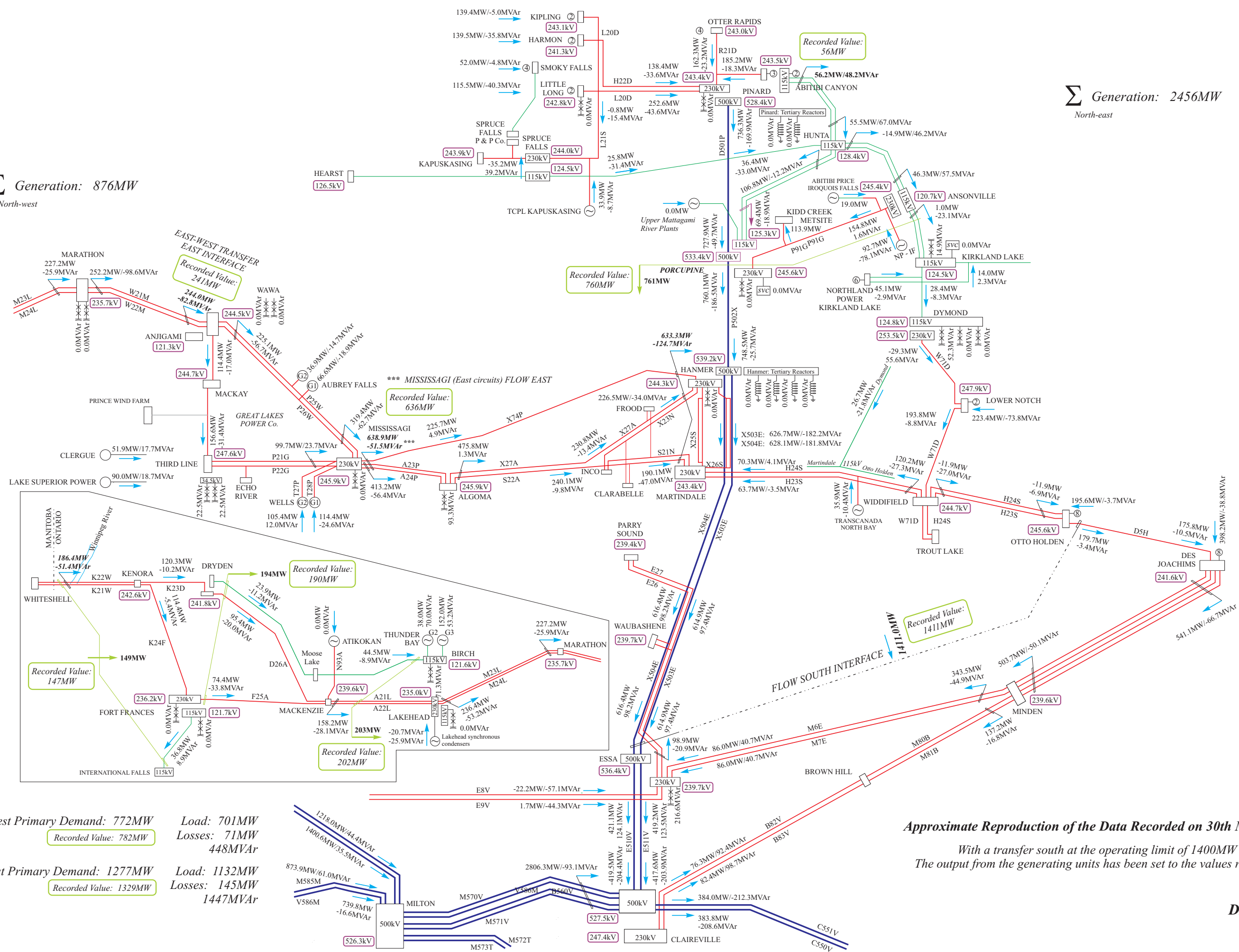


Σ Generation: 876MW
North-west

Σ Generation: 2456MW
North-east



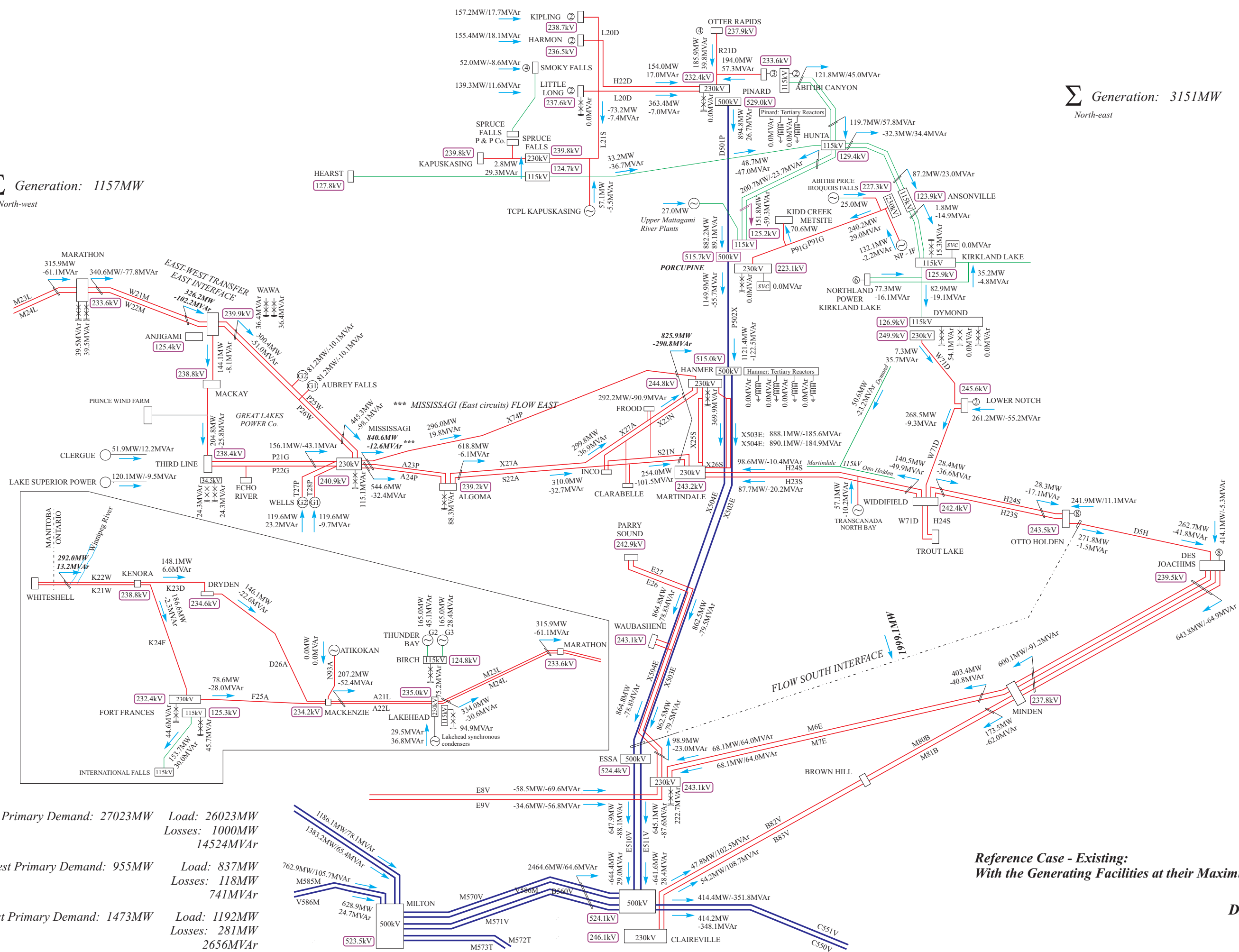
North-west Primary Demand: 772MW
Recorded Value: 782MW
Load: 701MW
Losses: 71MW
448MVar

