



Product Safety Engineering Society
Taipei Chapter

IECEE CB Scheme: CTL & PTP

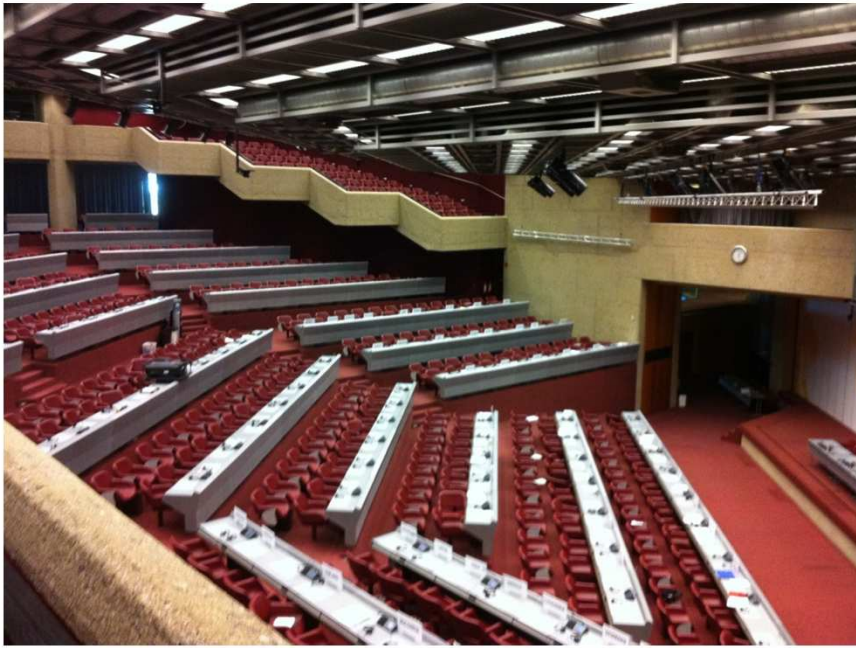
Presented by: Answer Sung
Date: 2012-4-27



Objective

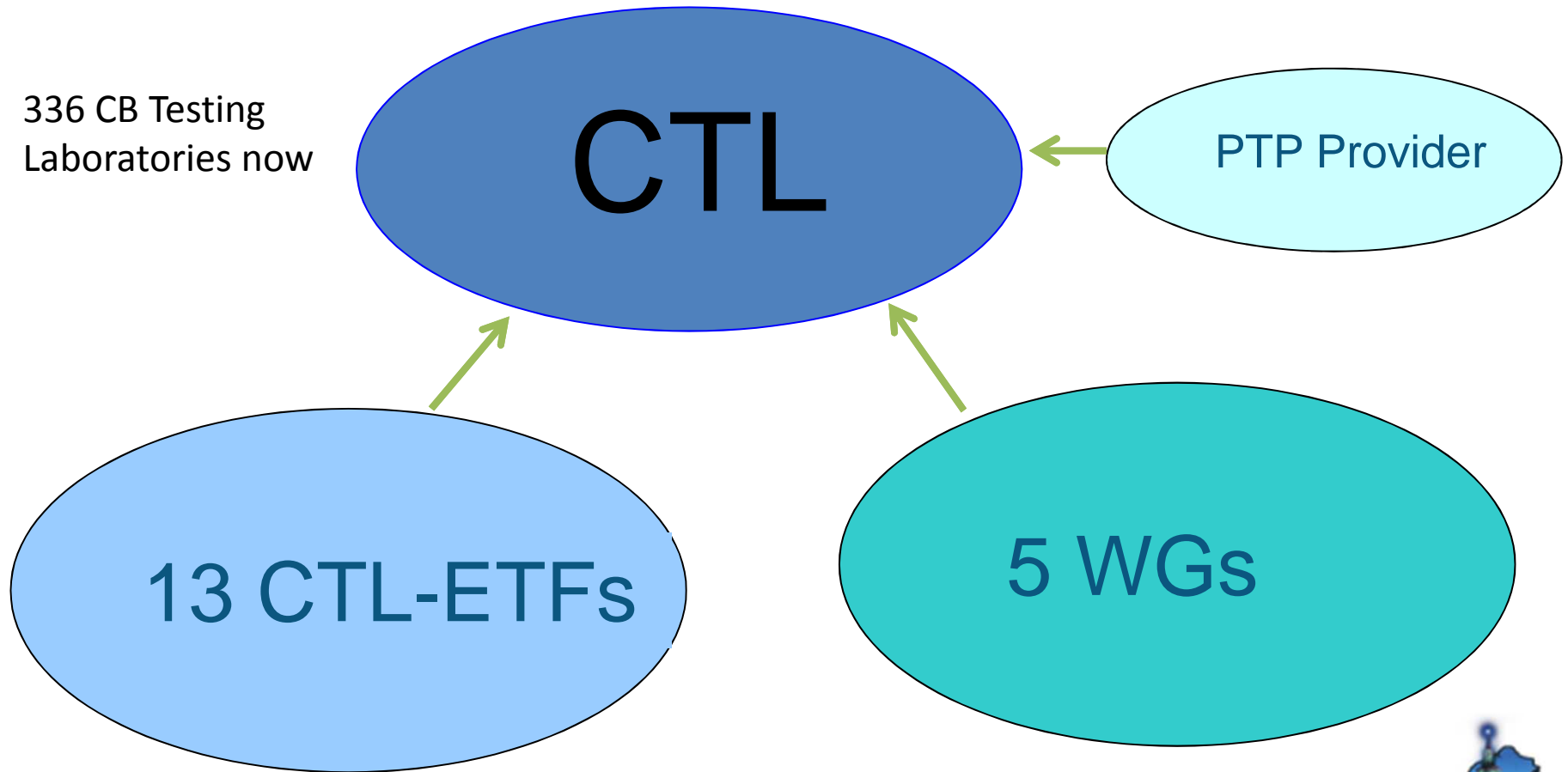
- What's CTL & PTP?
- Your work associated with CTL
- Your work associated with PTP





