

## Question 23.20

**Topic:** Fuel Flow-to-Load Ratio Test

**Question:** I have a combined-cycle turbine with a duct burner. Both the turbine and the duct burner combust only natural gas, and fuel flow to the turbine and duct burner are metered separately. In my monitoring plan, I have represented this as a single "GAS" monitoring system, with two component meters.

If I want to use the optional fuel flow-to-load ratio test in Section 2.1.7 of Appendix D to extend the accuracy test deadline for my gas fuel flowmeters, may I perform the fuel flow-to-load data analysis using just the fuel flow to the CT and the electrical load generated by the turbine?

**Answer:** Yes, provided that the duct burner is used, on average, for 25 percent of the unit operating hours, or less. If you perform the fuel flow-to-load test in this manner, apply the test result to both the turbine flowmeter and the duct burner flowmeter. Report the baseline data for the fuel flowmeter system, and report the *same* flow-to-load test result for each flowmeter component separately.

**References:** Appendix D, Section 2.1.7

**History:** First published in October 2003 Revised Manual; revised in 2013 Manual