

Ministry of Energy and Mines
Lao People's Democratic Republic

PREPARATORY SURVEY
ON
NAM NGUM 1 HYDROPOWER STATION EXPANSION
IN
LAO PEOPLE'S DEMOCRATIC REPUBLIC
FINAL REPORT
APPENDICES

January 2010

Japan International Cooperation Agency



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Mines of Lao PDR

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THE PREPARATORY SURVEY
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Appendix A Power Flow and Voltage Regulation Analysis

Appendix A

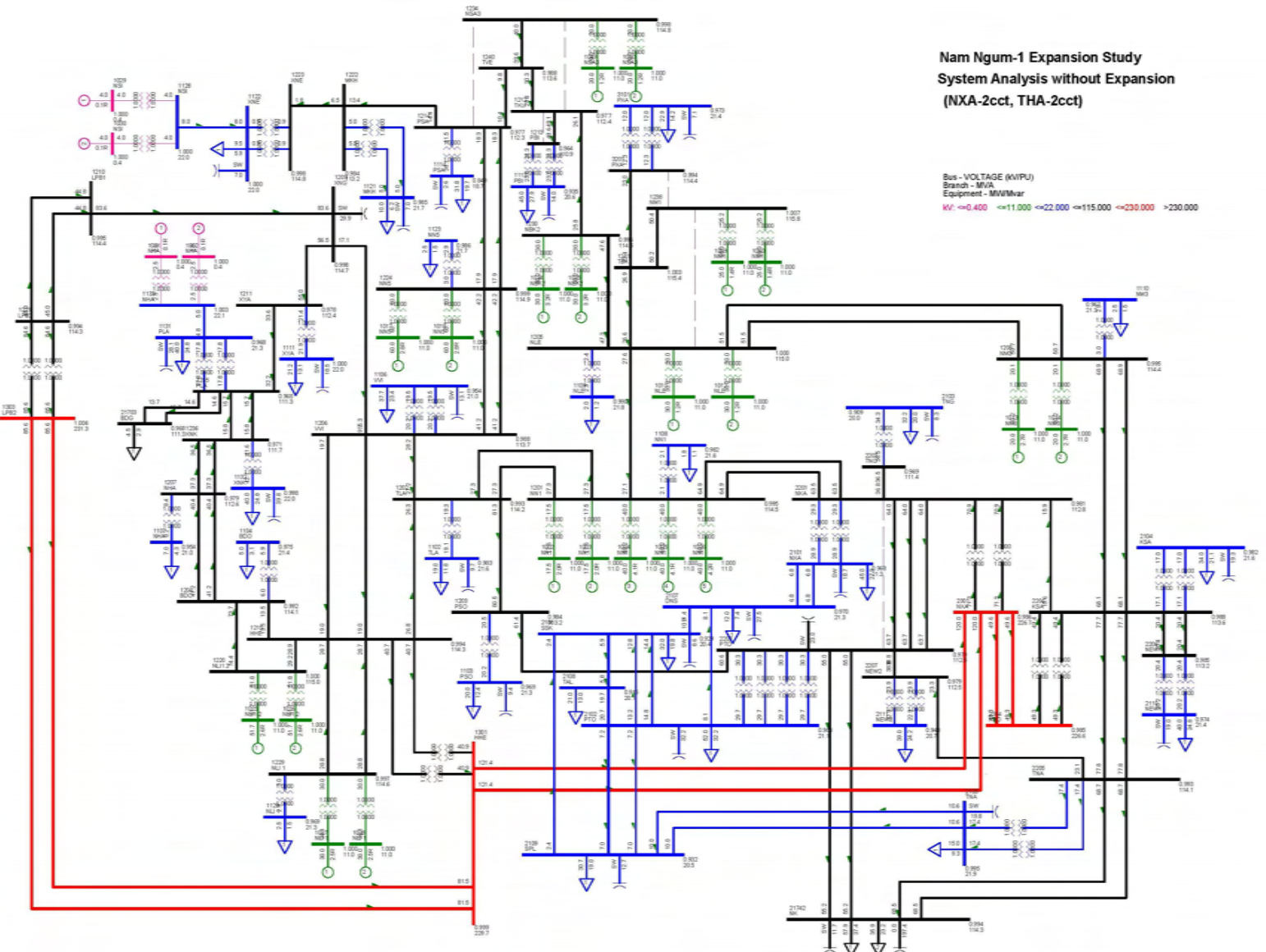
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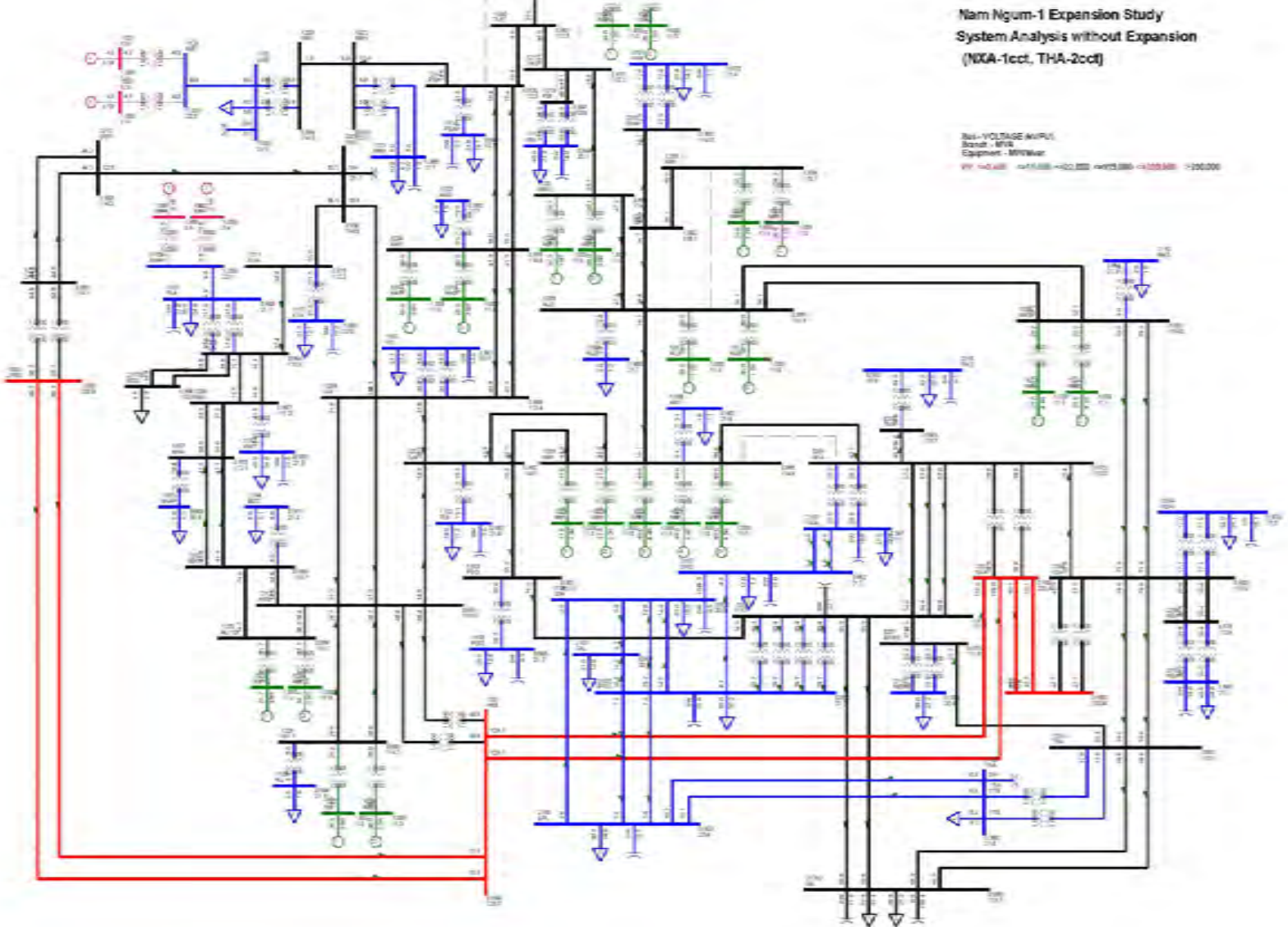


