

Distribution Transformer Subcommittee

Task force / Working Group Report

Document #: C57.12.39

Document Title: Tank Pressure Coordination

Chair: Carlos Gaytan Vice-Chair: Jeremy Van Horn

Secretary: _____

Current Draft Being Worked On: 1.1 Dated: Mar 2025

Meeting Date: March 25, 2025 Time: 4:45 PM PST

Attendance:	Members	<u>21</u>
	Guests	<u>29</u>
	Total	<u>50</u>

List of Members:

Nabi Almeida (Prolec GE)
Alejandro Ayala (Power Partners)
Samuel Brodeur (Hitachi Energy)
Darren Brown (Howard Industries)
Jim Cai (JSHP Transformers)
Paul Chisholm (IFD Technologies)
Janet Crockett (Fayetteville PWC)
Carlos Gaytan (Prolec GE)
Luke Grandbois (IFD Technologies Inc.)
Didier Hamoir (Transformer Protector Corp)
Ramadan Issack (AEP)

Andrew Larison (Hitachi Energy)
Alejandro Macias (Centerpoint Energy)
Jerry Murphy (RCES)
Dwight Parkinson (Eaton Corp.)
Marty Rave (IFD Technologies Inc.)
Stephen Shull (BBC Electrical Services)
Fernando Tirado (Prolec GE)
Alan Traut (Howard Industries)
Jeremy Van Horn (IFD Technologies Inc.)
Joshua Verdell (ERMCO)

List of Guests:

Rehan Ali (Siemens Energy, inc.)
Brian Conneighton (Cleveland-Cliffs)
John Crotty (Ameren)
Tom Dauzat (AEP)
Fernando Duarte (Hitachi Energy)
Hugo Flores (Ermco)
Gilberto Garza (Prolec GE)
Ken Hampton (BGE)
Rebecca Kim (Cheryong Electric)
Yeounsoo Kim (JST power equipment)
Kang Jin Lee (Cheryong Electric)

Justin Minikel (Eaton)
Martin Muñoz (Orto)
Hossein Nabi-bidhendi (ITEC)
Juan Ortiz (Reinhausen Manufacturing)
Joel Pacas (IFD Technologies)
Ashwin Padmanaban Iyer (STP)
Juan Rodriguez (Magnetron)
Joe Schumack (Ameren)
Stefan Schindler (Maschinenfabrik Reinhausen)
Ahmad Skeik (Crosslink Technology)
Mike Thibault (pacific gas and electric)

Distribution Transformer Subcommittee

Task force / Working Group Report

Timothy Tillery (Howard Industries)
Juan Velasquez (Magnetron sas)
Hector Villa (Ecuatran SA)
Pragnesh Vyas (Cleveland Cliffs)

Shelby Walters (Howard Industries)
Joshua Watson (NPPD)
Michael Zarnowski (Carte)

Meeting Minutes:

1. Carlos Gaytan called the meeting to order at 4:45 PM MST. Group introductions were made.
2. Carlos Gaytan reviewed IEEE SA Copyright Policy and Essential Patent Claims. No issues were raised.
3. Quorum was verified. The working group consisted of **41** members, requiring **21** for quorum. Attendance records confirmed **21** members were present for the meeting.
4. Carlos Gaytan requested approval of the Spring 2025 Agenda. Jerry Muphy made a motion, second by Steve Shull. The agenda was unanimously approved.
5. Carlos Gaytan requested approval of the Fall 2024 Minutes. Marty Rave made a motion, second by Al Traut for approval of the minutes. Minutes were unanimously approved.
6. Old Business

- a. *Task force report: Liquid Preservation* – Luke Grandbois

Luke Grandbois presented the recommendations of the task force for Clause 4.1 Liquid Preservation. The group discussed the recommendation and agreed to add a comma for clarity. The clause, as modified and agreed by the working group is the following:

“By manipulating the tank size, liquid volume, and gas space, the sealed-tank system shall be designed so the internal gas pressure does not exceed 49 kPa (gauge) (7 psig), or -35 kPa (gauge) (-5 psig) while operating within the conditions described in the preceding paragraph without relying upon pressure regulating devices.”

A **motion** was made by Jerry Murphy and seconded by Marty Rave to accept the clause as proposed and modified by the group. The motion passed unanimously.

- b. *Task force report: Compromising deformation* – Luke Grandbois

Luke Grandbois presented the second recommendation of the task force, which is the following updated definition for the term “compromising deformation”:

“**compromising deformation:** elastic or plastic deformation that precludes normal operation of transformer sealing and cabinet security; compromises mechanical operation of covers or doors, electrical clearances, thermal operation, or the tank’s ability to shed water; or creates areas where corrosive elements can accumulate.”

A **motion** was made by Steve Shull and seconded by Josh Verdell to accept the definition as proposed. The motion passed unanimously.

- c. *Task force report: Assess potential conflict with C57.12.00* – Luke Grandbois

Distribution Transformer Subcommittee Working Group Report

Luke Grandbois presented the third finding of the task force, which was to determine whether Clause 4.1.2.2 of C57.12.00 presented a conflict with clause 4.1 of C57.12.39 as it relates to the temperature requirement.

The task force found that no conflict was present between the clauses and recommended that no change to the clause be made.

The working group discussed the proposal and commented that the clause could be interpreted that the transformer doesn't need to be sealed from -5 to -20 C. Further discussion revealed that -5 C was an acceptable lower temperature limit for a transformer operating at full load.

The working group agreed with the task force's recommendation. No motion was required as no change was made.

- d. *Review of Draft 1.1* – Carlos Gaytan
Carlos reviewed the changes the working group had previously agreed to in the Draft 1.1 document.

It was discussed that the change to the purpose was acceptable since it had not been included in the PAR.

Luke Grandbois commented that the purpose is different than the 2017 published version. Carlos mentioned that the draft was based on the latest draft produced by the working group in the previous revision, rather than the version that had been published, since an updated editable template of the 2017 publication had not been provided to the working group by IEEE at this time. It has been requested.

Carlos requested that members of the working group review the draft document prior to the Fall meeting, with the objective of possibly going to ballot in the Fall 2025 meeting.

- 7. New business –
 - a. No new business was raised by the working group.
- 8. Next meeting: October 21, 2025 in Bonita Springs, FL, USA
 - a. The following guests requested membership and met the criteria; they will be added to the membership list following the meeting: John Crotty, Tom Dauzat, Gilberto Garza, Rebecca Kim, Joseph Shumack, Shelby Walters
- 9. The meeting was adjourned 4:25 PM MST.

Submitted by: Jeremy Van Horn

Date: March 25, 2025