HYUNDAI HEAVY INDUSTRIES CO.,LTD.

Date: 27th December, 2015

Certificate No.: JSTPP-HHI E&I-003

Attn. to

: Spectrum Engg. & Contracting Co

(POWER LINKS CONTRACTING CO LTD)

Ref. PO No.: JSTPP-E-06-001

Project

: 380KV EHV Cable Installation Works

Completion Certificate

Technical Advisory Work for 380KV EHV Cable

Hyundai Heavy Industries Co., Ltd hereby confirmed that the Technical Advisory work for 380KV EHV Cable Installation Works (EHV Cable Installation by Spectrum) was successfully completed installation and testing in accordance with the scope of work.

Hyundai Heavy Industries Co., Ltd

Title: E&I Manager Name: Kwak Sang Bok Date: 27th Dec, 2015

Hyundai Heavy Industries Co., Ltd

Title: E&I BOP Manager

Name: Jeon Je Hun Date: 27th Dec, 2015

SEWOONG PLANT CO., LTD.

 Room # 1001~1004, Seoul Forest Digital Tower,
 Tel
 : +82-2-467-2141

 308-4, Seongsu2-ga 1-dong, Seongdong-gu,
 Fax
 : +82-2-467-2170

 Seoul 133-827, Korea.
 Email
 : hslee@swplant.com

Attn. to : POWER LINKS Contracting Co, Ltd

Date : 10 March, 2017

Certificate No.: SW-Letter-170310

Project: SWCC Shoaibah Pipe line EHV 380KV Cable Replacement Works

Completion Certificate

Replacement Work for 380KV EHV Cable

Sewoong Plant Co., Ltd hereby confirmed that the Replacement work for 380KV EHV cable (EHV Cable Installation and Test by Powerlink) was successfully completed installation and testing in accordance with the scope of work.

Yours Sincerely,

J.H. Lee / President Sewoong Plant Co., Ltd.



DATE

: 01.01.2016

WORK

380kV U/G Cable Testing.

LOCATION

RKPP, Ras Al Khair.

This certifies as a proof that <u>Powerlinks Contracting Co. Ltd.</u> conduct testing for the circuit mentioned below and submitted the Test reports to SEPCO-III representative.

380kV, 1Cx630SQMM, Cu, XLPE cable.

1. RKPP, ST- 60 to 380kV GIS (C15) cable circuit LV electrical test and HVAC test completed (1 circuit).

Submitted by

P. MANICKADHAS

(PLCC)

m th 2016.01.01

Received by:

SEPCO-III Representatives

DATE

: 14.01.2016

JOB NAME

380kV U/G Cable Testing.

LOCATION

HHR 3, Rabigh.

This certifies as a proof that <u>Power Links Contracting Co.Ltd.</u> conduct testing for the circuit mentioned below and submitted the Test reports to LS Cable representative.

380kV, 1Cx630sqmm, Cu, XLPE Cable.

10.01.2016: Testing team and test equipments mobilized at HHR3 site.

11.01.2016: Witness not available for testing (Test equipments and testing team were idle)

12.01.2016: 380kV GIS to ODSE (SRO 1) cable circuit's LV electrical test completed. (1 circuit).

13.01.2016 : 380kV GIS to ODSE (SRO 2) cable circuit's LV electrical test completed. (1 circuit).

14.01.2016: 380kV GIS to ODSE (SRO 1 & SRO 2) cable circuit's HVAC test completed. (2 circuits). Demobilized the testing team and test equipments.

P. MANICKADHAS

PLCC

Received by:

T-H Kim 14.01.2016 Jet

LS Cable Representatives

DATE

January 17, 2016

NAME OF PROJECT

115kV D/C OHTL 795kCmil 26/7 ACSR AW/DRAKE

NAME OF CIRCUIT

New Jawatha BSP to Al Masoudi S/S (Transition Yard)
New Jawatha BSP to North Mubarraz S/S (Transition Yard)

NO. OF CIRCUIT

2 Circuits

LOCATION

AL HASSA

NAME OF CUSTOMER

NCC

NAME OF TESTING ENGG:

Alex A. Galanida

This certify as a proof that Power Links Contracting Co. conducted the 115kV OHTL LV test for the circuits mentioned above and submitted the test report to NCC.

- 1. OHL PHASING AND PHASE ROTATION TESTS
- 2. OHL INSULATION RESISTANCE TEST
- 3. SUSCEPTANCE MEASUREMENT
- 4. OHL DC CONDUCTOR RESISTANCE TEST
- 5. OHL IMPEDANCE MEASUREMENT
- 6. OHL MUTUAL IMPEDANCE MEASUREMENT

Submitted by

Received by

Signature:-

Date: 7AD 17 2016

DATE

:

:

:

20-01-2016

CONTRACTOR

M/s. Samsung C&T

PROJECT NAME

Rabigh-2 Independent Power Plant

CIRCUIT NAME

STG-10, GTG-11, GTG-12

LOCATION

Rabigh

This certifies as a proof that <u>M/s. Power Links Contracting Co.</u>
<u>Ltd</u> conduct testing for the circuits mentioned below and submitted the Original Test reports to M/s. Samsung C&T representative

- 380kV GIB STG-10, GTG-11 & GTG-12:
 - 380kV GIB HVAC Test Reports Three Circuits
 - 380kV GIB PD Measurement Three Circuits

Submitted By,

CS Kalicharan

Testing Engineer

PLCC

Received by: FARRUKH

2-1-2014

DATE

: 20-01-2016

CONTRACTOR

M/s. LS Cable

PROJECT NAME

Rabigh-2 Independent Power Plant

CIRCUIT NAME

STG-10, GTG-11, GTG-12

LOCATION

Rabigh

This certifies as a proof that <u>M/s. Power Links Contracting Co.</u>
<u>Ltd</u> conduct testing for the circuits mentioned below and submitted the Original Test reports to M/s. LS cable representative

