

# Generator rear air leakage phenomenon

What causes a leaking heat recovery steam generator condensate preheater tube?

This investigation delves into the metallurgical root cause failure analysis of a leaking heat recovery steam generator (HRSG) condensate preheater tube from a combined cycle power plant. The CPH tube experienced failure in the form of multiple pinholes, resulting in leakage.

### What happens when a generator is tripped?

Megawatt load,turbine end and exciter end cold gas temperatures and rotor speed are plotted. It can be seen that the cold gas temperature drops rapidlyafter the generator is tripped. Figure 7 is a summer shutdown curve. Winter shutdowns generally will result in lower temperatures due to lower cooling water temperatures.

## What happens when a generator is put back in service?

When the generator is put back in service, the combination of moisture, high temperature and pressure continues to attack the interturn insulation. The insulation thins under pressure and begins to bond to the copper surfaces. Each start/stop cycle will repeat the same degrading series of events.

### Why is my exhaust leaking a lot of air?

The root cause of this damage mechanism can be associated with multiple factors including type of fuel, presence of excess air during the combustion stage, the temperature of condensate inlet temperature and presence of excess moisture in the exhaust flue gas.

Did a stator ground fault tripped a generator off-line?

Mr. Bothwell,was investigating a stator ground fault which had tripped the unit off-line. The particular generator had a top mounted hydrogen cooler that ran the length of the machine. He was able to enter the machine near the cold gas exit of the cooler. Much to his surprise, there was a considerable amount of water in pockets in the frame.

The gap between the piston and the cylinder is too large, and the oil is burned to the combustion chamber. 2.The air in the process of being absorbed by the supercharger, the air flow encounters greater resistance ...

the stator slot part. Leakage of the generator stator coolant and water absorption and winding abrasion phenomena frequently occur at the stator end winding part. A special drying device is ...

The significance of the high moisture condition is that water particles, lead carbonate and other contaminants are carried to the field end turn area. Once in place in the end turns, the ...

saturation phenomenon implies that it is strictly incorrect to consider that the zero power factor characteristic is a simple translation of the o.c.c., as it is the case with the classical Potier



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A calculation method of a synchronous generator rotor air-cooling system with self-ventilation of the rotor winding from a sub-slot duct is presented, which makes it possible to obtain the air velocity distributions and ...

Internal leakage occurs in the diesel generator fuel injection pump, which is generally difficult to detect with the naked eye. If the diesel engine is difficult to start, the power ...

reduction of the amount of air to gas leakage in a typical rotary regenerative air preheater of coal-fired steam generators, by means of computational thermo-fluid-dynamics. Due to the gaps, or ...

3. The screw for the plunger sleeve is leaking oil. There is a pure copper cushion under the plunger sleeve positioning screw, the main function is to seal. If this small gasket installation leaks or becomes fluffy or ...

leakage mass, and the internal circulation of the steam generator. Leakage flow has little effect on it. This phenomenon causes the coolant temperature at the primary side of the steam ...

What Is the Most Common Oil Leak? One of the most common oil leaks in generators is often found at the drain plug. Over time, the vibrations from the motor can cause the drain plug to loosen, resulting in oil seepage or ...

influence of different upper and lower excitation ampere-turns ratio on air gap flux and magnetic flux leakage when the number of ampereturns remains unchanged- . In this paper, ...

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