RODE Meeting Agenda

October 7, 2020 – Virtual Fort Worth Meeting

Chair: **François Soulard** **Vice-Chair: Travis Johnson** **Secretary:** -

Meeting Agenda

1. **Call to Order** ..... **François Soulard**
2. **Introduction of Members and Guests** ..... **François Soulard**
3. **Call for patents** ..... **François Soulard**
    a. Ensure the verbal call is performed and documented for each Working Group meeting.
4. **Virtual attendance and Quorum Check** ..... **Travis Johnson**
    a. RODE count a total of 25 actives members (Quorum is met at 50%+1 members)
    b. We have Quorum, 24/25 members
5. **Procedure for the virtual meeting** ..... **François Soulard**
6. **Approval of the Agenda** ..... **François Soulard**
    a. Anything new to add to the agenda.
    b. Agenda approved Brendan Kirkpatric Approved, Second by Ian Rokser
7. **Approval of Minutes of spring 2019 Meeting** ..... **François Soulard**
    a. https://www.ewh.ieee.org/soc/pes/switchgear/minutes/2020-1/S20RODEmiREV0.pdf
    b. Minutes correction has been raised to our attention.
    c. Karla Trost proposed to approve revised minutes, second by Brendan Kirkpatrick;
    d. Minutes has been approved by majority.
8. **Working Group Report;**
    a. IEEE C37.60/IEC 62271-111 ..... **Ian Rokser**

    Nothing to report

    b. IEEE C37.62 Fault Interrupter ..... **Antone Bonner**

    Two recirculations of the ballot were completed during the summer.
    All comments were resolved.
    The second recirculation ballot returned with 0 comments.
    The ballot passed with

    - Return Ballots – 88% Pass
    - Abstentions – 5% Pass
    - Approval Rate – 92% Pass

    All necessary documents have been submitted to REVCOM for their Dec 2 meeting.
    We expect the standard to be published early next year.

    a. IEEE C37.63 Overhead, Pad-Mounted, and Subm. Autom. Sectionalizers… Open (end 2023)

Need volunteers to review document, 1 or 2 people. Due for revising it. Is the standard applicable to the current devices on the market. Is it still relevant? Should we review it or drop the standard if not relevant. Then spring can start work if needed. Would like to get a response on status by December 2020 (revise or let it lapse), need to form a group to start work on standard if keeping standard. Frank DeCesaro "I move that a Working Group be created for C37.63". Seconded by Harry Hinz. Motion

approved by 19 members. Frank DeCesaro volunteered to be chair. Chair Francois approved appointment.

c. IEEE C37.66 Capacitor Switches …… Harry Hirz

C37.66 21 guests, 10 members present, focus on last draft, request presented to extend 1 year, editorial coordination completed, draft 9, going out for ballot 1 week from Friday

d. IEEE C37.68 Distribution Controls …… Paul Found

21 members, 19 present, 12 guests, added 1 member, chapter leads, resolve in a few months, first working got 202 lines of comments, good feedback, working through, may require 2nd working group to resolve comments, expires in Dec 2021, may need to extend, work moving well, good volunteers.

Time line;

- ballot is targeted for Jan 2021
- PAR expires Dec 2021

e. IEEE C37.74 Subsurface, Vault, and Padmounted Switchgear..... Open (end 2024)

Francois thinks this is one we should sustain. Would like to get a response on status by December 2020 (revise or let it go), form a group to start work on standard if keeping standard. Kennedy would like to volunteer. Nenad believes this is something that we need to maintain. Karla seconds the idea that we should do a study group to come back with a PAR. Doug suggested that a member should make a motion to form a study group and get rolling. Karla Trost "I motion that a Working Group be created for C37.74 with the purpose of drafting a PAR". Seconded by Edwin Almeida. Doug recommends working IEEE SASB Calendar. Revised motion by Karla "I motion that a Working Group be created for C37.74." Edwin accepted the revision. 20 members have approved the motion. Kennedy Darko has volunteered to chair. Chair Francois approved appointment.

f. IEEE C37.75 Enclosure Integrity …….. Anil Dhawan

Met Monday, 12 members, 14 guests, total 26, quorum achieved, one item remain is label section, PAR expires Dec 2021, want to finish prior to avoid extension

PC37.100.6 Guide for Determination of Test Specification for Seismic Qualification for Building Code Applications (Karla Trost) Should RODE request we are to be removed or should we participate to contribute to the guide. Guide to select proper test articles and components to follow building seismic performance. Lots of request for a standard.

9. Task Forces and Discussion group;

a. Discussion group on Recloser interface…….. Mark Feltis

Did not meet this time. Previously received good feedback. Why go to common interface, what are the benefits. Would like to get some User feedback, hold discussion group this coming Spring 2021.

No update on the visible break.