- Power Cable -1Cx 630 Sqmm, 380kV, Cu, XLPE, LS Cable
 - 1. Electrical Test Reports Three Circuits
 - 2. HVAC Test Report Three Circuits
 - 3. PD Measurement Three Circuits

Submitted By,

CS Kalicharan Testing Engineer

PLCC

Received by: Man Cho

FARRUKH

20, Jan, 1

DATE

: 24-01-2016

CONTRACTOR

M/s. Advance Energy Company(AECC)

PROJECT NAME

Al-Khadra Substation-132 KV/33 KV /13.8 KV

LOCATION

Al-Khadra

This certifies as a proof that <u>M/s. Power Links Contracting Co.</u> <u>Ltd</u> conduct testing for the circuits mentioned below and submitted the Original Test reports to M/s. Advance Energy Company representative

- Power Cable- 132kV, 1Cx2000 Sqmm, Cu, XLPE, Riyadh Cable Two Circuits (Ad Dard, Ash Shuqayq)
- Power Cable 132kV , 1Cx 630 Sqmm, Cu, XLPE, Riyadh Cable Four Circuits (T601, T602, T603, T604)

Electrical Test done:

- Circuit Phase Verification / Sheath continuity
- Sheath Test
- SVL Test
- Conductor Insulation Resistance
- Conductor Capacitance
- Link Box Contact Resistance

Submitted By,

CS Kalicharan / R Pradeep

Testing Engineer

PLCC

Received by:

SABYUR RAHMAN)

ID:535

ADVANCED ENDROY CONPANY.

DATE

: February 8, 2016

CIRCUIT NAME

: 115kV UG Cable between Halfmoon BSP and WEST DIE-2 S/S

No. of Circuit/s

: One (1) Circuit

LOCATION

: WEST DIE-2 S/S

This certifies as a proof that <u>Powerlinks Contracting Co.</u> conducted and HV tested the One (1) circuit mentioned above and submitted the Test reports to Al Ojaimi representative.

Received by:

Al Ojaimi Representative

DATE

11-02-2016

CONTRACTOR

M/s. BEMCO - NEXANS

PROJECT NAME

PP-10, 380kV S/S 9023

CIRCUIT NAME

B27 (K20) & C19 (K16)

LOCATION

Rivadh

This certifies as a proof that M/s. Power Links Contracting Co. Ltd conduct testing for the circuits mentioned below and submitted the Original Test reports to M/s. Arabian BEMCO representative

- Power Cable 380kV, 1Cx 1000 Sqmm, Cu, XLPE, Nexans Cable
 - 1. Electrical Test Two Circuits
 - 2. HVAC Test Two Circuits
 - 3. PD Measurement Two Circuits

PD Measurement:

B-27 Two Points per Phase

C-19 Three Points per Phase

1. Mobilized on: 01-02-2016 from 2. Demobilized on: 11-02-2016.

Submitted By,

CS Kalicharan

Testing Engineer

PLCC

Received by:

M/s. Arabian BEMCO

112116

DATE

20.02.2016

JOB NAME

380kV U/G Cable Testing.

LOCATION

Shugaig Steam PP, Jazan.

This certifies as a proof that <u>Power Links Contracting Co.Ltd.</u>
Conducted testing for the circuit mentioned below and submitted the Test reports to LS Cables representative.

380kV, 1Cx2500SQMM, Cu, XLPE cable.

- 1. 380kV GIS C 09 (Steam 4) to GSUT -14 LV electrical completed on 17.02.2016, (1 circuit).
- 2. 380kV GIS C 09 (Steam 4) to GSUT -14 High Voltage and PD (12 points) completed on 20.02.2016, (1 circuit).
- 3. HV kit mobilized on 17.02.2016.
- 4. HV kit demobilized on 20.02.2016.

Received by:

LS Cables Representatives

S. H. choi

Submitted By: R. P.

PLCC

DATE

: February 23, 2016

CIRCUIT NAME

: 115kV UG Cable between Halfmoon BSP and WEST DIE-2 S/S

No. of Circuit/s

: One (1) Circuit - Line 2

LOCATION

: WEST DIE-2 S/S

This certifies as a proof that **Powerlinks Contracting Co.** conducted and HV tested the One (1) circuit mentioned above and submitted the Test reports to Al Ojaimi representative.

Received by:

MD. MASOOD MEDULIAH ELECTRICAL ENGINEER

DATE

: February 29, 2016

CIRCUIT NAME

: JPSS Factory Test - 33kV 3C x 185sqmm Cu. XLPE

No. of Circuit/s

: One (1) Circuit

LOCATION

: JPSS Tanajib

This certifies as a proof that <u>Powerlinks Contracting Co.</u> conducted and HV tested the One (1) circuit mentioned above and submitted the Test reports to JPSS representative.

Received by:

JPSS Representative

DATE

: March 2, 2016

CIRCUIT NAME

: 115kV UG Cable bet. Al Bandariyah S/S and Al Markaz S/S

No. of Circuit/s

: One (1) Circuit

LOCATION

: Al Bandariyah S/S

This certifies as a proof that <u>Powerlinks Contracting Co.</u> conducted and HV tested the One (1) circuit mentioned above and submitted the Test reports to Al Ojaimi representative.

Received by:

Al Ojaimi Representative

DATE

: March 9, 2016

CIRCUIT NAME

: 132kV GIS Busbar Test, PD test & VT test

No. of Circuit/s

: Whole Bus Bays

LOCATION

: SSEM, Al Kharj Industrial City (SS9067)

This certifies as a proof that <u>Powerlinks Contracting Co.</u> conducted and HV tested the following and submitted the Test reports to SSEM. representative.

