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CONNECTION ASSESSMENT & APPROVAL PROCESS

ASSESSMENT SUMMARY - Addendum

Applicant: Hydro One Networks Inc.

*Project: Porcupine TS - 500kV & 115kV Switchyards
Replace the existing Air-blast Circuit Breakers with SF₆ units*

INTERMEDIATE PHASE

CAA ID No. 2004-EX204

Transmission Assessments & Performance Department

FINAL Version

Date: 29th August 2005

ADDENDUM TO THE ORIGINAL ASSESSMENT SUMMARY

HYDRO ONE NETWORKS Inc.

Porcupine TS: Replace the existing 500kV & 115kV Air-blast Circuit Breakers with SF₆ Units

1.0 INTRODUCTION

As a prelude to replacing the three, existing 500kV air-blast circuit breakers at Porcupine TS with SF₆ units, Hydro One was to install a fourth 500kV circuit breaker at Porcupine TS which would effectively replace the existing 500kV disconnect switch H1H2, once the planned work was completed.

The installation of this circuit breaker in the vacant position on the existing diameter in the 500kV switchyard has now been completed. However, due to the on-going labour dispute it has not been possible to complete the commissioning of this breaker or to integrate it into the switching sequences.

2.0 INTERMEDIATE PHASE

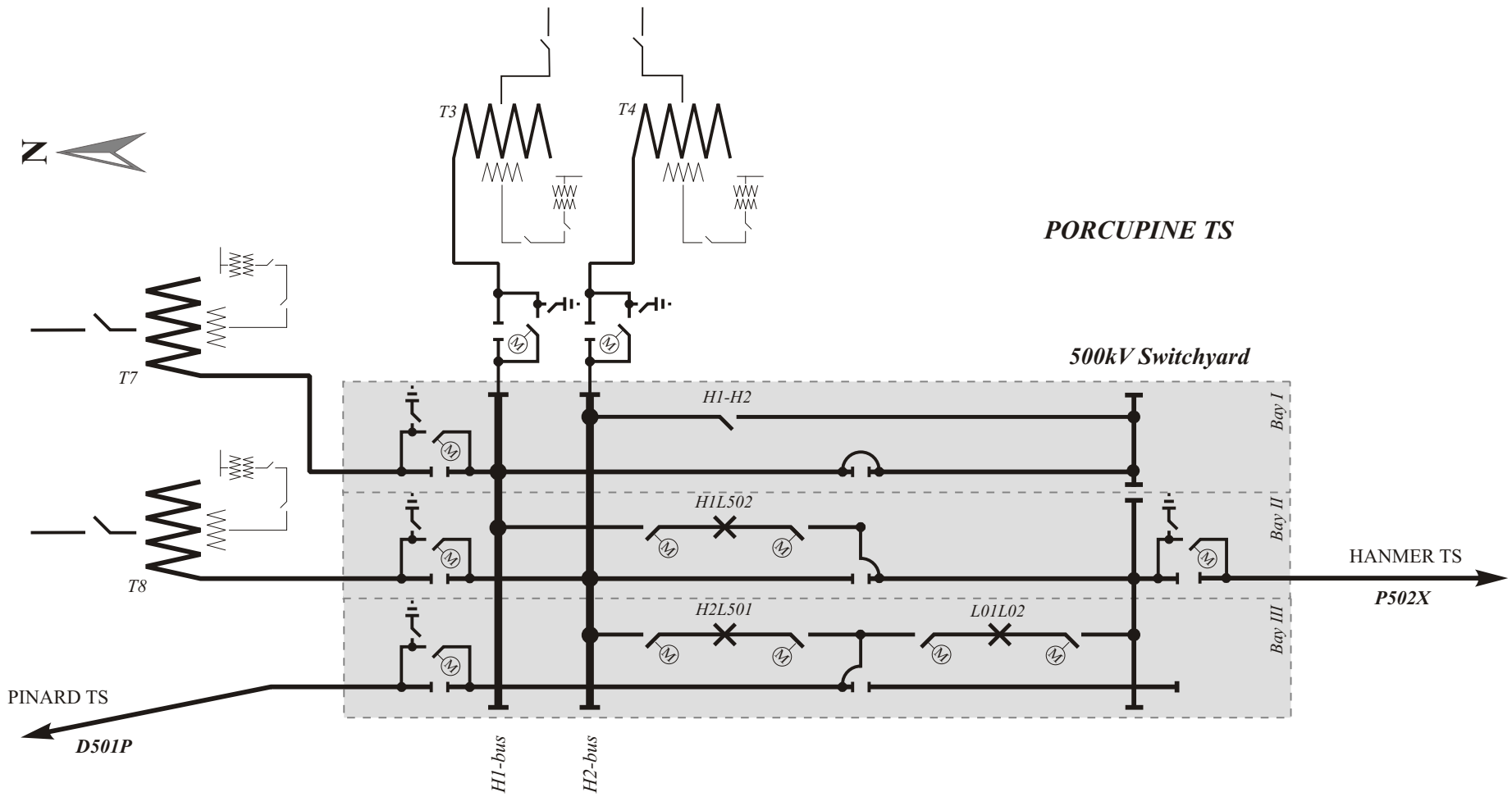
Diagram 1 shows the original arrangement of the facilities at Porcupine TS, prior to the installation of the new circuit breaker.