10. Liaison Report

a. T&I representative from RODE …… Nenad Uzelac

Meeting on Monday. Starting 3 task force. Renewables on switchgear. Paper being developed. Task force being formed. Special applications for switchgear. Identify the ones relevant to the

committee. That we don't have a standard on. Have one on asset management for end of life for switchgear, could be a great fit for this working group. Talk to peers.

b. PC37.100.6 Selection criteria for seismic qualification testing..... Karla Trost

Most of the seismic inquires comes from industrial users. The utilities typically do not have a seismic qualifications. Sometime will be required for heavy truck traffic but try to avoid these situations. From a manufacturer standpoint, for manufacturer, typically do not need to be concerned padmount. Opinion is annex for RODE would be a lot of work and little application. No issue with guide existing and including RODE since it is a guide, it will be up to the user to determine when invoked, left up to the application and up to the design. Will be difficult be able to certify an entire product line to this guide. The guide is curently blank and RODE would need to be able to fill in the guide. If a user did have a seismic need, this would be fill this needed. It would be difficult due to the differences in mass and size. Typically this is certified by each piece of equipment. Sometimes guidelines can become standards. Should be kept in mind.

Karla Trost "I motion that we have the RODE chair approach the C37.100.6 chair to have C37.74 removed from their scope". Seconded by Larry Putman. Motion approved by 17 members.

11. New Business

a. Request for clarification on; …… François Soulard

- **C37.74 art. 6.7.5.7- Unloaded transformer switching current test (See Annex 1)**
- **Clarification was requested for C37.74. We cannot clarify a published document, but the inquiry was recommended to analyze the problem raised and suggestion will be made to participate in the next revision.**

b. Officers rotation…… François Soulard

Francois Soulard has competed this fall his 3 years mandate as RODE's Chair. Recommendation will be made to ADSCOM for succession.

12. Next Meetings …… François Soulard

Spring 2021: April 18-23, 2021, Hilton Charlotte University Place, Charlotte, NC

Special notes to WG & TF Chairmen:

1) Please supply bullet items to the Chair for anything from your WG/TF that RODE needs to report out to ADSCOM or the Main Committee on Thursday.
2) Please furnish an electronic copy of your WG/TF report to the Chair and Vice-Chair for inclusion in the meeting minutes within one week after the meeting.

Membership

Role	First Name	Last Name	Company / Affiliate	Country
Chair	**Francois**	**Soulard**	**Hydro-Quebec**	**Canada**
Vice-Chair	**Travis**	**Johnson**	**Xcel Energy**	**USA**
Secretary	**vacant**	**-**	**-**	**-**
Member	Chris	Ambrose	Federal Pacific	USA
Member	David	Beseda	S&C Electric Co.	USA
Member	Antone	Bonner	-	USA
Member	Kennedy	Darko	G&W	USA
Member	Frank	DeCesaro	DeCesaro Consulting Services	USA
Member	Anil	Dhawan	ComEd	USA
Member	Edgar	Dullni	ABB	Germany
Member	Mark	Feltis	Schweitzer Engineering Lab.	USA
Member	Paul	Found	BC Hydro	Canada
Member	Jeffrey	Gieger	ABB/Elastimold	USA
Member	Harold	Hirz	G&W	USA
Member	Brendan	Kirkpatrick	Southern California Edison	USA
Member	Donald	Martin	G&W	USA
Member	Steven	Meiners	GE	USA
Member	Larry	Putman	Powell Electrical Systems Inc.	USA
Member	Ian	Rokser	Eaton Corp	USA
Member	David	Stone	DTS Technical Services	USA
Member	Karla	Trost	G&W	USA
Member	Nenad	Uzelac	G&W	USA
Member	William	Walter	We-Energies	USA
Member	Pete	Agliata	Hubbell Power Systems	USA
Member	Edwin	Almeida	Southern California Edison	USA
Member	Christopher	Borck	Eaton	USA
Member	Rahul	Jain	S&C Electric Co.	USA
Member	Peter	Meyer	S&C Electric Co.	USA
Member	Al	Pruitt	Durham Company	USA

Annex 1

RE: Request for clarification - IEEE C37.74 – 2014; article 6.7.5.7 – Unloaded transformer switching current test

Good morning Mr. Soulard,
I am reaching you out to ask clarification about the par. 6.7.5.7 – Unloaded transformer switching current test.

The standard states that this test can be carried out both with an actual transformer or an equivalent circuit.

> For larger transformers rated greater than 2500 kVA the tests shall use the test circuit of Figure 4 and consist of an actual transformer or be composed of resistance connected in parallel with iron core reactance of such magnitude as to produce the required test current shown in Table 4, Column 6 (±20%) at rated maximum voltage at a power factor between 5% and 10% lagging. The test may be conducted single phase at 87% of rated maximum voltage, see Figure 5. The switch shall be tested per the duty given in Table 8.

In case an equivalent circuit is used, we shall refer to the preferred unload current ratings indicated in table 3 or 4, column 6.