- 1. 132kV GIS Busbar Test
- 2. PD Test
- 3. VT Withstand and VT Ration Test
- 4. Mobilization and Demobilization Dates (March 5, 2016 and March 8, 2016)

Received by:

915/201

SSEM Representative



DATE

: March 21, 2016

CIRCUIT NAME

: JPSS Factory Test - 33kV 3C x 185sqmm Cu. XLPE

No. of Circuit/s

: One (1) Circuit

LOCATION

: JPSS Tanajib

This certifies as a proof that <u>Powerlinks Contracting Co.</u> conducted and HV tested (internal and witness) the One (1) circuit mentioned above and submitted the Test reports to JPSS representative.

Received by:

JPSS Representative



DATE : March 28, 2016

CIRCUIT NAME: JPSS Factory Test - 33kV 3C x 185sqmm Cu. XLPE

No. of Circuit/s : One (1) Circuit

LOCATION : JPSS Tanajib

This certifies as a proof that <u>Powerlinks Contracting Co.</u> conducted and HV tested (internal and witness) the One (1) circuit mentioned above and submitted the Test reports to JPSS representative.

Received by:

JPSS Representative



DATE

: April 6-19, 2016

PROJECT NAME:

380kV Cable Test at Power Plant-10

LOCATION

Al-Iskan, Riyadh

This certifies as a proof that <u>Power Links Contracting Co.</u> conduct LV and HV Test including PD Measurement for the circuit mentioned below and submitted the Test report to Arabian Bemco representative.

- 1. STG B289BAT01/K16 1 Cable per phase 1c x 1000 sq.mm
- 2. STG C110BAT01/K20 1 Cable per phase 1c x 1000 sq.mm.

Received by:

Arabian Bemco Representatives 26/4/16

DATE

: April 7, 2016

CIRCUIT NAME

132kV UG Cable between 132kV ODSE and 132kV GIS

No. of Circuits

One (1) Circuit

LOCATION

Asser Power Plant (ABHA)

This certifies as a proof that <u>Powerlinks Contracting Co.</u> conducted the LV test of One (1) circuit mentioned above and submitted the Test reports to NCC representative.

Received by:

NCC Representative



DATE

April 18-20, 2016

PROJECT NAME:

132kV Cable Test at Kharj Industrial City (KIC)

LOCATION

Al-Kharj

This certifies as a proof that <u>Power Links Contracting Co.</u> conduct HV Test for the circuit mentioned below and submitted the Test report to SSEM representative.

- 1. SGT-01 3 Cable per phase 1CX 2000 sq.mm
- 2. SGT-02 3 Cable per phase 1CX 2000 sq.mm.
- 3. SGT-03 3 Cable per phase 1CX 2000sq.mm (Except Three Yellow Phase cable)
- 4. GT-01 1 Cable per phase 1C X 630 sq.mm.
- 5. GT-02 1 Cable per phase 1C X 630 sq.mm.
- 6. GT-03 1 Cable per phase 1C X 630 sq.mm.
- 7. GT-04 1 Cable per phase 1C X 630 sq.mm.
- 8. GT-05 1 Cable per phase 1C X 630 sq.mm.
- 9. GT-06 1 Cable per phase 1C X 630 sq.mm.
- 10. 40 MVAR Shunt Reactor -01 1 Cable per phase 1C X 630 sq.mm.
- 11. 40 MVAR Shunt Reactor-02 1 Cable per phase 1C X 630 sq.mm.

Received by:

SSEM Representatives

DATE

: April 11, 2016

CIRCUIT NAME

380kV OHL Cable between Shuqaiq2 S/S and Shuqaiq1 S/S

380kV OHL Cable between Shuqaiq2 S/S and Kudmi/JEC S/S

No. of Circuits

Two (2) Circuit

LOCATION

Shuqaiq Steam Power Plant (JIZAN)

This certifies as a proof that <u>Powerlinks Contracting Co.</u> conducted the LV test of Two (2) 380kV OHL circuit mentioned above and submitted the Test reports to NCC representative.

Received by:

NCC Representative



DATE

: 12.04.2016

JOB

380kV GIB Testing.

LOCATION

Rabigh 2.

This certifies as a proof that <u>Power Links Contracting Co.Ltd.</u> conduct testing for the circuit mentioned below and submitted the Test reports to Samsung C&T representative.

380kV, Hyundai GIB.

Project name: Rabigh-2 Independent Power Plant Project

Manufacturer : Hyundai Heavy Industries Co. Ltd.

Circuits (GIB) : STG20, GTG21, GTG22 (3 circuits)

Test Details : -

22.03.2016: HVAC kit system mobilized and assembled.

STG20 Red phase GIB, HVAC test and PD measurement completed.

23.03.2016 : STG20 Yellow phase GIB, HVAC test and PD measurement completed.

24.03.2016: STG20 Blue phase GIB, HVAC test and PD measurement completed.

29.03.2016: GTG22 Red phase GIB, HVAC test and PD measurement completed.

30.03.2016 : GTG22 Yellow phase GIB, HVAC test and PD measurement

completed.

31.03.2016: GTG22 Blue phase GIB, HVAC test and PD measurement completed.

An Carrela

Jamo

Page 1 Of 2

05.04.2016 : GTG21 Blue phase GIB, HVAC test and PD measurement completed.

06.04.2016: GTG21 Yellow phase GIB, HVAC test and PD measurement

completed.

10.04.2016: GTG21 Red phase GIB, HVAC test and PD measurement completed.

12.04.2016: HVAC kit system and testing team demobilized from Rabigh-2 IPP.

Maximum high voltage for 380kV GIB: 515kV

Maximum high voltage for PD measurement of 380kV GIB: 290kV

Received by:

Samsung C&T Representatives

P.Manickadhas [PLCC]

DATE

April 21-30, 2016

PROJECT NAME:

132kV Cable Test at Salboukh BSP

LOCATION

Salboukh

This certifies as a proof that *Power Links Contracting Co.* conduct LV and HV Test for the circuit mentioned below and submitted the Type Written Test Report to NCC representative.