Diagram Int-1 shows the location of the new 500kV circuit breaker and its associated disconnect switches. However, because the relay protection for the new breaker is not yet operational, the existing high-level by-pass connection is to remain in-service; effectively shorting-out the breaker.

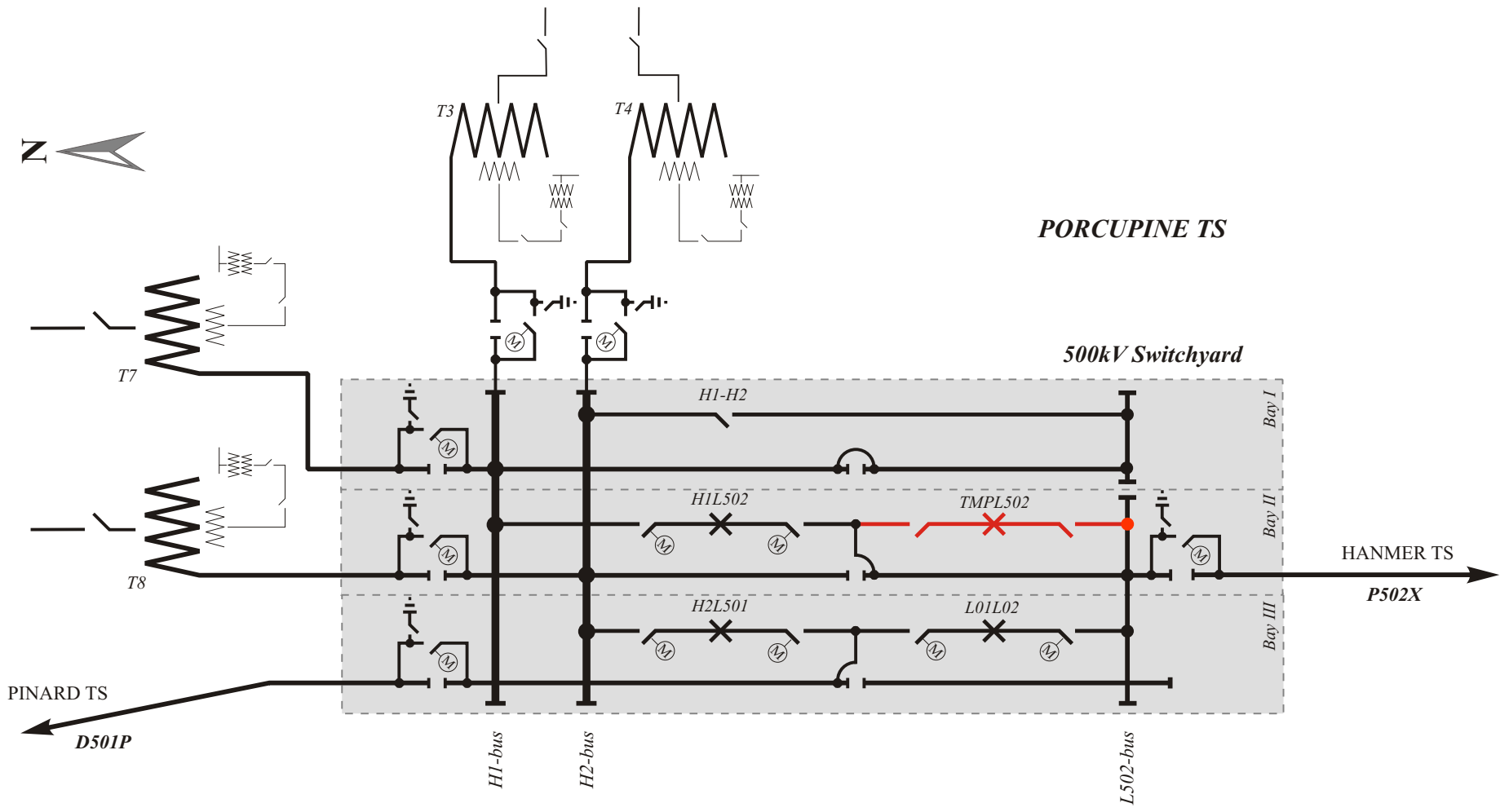
Diagram Int-2 shows the equivalent single-line-diagram for this interim arrangement.