Figure A-3 Results of Power Flow and Voltage Regulation Analysis (w/o Expansion, N-1 Contingency: NN1-NXA Fault)

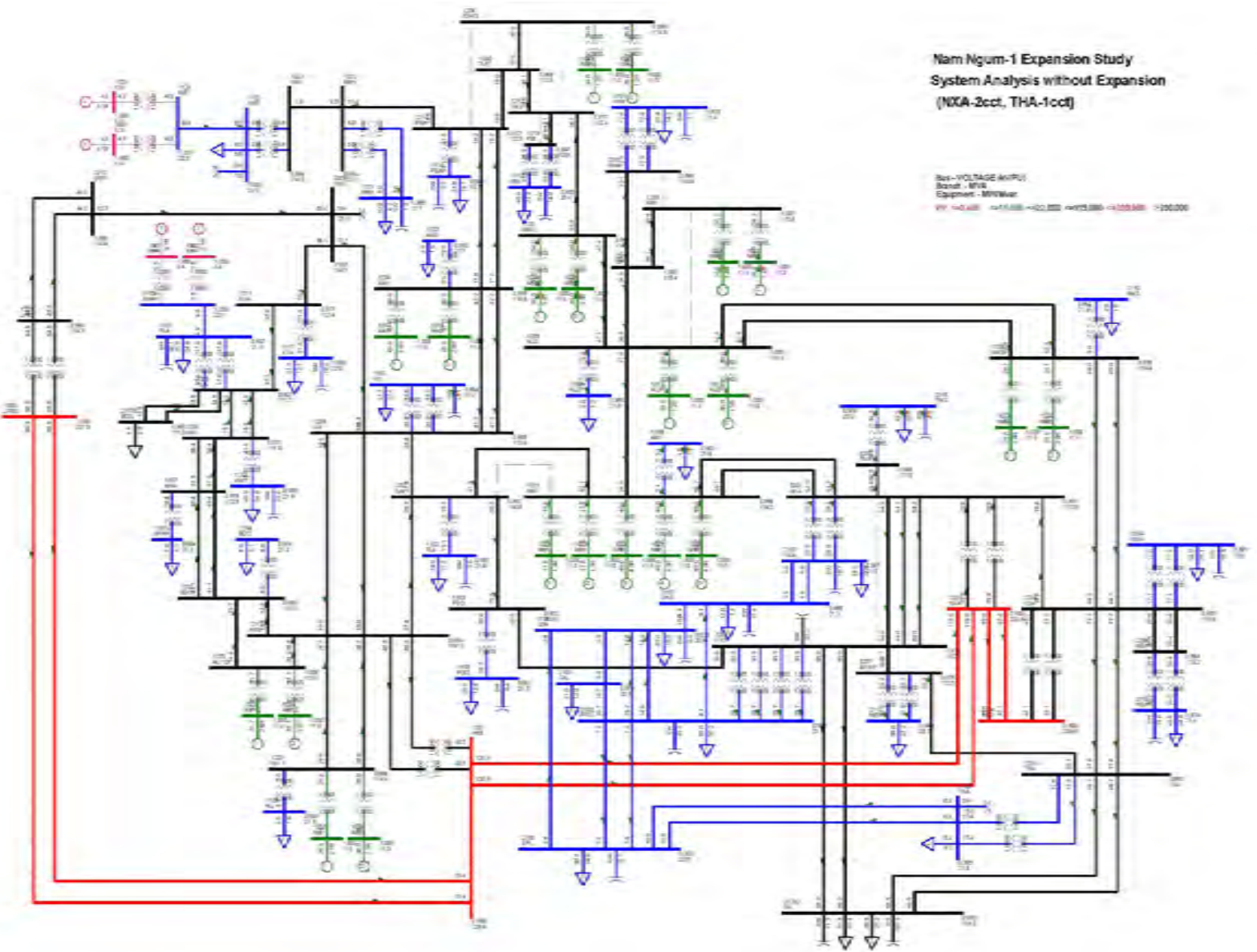


Figure A-4 Result of Power Flow and Voltage Regulation Analysis (w/o Expansion, N-1 Contingency: NNI-TLA Fault)