- 1. SGT-01 3 Cable per phase 1CX 2000 sq.mm
- 2. SGT-02 3 Cable per phase 1CX 2000 sq.mm.
- 3. SGT-03 3 Cable per phase 1CX 2000 sq.mm.
- 4. 40 MVAR Shunt Reactor -01 1 Cable per phase 1C X 630 sq.mm.
- 5. 40 MVAR Shunt Reactor-02 1 Cable per phase 1C X 630 sq.mm.

Received by: A. Armhum

NCC Representatives

ACCOMPLISHMENT

DATE

April 21-30, 2016

PROJECT NAME:

132kV Cable Test at Salboukh BSP

LOCATION

Salboukh

This certifies as a proof that Power Links Contracting Co. conduct LV and HV Test for the circuit mentioned below and submitted the Type Written Test Report to NCC representative.

- 1. SGT-01 3 Cable per phase 1CX 2000 sq.mm
- 2. SGT-02 3 Cable per phase 1CX 2000 sq.mm.
- 3. SGT-03 3 Cable per phase 1CX 2000 sq.mm.
- 4. 40 MVAR Shunt Reactor -01 1 Cable per phase 1C X 630 sq.mm.
- 5. 40 MVAR Shunt Reactor-02 1 Cable per phase 1C X 630 sq.mm.

Received by: A. Armburan.

NCC Representatives



DATE

: 23.04.2016

JOB

110kV GIS Testing.

LOCATION

Al Adel BSP, Jeddah.

This certifies as a proof that <u>Power Links Contracting Co.Ltd.</u> conduct testing for the circuit mentioned below and submitted the Test reports to **SSEM** representative.

110kV, HYOSUNG GIS.

Project name: 380/110/13.8 kV Al Adel BSP.

Manufacturer : Hyosung.

Circuit

: 110kV GIS

13.04.2016: HVAC kit mobilized and visited the site.

17.04.2016: HVAC kit assembled for 110kV GIS test.

18.04.2016 : 110kV GIS not ready for HVAC test (SF6 gas leakage test didn't completed)

19.04.2016: HVAC test and PD measurement completed for 110kV GIS Red phase and

Yellow phase.

20.04.2016 : Blue phase HVAC test failed by flashover.

21.04.2016: HVAC test and PD measurement completed for 110kV GIS Blue phase.

23.04.2016: VT measurement completed for 110kV GIS and Demobilized.

Maximum high voltage for 110kV GIS: 235kV

Maximum high voltage for PD measurement: 100.5kV

Maximum high voltage for VT: 95.5kV

Received by:

ENOR. IMRAN ALLA AZI Submitted by

SSEM Representatives

P.Manickadhas [PLCC]

Page 1 Of 1

ENOR. OSAMA AYESH



DATE

: 26.04.2016

JOB NAME

380kV Cable Testing.

LOCATION

HHR-6.

This certifies as a proof that <u>Power links Contracting Co.</u> conducted testing for the circuit mentioned below and submitted the Test reports to Alfanar.co representative.

380kV, 1Cx630SQMM, Cu, XLPE cable.

1. HHR-6, SRO-1 & SRO-2 (380kV GIS to ODSE) circuit, LV electrical test and HVAC test completed. (2 circuits).

Received by:

Alfanar.co



DATE

: 27/04/2016

PROJECT NAME :

132kV GIS Extension Bay

LOCATION

Al-Kharj 2 Military City

This certifies as a proof that *Power Links Contracting Co.* conduct HV Test for GIS Extension Bay and submitted the Test report to SSEM representative.

1. GIS Extension Bay

Received by

SSEM Representatives



DATE

: 27/04/2016

PROJECT NAME :

132kV GIS Extension Bay

LOCATION

Al-Kharj 2 Military City

This certifies as a proof that <u>Power Links Contracting Co.</u> conduct HV Test for GIS Extension Bay and submitted the Test report to SSEM representative.

1. GIS Extension Bay

Received by

SSEM Representatives

DATE

: May 2-3, 2016

PROJECT NAME :

132kV Test at Salboukh BSP

LOCATION

Salboukh

This certifies as a proof that <u>Power Links Contracting Co.</u> conduct HV Test for the GIS mentioned below and submitted the Type Written Test Report to NCC representative.

1. 132kV GIS at S/S 9018 - 28 Bays

Received by: A. Armlum.

NCC Representatives



DATE

May 5 - June 7, 2016

PROJECT NAME :

132kV Cable Test at Kharj Industrial City (KIC)

LOCATION

Al-Kharj

This certifies as a proof that <u>Power Links Contracting Co.</u> conduct LV and HV Test for the circuit mentioned below and submitted the Test report to SSEM representative.

1. SGT3 -Yellow Phases - 1c x 2000 sq.mm XLPE Cu. - HV Test

LV Test Conducted for Yellow Phase 3

DC Sheath Test
DC Conductor Measurement
Link box Contact Resistance
Insulation and Capacitance Measurement

Received by:

SSEM Representatives

DATE

May 13-June 1, 2016

PROJECT NAME:

33kV Cable Test at Riyadh Metro S/S 9051

LOCATION

Riyadh

This certifies as a proof that <u>Power Links Contracting Co.</u> conduct LV and HV Test for the circuit mentioned below and submitted the Hand Written Final Test Report to NCC representative.

- 1. SGT-01 5 Cable per phase 1c x 500 sq.mm
- 2. SGT-02 5 Cable per phase 1c x 500 sq.mm.
- 3. SGT-03 Cable per phase 1c x 500 sq.mm.
- 4. RMU to Switchgear 1 1 Cable per phase 1c x 185 sq.mm.
- 5. RMU to Switchgear 2 1 Cable per phase 1cx 185 sq.mm.
- 6. RMU to SST 1 1 cable per phase 1c x 185 sq.mm.
- 7. RMU to SST2 1 cable per phase 1c x 185 sq.mm.

