IEEE/PES Switchgear Committee Administrative Subcommittee Minutes April 28, 1992 Charleston, South Carolina

- 1. The meeting was called to order at 0800 by the Chairman, J. H. Brunke.
- 2. Introduction of members and guests. Attendance report attached.
- 3. The minutes of the October 3, 1991, meeting in Vancouver BC were approved.

PES Reports

- 4. Meeting and Publications J. H. Brunke see Switchgear Committee minutes.
- 5. Technical Council D. G. Kumbera see Switchgear Committee minutes.

Subcommittee Reports

Α High Voltage Fuse - L.R. Beard 6. High Voltages Switches - No report. 7. Harvey Bowles was appointed as the new Chairman. В Low Voltage Switchgear Devices - M.T. Brown 8. С Reclosers and Sectionalizers - R.L. Capra 9. D Switchgear Assemblies - L.W. Gaussa 10. Education, Recognition, and Planning - E.F. Veverka Ε 11. High Voltage Circuit Breaker - J.E. Reed F 12.

ADSCOM Working Groups and Task Forces

- 13. Nuclear Liaison Report L.W. Gaussa see Switchgear Committee minutes.
- 14. Task Force on Partial Discharges E.F. Veverka
- 15. Working Group on Insulating Materials L.V. McCall No report
- 16. Task Force on Pressure Vessels for Gas Filled Equipment
 A. B. Rishworth
- 17. Conversion of Power Switchgear P.W. Dwyer I

Standards Activities

- 20. Standards Board & PES Standards Coordinating Committee D. M. Larson see Switchgear Committee minutes.
- 21. ANSI C37 T.C. Burtnett

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FINIS

Old Business

- 1. Subcommittee scopes K
 There is a revision to the Ward Laubach proposal for changes in subcommittee scopes included for reference.
- 2. Equipment Nameplate requirements.

 A report, with recommendations, also from Ward is attached which shows significant differences in name plate requirements in the standards for different switchgear apparatus. This will be reviewed by ADSCOM.

New Business

A Task Force was set up to investigate rating requirements for Circuit Switchers under the chairmanship of Dave Johnson.

Future Meetings:

o San Fra o New Orl o Boston,	, Illinois - nsisco, California - eans, Louisiana - Massachusetts -	September 28 - Octo May 1993 October 1993 May 1994	ber 1, 1992
o Nashvil	le, Tennessee -	October 1994	

The meeting was adjourned at 12:00.

Respectfully Submitted,

ADMINSPR.92

Keith I. Gray Secretary

ADSCOM Committee Attendance Summary April 28, 1992

Member	Present	Guests .
Beard, L.R. Bowles, H.L. Brown, M.T. Brunke, J.H. Capra, R.L. Gaussa, L.W. Gray, K.I. Hendrix, K.D. Kumbera, D.G. Lambert, S.R. Lester, G.N. McCall, L.V. Reed, J.E. Veverka, E.F. Wagner, C.L.	x x x x x x x x x x x	Tom Burtnett Bob Harner Ray O'Leary Roy Alexander Matt Williams Fred Teufel Rubin Garzon Ward Laubach Alan Rishworth George Montillet

Scope Revision Proposal

Referring to the original 4/30/91 Scope revision proposal, this R1 revision of the second 10/15/91 proposal includes less controversial scopes for active consideration by ADSCOM and the Switchgear Committee for inclusion in the new manual.

HIGH VOLTAGE FUSES SUBCOMMITTEE

Scope: Treatment of all matters relating to all fuses rated above 1000 Volts AC and 3200 Volts DC.

HIGH VOLTAGE SWITCHES SUBCOMMITTEE

Scope: Treatment of all matters relating to all outdoor switches rated above 1000 Volts AC and 3200 Volts DC and those indoor type switches used in individual enclosures not defined as switchgear.

HIGH VOLTAGE CIRCUIT BREAKERS SUBCOMMITTEE

Scope: Treatment of all matters relating to outdoor high voltage power circuit breakers and indoor generator circuit breakers rated above 1000 Volts AC and 3200 Volts DC.

SWITCHGEAR DEVICES SUBCOMMITTEE

Scope: Treatment of all matters relating to all switchgear type devices rated 38000 Volts AC and 3200 Volts DC and below, including indoor switches, indoor low voltage ac and dc power circuit breakers, indoor medium voltage drawout ac power circuit breakers and ground and test devices, all for use in enclosures.

RECLOSERS AND SECTIONALIZERS SUBCOMMITTEE

Scope: Treatment of all matters relating to automatic circuit reclosers, automatic line sectionalizers and distribution switches with load current switching ratings only, rated above 1000 Volts AC, utilized for overhead, pad and submersible mounting, encapsulated or tank contained, not having an air interrupting medium for switching capacitors or line sectionalizing.