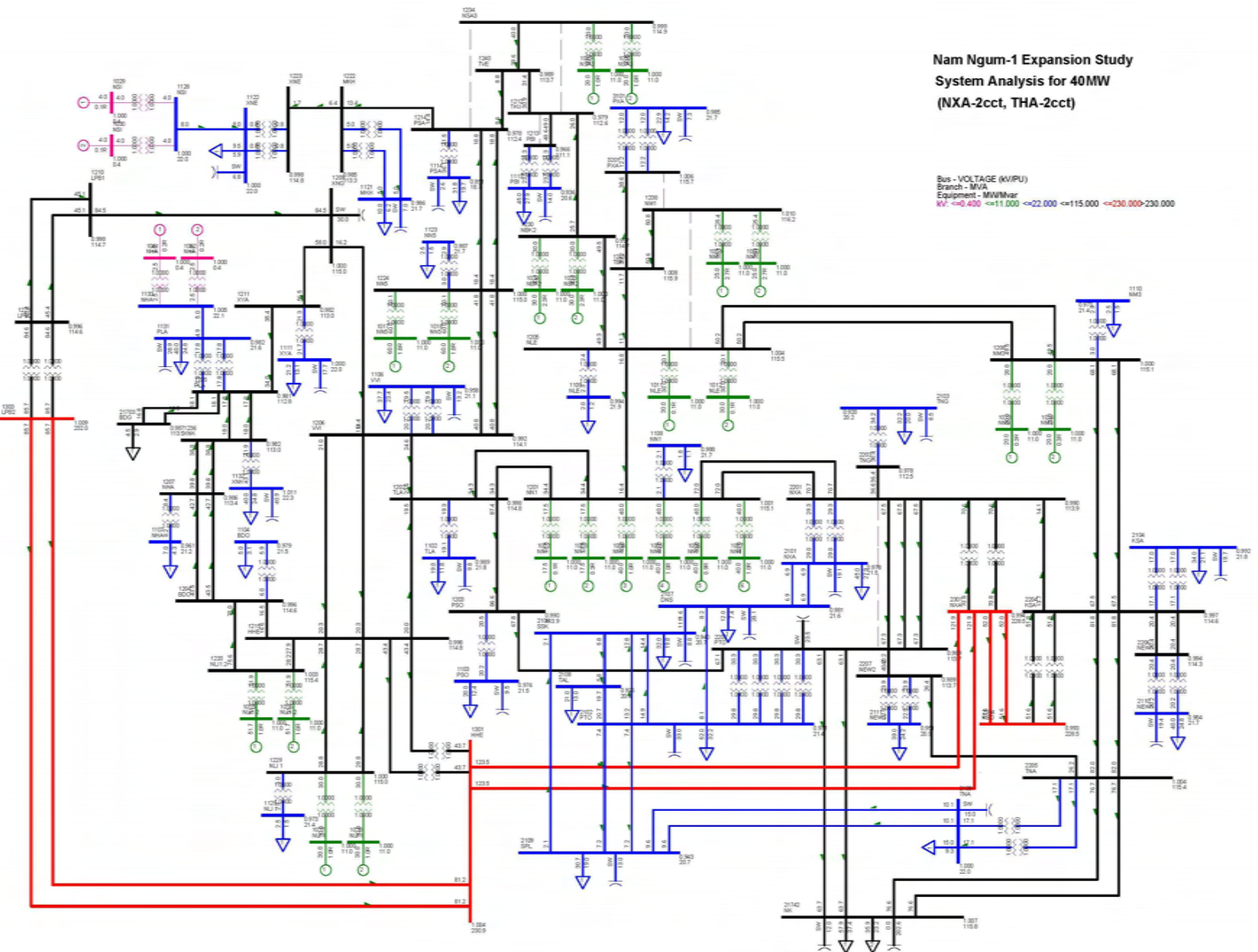


Figure A-5 Result of Power Flow and Voltage Regulation Analysis (Expansion Plan: 40MW, Normal Condition)

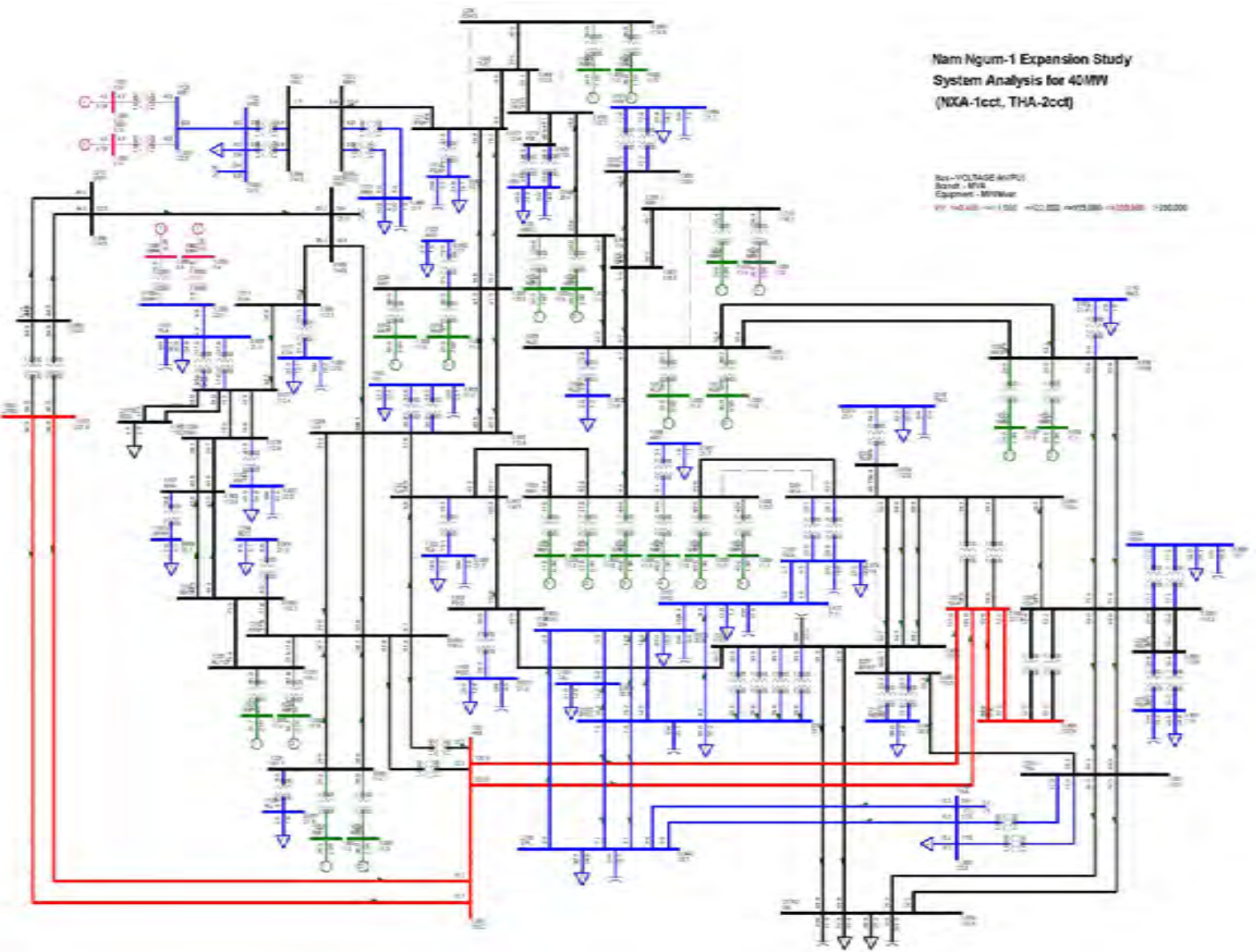
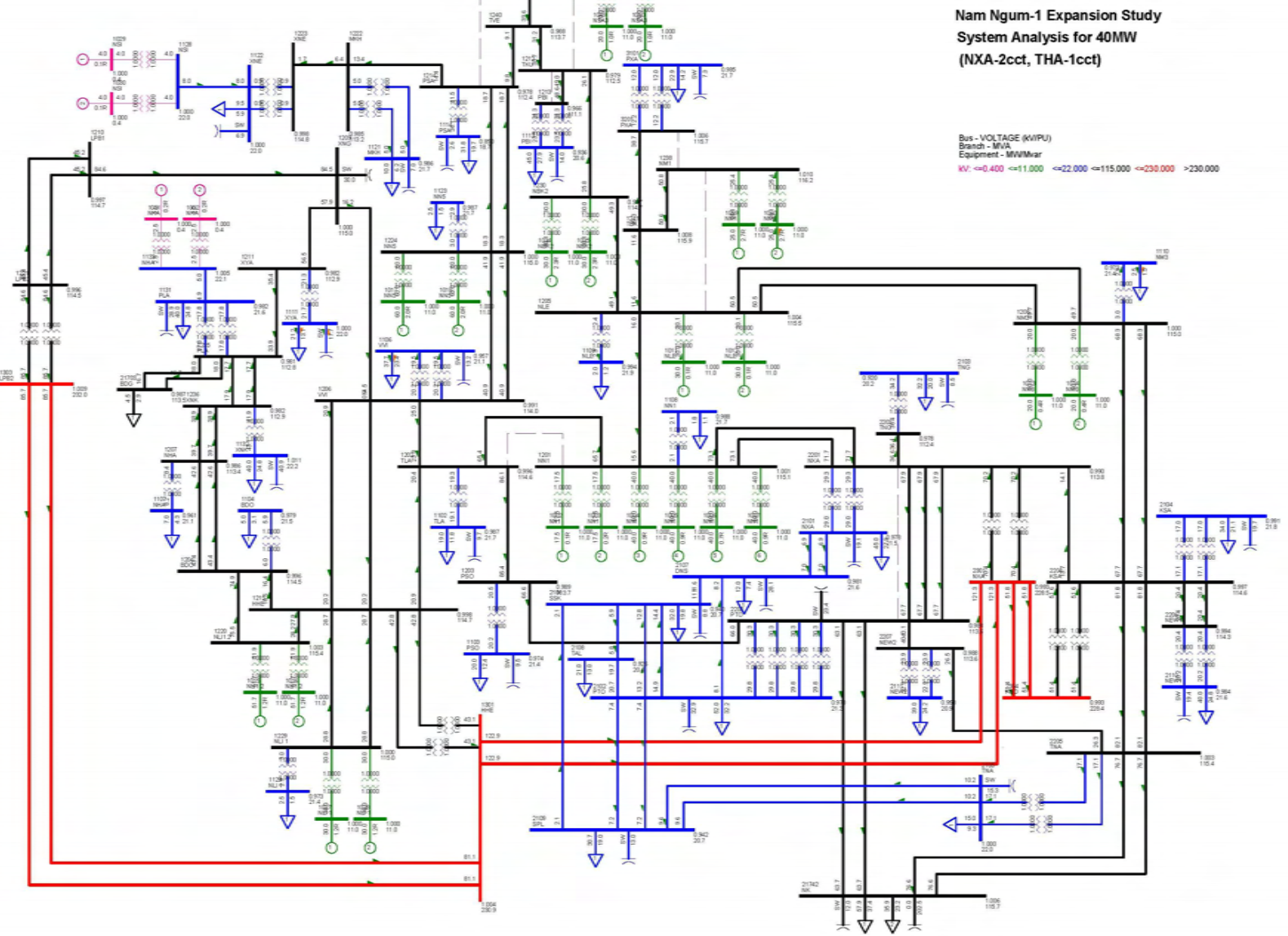


Figure A-6 Result of Power Flow and Voltage Regulation Analysis (Expansion Plan: 40MW, N-1 Contingency: NNI-NXA Fault)



**Figure A-7 Result of Power Flow and Voltage Regulation Analysis (Expansion Plan:
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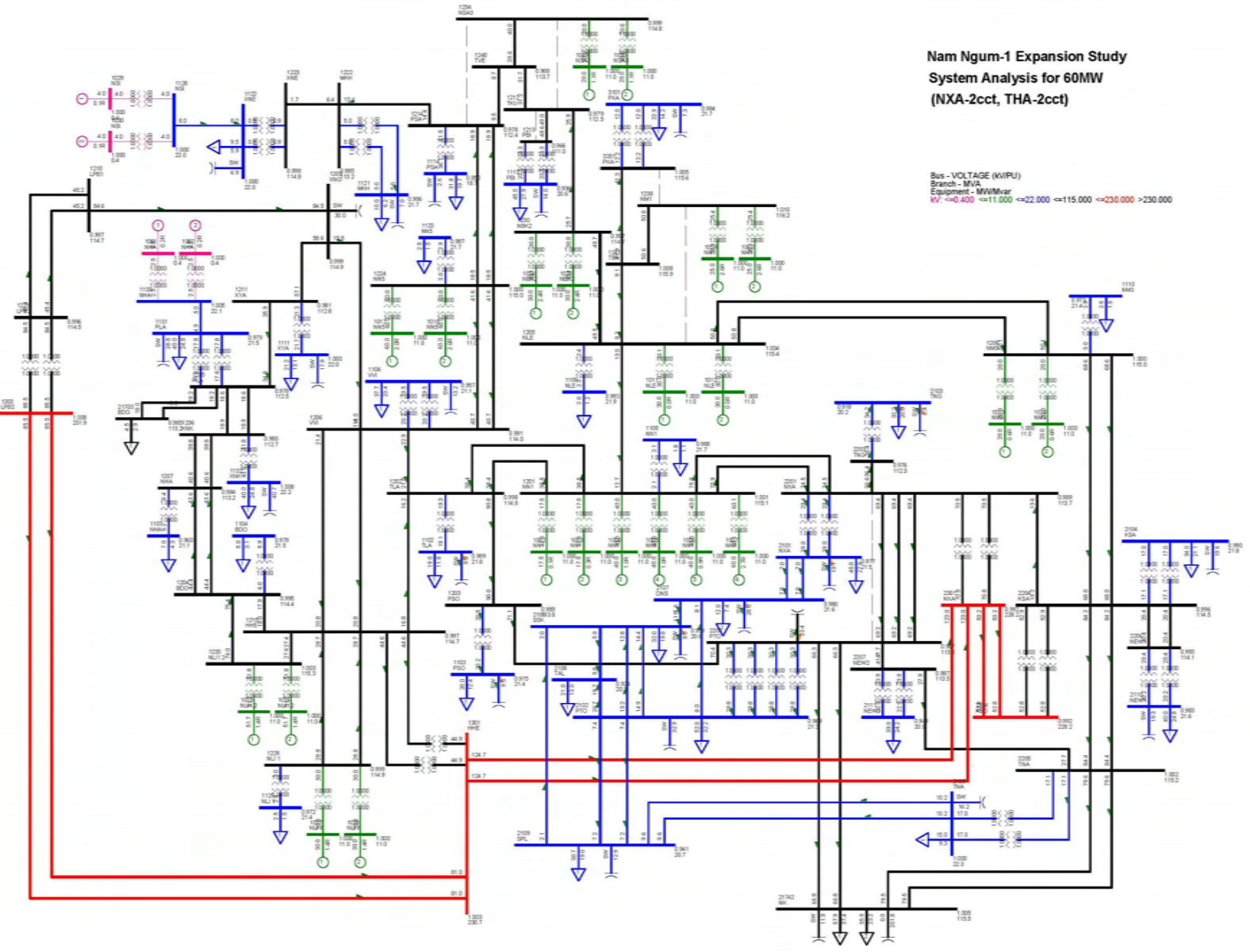