Received by: _

NCC Representatives

DATE

May 17-22, 2016

PROJECT NAME:

13.8kV and 132kV Cable Test at Salboukh BSP

LOCATION

Salboukh

This certifies as a proof that *Power Links Contracting Co.* conduct LV and HV Test for the circuit mentioned below and submitted the Type Written Test Report to NCC representative.

- 1. SGT-02 1 Cable per phase 1c x 2000 sq.mm (Yellow Phase Re-Test)
- 2. GT-01-6 Cable per phase 1c x 630 sq.mm.
- 3. GT-02 6 Cable per phase 1c x 630 sq.mm.
- 4. GT-03 6 Cable per phase 1c x 630 sq.mm.
- 5. SST-01 1 Cable per phase 1c x 185 sq.mm.
- 6. SST-02 1 Cable per phase 1c x 185 sq.mm.

Received by: A. Amb

NCC Representatives

DATE

: May 25, 2016

NAME OF PROJECT

: 132kV D/C OHTL 468mm2 ACSR AW/DRAKE

NAME OF CIRCUITS

: Qunfudah North S/S to Qunfudah CPS

Qunfudah North S/S to Dogah S/S

NO. OF CIRCUITS

: 3 Circuits

LOCATION

: Qunfudah North S/S

NAME OF CUSTOMER

: NCC

NAME OF TESTING ENGG:

Alex A. Galanida

This certify as a proof that Power Links Contracting Co. conducted the 132kV OHTL LV test for the circuits mentioned above and submitted the test reports to NCC.

- 1. OHL PHASING AND PHASE ROTATION TESTS
- 2. OHL INSULATION RESISTANCE TEST
- 3. SUSCEPTANCE MEASUREMENT
- 4. OHL DC CONDUCTOR RESISTANCE TEST
- 5. OHL IMPEDANCE MEASUREMENT
- 6. OHL MUTUAL IMPEDANCE MEASUREMENT

Submitted by

Received by

Signature:-

M. SENTHILKUMAR / NCC.

DATE

: 25.05.2016

JOB

380kV GIB Testing.

LOCATION

Rabigh 2.

This certifies as a proof that <u>Power Links Contracting Co.Ltd.</u> conduct testing for the circuit mentioned below and submitted the Test reports to <u>Samsung C&T</u> representative.

380kV, Hyundai GIB.

Project name: Rabigh-2 Independent Power Plant Project

Manufacturer : Hyundai Heavy Industries Co. Ltd.

Circuits (GIB) : STG30, GTG31, GTG32 (3 circuits)

Test Details: -

02.05.2016: HVAC kit system mobilized and assembled.

04.05.2016 : GTG31 Red phase GIB, HVAC test and PD measurement completed.

05.05.2016 : GTG31 Yellow phase GIB, HVAC test and PD measurement completed.

07.05.2016 : GTG31 Blue phase GIB, HVAC test and PD measurement completed.

11.05.2016 : STG30 Red phase GIB, HVAC test and PD measurement completed.

12.05.2016 : STG30 Yellow phase GIB, HVAC test and PD measurement completed.

14.05.2016 : STG30 Blue phase GIB, HVAC test and PD measurement completed.

18.05.2016 : GTG32 Red phase GIB, HVAC test and PD measurement completed.

19.05.2016 : GTG32 Yellow phase GIB, HVAC test and PD measurement

completed.

21.05.2016 : GTG32 Blue phase GIB, HVAC test and PD measurement completed.

24.05.2016: HVAC kit system and testing team demobilized from Rabigh-2 IPP.

Maximum high voltage for 380kV GIB: 515kV

Maximum high voltage for PD measurement of 380kV GIB: 290kV

Received by:

FARRURIT SARRED

Samsung C&T Representatives

Submitted by

R.Pradeep [PLCC]

DATE : 25.05.2016

JOB : 380kV U/G Cable Testing.

LOCATION : Rabigh 2.

This certifies as a proof that <u>Power Links Contracting Co.Ltd.</u> conduct testing for the circuit mentioned below and submitted the Test reports to **LS Cable** representative.

380kV, 1Cx630sqmm, Cu, XLPE cable.

Project name: Rabigh-2 Independent Power Plant Project

Manufacturer : LS Cable.

Circuits : 380kV GSUT (STG30, GTG31, GTG32) to 380kV GIS (3 circuits)

Test Details: -

02.05.2016: HVAC kit system mobilized and assembled.

02.05.2016 : 380kV cable's LV electrical test completed for GTG31 circuit. (1 circuit)

03.05.2016 : 380kV cable's LV electrical test completed for STG20 & GTG32 circuits. (2 circuits)

08.05.2016 : GTG31 Blue phase cable, HVAC test and PD measurement completed.

09.05.2016 : GTG31 Yellow phase cable, HVAC test and PD measurement completed.

10.05.2016 : GTG31 Red phase cable, HVAC test and PD measurement completed.

15.05.2016 : STG30 Blue phase cable, HVAC test and PD measurement completed.

16.05.2016 : STG30 Yellow phase cable, HVAC test and PD measurement completed.

17.05.2016 : STG30 Red phase cable, HVAC test and PD measurement completed.

22.05.2016 : GTG32 Blue phase cable, HVAC test and PD measurement completed.

23.05.2016 : GTG32 Yellow phase cable, HVAC test and PD measurement completed.

24.05.2016 : GTG32 Red phase cable, HVAC test and PD measurement completed.

24.05.2016: HVAC kit system and testing team demobilized from Rabigh-2 IPP.

Maximum high voltage for 380kV cable : 260kV

Maximum high voltage for PD measurement of 380kV cable: 220kV

Received by:

Submitted by

R.Pradeep[PLCC]

DATE

: May 30, 2016

CIRCUIT NAME

: 115kV UG Cable between WEST KHOBAR S/S and DOHA BSP

No. of Circuits

: Two (2) Circuits

LOCATION

: DOHA BSP

This certifies as a proof that <u>Powerlinks Contracting Co.</u> conducted and completed the LV and HV test of the two (2) circuits mentioned above and submitted the Test reports to Al Haider representative.

