

SKN_N0429R0

Report from IEC/TC 117 Solar thermal electric plants

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SCOPE

To prepare international standards for systems of Solar Thermal Electric (STE) plants for the conversion of solar thermal energy into electrical energy and for all the elements (including all sub-systems and components) in the entire STE energy system.

The standards would cover all of the current different types of systems in the STE field, as follows:

- Parabolic trough
- Solar tower
- Linear Fresnel
- Dish
- Thermal storage

Problem

The standardization work within IEC/TC 117 partly interferes with the standardization work being done in ISO/TC180 and CEN/TC312 respectively.

This might lead to different test standards for same products e.g. parabolic trough collectors.

TC 117 officers

Position	Name	Institution
Chairman	Mr Werner Platzter (GER)	Fraunhofer ISE
Secretary	Mr Eduardo García Iglesias (ES)	PROTERMO SOLAR
Assistant Secretary	Mrs Carmen Martín Marino (ES)	AENOR
Technical Officer	Mr Anson Chiah	IEC Central Office

MEMBERSHIP STATUS

Participating countries: 14

Observing counties 13

Participating countries:

- | | |
|----------------------|---------------|
| - China | - Sweden |
| - Egypt | - Switzerland |
| - France | - USA |
| - Germany | |
| - Israel | |
| - Italy | |
| - Japan | |
| - Morocco | |
| - Portugal | |
| - Russian Federation | |
| - Spain | |

Observing countries:

- Australia
- Austria
- **Belgium**
- Brazil
- Czech Republic
- Denmark
- Iran
- Republic of Korea
- Mexico
- Poland
- **Romania**
- South Africa
- United Kingdom

LIASIONS

Internal IEC Liaison:

TC 82 **Solar photovoltaic energy systems**

Liaison ISO:

TC 180 **Solar energy** (It is confirmed that the coordination with is working well both in the case of collectors and terminology)

TC 192 **Gas turbines (will be cancelled)**

Liaison A:

IEA Solar PACES

Projects

IEC TS 62862-1-1:

Solar thermal electric plants - Part 1-1: Terminology

Current status: Technical Specification, Edition 1, 2018-02

IEC TS 62862-1-2:

Solar thermal electric plants - Part 1-2: General - Creation of annual solar radiation data set for solar thermal electric (STE) plant simulation

Current status: Technical Specification, Edition 1, 2017-11

Projects

IEC TS 62862-1-3:

Solar thermal electric plants - Part 1-3: General - Data format for meteorological data sets

Current status: Technical Specification, Edition 1, 2017-11

IEC TS 62862-2-1 ED1

Solar thermal electric plants - Part 2-1: Thermal energy storage systems - General characterization

Project leader: **Abderrahim JAMRANI** (~~M. Gommel~~)

Current status: Approved New Work Item Proposal

1st CD is expected for 2018-12

Projects

IEC 62862-3-1 ED1

Solar thermal electric plants - Part 3-1: General requirements for the design of parabolic trough solar thermal electric plants

Project leader: W. Shi

Current status: Approved New Work Item Proposal
(no document up to now)

IEC 62862-3-2 2018

Solar thermal electric plants - Part 3-2: Systems and components
- General requirements and test methods for large-size parabolic-trough collectors

Current status: Standard, 2018-10

Projects

IEC 62862-3-3 ED1

Solar thermal electric plants - Part 3-3: Systems and components -
General requirements and test methods for solar receivers

Project leader: E. Pahl

Current status: Revised CD will be distributed as draft TS by
2018-12

~~**IEC 62862-5-2 ED1**~~

~~Solar thermal electric plants - Part 5-2: Linear Fresnel systems -
General requirements and test methods for linear Fresnel
collectors~~

~~Project leader: P. Pili~~

~~Current status: : Approved New Work Item Proposal~~

Projects

IEC 62862-4-1 ED1

Solar thermal electric plants – Part 4-1: General requirements for the design of solar power tower plants

Project leader: jigang xu

Current status: : Approved for CD

MEETINGS

Meetings:

Madrid, Spain, 7th – 8th March 2012 (participated)

Tel Aviv, Israel, 30th October – 1st November 2012

Northbrook, USA, 19th -20th November 2013

Tokyo, Japan, 14th – 15th November 2014

Madrid, Spain, 9th – 10th, 2015 (participated)

Frankfurt, October 5th, 2016

Rabat, Marocco, 25th – 27th *October 2017*

Next meeting:

Beijing, China, 7th – 9th *November 2018*

Thank you ...