Figure A-8 Result of Power Flow and Voltage Regulation Analysis (Expansion Plan: 60MW, Normal Condition)

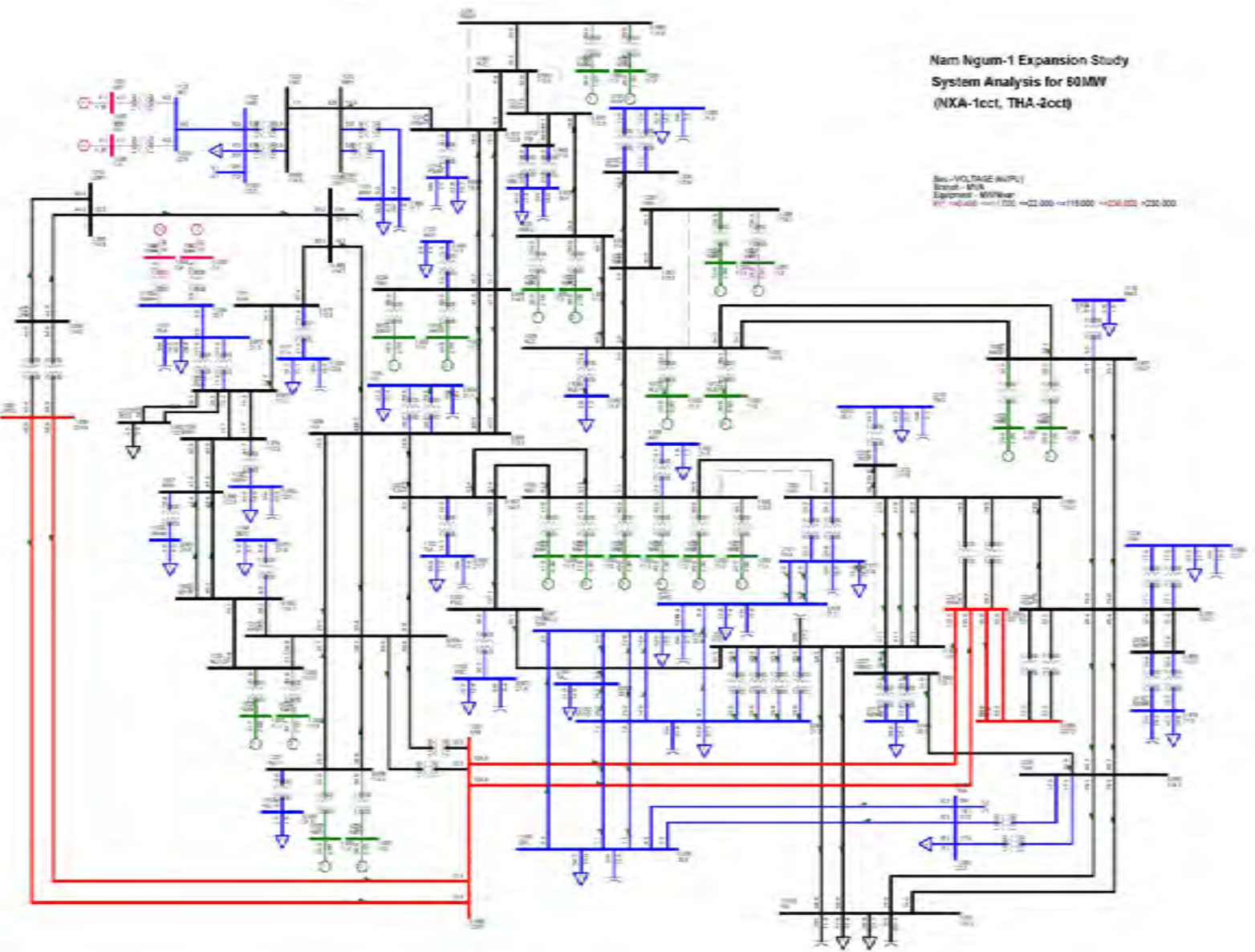


Figure A-9 Result of Power Flow and Voltage Regulation Analysis (Expansion Plan: 60MW, N-1 Contingency: NN1-NXA Fault)