Received by:

Al Haider Representative

DATE

: March 31 - April 5, 2016

PROJECT NAME:

132kV Cable Test at Kharj Industrial City (KIC)

LOCATION

Al-Kharj

This certifies as a proof that *Power Links Contracting Co.* conduct LV Test for the circuit mentioned above and submitted the Test report to SSEM representative.

- 1. SGT-01 3 Cable per phase 1CX 2000 sq.mm
- 2. SGT-02 3 Cable per phase 1CX 2000 sq.mm.
- 3. SGT-03 3 Cable per phase 1CX 2000 sq.mm.
- 4. GT-01 1 Cable per phase 1C X 630 sq.mm.
- 5. GT-02 1 Cable per phase 1C X 630 sq.mm.
- 6. GT-03 1 Cable per phase 1C X 630 sq.mm.
- 7. GT-04 1 Cable per phase 1C X 630 sq.mm.
- 8. GT-05 1 Cable per phase 1C X 630 sq.mm.
- 9. GT-06 1 Cable per phase 1C X 630 sq.mm.
- 10.40 MVAR Shunt Reactor -01 1 Cable per phase 1C X 630 sq.mm.
- 11.40 MVAR Shunt Reactor-02 1 Cable per phase 1C X 630 sq.mm.

Received by: Abdul Cahmau
SSEM Representatives



DATE

May 31, June 4, 2016

PROJECT NAME :

132kV Cable Test at Kharj Industrial City (KIC)

LOCATION

Al-Kharj

This certifies as a proof that <u>Power Links Contracting Co.</u> conduct HV and LV Test for the circuit mentioned below and submitted the Test report to SSEM representative.

- 1. Capacitor Bank No.1 1 Cable per phase 1c x 630 sq.mm
- 2. Capacitor Bank No.2 1 Cable per phase 1c x 630 sq.mm.

Received by:

SSEM Representatives



DATE

: 01.06.2016

PROJECT NAME

380kV U/G Cable Testing.

LOCATION

SVC Hail 2

This certifies as a proof that <u>Power Links Contracting Co.Ltd.</u> conducted testing for the circuit mentioned below and submitted the Test reports to LS Cables representative.

380kV, 1Cx2500SQMM, Cu, XLPE cable.

Manufacturer : LS Cables

Circuit

: ODSE to 380kV GIS

- 1. LV and HV kit mobilization on 30.05.2016
- 2. LV electrical test completed for 380kV cable on 30.05.2016
- 3. HVAC test completed for 380kV cable on 01.06.2016
- 4. HV kit demobilized on 01.06.2016

Received by:

LS Cables Representatives

Report submitted by:

S. NAVEEN

DATE

06/06/2016

NAME OF PROJECT

Replacement of 69KV OHL by UG Cables B/W MODA S/S and DIE 1C S/S

NAME OF CIRCUIT

Line 1A&1B(2 CIRCUITS)

LOCATION

Dammam

NAME OF CUSTOMER

Mastoura Co.

NAME OF TESTING ENGG:

Rajkumar Ramasamy

This certify as a proof that POWERLINKS conduct LV & HVAC test as per SEC-NG standard in accordance with the PO issued to PLCC for the circuit mentioned below and submitted the test report.

Submitted by

Name:-

RATKUMAD

Signature:

Rajkermal

Date:- 66/06/2016

Received by

DATE

June 7-8, 2016

PROJECT NAME:

13.8kV Cable Test at Salboukh BSP

LOCATION

Salboukh

This certifies as a proof that <u>Power Links Contracting Co.</u> conduct LV and HV Test for the circuit mentioned below and submitted the Type Written Test Report to NCC representative.

1. GT's NER cables- 13.8kV, 3×1 c $\times 630$ sq.mm

Received by: _ CJETABA

NCC Representatives



DATE

July 27-31, 2016

PROJECT NAME :

115kV GIS at Dammam Port

LOCATION

Dammam

This certifies as a proof that <u>Power Links Contracting Co.</u> Conducted HV Test for the circuit mentioned below.

1. 115kV GIS at MRJN - TP-09 - Dammam Port - 3 bays (HITACHI)

Received by:

Wescosa Representative



DATE

: June 30, 2016

PROJECT NAME:

33kV Cable Test at Riyadh Metro S/S 9051

LOCATION

Riyadh

This certifies as a proof that <u>Power Links Contracting Co.</u> conduct LV and HV Test for the circuit mentioned below and submitted the Hand Written Final Test Report to NCC representative.

1. All Neutral Cable for all SGT's 3 Nos

Received by:

NCC Representatives

DATE

: July 11-15, 2016

PROJECT NAME:

380kV Cable Test at Shuqaiq SPP

LOCATION

Shuqaiq, Jizan

This certifies as a proof that *Power Links Contracting Co.* conducted LV and HV Test for the circuit mentioned below and submitted the Hand Written Final Test Report to LS Cable representative.

1. GSUT-13 to 380kV GIS(Steam-3) - 1 Cable per phase - 1c x 2,500 sq.mm

Received by:

LS Cable Representative

DATE

: July 13, 2016

CIRCUIT NAME

: a) 13.8kV UG Cable between T801 and GT301

b) 13.8kV UG Cable between T802 and GT302

c) 13.8kV UG Cable between T801 and 13.8kV Switchgear (K01) d) 13.8kV UG Cable between T802 and 13.8kV Switchgear (K03)

e) 13.8kV UG Cable between SST301 and 13.8kV Switchgear (K02)

f) 13.8kV UG Cable between SST302 and RMU

g) 13.8kV UG Cable between RMU and 13.8kV Switchgear (K04)

No. of Circuits

: Seven (7) Circuits

LOCATION

: New Juaymah 380kV/230kV/13.8kV BSP

This certifies as a proof that <u>Powerlinks Contracting Co.</u> conducted and completed the LV and HV test of the seven (7) circuits mentioned above and submitted the Test reports to NCC representative.

