

**IEEE Standard Definitions in
Power Operations Terminology
Including Terms for
Reporting and Analyzing Outages of
Electrical Transmission and Distribution Facilities
and Interruptions to Customer Service**

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Sponsor

**Power System Engineering Committee of the
IEEE Power Engineering Society**

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Foreword

(This Foreword is not a part of IEEE Std 346-1973, IEEE Standard Definitions in Power Operations Terminology Including Terms for Reporting and Analyzing Outages of Electrical Transmission and Distribution Facilities and Interruptions to Customer Service.)

The purpose of these definitions is to foster uniformity and standardization of language among engineers engaged in reporting, analyzing, and predicting outages of transmission and distribution facilities and interruptions to customers. While the proposed definitions are not intended to be specific instructions for reporting outages of facilities and interruptions to customers, use of standardized definitions should facilitate exchanges of data between workers in the field. The preparation of standard definitions of terms may be regarded as a first step before pooling of data between utilities can be successfully accomplished.

The work of preparing this publication was carried out by a task force of the System Operations Subcommittee of the Power System Engineering Committee of the IEEE Power Engineering Society. The members of the task force were:

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IEEE Standard Definitions in Power Operations Terminology Including Terms for Reporting and Analyzing Outages of Electrical Transmission and Distribution Facilities and Interruptions to Customer Service

1. Glossary of Power Operations Terms

burnup, nuclear. (1) A measure of nuclear reactor fuel consumption, usually expressed as energy produced per unit weight of fuel exposed (megawatt-days per metric ton of fuel). (2) Percentage of fuel atoms that have undergone fission (atom percent burnup).

capability. The maximum load-carrying ability expressed in kilovolt-amperes or kilowatts of generating equipment or other electrical apparatus under specified conditions for a given time interval.

capability, emergency transfer (maximum transmission transfer capability). The maximum amount of power that can be transmitted following a loss of transmission or generation capacity without causing additional transmission outages.

capability, extended. The generating capability increment in excess of net dependable capability which can be obtained under emergency operating procedures.

capability, hydro. The capability supplied by hydroelectric sources under specified water conditions.

capability margin. The difference between capability and system load.

capability, net. The maximum generation expressed in kilowatt-hours per hour which a generating unit, station, power source, or system can be expected to supply under optimum operating conditions.

capability, net assured. The net dependable capability of all power sources available to a system, including firm power contracts and applicable emergency interchange agreements, less that reserve assigned to provide for scheduled maintenance outages, equipment

and operating limitations, and forced outages of power sources.

capability, net dependable. The maximum generation, expressed in kilowatt-hours per hour which a generating unit, station, power source, or system can be depended upon to supply on the basis of average operating conditions.

capability, normal transfer (transmission). The maximum amount of power that can be transmitted continuously.

capability, pumped-storage hydro. The capability supplied by hydro-electric sources under specified water conditions using a reservoir that is alternately filled by pumping and depleted by generating.

capability, steam. The maximum net capability of steam generating units which can be obtained under normal operating practices for a given period of time as demonstrated by total plant tests. Units can be rated at overpressure and with top heaters out, providing one is willing to operate under these conditions and has developed normal procedures for such operation. The effects of any seasonal changes in cooling water temperature are to be taken into account.

capability, total for load. The net dependable capability available to a system from all sources including purchases.

capacity. The rated load-carrying ability expressed in kilovolt-amperes or kilowatts of generating equipment or other electrical apparatus.

capacity factor. The ratio of the average load on a machine or equipment for the period of