IEEE/PES Transformers Committee

TF C57.127- Revision of IEEE Guide for the Detection, Location and Interpretation of Sources of Acoustic Emissions from Electrical Discharges

Unapproved Approved Meeting Minutes
Vancouver, March 12th, 2024, Room: Balmoral (3)

Meeting Attendance

The working group met at 9:30 AM. 36 participants were in the room including 9 of the 20 members. Quorum was not met. Attendance list is shown at the end of the present minutes.

Discussions

After the call for patent and showing the copyright policy, it was announced that after a few questions, the PAR was approved in February. Our work from now on will be conducted under an official working group. The schedule has been updated accordingly but the committee website is still pending an update.

Our intention to allow short presentations was validated with the subcommittee. They are beneficial to the entire group to establish a common ground on the technology as well as to introduce new methods. Such presentations can be scheduled within the working group with the following recommendations:

- Presentations must be sent in advance to the WG officers.
- Commercial references must be removed from the presentation.

Requests for presentation can be sent to officers (Detlev Gross, Jack Harley, David Larochelle).

It was mentioned that the document does not need major modifications and will surely be republished before the expiration of our PAR in 2028. The following remarks were made by group:

- 1. Add more details on what conditions usually trigger an acoustic measurement, for example PD levels, DGA, monitoring etc. (Markus Soeller)
- 2. Chapter 7.2 should provide more details on the injected signal properties. Is it possible to identify a procedure? (Markus Soeller)
- 3. Chapter 8.3 uses the term "calibrated" and should be reviewed (Markus Soeller)
- 4. Phase shift between electrical and acoustic PD could provide additional useful information. (Markus Soeller)
- 5. Acoustic cameras are used to detect if PD emitted from the surroundings and could be added to the section that introduces the parabolic acoustic sensors. (Detlev Gross)
- 6. Annex B on signal processing needs rework (Detlev Gross)
- 7. The section 9.1 refers to a severity threshold of 300 to 500 pC. Such range is dependent on the type of PD and its location. Should be reviews (Markus Soeller).
- 8. Table 1 could be updated with speed of sound in silicone and ester oil with references. (Mathieu Lachance)
- 9. Localization cases could be added to Annexe C. (Detlev Gross)

It was observed that a few individuals missed the meeting because of a schedule conflict with the Condition Assessment Guide working group (PC57.170). A schedule change will be requested.

Adjournment

The meeting was adjourned at 10h30.

David Larochelle

Attendance List

Last Name	First Name	Affiliation	Status
Barker	Sean	Hitachi Energy	G
Berler	Daniel	ZTZ Services	G
Bouty	Georges	Delta Star inc.	G
Chan	Vivian	Hitachi Energy	G
Chiang	Solomon	TGC	G
Gagné	Zach	IFD Technologies	G
Garcia	Eduardo	Siemens Energy	G
Gasperin	Eloy	Mistras	G
Grandbois	Luke	IFD Technologies	G
Gross	Detlev	Independent	С
Harley	John	FirstPower Group LLC	VC
Hollrah	Derek	Burns McDonnell	G
Juchem	Kevin	Hitachi Energy	G
Lachance	Mathieu	Omicron	G
Larochelle	David	NDB Technologies	S
Lewis	Samuel	Hitachi Energy	G
Lin	David	IFD Technologies	G
Lopez-Fernandez	Jose	Universidad de WGO	G
Mamede	Gabriel	Siemens Energy	G
Martinez	Alberto	WEG USA	G
Maryer	Robert	Siemens Energy	G
Mbouombouo	Mama	Hitachi Energy	G
Mendez	Omar	Prolec GE	G
Montanha	Juliano	Siemens Energy	G
Moreno	Andre	Siemens Energy	M
Newbill	Mark	Hitachi Energy	G
Ortiz	Cuauhtemol	Niagara Power	G
Reimer	Jonathan	Fortis BC	G
Rocque	Timothy	Prolec Energy	M
Shalkh	Abdulmajid	Delta Star inc.	M
Soeller	Markus	Power diagnostix Systems	M
Szczechowski	Janusz	Reinhausen	M
Sze	Matthew	Omicron	M
Tan	Jonathan	Northern Transformer	G
Todstrud	Mark	Dynamic Ratings	G