SWITCHGEAR ASSEMBLIES SUBCOMMITTEE

Scope: Treatment of all matters relating to switchgear assemblies, metal-enclosed bus and control switchboards, regardless of voltage or insulating medium.

W. E. Laubach

Review, Report and Recommendations

C37 Product Nameplate Information

Product ratings are established, tests are run to prove those ratings and application guides are created for the purpose of utilizing the product in accordance with those ratings. However, if the final product does not have a complete nameplate, the present and future users and reconditioners/converters do not know what the particular product can do. Advertising literature and product standards mean nothing unless the product is properly described, especially in the reconditioning and conversion areas and, proper nameplates were a serious consideration in the development of C37.59.

In reviewing all the Switchgear Committee C37 products, many diverse nameplate requirements are noted, with some wide discrepancies in what is required by the individual standards. If a product has specific ratings, then those ratings should be on the nameplate for the specific description needed. There are also other criteria that should be included for a more complete description.

Based on this precept, the following recommendations are made for the guidance of the Subcommittee Chairs in future revisions of their product nameplates.

(1) Manufacturers' name, address and country.

Country is added because of the present and future global economy and the need to document where the product was manufactured/assembled.

(2) Manufacturers' type designation

Trademarks or Monograms are commercial and not appropriate in a standard. This practice is now allowed in the Fuse and Recloser/Sectionlizer standards.

(3) Serial number

A serial number is important on all mechanical operating devices for future conversions/recalls as needed. Serial numbers on individual fuses, though, does no seem appropriate.

(4) Year of manufacture by date

A code means nothing to an independent reconditioner or converter since there is no access to this code at a latter time by anyone except the manufacturer. A date is needed to establish a standards relationship for correlation of ratings and recalls in the fuse areas.

- (5) Rated Maximum Voltage (and Rated Voltage Range Factor as applicable.)
- (6) Rated Continuous Current
- (7) Rated Frequency

This rating should always be listed with no exceptions since it can affect operation and there are other frequencies in the world.

- (8) Rated Control Voltage(s)- as applicable
- (9) Rated Dielectric Strength (Power-Frequency Withstand Voltage and/or Impulse Withstand Voltage as applicable)
- (10) All other assigned Ratings listed in the product standard should be listed on the nameplate

If a product has a particular rating, such as short-circuit current, shorttime current, capacitance switching current, whatever, then that rating is needed on the nameplate to guide the user and others now and in the future.

(11) Any other pertinent Capabilities should also be included on the nameplate to guide the user and others, now and in the future.

For instance, HVCB nameplates need to include the asymmetrical rating factor (S) to guide the user in future short-circuit studies when systems grow, to properly determine if the installed breakers can handle the new capability or if new, higher rated breakers are needed.

(12) Instruction/renewal parts manuals, product weight, minimum operating pressure, gallons of oil or weight of gas per tank/device, wiring diagram number and the like should be included as applicable to provide the user and others with needed information now and in the future.

Note: In this era of service life extension and conversion, wiring diagrams should be attached to the products such as switchgear and in the instruction manual for devices since they are usually not available to independents.

Accordingly, each product standard nameplate was reviewed for content to insure that the ratings described in the document were indeed called for on the nameplate as well as other items, since there should be no missing communication of the products' capability to the user.

Attached is a complete summary of nameplates from C37.04 through C37.72, noting what is not consistent and/or missing from each, based on the above listing numbers. This is provided to guide the Subcommittee Chairs in their review to insure that sufficient rating data and other needed information is provided on present and future nameplates for the user and others, now and in the future.

Major omissions are: the manufacturers' address (1); missing serial numbers (3); missing year of manufacture (4); missing rated frequency (7); missing rated control voltages on devices (8); missing power-frequency withstand voltage (9); and too many other missing ratings (10) that should be listed. recommended that the respective Subcommittees should seriously consider the omissions at their next meeting for immediate revision.

WELander

W. E. Laubach

List

C37 Standards Number

No.	0	4	13	14	18	20, 1, 2, 3	21	23	29	30	38	42	44	45	46	47	60	63	66	71, 72	
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(3)5	Х		Х	X	Χ	Х	-	-	X	-	Х	-	- ,	_	-			•		-	
(4)Y	Х		Х	X	Х	-	-	-	х		_		-	-			_	_	_		
(5)V	Х		Х	Х	Х	X	_	-	х	Х	Х		Х	X	Х	Х	X	Х	Х	Х	
(6)I	X		х	Х	Х		_		Х	х	x	X	Х	X	Х	Х	Х	х	х	X	
(7)F	X		Х	_		х	-	-	X	-	-		_	-	-	_	-	_	~	-	
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<u>Key:</u>

X = OK

- = None or none req'd (control volts)

NA= No Address

S = Some

F = Few

D = Only Impulse

M = Most

W. E. Laubach