Chair: Kennedy Darko

Secretary: Frank DeCesaro (filling in)

Meeting Agenda

- 1. Call to Order
- 2. Call for Patents and Copyrights.
 - i. <u>Patent Slides</u>

No issues presented by members.

ii. Copyright Slides

No issues presented by members.

3. Introduction of Members and Guests

Through chat feature in MS Teams

4. Attendance and quorum check

Quorum achieved (15 of 19 members present)

5. Approval of agenda

Agenda was presented. There were no additions or changes suggested

- 6. Action Items
 - Continuation of Ballot comment resolution (attached spreadsheet)
- 7. Any other business
- 8. Next in person meeting
 - Virtual
- 9. Adjournment

 I-388 and I-652, Line 486, Subclause 5.3 calls out preferred rated powerfrequencies (50 or 60hz). Subsequent subclauses (7.7.2.4; 7.7.4; 7.7.5.6) call out various tolerances. This could lead to confusion.

Consider terminology "rated power frequency" vs terminology is other sub clauses and various tolerances used throughout for frequency.

• The standard is silent on applicability of tests at 50 Hz to 60 Hz ratings and viceversa. Transferability is frequently requested in some markets.

The standard should at least comment on / caution against wholesale application of test results at one preferred rated power-frequency to the other. Consider referencing work being done on this topic in the C37.60 Reclosers DLMT.

- *Harm Bannink* will look into this and come back with a response to the WG.
- I-597, Line 505, It is not clear why a list is given. I had to read it a few times.
 It would be better to end the preceding paragraph, line 504, with a colon:

Discussion:

Recommendation to place A colon after "...any of the ways:" and then list the a, b, and c items.

Question raised that before we do this, we need to decide what we want on the name plate. Right now, we list rated short-circuit current. Is this the one value we want or also call out the peak, the short-time, and the fault making?

Then follow with the other part of the sentence, "These shall be expressed in shorttime withstand, peak withstand, and fault-making currents."

These changes will need us to go back to 6.x and make changes to the nameplate requirements.

The rated short-circuit current shall be the lowest rating of any of the ways in the DSG.

The short-circuit current rating shall be the lowest rating of the peak withstand, short-time withstand, fault-making and interrupting current ratings (as applicable). Each rating shall be documented within the test reports and on the nameplate as described in 6.14.

Recommendation from David Beseda and Karla Trost: (Accepted)

5.7 Rated Short Circuit Current (Ik)

The rated short-circuit current shall be the lowest of the following ratings of any of the ways and shall be expressed as a symmetrical current.

a. The rated interrupting current of the protective devices (if applicable).

- b. The rated peak withstand, and short-time withstand current of the switches, loadbreak devices (if applicable), grounding switches (if applicable), and bus.
- c. The rated fault-making current of the switches, loadbreak devices, protective devices, and grounding switches (if applicable).
 The rated fault-making current of the switches, loadbreak devices, protective devices, and grounding switches (if applicable).
- *I-645, Line 534, "Fault interrupter way" is not defined. Should it be "protective way"?*
 - *Rejected: "Fault interrupter way" is defined in the online dictionary and C37.62 is also a normative reference of this standard.*
- I-601, Line 568, I don't think the reference to 3.3 of C37.100.1-2018 is correct. We are citing only two subclauses of 6.1 in C37.100.1 (6.1.2 and 6.1.3). Remove line 568.
 - Accepted.
- I-693, Line 573, This section seems redundant since liquid is addressed in section 6.2 If line 574 is unique to oil, include the sentence in section 6.2 and delete section 6.1.3. Otherwise, just delete section 6.1.3
 - Accepted. 6.1.3 has been deleted.
- I-602, Line 580, This sentence contains unnecessary information.
 Remove "by the owner or a third-party designee.
 - *Revised. removed owner or third-party designee and replaced with the user.*
- I-656, Line 710, I had to read the second sentence a few times to figure out what it was saying. I believe I now understand the intent, but others have also had some trouble catching the meaning. I suggest a wording adjustment.

