SMB/6052/QP

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2016-01-06

INTERNATIONAL ELECTROTECHNICAL COMMISSION

STANDARDIZATION MANAGEMENT BOARD

SUBJECT

Scope of IEC TC 120, *Electrical Energy Storage (EES) System.*

BACKGROUND

At its last plenary meeting held in Frankfurt 2016-10-13, TC 120 has discussed its scope and agreed to revise it.

ACTION

The following question of principle requires the SMB general comments by **2017-02-03** and decision by **2017-02-17**.

SMB members are invited to vote by choosing the appropriate button YES, NO or ABSTENTION in the special voting area in the management technical server.

Replies should not be conditional on the acceptance of modifications

Question (mentioned as item in the voting area of the management technical server)

Members of the SMB are asked whether they approve the following scope of TC 120:

TC 120:

Revised Scope:

1. Standardization in the field of grid integrated EES Systems.

- TC 120 focuses on system aspects on EES Systems rather than energy storage devices.

- TC 120 investigates system aspects and the need for new standards for EES Systems.

-TC 120 also focuses on the interaction between EES Systems and Electric Power Systems (EPS).

2. For the purpose of TC120, “grid” includes and is not limited to applications in:

a) transmission grids

b) distribution grids

c) commercial grids

d) industrial grids

e) residential grids

f) islanded grids

g) MUSH(Municipal/Military, Utilities/Universities, Schools, Hospitals) grids

h) ICI (Institutional, Commercial and Industrial) grids

It is also confirmed that TC120 can include “smart grid.” Storage in railway systems is considered if it contributes as an EES System to the grid as referenced in2 a-f.

Note: grid: electricity supply network (ISO/IEC 15067-3)

smart grid: electric power system that utilizes information exchange and control technologies, distributed computing and associated sensors and actuators, for purposes such as:

- to integrate the behaviour and actions of the network users and other stakeholders

- to efficiently deliver sustainable, economic and secure electricity supplies (IEV 617-04-13)

3. EES Systems include any type of grid-connected EES Systems which can both store electrical energy from a grid or any other source and provide electrical energy to a grid. By that feature it maintains the balance between electrical energy demand and supply over a period of time.

TC 120 considers all storage technologies as long as they are capable to store and to discharge electrical energy. (Energy storage itself is not in the scope of the work.)

Note) Thermal storage systems are included in the scope, only from the electricity exchange point of view.

Unidirectional energy storage systems such as UPS are not included in the scope of TC 120.

4. The scope of TC 120 is to prepare normative documents dealing with the system aspects of EES Systems.

Original Scope :

1. Standardization in the field of grid integrated EES Systems.

- TC 120 focuses on system aspects on EES Systems rather than energy storage devices.

- TC 120 investigates system aspects and the need for new standards for EES Systems.

2. For the purpose of TC120, “grid” includes :

a) transmission grids

b) distribution grids

c) commercial grids

d) industrial grids

e) residential grids

f) islanded grids

It is also confirmed that TC120 can include “smart grid.” Storage in railway systems is considered if it contributes as an EES System to the grid.

Note:

grid: electricity supply network (ISO/IEC 15067-3)

smart grid: electric power system that utilizes information exchange and control technologies, distributed computing and associated sensors and actuators, for purposes such as:

- to integrate the behaviour and actions of the network users and other stakeholders

- to efficiently deliver sustainable, economic and secure electricity supplies (IEV 617-04-13)

3. EES includes any type of grid-connected energy storages which can both store electrical energy from a grid or any other source and provide electrical energy to a grid.

TC120 includes Chemical ES as one of the ESs.

Thermal storage is included in the scope, only from the electricity exchange point of view.

Unidirectional energy storages such as UPS are not included in the scope of TC 120.

Note : The importance of discussing what is to be done for the thermal energy storage in the Gap Analysis (by PT or CAG to be established) was acknowledged, considering TC 117 and other TC/SC work.

4. The scope of TC 120 is to prepare normative documents dealing with the system aspects of electrical energy storage.

For example, TC 120 deals with defining unit parameters, testing methods, planning and installation, guide for environmental issues and system safety aspects.