Received by:

NCC Representative

DATE

: July 13, 2016

CIRCUIT NAME

: a) 230kV UG Cable between T801 and 230kV GIB

b) 230kV UG Cable between T802 and 230kV GIB

No. of Circuits

: Two (2) Circuits (2Runs per Phase)

LOCATION

: New Juaymah 380kV/230kV/13.8kV BSP

This certifies as a proof that <u>Powerlinks Contracting Co.</u> conducted and completed the LV and HV test of the two (2) circuits mentioned above and submitted the Test reports to NCC representative.

Received by:

NCC Representative

DATE

: July 14, 2016

CIRCUIT NAME : 69kV UG Cable between DIE 1C S/S and MODA S/S

No. of Circuits

: 1 Circuit – 2Runs per Phase (Retest Impedance Test Only)

LOCATION

: Dammam 2nd Industrial City

This certifies as a proof that Powerlinks Contracting Co. conducted and completed the Retest of Impedance Test of 1 circuit mentioned above and submitted the Test reports to Mastoura representative.

Received by:

Mastoura Representative



DATE

≈ 18-21, 2016

PROJECT NAME:

33kV Cable Test at Riyadh Metro S/S 9052

LOCATION

Riyadh

This certifies as a proof that *Power Links Contracting Co.* conduct LV and HV Test for the circuit mentioned below and submitted Type Written Final Test Report to NCC representatives.

- 1. RMU to SST1 1 Cable per phase 1c x 185 sq.mm.
- 2. RMU to SST2-1 Cable per phase 1c x 185 sq.mm.

3) SWITHGEAR TO SGT-1 - 5 CABLE PER PHASE - LCX 500 SQ. MM.

4) SIDTENCEAR TO SGT-2 = 5 CADLE PER PHASE - 1C X 500 SR. MM.

5. SWITCHLOTAIN TO SGT-3-5 CABLE FER PHASE - 10 x 500 SQ. MM.

Received by: B-PRASAP

NCC Representatives

DATE: 26 JULY 2016

NAME OF PROJECT: HAIL-2 380KV CABLE LAYING

P.O NO: 4769 Dated 24 April 2016

DESCRIPTION: 380KV Cable 1000sqmm 1C,9 Drums –approx. 3800 Mtrs- Cable

laying, Cable dressing Including all Personnel and Equipment's.

LOCATION: HAIL

NAME OF CUSTOMER: AL TOUKHI CO

NAME OF SITE MANAGER: AHAMED AKEEL

This certify as a proof that POWERLINKS conducted and successfully completed the job specified on Purchase order no 4769 Dt 24 April 2016 for Laying of 380kV, 1000sqmm cable, Total quantity laid 3913.00 L.Meter, Dressing& clamping including Mobilization and De mobilization as per SEC-NG standard in accordance with the

Approved by

2/9/7/2016

(For Altouki Co)

PO issued to PLCC.

Prepared by

Name:- AHAMED AKEEL

26 JULY 2016 Date:-

DATE

: July 27, 2016

NAME OF PROJECT

: 132kV D/C OHTL 362.1mm² AAAC/UPAS

NAME OF CIRCUITS

: Al Quz S/S to Tihamah CPS

Al Quz S/S to Al Suffah S/S

NO. OF CIRCUITS

: 4 Circuits

LOCATION

: Al Quz S/S

NAME OF CUSTOMER

: NCC

NAME OF TESTING ENGG:

Alex A. Galanida

This certify as a proof that Power Links Contracting Co. conducted the 132kV OHTL LV test for the circuits mentioned above and submitted the test reports to NCC.

- 1. OHL PHASING AND PHASE ROTATION TESTS
- 2. OHL INSULATION RESISTANCE TEST
- 3. SUSCEPTANCE MEASUREMENT
- 4. OHL DC CONDUCTOR RESISTANCE TEST
- 5. OHL IMPEDANCE MEASUREMENT
- 6. OHL MUTUAL IMPEDANCE MEASUREMENT

Submitted by

Received by

Name: ALX GALANIDA

N. VAIRAMUTHU



DATE

08.08.2016

PROJECT NAME

380kV U/G On-line PD Testing.

LOCATION

Shuqaiq Steam PP ,Jazan.

This certifies as a proof that <u>Power Links Contracting Co.Ltd.</u>
Conducted testing for the circuit mentioned below and submitted the Test reports to LS Cables representative.

380kV, 1Cx2500SQMM, Cu, XLPE cable.

1. 380kV GIS C 09 (Steam 4) to GSUT -14 On-line PD test completed. (totally 12points) on 07.08.2016, (1 circuit).

Received by:

LS Cables Representatives

S. H. CHOI.

Submitted By:

DICC

P PRADEFT



DATE

22.08.2016

JOB NAME

110kV U/G Cable Testing.

LOCATION

Al Adel BSP, Jeddah.

This certifies as a proof that **Power Links Contracting Co.Ltd.** conduct testing for the circuit mentioned below and submitted the Test reports to SSEM representative.

110kV, 1Cx2000SQMM, Cu, XLPE cables for 380/110 kV TRX circuits.

Site progress Details: -

20.08.2016: Testing team and test equipments mobilized at Al Adel BSP site. Done the HVAC kit setup.

21.08.2016: HVAC test completed for SGT#802 circuit B1 phase cable. 22.08.2016: HVAC test report submitted to SSEM representative and demobilized.

Received by:

SSEM Representative.

