



CONNECTION ASSESSMENT & APPROVAL PROCESS

ASSESSMENT SUMMARY

Applicant: INCO Limited

*Project: Temporary Relocation of Transformer T2 from Froid
Stobie No. 2 Substation to Inco No. 4 Substation to
replace the faulted Transformer T1*

CAA ID No. 2002-EX028

Long Term Forecasts & Assessments Department

Date: 2nd May 2002

ASSESSMENT SUMMARY

INCO Limited

INCO No. 4 Substation - Replace faulted transformer T1

1.0 GENERAL DESCRIPTION

Transformer T1 at the INCO No. 4 Substation was recently faulted, and has been removed and returned to Canadian General Electric for re-winding.

INCO has removed transformer T2 from their Froid Stobie Substation and this unit is to be installed in the position vacated by the faulted transformer T1 at the INCO No. 4 Substation.

The remaining transformer, T2, at the INCO No. 4 Substation is rated at 300MVA while the T2 transformer that is to be relocated from the Froid Stobie Substation is only rated at 150MVA. Consequently, although INCO is planning to energise the relocated transformer from the 230kV system, it is not their intention to place the unit on load unless transformer T2 should fail. The LV disconnect switches on the relocated transformer are therefore to be locked open.

This arrangement is to remain in use until later this summer when re-winding of the faulted transformer is scheduled to be completed.

It is worth noting that this arrangement was adopted in 1974 when this transformer experienced a similar fault and had to be removed for re-winding.

The scheduled in-service date for the relocated unit is 15th May 2002.

2.0 ASSESSMENT

With the removal of transformer T2 from the Froid Stobie Substation, all of the load at this Substation will be supplied from circuit X23N. Similarly, with transformer T1 at INCO No.4 Substation energised, but off-load, all of the load at this substation will be supplied from circuit S21N.

The appropriate transformer at Froid Stobie Substation has therefore been selected for relocation to minimise INCO's exposure to line contingencies.

Apart from the change in loading on circuits S21N & X23N this temporary arrangement is expected to have no adverse impact on the IMO-controlled grid.

Conclusions

The only impact on the IMO-controlled grid that the temporary relocation of transformer T2 from the Froid Stobie Substation to the INCO No. 4 Substation is expected to have is a small change in the loading on circuits S21N & X23N (which is expected to be less than 100MVA).

4.0 NOTIFICATION OF APPROVAL

It is therefore recommended that a Notification of Approval of the Connection Proposal be issued.

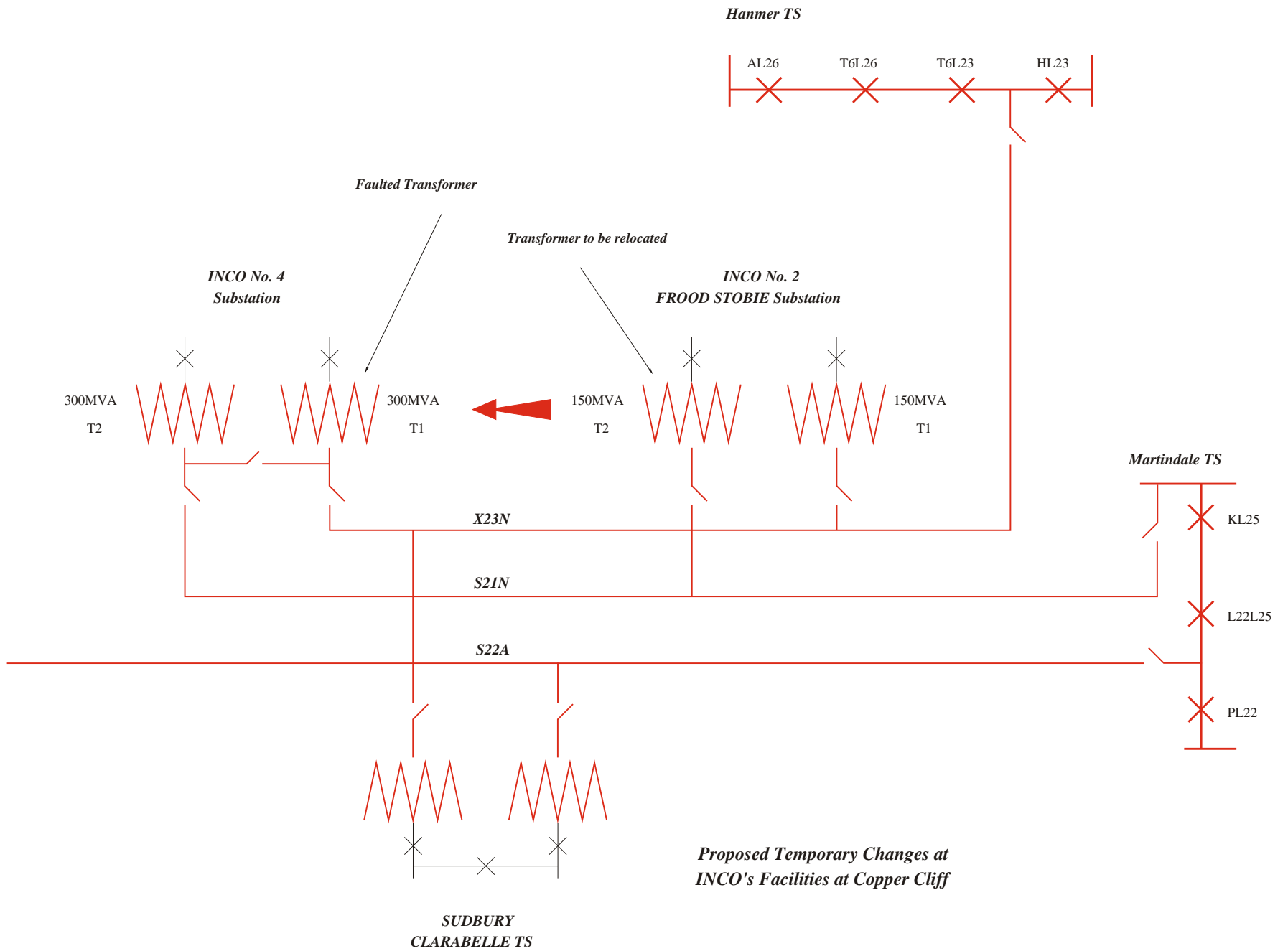


DIAGRAM 1