more, a Major Emergency shall be declared immediately and corrective measures, which may include Load Relief, shall be initiated to bring the loading to established limits. If loadings are not below 105% of the stability limit within 15 minutes from the initial overload, or below the stability limit within 30 minutes from the initial overload, Load Relief measures must be instituted.

## J. Major Emergency - Low Frequency

A sustained low frequency of 59.9 Hz is an indication of major load-generation imbalance in which case the SPD shall declare a Major Emergency. It is important for the Area causing the imbalance to provide load-generation balance at once to restore frequency.

During a Major Emergency resulting from a low frequency condition caused by load-generation imbalance within NYPP, if a Member System loses generation such Member shall immediately Shed Load in accordance with a schedule previously determined by the SPD.

#### 1. Deficient Area Identifiable and Within NYPP

When the generation-deficient Area is clearly identifiable and within NYPP, when the frequency decline is slow enough to permit communication among the SPD and Member System Dispatchers, and when adequate consideration can be given to the amount of assistance which can be delivered to the deficient Area by all power systems, the SPD shall Order such assistance and, to the extent required, he shall Order the deficient system to initiate immediate Action to correct load-generation imbalance.

#### 2. Deficient Area Not Clearly Identifiable

59.5 to 59.0 Hz

a.

When the generation-deficient Area is not clearly identifiable, and/or when the frequency decline is so rapid as to preclude analysis and communication among various dispatchers, the following procedures will apply up to permissible LTE ratings:

All Systems should have achieved a 10% Load

		Shedding if the transmission system loadings permit.
b.	59.0 to 58.5 Hz	All Systems should have achieved an additional 15% Load Shedding if the transmission system loadings permit.
C.	58.5 Hz	If frequency is still declining, all Systems shall take such steps as are necessary, including separating units to preserve generation, minimize damage and service interruption.

In the event that the frequency decline is so rapid as to prevent operator action, automatic facilities exist to achieve the Load Shedding in Steps (1) and (2) above without regard for transmission loadings.

### . K. <u>Major Emergency - Load Shedding Allocation</u>

It is the responsibility of all Member Systems to shed load as ordered by the SPD to assist other Member Systems. However, should the duration of the period during which load is shed be sufficient to warrant such action, and should transmission loading permit, the SPD shall allocate Load Shedding such that at all times the power deficient Member or Members shall have shed 6% more of their respective loads than the power sufficient members.

The amount of load to be shed by each Member System, within the geographic Area of its franchise Area where Load Shedding can contribute effective relief, shall be in ratio that its estimated peak load for the current Capability Period in such Area bears to the sum of the estimated peak loads for the current Capability Period for all Member Systems in such Area, as set forth in Appendix A.

Each Area must be capable of carrying out the following:

- 1. Automatic Load Shedding of ten percent of its load at a nominal trip point of 59.3 hertz.
- 2. Automatic Load Shedding of an additional 15 percent of its load at a nominal trip point of 58.8 hertz.

Each Area must be capable of shedding at least 50 percent of its load in ten minutes or less. Insofar as practical, the first half of the load shed manually should not include that load which is part of any Automatic Load Shedding plan.

# L. Responsibility of New York Power Authority

The Power Authority loads are largely wholesale deliveries to other Pool Members, and reduction of such load would not be appropriate. Other Power Authority loads are supplied by wheeling power over the transmission facilities of other Pool Members. The Authority has agreed that such wheeled loads may be included in the reduction provision of the wheeling utility on the same basis as the utility applies to its own loads. The Power Authority has ad hoc arrangements with its directly served principal industrial customers to reduce load under certain conditions. Such reduction, to the extent that it would alleviate the Emergency condition, will probably have been implemented before widespread reduction of other loads.

#### VIII. RESTORATION STATE

#### A. Definition

The Restoration State exists when an Area within the NYPP becomes islanded and/or customer load becomes interrupted, following a System disturbance affecting the Bulk Power System.