In case an actual transformer is used, shall we refer to the same table?

Just to make an example, considering the line 2 of the table 3 that I report here for easiness of consultation, there isn't any transformer rated 15.5 kV that has 14A no load current.

Table 3—Preferred current ratings for switched ways

Line No.	Rated maximum voltage V, kV			Rated continuous load and loop switching currents, A[a]	Rated cable-charging switching current, A	Rated transformer magnetizing switching current, A	Rated symmetrical short-circuit withstand current, kA[b,c,d]		
	Three-phase DSG		Single-phase DSG				Class 1	Class 2	Class 3
	Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8	Col. 9
1	15.5	15.5 Grd-Y	8.9	200	10	7	12	N/A	N/A
2	15.5	15.5 Grd-Y	8.9	400	10	14	12	N/A	N/A
3	15.5	15.5 Grd-Y	8.9	600	10	21	12	25	38
4	27	27 Grd-Y	15.5	200	15	7	12	N/A	N/A
5	27	27 Grd-Y	15.5	400	15	14	12	N/A	N/A
6	27	27 Grd-Y	15.5	600	15	21	12	25	38
7	38	38 Grd-Y	21.9	200	20	7	10	N/A	N/A
8	38	38 Grd-Y	21.9	400	20	14	10	N/A	N/A
9	38	38 Grd-Y	21.9	600	20	21	10	20	38

Can we kindly ask your support in going through this?
Thanks in advance for your availability.
Wish you a good day!

Carlo Antonio Camporeale
PG,PGTR,2425
Hitachi ABB Power Grids
Via Campestrin 6/A
Padova
35043 Monselice, IT

Dear Mr. Soulard,
Thanks for the reply.
I would take advantage of your availability and bring to your attention two further doubts relating with the same unload switching test I hope you could discuss during your next meeting.

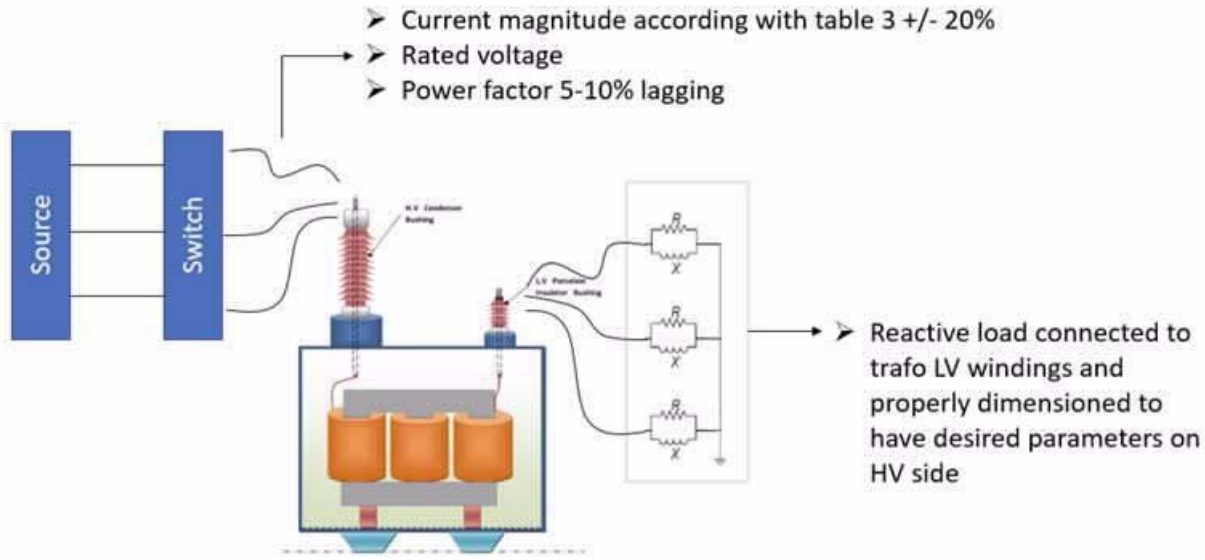
I will list them below for sake of clarity:

1)

> For larger transformers rated greater than 2500 kVA the tests shall use the test circuit of Figure 4 and consist of an actual transformer or be composed of resistance connected in parallel with iron core reactance of such

In case I would use an actual transformer to perform the test, is this transformer constrained to be rated more than 2500 kVA? If this is not the case, can I assume that having a transformer rated, for example, 7000 kVA allows me to cover everything below that rating?

2) In case I am using an equivalent circuit to perform the test can this circuit be made of an actual transformer with secondary windings closed on an inductive load of such a magnitude to generate on the HV windings the current rating prescribed in table 3 and 4, with the required power factor and finally connect my switch to the HV winding of the trafo (as schematized below)?



Once again I would thank you for the availability.
Wish you a good day!

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