

Parameter Monitoring Plan

Ada Cogeneration Standing Orders

Date: 05/18/16

Standing Order Number: 004 Rev 3

Subject: Ada Cogeneration Title V Air Permit Requirements

Ada Cogeneration Title V Air Permit Requirements for plant start-up:

1. NOx pump must be in operation whenever Gas Turbine is running.
2. Evaporate Cooler in service when outside air temperature is at 60 deg. F or above
3. Monitor NOx water injection and record time when NOx water is first injected into the Gas Turbine.
4. Record time and start Gas Turbine hourly water to fuel readings when plant total mw output reaches 16.2 mw's.
5. While at 16.2 mw's, maintain a Gas Turbine water to fuel ratio at or above .67 with the Duct Burner off, or at or above .62 with the Duct Burner on.

Ada Cogeneration Title V Air Permit Requirements for plant operations at 16.2 mw's with no Duct Burner:

1. NOx water pump is in operation.
2. Evaporate Cooler is in operation when outside air temperature is at 60 deg. F or above.
3. Gas Turbine water to fuel ratio must be maintained at or above .67.
4. Hourly Gas Turbine gas and water reading must be taken when Gas Turbine is operating.

Ada Cogeneration Title V Air Permit Requirements for plant operations at 16.2 mw's with Duct Burner on:

1. NOx water pump is in operation.
2. Evaporate Cooler is in operation when outside air temperature is at 60 deg. F or above.
3. Gas Turbine water to fuel ratio must be maintained at or above .62.
4. Duct Burner on.
5. Hourly Gas Turbine gas and water reading must be taken when Gas Turbine is operating.

Ada Cogeneration Title V Air Permit Requirements for plant operations at 29.4 mw's:

1. NOx water pump is in operation.
2. Gas Turbine at full load.
3. Duct Burner on.
4. Evaporate Cooler in service when outside air temperature is at 60 deg. F or above.
5. Gas Turbine water to fuel ratio must be maintained at or above .85.
6. Hourly Gas Turbine gas and water reading must be taken when Gas Turbine is operating.

Note: Contact Plant Management immediately the Gas Turbine water to fuel ratio cannot be maintained at or above the minimum level or in the event of any abnormal condition or malfunction.

Note: If the Duct burner trips at 16.2 mw's and can't be immediately restarted, the Gas Turbine water to fuel ratio must be maintained at or above .67 until the Duct Burner can be restored.

Note: If the Duct Burner trips at 29.4 mw's and can't be immediately restarted increase the Gas Turbine water to fuel ratio at or above .89 until the Duct Burner can be restored.

Note: In the event of loss of water injection to the Gas Turbine that cannot be restored within one hour, the plant must be shutdown in accordance with the Normal Plant shutdown procedure OP-2.0.

DATE:		ADA COGENERATION NOX HOURLY LOG								
TIME	GT LOAD	GT FUEL TOTALIZER	FUEL USED LAST HOUR	GT NOX H2O TOTALIZER	NOX H2O USED LAST HOUR	AVE. HR RATIO	ON HR RATIO	DB On / Off	COMMENTS / REMARKS	
2300										
0000										
0100										
0200										
0300										
0400										
0500										
0600										
0700										
0800										
0900										
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NOX WATER / GAS RATIO LIMITS: @ 16.2 mw NOX RATIOS With Duct Burner => .62 @ 16.2 mw NOX RATIOS No Duct Burner => .67 @ 29.4 mw NOX RATIOS With Duct Burner => .85 @ 29.4 mw NOX RATIOS No Duct Burner => .89 NOX RATIO = NOX H2O / FUEL UNDER NO CIRCUMSTANCES LET NOX RATIO DROP BELOW MINIMUM SETPOINT			NOTE: CARRY FORWARD PREVIOUS DAYS 2300 READING TO DETERMINE 0000 HOURS USE.			ADDITIONAL COMMENTS:				