

## APPENDIX H

### Steady State Transmission Security Analysis

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### Steady State Transmission Security Analysis

D.1	Transmission Security Violations	H-1
D.2	Transmission Security Analysis N-1-1 Summary Table	H-2
D.3	Transmission Security Analysis N-1-1-0 Summary Table	H-4

### **2020 Comprehensive ATR Transmission Security Violations**

Year 5 was studied and the top BPTF N-1-1 violations identified in the transmission security analyses are shown on the next page. The N-1-1-0 transmission security violations are shown on the page H-4.

**2020 Comprehensive ATR Transmission Security Analysis N-1-1 Summary Table**

Transmission Security N-1-1 Violations of the 2020 ATR Base Case							
Zone	Owner	Monitored Element	Normal Rating (MVA)	Contingency Rating (MVA)	1st Contingency	2nd Contingency	2025 Summer Peak Flow (%)
I/J	ConEd	Dunwoodie-Mott Haven 345 kV (71)	785	925	Loss of Ravenswood 3	Dunwoodie-Mott Haven 345 kV (72)	110
I/J	ConEd	Dunwoodie-Mott Haven 345 kV (71)	785	925	Loss of Ravenswood 3	Stuck breaker at Mott Haven 7	110
I/J	ConEd	Dunwoodie-Mott Haven 345 kV (71)	785	925	Loss of Ravenswood 3	Stuck breaker at Mott Haven 3	110
I/J	ConEd	Dunwoodie-Mott Haven 345 kV (71)	785	925	Loss of Ravenswood 3	Stuck breaker at Dunwoodie 8	107
I/J	ConEd	Dunwoodie-Mott Haven 345 kV (71)	785	925	Dunwoodie-Mott Haven 345 kV (72)	Loss of Ravenswood 3	109
I/J	ConEd	Dunwoodie-Mott Haven 345 kV (71)	785	925	Sprainbrook-W 49th St 345 kV (51)	Stuck breaker at Sprainbrook RS4	101
I/J	ConEd	Dunwoodie-Mott Haven 345 kV (71)	785	925	Sprainbrook-W 49th St 345 kV (52)	Stuck breaker at Sprainbrook RS5	101
I/J	ConEd	Dunwoodie-Mott Haven 345 kV (72)	785	925	Loss of Ravenswood 3	Dunwoodie-Mott Haven 345 kV (71)	108
I/J	ConEd	Dunwoodie-Mott Haven 345 kV (72)	785	925	Loss of Ravenswood 3	Stuck breaker at Mott Haven BTE	108
I/J	ConEd	Dunwoodie-Mott Haven 345 kV (72)	785	925	Loss of Ravenswood 3	Stuck breaker at Mott Haven 2	108
I/J	ConEd	Dunwoodie-Mott Haven 345 kV (72)	785	925	Dunwoodie-Mott Haven 345 kV (71)	Loss of Ravenswood 3	108
I/J	ConEd	Dunwoodie-Mott Haven 345 kV (72)	785	925	Loss of Ravenswood 3	Stuck breaker at Dunwoodie 3	105
J	ConEd	Goethals-Gowanus 345 kV (26)	518	738	Loss of Ravenswood 3	Stuck Breaker at Goethals 5	102
J	ConEd	Goethals-Gowanus 345kV (25)	518	738	Loss of Ravenswood 3	Gowanus - Goethals 345 kV (26)	103
J	ConEd	Goethals-Gowanus 345kV (25)	518	738	Loss of Ravenswood 3	Stuck Breaker at Goethals 8	102
J	ConEd	Goethals-Gowanus 345kV (25)	518	738	Sprainbrook-W 49th St 345 kV (51)	Gowanus - Goethals 345 kV (26)	101

Transmission Security N-1-1 Violations of the 2020 ATR Base Case							
Zone	Owner	Monitored Element	Normal Rating (MVA)	Contingency Rating (MVA)	1st Contingency	2nd Contingency	2025 Summer Peak Flow (%)
J	ConEd	Goethals-Gowanus 345kV (25)	518	738	Sprainbrook-W 49th St 345 kV (52)	Gowanus - Goethals 345 kV (26)	101
I	ConEd	Sprainbrook/Dunwoodie 345/138 kV (N7)	366	423	Loss of Ravenswood 3	Tower W89 & W90	106
I	ConEd	Sprainbrook/Dunwoodie 345/138 kV (S6)	309	438	Loss of Ravenswood 3	Tower W89 & W90	103

**2020 ATR Transmission Security Analysis N-1-1-0 Summary Table**

Transmission Security N-1-1-0 Violations of the 2020 ATR Base Case							
Zone	Owner	Monitored Element	Normal Rating (MVA)	Contingency Rating (MVA)	1st Contingency	2nd Contingency	2025 Summer Peak Flow (%)
I/J	ConEd	Dunwoodie-Mott Haven 345 kV (71)	785	925	Loss of Ravenswood 3	Dunwoodie-Mott Haven 345 kV (72)	132