CTL - Committee of Testing Laboratories

336 CB Testing
Laboratories now



CTL Working Groups

WG1 – Metrology and Uncertainty/Accuracy

WG2 – Proficiency Testing

WG3 – Editing Group

WG4 – Coordination

WG4 – Software Evaluation



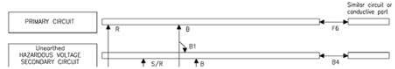
CTL EXPERT TASK FORCES (ETF)



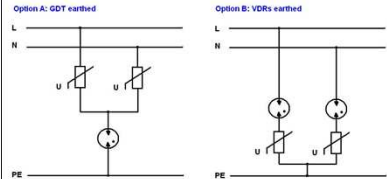
CTL Decision Sheets

Approval by ETF: Provisional Decision Sheet
 Approval by CTL: CTL Decision Sheet

CTL PROVISIONAL DECISION SHEET (PDSH)

Standard(s) - (incl. year)	Subclause(s):	No.	Year
IEC 60950-1:2005 2 nd ed.	2.9/2.9.1/5.3.4	PSEH 0798	2011
Category: OFF		Developed by: ETF2	
Subject: Insulation requirement from mains input (between L and N) up to the fuse.	Key words:	To be approved at the 2012 CTL Plenary Meeting	
<p>Question: Which insulation requirement shall be applied from the mains input up to the equipment fuse?</p> <p>Decision: Functional insulation is sufficient.</p> <p>Explanatory Notes: - The following are reasons for acceptance of the functional insulation:</p> <ol style="list-style-type: none"> According to clause 2.9 functional insulation (F-I) is required between primary circuits, see below part of figure 2F:  <ol style="list-style-type: none"> The creepage and clearance distances smaller than those specified in clause 2.10 are permitted for functional insulation. Clause 2.10.1 states as follows: <small>For functional insulation, clearances and creepage distances smaller than those specified in 2.10 are permitted subject to the requirements of 5.3.4 b) or 5.3.4 c).</small> Clause 5.3.4 b) states: 5.3.4 Functional insulation <i>For functional insulation, clearance and creepage distances shall satisfy one of the following requirements a) or b) or c).</i> b) They withstand the electric strength tests for functional insulation in 5.2.2. 			

CTL DECISION SHEET (DSH)

Standard(s) - (incl. year)	Subclause(s):	No.	Year
IEC 60950-1:2005A1	15.9.4	DSH 0794	2011
Category: OFF		Developed by:ETF 2	
Subject: Requirements of subclause 15.9.4 of IEC 60950-1:2005A1 for combinations of varistors (VDR) and gas discharge tubes (GDT)	Key words: - Varistor - Gas discharge tube - Earthing	Approved at the 2011 CTL Plenary Meeting	
<p>Question: Is it relevant in series connections of VDR+GDT, which component is connected to PE? See circuit diagram below.</p> <p>Decision: The order of VDR and GDT is driven by its specific application, and for safety reasons it cannot be generally said, which component of the two must be connected to PE. The PE connection shall be made in accordance with sub-clause 15.9.4 and the corresponding component application requirements of the manufacturer shall be followed.</p> <p>Explanatory Notes: a) Two examples with different components connected to PE: - Option A with the GDT connected to PE. - Option B with the VDRs connected to PE. In both options, the combination of VDR+GDT is connected to PE.</p> 			



PTP: Proficiency Testing Program



The roles of proficiency testing is for:

- promotion of technical accuracy, quality management, training and assurance.
- Promote mutual confidence in testing results



The first IECEE CTL PTP was conducted in 1999

- Measured temperature rise in a switch



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PTP: Proficiency Testing Program



Who shall participate?

CB Testing Laboratories (CBTLs and ACTLs) and Supervised Manufacturer's Testing Laboratories (SMTLs).



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PTP Update on 2011 PTP Workshop



New!

Regional PTP Workshop in China

May 15th, 2012 from 9 am to 5 pm, limited to 30 persons



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Type of errors made

- Administrative
- Technical
- Equipment
- Calibration



Administrative



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Technical

- We will be late submitting the results. In setting up the PTP, the technician failed to check the voltage he was applying and blew some lab equipment.
- He failed to use an electrical protective device and this caused a fire.



Technical

- How should we confirm the trip current on our tracking test gear?
- What do you mean: “attach thermocouples?”
- How will I know what the current should be if I apply 243.8V?



PTP: Temperature Rise - SMPS





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Thank you for your Time !

