No Load</li> <li>b. Variable Displacement</li> <li>c. Variable Speed Drive</li> </ol> </li> <li>5. Installed along with sufficient primary air storage (receiver) capacity to satisfy the minimum requirements specified in the applications. See Page 3, Note 4 on the application.</li> <li>6. Comply with minimum hours of operation requirements, (Page 3, Note 5).</li> <li>7. All Variable Speed Drive (VSD) machines must comply with National Grid harmonics requirements.</li> <li>8. Plant information questionnaire Section 7.4 of the application must be completed.</li> </ol>	<p><b>Any of the following are only eligible for incentives on Custom Applications</b></p> <ol style="list-style-type: none"> <li>1. Oil free rotary screw machines</li> <li>2. Installation of new reciprocating compressors</li> <li>3. Scroll compressors</li> <li>4. Compressors that are installed as a part of a larger comprehensive compressed air system enhancement should be processed under the 5.</li> <li>5. Custom Worksheet #5 - Compressors under 15 horsepower.</li> </ol> <p><i>Note: Consult a National Grid Tech Rep to determine proper incentive program path for rotary vane compressors.</i></p> <p><b>Miscellaneous Eligibility Issues</b></p> <ol style="list-style-type: none"> <li>1. Replacement of energy efficient operating compressors, are NOT eligible under Energy Initiative. Equipment ineligible for replacement includes: reciprocating compressors, compressors with load/no load controls, variable displacement and variable speed drive compressors.</li> <li>2. Replacement of existing operating compressors older than 20 years to be processed under Design 2000plus. (Compressors are assumed to be close to end of operational life).</li> </ol>
<b>Air Storage (Receivers)</b>	
<p><b>Receivers are eligible for prescriptive incentives if they meet <u>all</u> of the following criteria</b></p> <ol style="list-style-type: none"> <li>1. They are installed along with a new <u>qualifying</u> compressor</li> <li>2. Incentives are intended to support installation of new air storage as required for different compressor types. (2 gallons per</li> </ol>	<p><b>Ineligible receivers:</b></p> <ol style="list-style-type: none"> <li>1. Receivers installed without a new compressor</li> <li>2. Receivers installed as part of a Custom Application.</li> <li>3. Receivers that provide secondary storage</li> </ol>

<p>acfm for VSD and variable displacement machines or 4 gallons /acfm for load /no load machines. However, available receiver sizes may result in total storage capacities that exceed these values. In this case, the Company will pay incentives up to one gallon/CFM higher than these target values. (ie – up to 3 gallons per acfm for VSD and variable displacement machines or 5 gallons / acfm for load / no load machines</p> <p>3. <b>Baselines.</b> Storage incentives are available only for new storage required above baseline gallon/CFM values. For Energy Initiative and Design 2000<i>plus</i>, the baseline is defined as the existing storage capacity. For Design 2000<i>plus</i> ,if there is no existing storage, the baseline is zero.</p>	
<p><b>Cycling Air Dryers – Design 2000<i>plus</i> Only</b></p>	
<p>Cycling air dryers are eligible for prescriptive incentives if they meet <u>all</u> of the following criteria</p> <ol style="list-style-type: none"> <li>1. Must meet Design 2000<i>plus</i> program guidelines</li> <li>2. Must be either a cycling type with thermal mass or variable speed drive type dryers.</li> <li>3. Variable Speed Drive (VSD) dryers must comply with National Grid harmonics requirements.</li> <li>4. Dryers up to 500 CFM capacity qualify. Dryers up to 1000 CFM may qualify if approved by Company technical staff.</li> <li>5. For purposes of dryer incentives, size categories are defined as follows: <ul style="list-style-type: none"> <li>1 to 99 CFM</li> <li>100 to 199 CFM</li> <li>200 to 299 CFM</li> <li>300 to 399 CFM</li> <li>400 to 1000 CFM</li> </ul> </li> </ol>	<p><b>Ineligible dryers:</b></p> <ol style="list-style-type: none"> <li>1. Any dryers that are other than refrigerated air dryers.</li> <li>2. Non-cycling dryers.</li> </ol>

**Business Rules Regarding Energy Initiative and Design 2000plus Prescriptive Compressed Air Incentives.**

1. Any project that falls within the guidelines established in the prescriptive applications are not eligible for a custom incentive.
2. If a proposed project falls short of the minimum hours established in Item 5 of the Eligibility Requirements section of the prescriptive application, and in all other ways complies with the requirements of the prescriptive applications, the proposed project is not eligible for an incentive under either the prescriptive or the custom program.
3. Proposed compressor installations that satisfy all the requirements of the prescriptive worksheets, that also include significant energy conservation measures (ECM's) impacting the distribution system or reducing air consumption at the end uses, may be run as custom measures. Examples would include, leak reduction measures, intermediate controls, distribution piping improvements and secondary storage.
4. Accessory devices that will be installed along with compressors will be handled as separate stand alone Custom Applications while the compressor, receiver and dryer for the same project continue on the standard prescriptive incentive track. Such accessories include; low pressure drop filters and zero loss drains.
5. If harmonics remediation must be installed in order to make a proposed Variable Speed Drive Compressor project comply with National Grid's harmonic standards, the project may be run as a Custom Application and the proposed project cost may include the harmonics remediation work. If meter readings taken subsequent to the installation of the compressor and prior to the installation of the harmonics remediation demonstrate that harmonics remediation need not be installed, the project incentive will be capped at the level of the prescriptive incentive.