"Conformance testing by a user or third party to verify rated values is expected . . . "

Discussion:

One comment is why we are talking about performance testing in the type test section. The sentence about conformance testing should be in an area where it belongs other than here.

Move conformance testing to clause 9?

We should look at the wording to make sure the proper ratings are provided for conformance testing. Have one or two people look into what the wording should be. Ian Rokser will look into this.

• *Revised. Wording will be provided when lan Rokser* accomplishes his task.

- I-100, Line 712, The sentence could be misinterpreted: "For application purposes, the ratings are to be treated as maximum values."
 Change to "For application purposes, the ratings should be considered as the maximum values for tests conducted to their fullest extent".
 - Revised: information from **Ian Rokser** for I-656 will cover this as well.
- I-96, I-649, and I-649 will be skipped for this meeting because chair wants to refer this to the Ad Hoc group that was assigned this subject. (David Beseda, Edwin, Almeda, and Kennedy Darko).
- *I-98, Line 1537, This test is intended only for DSG that are intended to be submersible. While the text implies this, it does not clearly state this fact.*

Add the following sentence as the first sentence in 7.9.1: "Subclause 7.9. applies only to DSG identified by the manufacturer as a submersible DSG."

- Rejected: It was agreed the language in the current standard was sufficient. The Editorial group will look breaking the section up for readability and report back to the WG.
- *I-639, Line 1562, What are the pass/fail criteria for the operations while submerged?*

Suggest either adding requirement for successful operation or else indicating that the purpose of these operations is to test the seals

Discussion:

Member suggested that it may be conceivable that the operation may be impeded while it is under the pressures of submersion.

The recloser standard for low and high temperatures only requires travel speeds before and after since transducers may not be able to operate at these temperatures.

- Rejected.
- I-640, Line 1565, These are not necessarily "routine tests"

Remove "routine"

- Accepted.
- I-638, Line 1567, This allowance for water ingress due to the cable terminations is in conflict with point d)

Remove the allowance for water ingress through cable terminations.

- Rejected. The water ingress allowance is provided for the cable interface.
- I-637, Line 1570, Point b) should reference the thermal runaway subclause for the thermal runaway test

Add ref to 7.7.6.2

- *Rejected. Thermal runaway test is only performed for switches that have been exposed to actual current interruptions.*
- *I-473, Line 1588, Production tests must be reported and available to submit to the customer upon request.*

Add: Production tests 8.1 through 8.5 shall be documented and reported to the customer upon request. Test reports shall indicate the unit serial numbers, the test criteria, limits, and actual measurements. Reports shall be certified by the responsible factory representative.

- Member commented that we don't have any language of what certified means. Suggest just using their original comment wording.
- *Revised.* Adding "Results of applicable production tests shall be documented and provided to the customer upon request.

-	-	_
Fnd	of	session
LIIU	UJ.	36331011

Name	Email
Darko, Kennedy	kdarko@gwelec.com
Frank DeCesaro (Guest)	frank@decesaro.com
Trost, Karla L	ktrost@gwelec.com
Colby Lovins (External)	Colby.Lovins@electro-mechanical.com
John Kapitula (External)	john.kapitula@us.abb.com
Joseph Stemmerich (External)	JStemmerich@trayer.com
Kelsey Bush (External)	Kelsey.Bush@us.abb.com
Li, Eric	EricQian.Li@powertechlabs.com
Bannink, Harm	hbannink@gwelec.com
Beseda, David (External)	David.Beseda@sandc.com
Riley, Caryn (External)	caryn.riley@neetrac.gatech.edu
Soulard, Francois (External)	soulard.francois@hydroquebec.com
Found, Paul	Paul.Found@bchydro.com
Edwin Almeida	Edwin.Almeida@sce.com
Rokser, Ian W (External)	IanWRokser@Eaton.com