North-east Primary Demand: 1277MW
Recorded Value: 1329MW
Load: 1132MW
Losses: 145MW
1447MVar

Approximate Reproduction of the Data Recorded on 30th May 2006
With a transfer south at the operating limit of 1400MW
The output from the generating units has been set to the values recorded

Σ Generation: 1157MW
North-west

Σ Generation: 3151MW
North-east



Ontario Primary Demand: 27023MW Load: 26023MW
 Losses: 1000MW
 14524MVar

North-west Primary Demand: 955MW Load: 837MW
 Losses: 118MW
 741MVar

North-east Primary Demand: 1473MW Load: 1192MW
 Losses: 281MW
 2656MVar

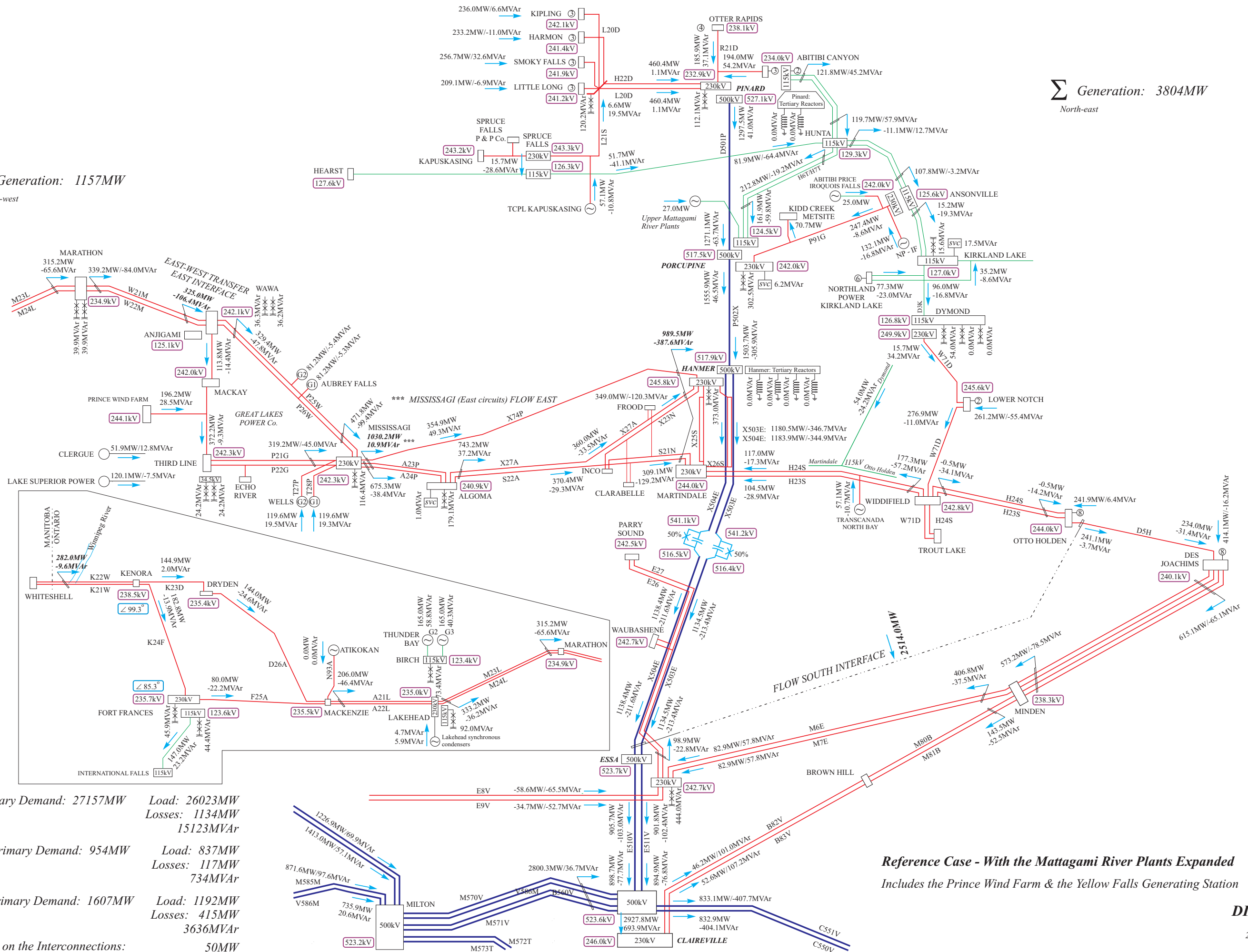
Reference Case - Existing:
 With the Generating Facilities at their Maximum Output

