

Standard Development Timeline

This section is maintained by the drafting team during the development of the standard and will be removed when the standard becomes effective.

Development Steps Completed

1. SAR posted for comment 12/17/10 – 1/21/11
2. SC authorized moving the SAR forward to standard development 3/25/11

Description of Current Draft

This draft is the first posting of the revised definition of the Bulk Electric System (BES). It is a 30-day formal comment period.

Anticipated Actions	Anticipated Date
30-day Formal Comment Period	4/28/11
45-day Formal Comment Period with Parallel Initial Ballot	8/23/11
Recirculation ballot	12/9/11
BOT adoption	12/30/11

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Effective Dates

This definition shall become effective on the first day of the first calendar quarter, 24 months after applicable regulatory approval. In those jurisdictions where no regulatory approval is required, all requirements go into effect on the first day of the first calendar quarter, 24 months after Board of Trustees adoption.

Version History

Version	Date	Action	Change Tracking
1	TBD	Respond to FERC Order No. 743 to clarify the definition of the Bulk Electric System	N/A

Definitions of Terms Used in Standard

This section includes all newly defined or revised terms used in the proposed standard. Terms already defined in the Reliability Standards Glossary of Terms are not repeated here. New or revised definitions listed below become approved when the proposed standard is approved. When the standard becomes effective, these defined terms will be removed from the individual standard and added to the Glossary.

Bulk Electric System (BES): ~~Unless modified by the lists shown below, All~~ Transmission Elements operated at 100 kV or higher, ~~and Real Power and Reactive Power resources as described below, and Reactive Power resources~~ connected at 100 kV or higher ~~unless such designation is modified by the list shown below.~~

Inclusions:

- I1 - Transformers, ~~other than Generator Step-up (GSU) transformers, including Phase Angle Regulators,~~ with ~~two primary and secondary winding terminals of~~ operated at 100 kV or higher unless excluded under Exclusions E1 ~~and~~ E3.
~~I2 – Individual generating units greater than 20 MVA (gross nameplate rating) including the generator terminals through the GSU which has a high side voltage of 100 kV or above.~~
- I3 ~~– Multiple~~ Generating units resource(s) located at a single site with aggregate capacity greater than 75 MVA (gross aggregate nameplate rating) including the generator terminals through the high-side of the generator step-up GSU transformer(s); ~~connected through a common bus operated~~ at a voltage of 100 kV or above.
- I4 ~~3~~ - Blackstart Resources ~~and the designated blackstart Cranking Paths~~ identified in the Transmission Operator's restoration plan ~~regardless of voltage.~~
- I5 ~~4~~ - Dispersed power producing resources with aggregate capacity greater than 75 MVA (gross aggregate nameplate rating), utilizing a ~~collector~~ system designed primarily for aggregating capacity, connected through a common point ~~of interconnection to a system Element~~ at a voltage of 100 kV or above.
- I5 ~~–~~ Static or dynamic devices dedicated to supplying or absorbing Reactive Power that are connected at 100 kV or higher, or through a dedicated transformer with a high-side voltage of 100 kV or higher, or through a transformer that is designated in I1.

Exclusions:

- E1 - ~~Any~~ Radial systems: ~~which is described as connected~~ A group of contiguous Elements emanating from a single point of connection of 100 kV or higher from a single Transmission source originating with an automatic interruption device and:
 - a) Only servingserves Load. ~~A normally open switching device between radial systems~~ may operate in a 'make-before-break' fashion to allow for

~~reliable system reconfiguration to maintain continuity of electrical service.~~

Or,

b) Only ~~including~~includes generation resources not identified in Inclusions I2, I3, ~~or I4 and I5 with an aggregate capacity less than 75 MVA (gross nameplate rating).~~ Or,

~~c) Is a combination of items (a.) and (b.) w~~Where the radial system serves Load and includes generation resources not identified in Inclusions -I2, I3, or I4 -and I5- with an aggregate capacity of non-retail generation less than 75 MVA (gross nameplate rating).

Note - A normally open switching device between systems does not affect this exclusion.

- E2 - A generating unit or multiple generating units that serve all or part of retail customer Load with electric energy on the customer's side of the retail meter if: (i) the net capacity provided to the BES does not exceed the criteria identified in Inclusions I2 or I3~~4~~, and (ii) standby, back-up, and maintenance power services are provided to the generating unit or multiple generating units or to the retail Load by a Balancing Authority, or provided pursuant to a binding obligation with a ~~Balancing Authority or another~~ Generator Owner/Generator Operator, or under terms approved by the applicable regulatory authority.
- E3 - Local ~~Distribution~~ Networks (LDN): A Ggroups of contiguous Elements operated at or above 100 kV that distribute power to Load rather than transfer bulk power across the Interconnected System. LDN's are connected to the Bulk Electric System (BES) at more than one location solely to improve the level of service to retail customer Load and not to accommodate bulk transfer across the interconnected system. The LDN is characterized by all of the following:

~~Separable by automatic fault interrupting devices: Wherever connected to the BES, the LDN must be connected through automatic fault interrupting devices;~~

a) Limits on connected generation: ~~Neither t~~The LDN; ~~nor~~and its underlying Elements do not include generation resources identified in Inclusions I2, I3, or I4 and do not have an aggregate capacity of non-retail generation more than 75 MVA (gross nameplate rating) (in aggregate), includes more than 75 MVA generation;

b) Power flows only into the ~~Local Distribution Network~~LDN: ~~The generation within the LDN shall not exceed the electric Demand within the LDN~~ The LN does not transfer energy originating outside the LN for delivery through the LN; and

~~Not used to transfer bulk power: The LDN is not used to transfer energy originating outside the LDN for delivery through the LDN; and~~

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c) Not part of a Flowgate or ~~T~~transfer ~~P~~path: The ~~L~~~~D~~N does not contain a monitored Facility of a permanent ~~f~~Flowgate in the Eastern Interconnection, a major transfer path within the Western Interconnection ~~as defined by the Regional Entity~~, or a comparable monitored Facility in the Quebec Interconnection, and is not a monitored Facility included in an Interconnection Reliability Operating Limit (IROL).

- E4 – Reactive power devices owned and operated by the retail customer solely for their own use.

~~Elements may be included or excluded on a case-by-case basis through the Rules of Procedure exception process.~~