



Operating Procedures

ISO New England Operating Procedure No. 19

*Transmission Operations – Appendix F –
Summary of OP 19 Transmission Operations*

Effective Date: June 1, 2010

Revision No. 4

APPENDIX F - SUMMARY OF OP 19 - TRANSMISSION OPERATIONS**NORMAL CONDITIONS**

Provides for the highest level of transmission reliability during non-stressed or NORMAL Conditions on the bulk power system.

NORMAL CRITERIA

1. Maintain generation and transmission to supply load and 10 minute reserve plus 30 minute reserve while covering NORMAL Contingencies.
2. Pre-contingency loadings should not exceed NORMAL ratings. Allowances can be made for scheduled switching activities that are typically completed within 15 minutes in accordance with OP 3.
3. NORMAL Contingencies should not cause instability, unacceptably high or low voltage, voltage collapse or unacceptable thermal loadings.

Acceptable post-contingent loadings are:

- 1) LTE-STE if \leq LTE in 15 minutes, otherwise limit to LTE.
- 2) STE-DAL if Transmission Provider agrees and there is a preplanned/automatic post-contingent action to reduce below LTE within 5 minutes.
- 3) NYISO LTE ratings, LTE-STE if cable (except 1385 Norwalk Harbor-Northport 138 KV cable and CONED-PSE&G tie lines, which are cable circuits) and \leq LTE within 15 minutes. (LTE-STE applies to PV-20 for L/O HQ system only.)

NORMAL CONTINGENCIES

1. Loss of any single element: generator, transformer, breaker, bus section, circuit, HVDC facility.
2. Stuck breaker or multiple circuit tower contingencies if loss has an unacceptable inter-Area impact.

NOTE: ISO New England will determine what is an unacceptable inter-Area impact per PJM and NYISO conditions. (e.g. L/O 1200 MW of load, L/O 1300 MW of generation.)

NORMAL ACTIONS

For contingencies that affect small/local areas within the New England Control Area:

- 1) Deviate from economic dispatch, **a**
- 2) Obtain written waiver covering first contingency. **a,c**

For contingencies that affect large areas within the New England Control Area bulk power system, or have unacceptable inter-Area impact:

- 1) Use SPS or preplanned opening of circuit breakers. **a,d,f**
- 2) Use weather sensitive transmission facility ratings. **a,b,f**
- 3) Deviate from economic dispatch and schedule generation to maintain Normal transmission reliability. **a, b**
- 4) Open or close transmission circuits to relieve transmission constraints. **a,d,e,f**
- 5) OP4, Actions 1-5. **a,e**

NOTE - Contact Transmission Provider via Local Control Center.

a - Notify appropriate Local Control Center(s).

b - Transmission Provider approval required.

c - Written Transmission Provider waiver required.

d - Preplanned/pre-documented/ Transmission Provider approval required.

e - Notify ISO New England management.

f - Also for contingencies that affect small/local areas within the New England Control Area.

EMERGENCY CONDITIONS

Provides for a lower level of transmission reliability when operating under EMERGENCY Conditions provided that all appropriate NORMAL Actions have been taken/initiated to restore NORMAL Criteria.

Exposure to reliability levels below EMERGENCY Conditions should not exist for > 30 minutes.

EMERGENCY CRITERIA

1. Maintain generation and transmission adequate to supply load and a minimum amount of 10-minute reserve.
2. Pre-contingency loadings \leq NORMAL or NORMAL-LTE for load cycle if no EMERGENCY contingency will cause loadings $>$ LTE
3. EMERGENCY Contingencies should not cause instability, unacceptably high or low voltage, voltage collapse or unacceptable thermal loadings.

Acceptable post-contingent loadings are:

- 1) LTE-STE if \leq LTE in 15 minutes, otherwise limit to LTE.
- 2) STE-DAL if Transmission Provider agrees and there is a preplanned/automatic post-contingent action to reduce below LTE within 5 minutes.
- 3) NYISO ratings, LTE-STE if \leq LTE in 15 minutes, otherwise limit to LTE.

EMERGENCY CONTINGENCIES

1. Loss of any single element: generator, transformer, breaker, bus section, circuit, or HVDC facility.

EMERGENCY ACTIONS

NOTE: Any NORMAL Actions, long term and short term, should be initiated to allow for cancellation of EMERGENCY Actions.

1. Open or close transmission circuits to relieve transmission constraints. **a,e**

NOTE: This action, without pre-determined studies, documentation, and authority will only be initiated to prevent more severe EMERGENCY Action. Notify all appropriate personnel immediately.

2. OP4, Actions 6-11. **a,e**
3. OP7. **a,e**

NOTE: If there is any doubt that post-contingency EMERGENCY Actions will be effective and timely, pre-contingency EMERGENCY Actions will be taken. Management at ISO New England and at the Local Control Centers, to the extent that time permits, should consult with the affected Transmission Providers when developing pre-contingency strategies.

NOTE - Contact Transmission Provider via Local Control Center.

- a** - Notify appropriate Local Control Center(s).
- b** - Transmission Provider approval required.
- c** - Written Transmission Provider waiver required.
- d** - Preplanned/pre-documented/ Transmission Provider approval required.
- e** - Notify ISO New England management.

OP 19 APPENDIX F REVISION HISTORY

Document History (This Document History documents action taken on the equivalent NEPOOL Procedure prior to the RTO Operations Date as well revisions made to the ISO New England Procedure subsequent to the RTO Operations Date.)

Rev. No.	Date	Reason
Rev 1	07/22/98	
Rev 2	02/01/05	Updated to conform to RTO terminology
Rev 3	02/03/06	Updated to clarify actions taken in OP 3 for scheduled switching activities that are typically completed within 15 minutes
Rev 4	06/01/10	Updated for the changes to OP #4 actions for FCM