



# SLOVENSKI STANDARD

## oSIST prEN IEC 61803:2025

01-julij-2025

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### Ugotavljanje močnostnih izgub v visokonapetostnih enosmernih (HVDC) pretvorniških postajah

Determination of power losses in high-voltage direct current (HVDC) converter stations

Détermination des pertes en puissance dans les postes de conversion en courant continu à haute tension (CCHT)

Ta slovenski standard je istoveten z: prEN IEC 61803:2025

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TITLE:

**Determination of power losses in high-voltage direct current (HVDC) converter stations**

PROPOSED STABILITY DATE: 2029

NOTE FROM TC/SC OFFICERS:

This CDV is prepared based on 22F/778/CD and the agreed NC comments in 22F/800A/CC by SC 22F/MT 14 (Convenor: Mr. Sanjay Mukoo).

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**DETERMINATION OF POWER LOSSES IN HIGH-VOLTAGE  
DIRECT CURRENT (HVDC) CONVERTER STATIONS****FOREWORD**

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International Standard IEC 61803 has been prepared by subcommittee 22F: Power electronics for electrical transmission and distribution systems, of IEC technical committee 22: Power electronic systems and equipment.

This third edition cancels and replaces the second edition published in 2020. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) HVDC stations with Voltage-Sourced Converters (VSC) technology have been included;
- b) to facilitate the application of this document and to ensure its quality remains consistent, 5.1.8 and 5.8 have been reviewed, taking into consideration that the present thyristor production technology provides considerably less thyristor parameters dispersion comparing with the situation in 1999 when the first edition of IEC 61803 was developed, and therefore the production records of thyristors can be used for the power losses calculation;
- c) the calculation of the total station load losses (cases D1 and D2 in Annex C) has been corrected.

The text of this International Standard is based on the following documents: