At present, turbine installations require approval from TSSA for the fuel features that include the valve train, exhaust flue passages and control. This approval requirement has been implemented since March 2001 after consultation with the industry. At that time, unlike reciprocating engines, there were no requirements contained in the Gas Code CSA-B149.1 and there was lack of experience in Ontario in turbine installations.

In processing a number of turbine applications in the past years, it was observed that the OEM (Original Engine Manufacture) turbines have their unique design with adequate safety features built in and that their installation requirements are similar to those of the reciprocating engines contained in B149 Codes.

Based on that finding, it is determined that there will be no approval required for turbine engines as long as these are manufactured by OEM (Original Engine Manufacturers). These will include the package turbine sets assembled by another manufacturers if the following conditions are met:

a) The package is mounted as a unit on a skid or frame and the manufacturer produces a complete set of specifications for the unit describing the engine, valves, fittings, components, controls and installations instructions;
b) The manufacturer provides operation and maintenance manuals;
c) The manufacturer specifies the type of gas and the supply pressure required;
d) The manufacturer provides a warranty for all components within the package, including the warranty from the engine manufacturers for the fuel being used; and
e) The manufacturer includes the package name, address, telephone, fax and e-mail where the manufacturer can be contacted.

If the above conditions are not met, then the non-OEM turbine engines and packages will require field approval.

For installation, it is noted that specific installation requirements are now being considered by B149 Code Committee with a plan to publish these in the next B149.1 edition. TSSA is planning to adopt these requirements as soon as these are accepted by the Committee. When these are adopted, installation requirements for turbine engines shall be in accordance with these new requirements.

In the meantime, the installation shall be in accordance with the appropriate requirements as per section 7.34 of B149.1-05 and the manufacturer’s installation instruction, whichever are more stringent.

The above approval requirement does not affect the position of high pressure piping installations where high pressure piping system application to TSSA is required.

This Advisory is effective immediately.