DIAGRAM 3

28th June 2006

Σ Generation: 1157MW
North-west

Σ Generation: 3804MW
North-east



Ontario Primary Demand: 27157MW Load: 26023MW
 Losses: 1134MW
 15123MVar

North-west Primary Demand: 954MW Load: 837MW
 Losses: 117MW
 734MVar

North-east Primary Demand: 1607MW Load: 1192MW
 Losses: 415MW
 3636MVar

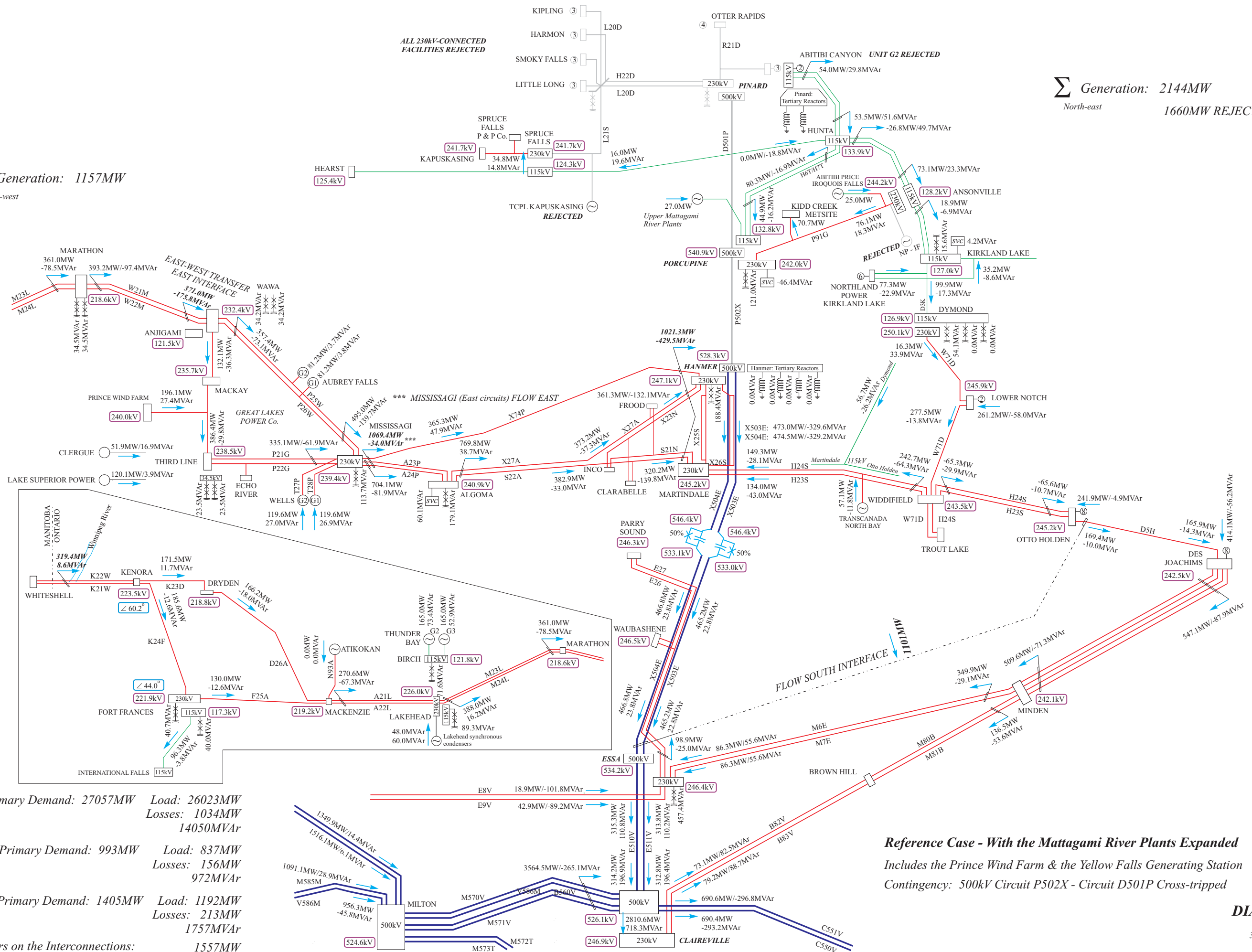
Net Transfers on the Interconnections: 50MW

Reference Case - With the Mattagami River Plants Expanded
 Includes the Prince Wind Farm & the Yellow Falls Generating Station

