CENTRAL POWER RESEARCH INSTITUTE

Prof. Sir CV Raman Road, PO Box 8066, Sadashivanagar PO, BANGALORE – 560 080. I N D I A

UCA International Users Group

IEC 61850 Certificate Level A

No. UARC/PL/C0165/2010

Issued to:
M/s. Easun Reyrolle Limited,
98, Sipcot Industrial Complex,
Hosur - 635126.
India.

For the product:
Transformer Protection Relay- TPRO
Hardware Version: 1.0
Firmware Version: 1.0
IEC 61850 module version: K0.03
Serial No.: TPRO-4000-100113-02

Issued by: CENTRAL POWER RESEARCH INSTITUTE, India

The product has not shown to be non-conforming to:
IEC 61850-6, 7-1, 7-2, 7-3, 7-4 and 8-1
Communication networks and systems in substations

The conformance test has been performed according to IEC 61850-10 with product's protocol, model and technical issue implementation conformance statements: "PICS version 1.00", "MICS version 1.00", "TICS version 1.00" and products extra information for testing: "PIXIT for testing for Easun Reyrolle range of Protection IEDs version 1.00".

The following IEC 61850 conformance blocks have been tested with a positive result (number of relevant and executed test cases/total number of test cases as defined in the UCA International Users Group Device Test procedures v2.2):

1	Basic Exchange (15/24)	6	Buffered Reports(16/20)
2	Data Sets (3/6)	9a	GOOSE Publish (5/11)
3	Substitution (4/4)	9b	GOOSE Subscribe (9/10)
4	Setting Group Selection (3/3)	12a	Direct Control (4/12)
5	UnBuffered Reports (13/18)	13	Time sync (3/5)
		14	File Transfer (6/7)

This Certificate includes a summary of the test results as carried out at CPRI, Bangalore, India with UniCAsim 61850 version 3.21.02 test system running test suit "61850 Conformance Test v3.20.00", and UniCAsim 61850 analyzer version 4.20.01. The test is based on the UCA International Users Group Device Test Procedures version 2.2. This document has been issued for information purposes only and the original paper copy of the CPRI report No.: UARC/PL/T0165/2010.Dated: February 04, 2011 will prevail.

The tests have been carried out on one single specimen of the products as referred above and submitted to CPRI by M/s. Easun Reyrolle Ltd., Hosur, India. The manufacturer's production process has not been assessed. This Certificate does not imply that CPRI has certified or approved any product other than the specimen tested.

Bangalore, 04 February 2011.

(Mridula Jain)
Test Engineer

(V. Arunachalam)
Additional Director

Level A – Independent Test Lab with certified ISO 9000 or ISO 17025 Quality System
Please Note: Hardcopy of the certificate with CPRI Hologram is only valid.

Applicable Test Cases:

Conformance Block	Mandatory	Conditional
1: Basic Exchange	Ass1, Ass2, Ass3, AssN2, AssN3, AssN4, AssN5 ,Srv1, Srv2, Srv3, Srv4, Srv5, SrvN1abcd, SrvN4	Srv8
2: Data Set	Dset1, Dset10a, DsetN1ae	---
3: Substitution	Sub1, Sub2, Sub3, SubN1	---
4: Setting Group Selection	Sg1,SgN1a	Sg3
5: Unbuffered Reporting	Rp1, Rp2, Rp3, Rp4, Rp7, Rp10, RpN1, RpN2, RpN3, RpN4	Rp5, RpN6, Rp8
6: Buffered Reporting	Br1, Br2, Br3, Br4, Br7, Br8, Br9, Br12,BrN1, BrN2, BrN3, BrN4, BrN5	Br5, Br10, Br N6
9a: GOOSE publish	Gop2, Gop3, Gop4, Gop7	Gop1
9b: GOOSE subscribe	Gos1a, Gos2, Gos3, GosN1, GosN2, GosN3, GosN4, GosN5, GosN6	-------
12a: Direct control	CtlN3, CtlN8 DOns1, DOns3	--------
13: Time sync	Tm1, Tm2,TmN1	--------
14: File transfer	Ft1, Ft2ab, Ft4, FtN1ab	Ft2c, FtN1c

(Mridula Jain)
Test Engineer

(V. Arunachalam)
Additional Director