

Check the current transformers in the AT1 cabinet

Does this solve the problem?

- 1] Yes
- 2] No
- 3] I don't know

● [Explanation](#)

That TAC computer uses three current transformers to read the current from each of the phases. If one of these CTs

Check the current reading while the turbine is in pause and consuming as little power as possible (no motors or heaters on). If there is a current imbalance at this point, confirm that it is not being caused by the grid or transformer and test the AT1:T03.

If the T03 is shorted or open, it should be replaced.

TRAFO CURRENT 2000/1A 25VA Part No: [60007164](#)

986 - Cut-in peak current L3 - NM72,NM82,V82 Mk1-5



Check the circuit for shorts and opens

Does this solve the problem?

- 1] Yes
- 2] No
- 3] I don't know

● [Explanation](#)

The signal from the current transformers must pass through six connections before it reaches the TAC computer. If any of these connections are loose or corroded, the signal could be altered and the current measurement would be unreliable.

Check the circuit with a multimeter and thoroughly inspect the Amphenol connections.

Amphenol Plug Service Kit Part No: [60025069](#)

Check the AT1:R01 shunt resistor

Does this solve the problem?

- 1] Yes
- 2] No
- 3] I don't know

● [Explanation](#)

The current transformers have a shunt resistor to lower the current sent to the TAC.

With the current transformer disconnected, measure the resistance from AT1:R01:03 to AT1:R01:08. If it is not 2.5 ohms then the resistor may be bad.

RESISTOR SHUNT 3x2.5 OHM Part No: [51700501](#)

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Check the gen speed readings, replace sensor if bad

Does this solve the problem?

- 1] Yes
- 2] No
- 3] I don't know

● [Explanation](#)

Check the generator speed in the alarm snapshot and compare it to the rotor speed. If the generator speed sensor is defective, replace it. If the sensor works but is misaligned, realign it.



Inspect thyristor circuit, repair any damage

Does this solve the problem?

1] Yes

2] No

3] I don't know

● [Explanation](#)

If the alarm is occurring during start up, when the thyristors are active, it could indicate a problem with one of the thyristors or the TAC 40.

| Spare parts | |
|---------------------------|--------------------------|
| THYRISTOR MODULE | 60001041 |
| TRIGGER BOARD TAC 40 690V | 51700901 |

Replace the TAC

Does this solve the problem?

1] Yes

2] No

3] I don't know

● [Explanation](#)

If the TAC II is malfunctioning, it could raise this error by mistake.

Check for voltage on terminal AT2:U2:P1.5, you should have about 19 volts

If there is no voltage there, the TAC II should be replaced.

If you suspect the TAC II is bad for other reasons, always try to re-upload the software before you replace the TAC computer.

TAC II/F NEGM 1500c/71/82 Part No: [51707301](#)

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Perform a generator test and report findings

Does this solve the problem?

1] Yes

2] No

3] I don't know

● [Explanation](#)

This alarm may indicate a generator is failing. Check the turbine log for other generator related alarms.

Perform a motor test and an insulation test on the generator. Use work instruction 959335 to insure the procedure is performed correctly.

Electrical measurements on generator doc. [959335](#)