3.0 ASSESSMENT

Since the new breaker is to remain shorted-out until normal work resumes at Porcupine TS, the *operational* configuration of the facilities at Porcupine TS will not change and there will therefore be no impact on either the existing fault clearance sequences or on the operation of the North-east Load & Generation Rejection Scheme.



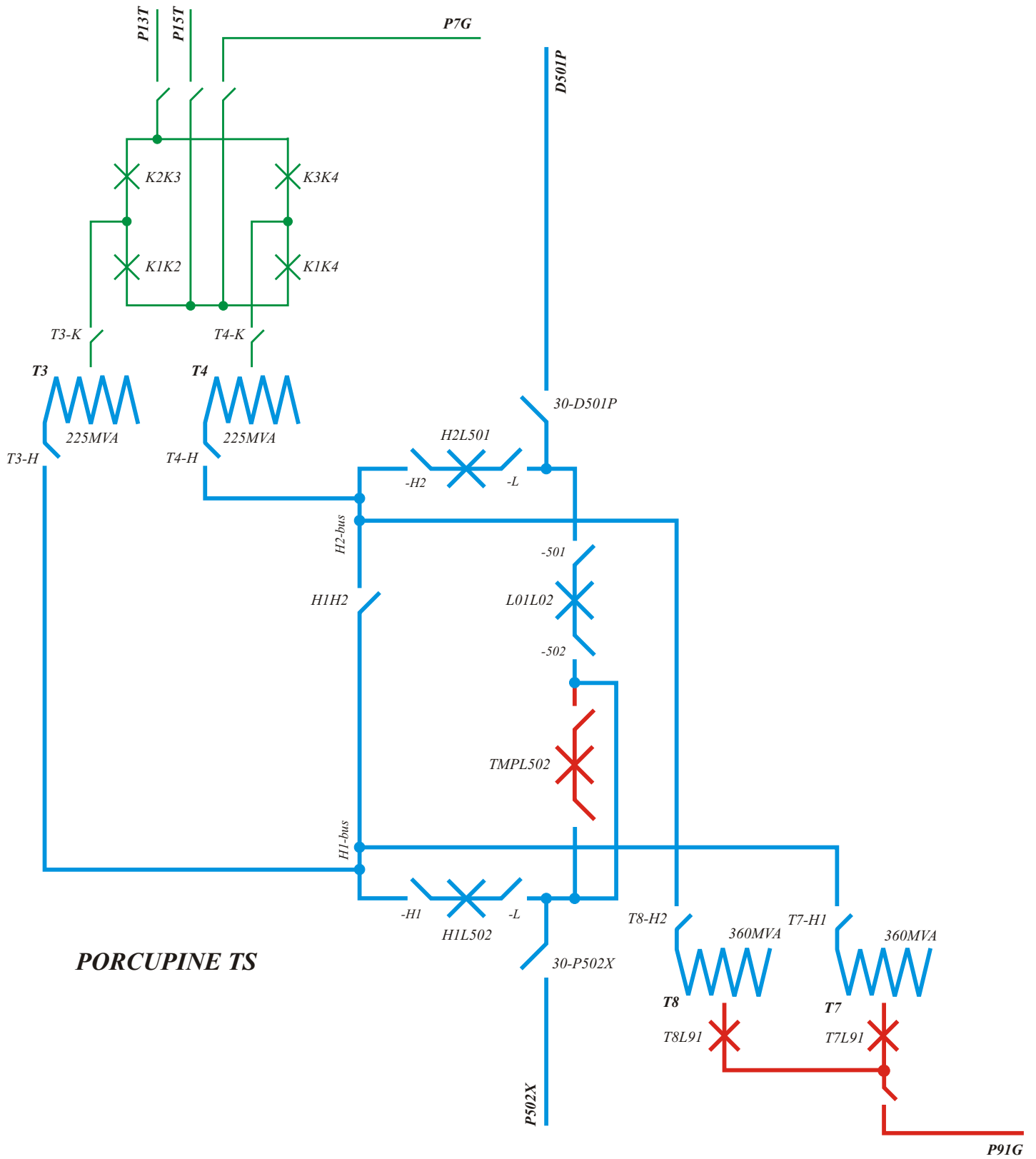
Existing 'Physical' Arrangement of the 500kV Switchyard at Porcupine TS



Intermediate Stage of the Development of the 500kV Switchyard at Porcupine TS

DIAGRAM Int.-1

29th August 2005



Intermediate Stage of the Development of the 500kV Switchyard at Porcupine TS