DIAGRAM 5

Σ Generation: 1157MW
North-west

Σ Generation: 2144MW
North-east
1660MW REJECTED



Ontario Primary Demand: 27057MW Load: 26023MW
Losses: 1034MW
14050MVar

North-west Primary Demand: 993MW Load: 837MW
Losses: 156MW
972MVar

North-east Primary Demand: 1405MW Load: 1192MW
Losses: 213MW
1757MVar

Net Transfers on the Interconnections: 1557MW

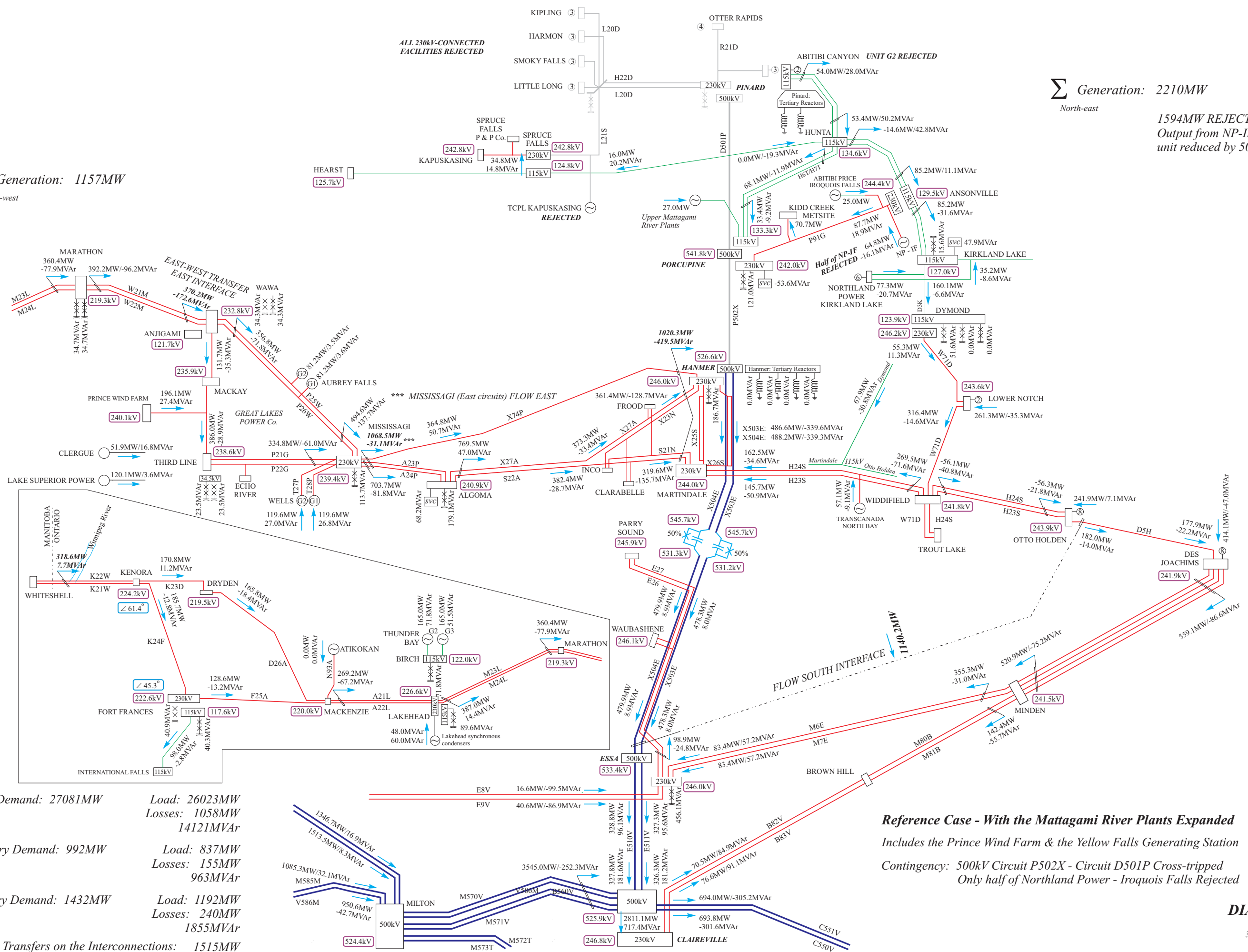
Reference Case - With the Mattagami River Plants Expanded
Includes the Prince Wind Farm & the Yellow Falls Generating Station
Contingency: 500kV Circuit P502X - Circuit D501P Cross-tripped

DIAGRAM 16

Σ Generation: 1157MW
North-west

Σ Generation: 2210MW
North-east

1594MW REJECTED
Output from NP-IF steam unit reduced by 50%



Ontario Primary Demand: 27081MW
Load: 26023MW
Losses: 1058MW
14121MVA

North-west Primary Demand: 992MW
Load: 837MW
Losses: 155MW
963MVA

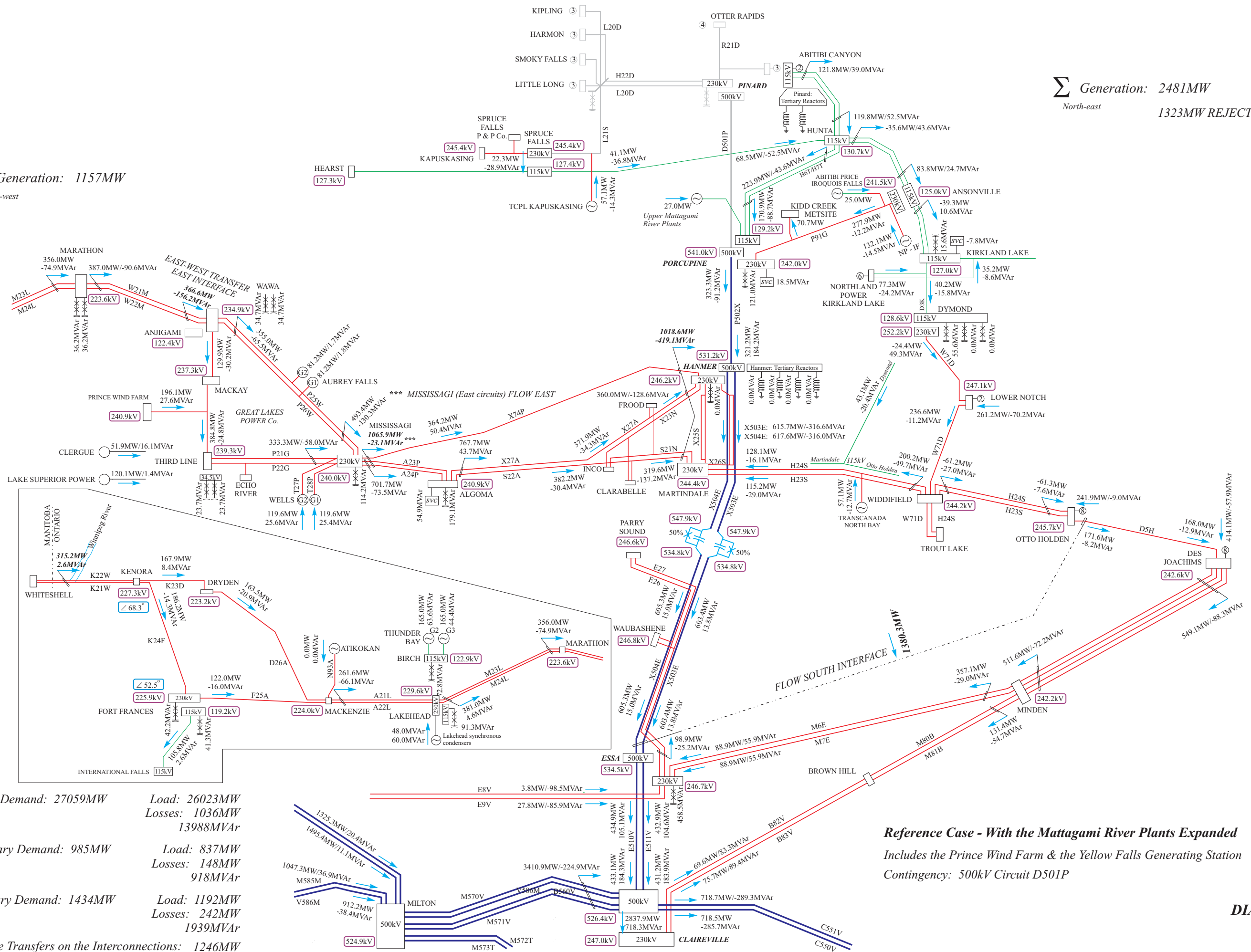
North-east Primary Demand: 1432MW
Load: 1192MW
Losses: 240MW
1855MVA

