# **Forced Outage**

## **Proposed NYISO Definition**

An unplanned failure that requires a unit to be removed from service, or the Load on the unit to be reduced before the end of the nearest following Weekend.

### **Forced Outages**

### **NERC**

The removal from service availability of a generating unit, transmission line, or other facility for emergency reasons or a condition in which the equipment is unavailable due to unanticipated failure.

## **NERC/GADS Reporting Instructions**

- U1 An outage that requires immediate removal from service, another outage state, or Reserve Shutdown state before the next Planned Outage.
- U2 An outage that does not require an immediate removal of a unit from the in-service state but requires removal within six hours.
- U3 An outage that can be postponed beyond six hours but requires that a unit be removed from the in-service state before the end of the next weekend.
- D1 A derating that requires an immediate reduction in capacity
- D2 A derating that does not require an immediate reduction in capacity but requires a reduction within six hours.
- D3 A derating that can be postponed beyond six hours but requires a reduction in capacity before the end of the next weekend.

### **ANSI/IEEE**

- 3.1.2.2.2 Class 1 Unplanned Outage (Immediate). An outage that requires immediate removal from the existing state. (NERC GADS event type U1)
- 3.1.2.2.3 Class 2 Unplanned Outage (Delayed). An outage that does not require immediate removal from the in-service state but requires removal within 6 hours. (NERC GADS event type U2)
- 3.1.2.2.4 Class 3 Unplanned Outage (Postponed). An outage that can be postponed beyo hours but requires that a unit be removed from the in-service state before the end of the new weekend. (NERC GADS event type U3)

# PJM/Generation Data Systems Manual

Forced Outage - An immediate reduction in output or capacity or removal from service, in whole or in part, of a generating unit by reason of Emergency or threatened Emergency, unanticipated failure, or other cause beyond the control of the operator or owner of the facility.

Alternate NERC - Based on definitions from the IEEE Standard 762, "Definitions for Use In Reporting Electric Generating Unit Reliability, Availability, and Productivity."

Forced Outage (U1, U2, U3, SF) - An unplanned component failure (immediate, delayed, postponed, startup failure) or other condition that requires the unit be removed from service immediately, within six hours, or before the end of the next weekend.

Forced Derating (D1, D2, D3) - An unplanned component failure (immediate, delayed, postponed) or other condition that requires the load on the unit be reduced immediately, within six hours, or before the end of the next weekend.

# Maintenance Outage

# **Proposed NYISO Definition**

A scheduled outage or derating that can be deferred beyond the end of the nearest following Weekend but that requires the unit to be removed from service or the Load reduced before the next Planned Outage.

(Note - Such an outage or derating may be scheduled earlier, such as the beginning of the weekend, by mutual agreement in accordance with NYISO Procedures.)

## **Maintenance Outages**

#### **NERC**

The removal of equipment from service availability to perform work on specific components that can be **deferred beyond the end of the next weekend**, but requires the equipment be removed from service before the next planned outage.

## **NERC/GADS** Reporting Instructions

MO - An outage that can be **deferred beyond the end of the next weekend**, but requires that the unit be removed from service, another outage state, or Reserve Shutdown state before the next Planned Outage.

D4 - A derating that can be **postponed beyond the end of the next weekend** but requires a reduction in capacity before the next planned outage.

### ANSI/IEEE

3.1.2.2.5 - Class 4 Unplanned Outage (Deferred). An outage that will allow a unit outage to be **deferred beyond the end of the next weekend** but requires that a unit be removed from the available state before the next planned outage. (NERC GADS event type MO)

# PJM/Generation Data Systems Manual

Maintenance Outage - The **scheduled removal from service**, in whole or in part, of a generating unit in order to perform necessary repairs on specific components of the facility approved by the PJM OI.

Proposed/tentative/Alternate NERC - Based on definitions from the IEEE Standard 762, "Definitions for Use In Reporting Electric Generating Unit Reliability, Availability, and Productivity."

Maintenance Outage (MO) - The removal of a unit from service to perform work on specific components that can be **deferred beyond the end of the next weekend**, but requires the unit be removed from service be-fore the next planned outage.

Maintenance Derating (D4) - The removal of a component for scheduled repairs that can be **deferred beyond the end of the next weekend**, but requires a capacity reduction before the next planned outage.