



LM Gas Turbine Minimum Load Operations

Introduction

Many times during commissioning, maintenance and troubleshooting periods it becomes necessary to operate the LM2X, LM6000, LMS100 at low output power levels. This position paper provides recommendations for operating the LM gas turbine during these situations

Description

The LM GT can be operated indefinitely and without restriction at very low loads such as for maintenance and/or emergency situations. Main concerns with operating at very low loads are: Operation for extended periods at low load may result in the following:

- Premature Wear of VBV system, as applicable
- Noise from VBV system, as applicable
- Reduced Ffuel efficiency
- Bearing seals of lube oil system
- Fuel manifold coking when operating on liquid fuel

Conclusion

Operating the LM2X, LM6000, LMS100 at synchronous idle or light load conditions should not be part of the normal operation. Optimal fuel efficiency is achieved when the LM GT is running at or near maximum output power.

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