Net Change in the Transfers on the Interconnections: 1515MW

Reference Case - With the Mattagami River Plants Expanded
Includes the Prince Wind Farm & the Yellow Falls Generating Station
Contingency: 500kV Circuit P502X - Circuit D501P Cross-tripped
Only half of Northland Power - Iroquois Falls Rejected

Σ Generation: 1157MW
North-west

Σ Generation: 2481MW
North-east
1323MW REJECTED



Ontario Primary Demand: 27059MW
Load: 26023MW
Losses: 1036MW
13988MVar

North-west Primary Demand: 985MW
Load: 837MW
Losses: 148MW
918MVar

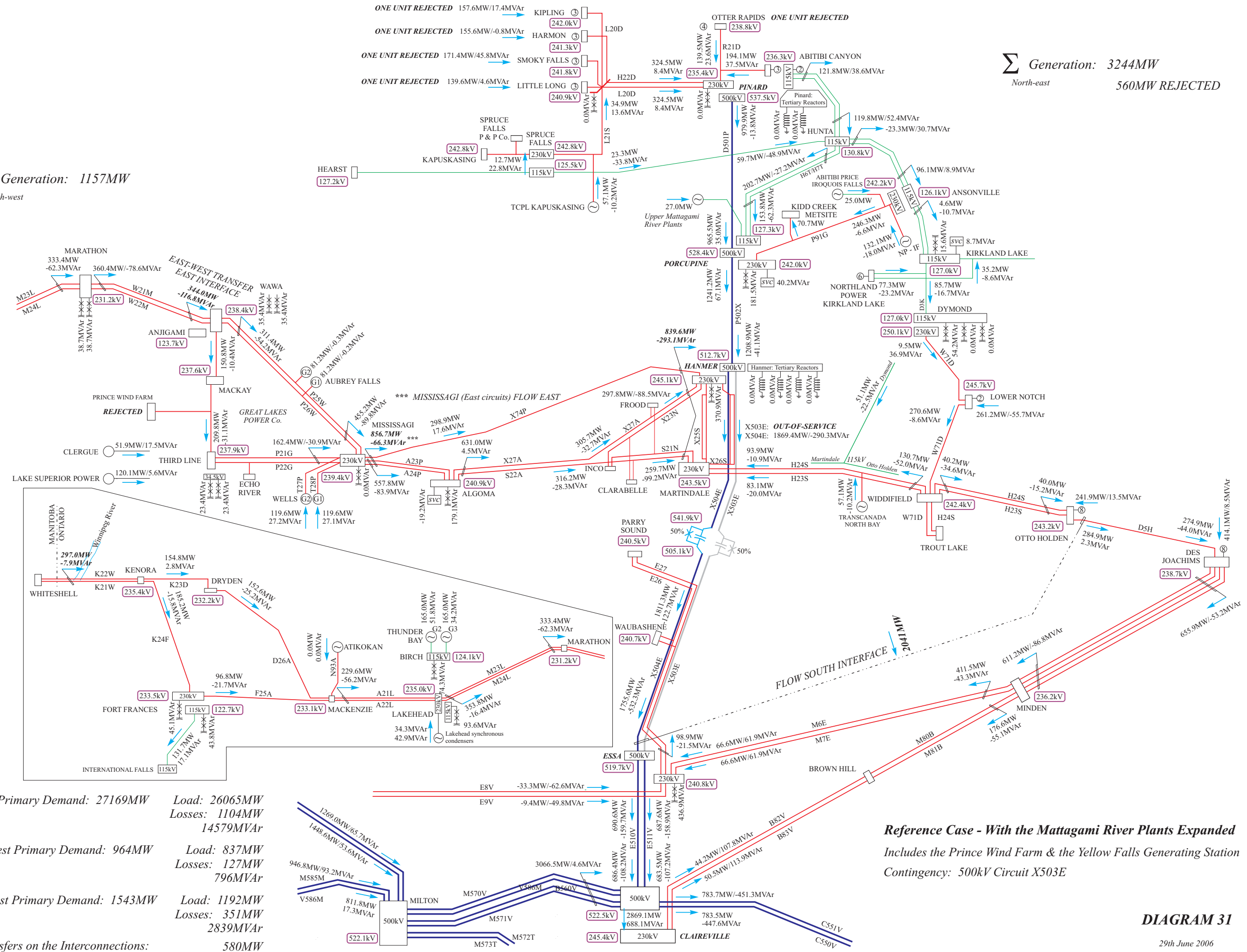
North-east Primary Demand: 1434MW
Load: 1192MW
Losses: 242MW
1939MVar

