IEC 61850 Certificate Level A[1]

Ref. No: 2016TS01691

Issued to:

Korea Electric Power Corporation(KEPCO)
#55 Jeollyeok-ro, Naju-si, Jeollanam-do
Republic of Korea, 520-250

For the client system:

iWind
Wind Farm SCADA System
Software version 1.0
MSI GS60 6QC with Microsoft
Windows server 2008 r2 Standard

Issued by:
Korea Electrotechnology Research Institute

The client system has not shown to be non-conforming to:

IEC 61850 First Edition Parts 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 and UCA IUG Conformance Test Procedures for Client System with IEC 61850-8-1 interface, revision 1.1 with TPCL version 1.2 with client system's protocol, model and technical issue implementation conformance statements: "Protocol Implementation Conformance Statement for the IEC 61850 interface in iWind, v1.0", "Model Implementation Conformance Statement for the IEC 61850 interface in iWind, v1.0", "TISSUES Implementation Conformance Statement for the IEC 61850 interface in iWind, v1.0" and product's extra information for testing "Protocol Implementation eXtra Information for Testing (PIXIT) for the IEC 61850 interface in iWind, v1.0".

The following IEC 61850 conformance blocks are tested with a positive result (number of relevant and executed test cases / total number of test cases) :

1	Basic Exchange (20/22)		12a	Direct Control (4/7)
2	Data Sets (5/9)		12b	SBO Control (5/9)
5	Unbuffered Reports (12/18)		12c	Enhanced Direct Control (4/7)
			12d	Enhanced SBO Control (5/9)
			13	Time Synchronization (3/4)

This Certificate includes a summary of the test results as carried out at KERI in Republic of Korea with UniCA IED simulator version 3.29.06, Anvil 3.7.0.0 and UniCA 61850 analyzer version 5.31.00. This document has been issued for information purposes only, and the original paper copy of the KERI report: 2016TS01691 will prevail.

The test has been carried out on one single specimen of the client system as referred above and submitted to KERI by Korea Electric Power Corporation(KEPCO). The manufacturer's production process has not been assessed. This Certificate does not imply that KERI has approved any product other than the specimen tested.

Republic of Korea, June 27, 2016
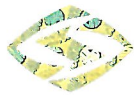
Y. J. Lee
Executive Director
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J. I. Jeong
Technical Manager

[1] Level A – Independent Tester with certified ISO 17025 Quality System
[2] TPCL - Test procedures change list

Applicable Test Procedures from the UCA International Users Group Device Test Procedures for Client System with IEC 61850-8-1 interface, version 1.1 with TPCL version 1.2

Conformance Block	Mandatory	Conditional
1: Basic Exchange	cAss1, cAss2, cAss3, cAss4, cAssN1, cAssN4, cAssN5, cAssN6	cAssN7 cSrv1, cSrv2, cSrv3, cSrv4, cSrv5, cSrv6, cSrvN1, cSrvN3, cSrvN4, cSrvN5, cSrvN6
2: Data Sets		cDs1, cDs2, cDs5, cDsN1a, cDsN1b
5: Unbuffered Reporting	cRp3, cRp4, cRp5, cRp8, cRp9, cRp10, cRpN2, cRpN3, cRpN7, cRpN8	cRp2, cRpN1
12a: Direct control	cCtl4, cCtlN1 cDOns1, cDOns2	
12b: SBO control	cCtl4, cCtlN1 cSBOns1, cSBOns2, cSBOns3	
12c: Enhanced Direct Control	cCtl4, cCtlN1 cDOes1, cDOes2	
12d: Enhanced SBO control	cCtl4, cCtlN1, cSBOes1, cSBOes2, cSBOes3	
13: Time sync	cTm1	cTm2, cTmN1