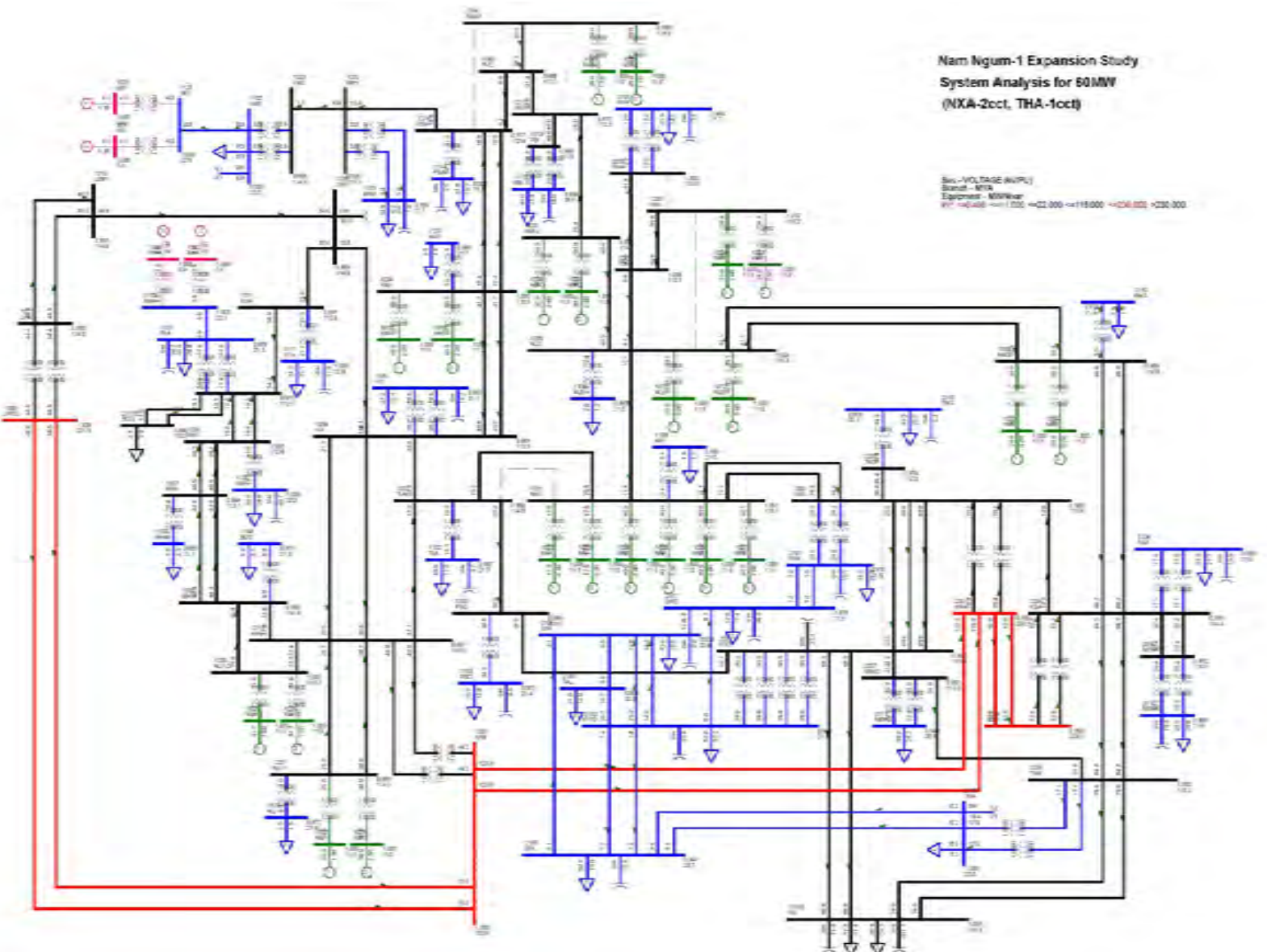


Figure A-10 Result of Power Flow and Voltage Regulation Analysis (Expansion Plan: 60MW, N-1 Contingency: NN1-TLA Fault)