Net Change in the Transfers on the Interconnections: 1246MW

Reference Case - With the Mattagami River Plants Expanded
Includes the Prince Wind Farm & the Yellow Falls Generating Station
Contingency: 500kV Circuit D501P

∑ Generation: 1157MW
North-west

∑ Generation: 3244MW
North-east
560MW REJECTED

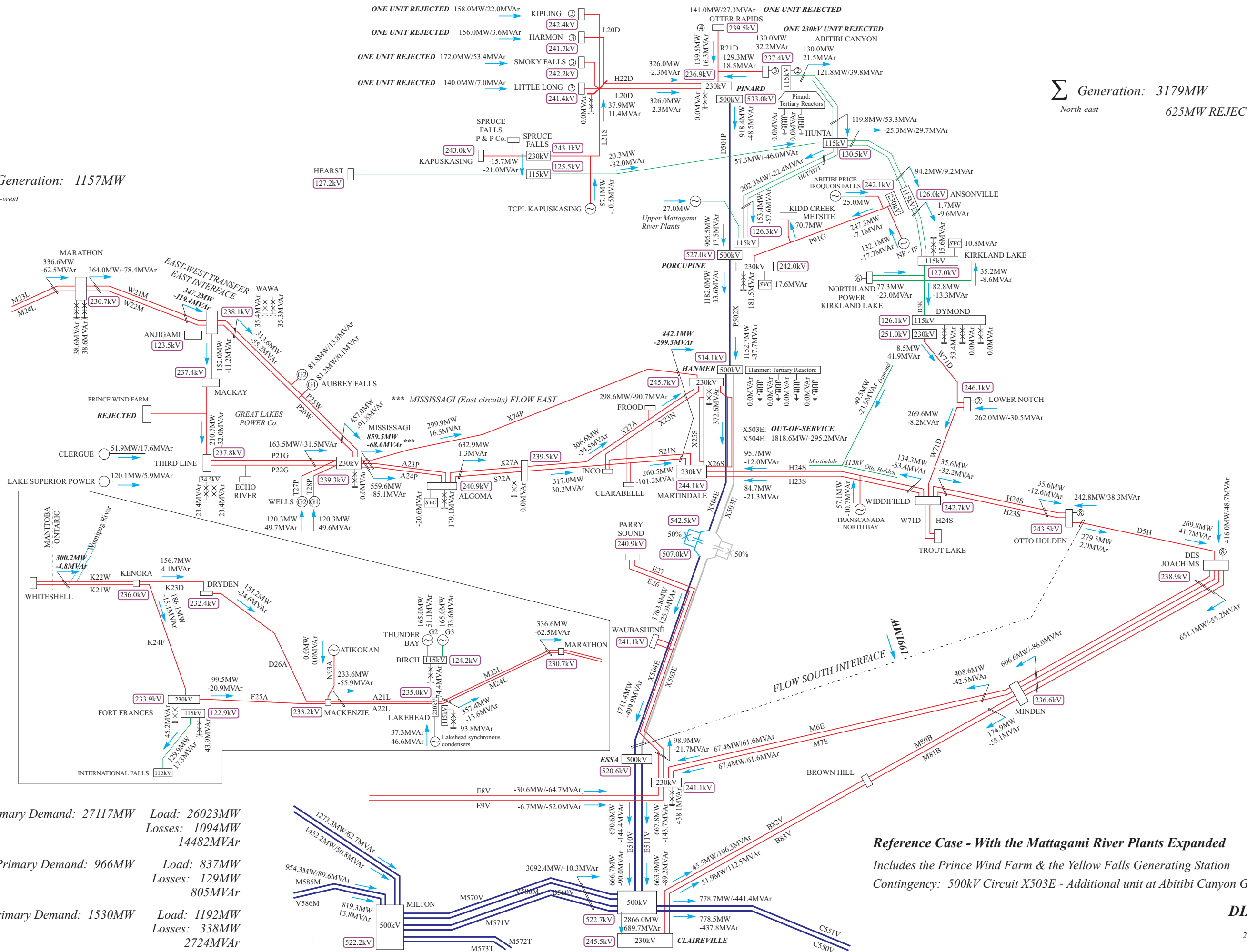


Reference Case - With the Mattagami River Plants Expanded
Includes the Prince Wind Farm & the Yellow Falls Generating Station
Contingency: 500kV Circuit X503E

DIAGRAM 31

Σ Generation: 1157MW
North-west

Σ Generation: 3179MW
North-east
625MW REJECTED



Ontario Primary Demand: 27117MW Load: 26023MW
Losses: 1094MW
14482MVA

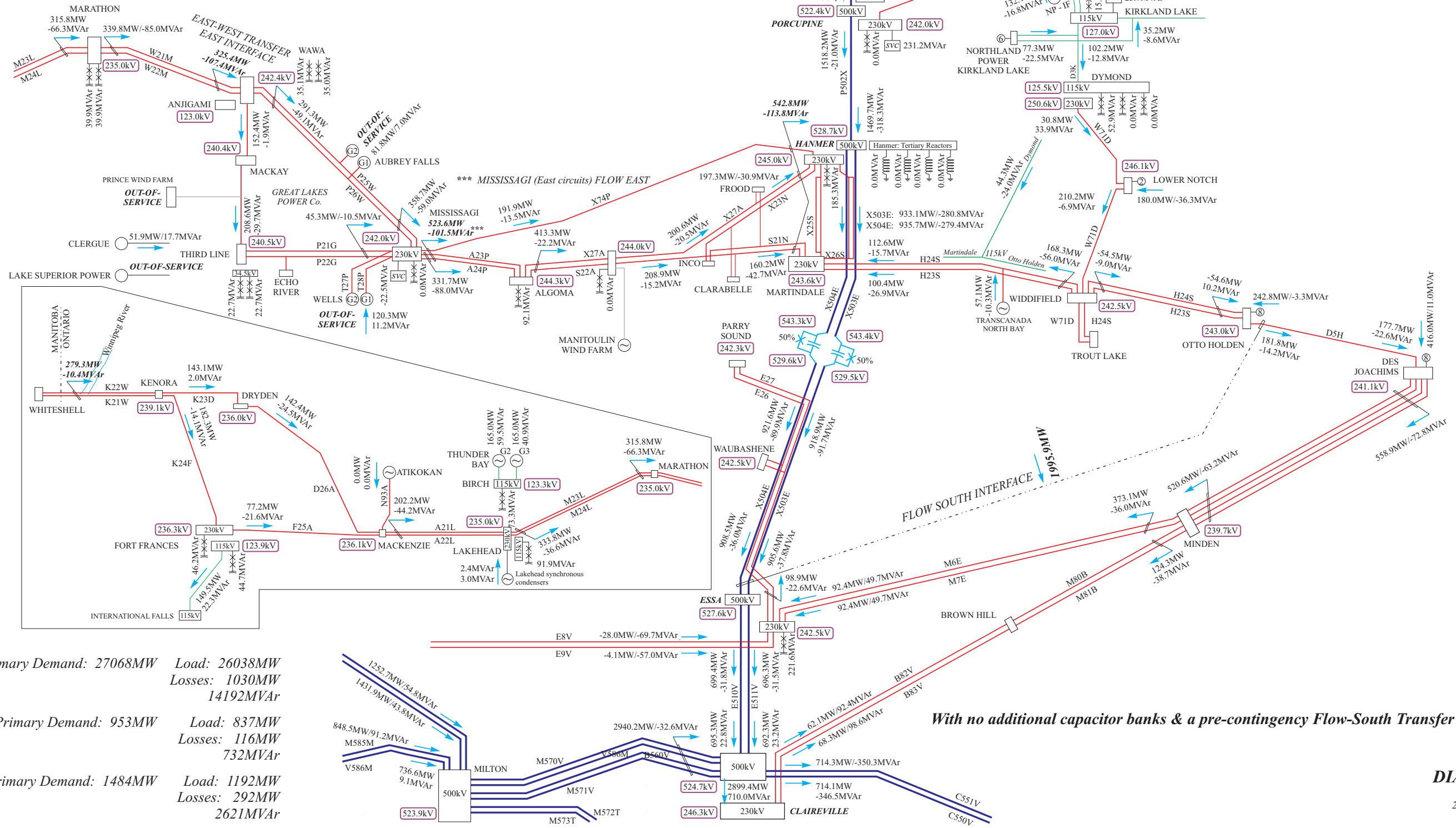
North-west Primary Demand: 966MW Load: 837MW
Losses: 129MW
805MVA

North-east Primary Demand: 1530MW Load: 1192MW
Losses: 338MW
2724MVA

Reference Case - With the Mattagami River Plants Expanded
Includes the Prince Wind Farm & the Yellow Falls Generating Station
Contingency: 500kV Circuit X503E - Additional unit at Abitibi Canyon GS Rejected

Σ Generation: 1162MW
North-west

Σ Generation: 3165MW
North-east



Ontario Primary Demand: 27068MW Load: 26038MW
Losses: 1030MW
14192MVar

North-west Primary Demand: 953MW Load: 837MW
Losses: 116MW
732MVar

North-east Primary Demand: 1484MW Load: 1192MW
Losses: 292MW
2621MVar

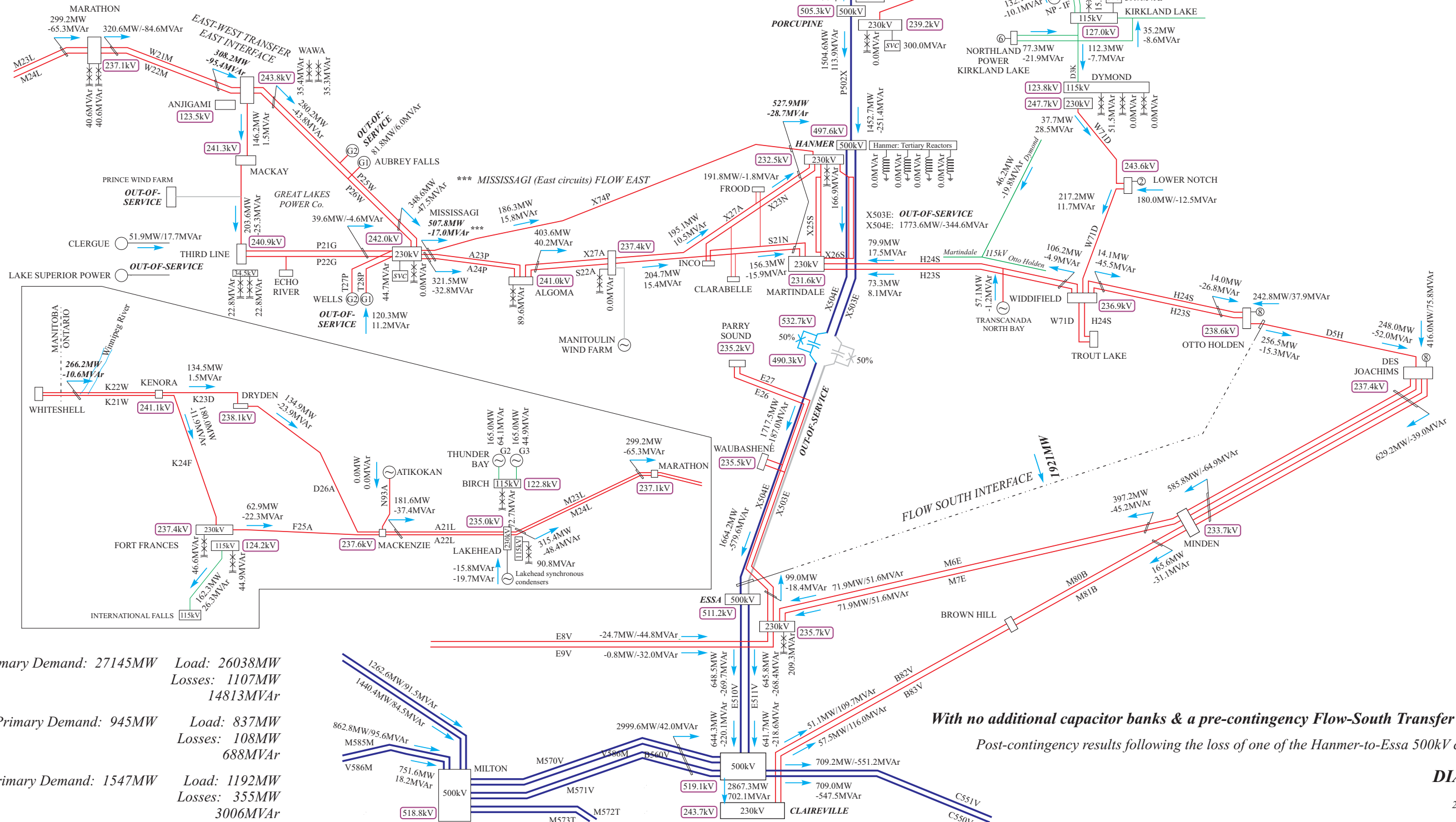
With no additional capacitor banks & a pre-contingency Flow-South Transfer of 2000MW

DIAGRAM 38

28th April 2007

Σ Generation: 1162MW
North-west

Σ Generation: 3165MW
North-east



Ontario Primary Demand: 27145MW Load: 26038MW
 Losses: 1107MW
 14813MVar

North-west Primary Demand: 945MW Load: 837MW
 Losses: 108MW
 688MVar

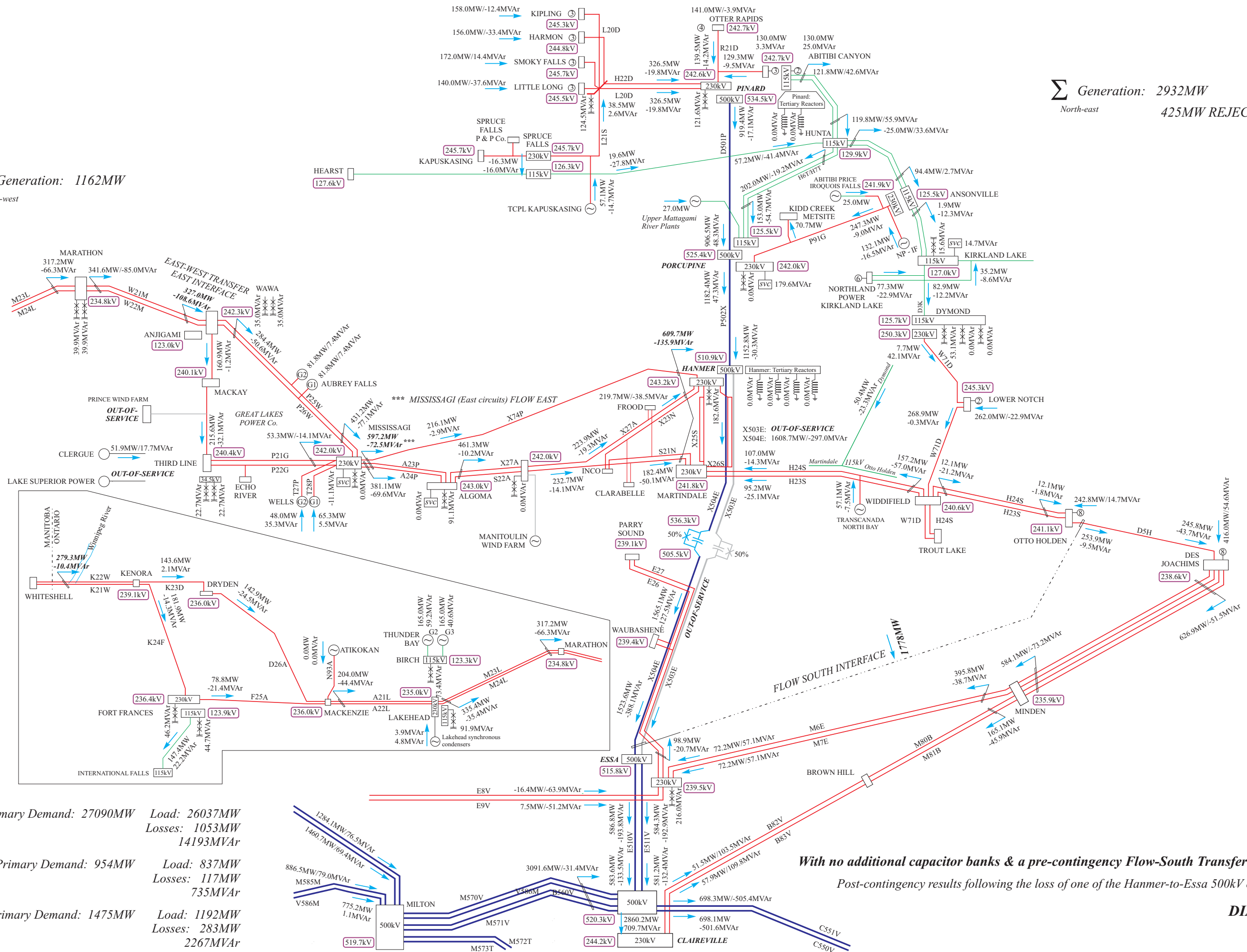
North-east Primary Demand: 1547MW Load: 1192MW
 Losses: 355MW
 3006MVar

With no additional capacitor banks & a pre-contingency Flow-South Transfer of 2000MW
 Post-contingency results following the loss of one of the Hanmer-to-Essa 500kV circuits

DIAGRAM 39

Σ Generation: 1162MW
North-west

Σ Generation: 2932MW
North-east
425MW REJECTED



Ontario Primary Demand: 27090MW Load: 26037MW
Losses: 1053MW
14193MVar

North-west Primary Demand: 954MW Load: 837MW
Losses: 117MW
735MVar

North-east Primary Demand: 1475MW Load: 1192MW
Losses: 283MW
2267MVar

With no additional capacitor banks & a pre-contingency Flow-South Transfer of 2152MW
Post-contingency results following the loss of one of the Hanmer-to-Essa 500kV circuits

DIAGRAM 45