Submitted by
Mariele
P.MANICKADHAS)

DATE

: August 11, 2016

CIRCUIT NAME

: 69kV UG Cable between Dammam PP and Ibn Khaldoun BSP

No. of Circuits

: Two (2) Circuits

LOCATION

: Dammam

This certifies as a proof that <u>Powerlinks Contracting Co.</u> conducted the LV and HV test of the two (2) circuits mentioned above and submitted the Test reports to Mastoura representative.

Note: The following tests are to be conducted after completing the diversion jointbay:

- a) DC Conductor Resistance Test
- b) Impedance Measurement
- c) Linkbox Contact Resistance Test

Received by:

Mastoura Representative

11/08/2016

DATE

: August 22, 2016

CIRCUIT NAME

: 69kV UG Cable between TUBAISHI S/S and DAMMAM HOUSING S/S

No. of Circuits

: ONE (1) Circuit

LOCATION

: TUBAISHI S/S

This certifies as a proof that <u>Powerlinks Contracting Co.</u> conducted and completed the LV and HV test of the ONE (1) circuit mentioned above and submitted the Test reports to Mastoura representative.

Received by:

Mastoura Representative



DATE

:

07.09.2016

JOB NAME

· Con

LOCATION

Construction of New Riyadh Metro BSP (9052). New Riyadh Metro BSP (9052), Riyadh

This certifies as a proof that <u>Power Links Contracting Co.Ltd.</u> conduct testing for the circuit mentioned below and submitted the Test reports to NCC representative.

33kV, 500SQMM, Cu, XLPE Power cable.

- 1. SGT NO.1 NER Cable HVAC Test Completed.
- 2. SGT NO.2 NER Cable HVAC Test Completed.
- 3. SGT NO.3 NER Cable HVAC Test Completed.

Received by:

ICC Representative.

L.C. DHANASEWA



DATE

September 25, 2016

PROJECT NAME:

33kV Cable Test at Riyadh Metro S/S 9052

LOCATION

Riyadh

This certifies as a proof that *Power Links Contracting Co.* Conduct LV and HV Test for the circuit mentioned below and submitted the type written Final Test Report to NCC representative.

- 1. RMU1 to Switchgear 1 Cable per phase 1c x 185 sq.mm. 205 meters
- 2. RMU2 to Switchgear 1 Cable per phase 1c x 185 sq.mm. 194 meters

Received by:

NCC Representatives

allin

Sachin Kelapure 26/09/2016,

DATE

: October 5, 2016

CIRCUIT NAME

: 115kV UG Cable between MOHANDASEEN S/S and DOHA BSP

No. of Circuit

: Line 1 / Blue Phase

LOCATION

: DOHA BSP

This certifies as a proof that <u>Powerlinks Contracting Co.</u> conducted and completed the HV test of one cable for the above mentioned circuit and submitted the Test report to Al Haider representative.

Received by:

Al Haider Representative



DATE

: October 12, 2016

JOB NAME

33kV Cable Test at Riyadh Metro S/S 9052

LOCATION

Riyadh

This certifies as a proof that <u>Power Links Contracting Co.Ltd.</u> conduct testing for the circuit mentioned below and submitted the Test reports to NCC representative.

33kV, 1Cx500SQMM, Cu, XLPE cable.

- 1. Capacitor Bank-01 to Switchgear cable circuit's LV electrical test and HVAC test completed (3 Cables).
- 2. Capacitor Bank-02 to Switchgear cable circuit's LV electrical test and HVAC test completed (3 Cables).
- 3. Capacitor Bank-03 to Switchgear cable circuit's LV electrical test and HVAC test completed (3 Cables).

Received by:

NCC Representatives



DATE

: Oct

October 18,2016

JOB NAME

. .

33Kv Cable Test at Rivadh Metro S/S 9051

LOCATION

Riyadh

This certifies as a proof that <u>Power Links Contracting Co.Ltd.</u> conduct testing for the circuit mentioned below and submitted the Test reports to NCC representative.

33kV, 1Cx500SQMM, Cu, XLPE cable.

- 1.Capacitor Bank-01 to Switchgear cable circuit's LV electrical test and HVAC test completed (3 Cables).
- 2. Capacitor Bank-02 to Switchgear cable circuit's LV electrical test and HVAC test completed (3 Cables).
- 3. Capacitor Bank-03 to Switchgear cable circuit's LV electrical test and HVAC test completed (3 Cables).

Received by:

NCC Representative.



DATE

26.10.2016

JOB NAME

380kV U/G Cable Testing.

LOCATION

Shugaig Steam Power Plant, Shugaig.

This certifies as a proof that *Power Links Contracting Co.Ltd.* conduct testing for the circuit mentioned below.

380kV, 1Cx2500SQMM, Cu, XLPE cables for 380kV TRX circuits.

Site progress Details: -

19.10.2016: Testing team and test equipment mobilized at SSPP site, Shugaig.

20.10.2016: Completed LV electrical test except Cross Bonding and Link Contact Resistance on the GUST 12 Circuit.

21.10.2016: Completed all LV electrical test on the GUST 12 circuit .

22.10.2016: Done HVAC kit Setup for the circuit.

23.10.2016: HVAC test on RED phase Completed for GUST 12 Circuit.

24.10.2016: HVAC test on YELLOW phase Completed for GUST 12 Circuit.

25.10.12016: HVAC test on BLUE phase Completed for GUST 12 Circuit.

25.10.2016: HVAC test equipment demobilized for the SSPP site

26.10.2016: All the LV electrical, HVAC test and PD reports has been

submitted to LS cable representative.

Received by: S.H. CHOI

DATE

: Ocotber 26-27, 2016

PROJECT NAME:

132kV GIS HV Test and PD Measurement

LOCATION

Al-Kharj - S/S 8713

This certifies as a proof that <u>Power Links Contracting Co.</u> conduct HV Test and PD Measurement for the substation GIS mentioned below and submitted the Test report to SSEM representative.

1. 132KV GIS Test - 11 Bays

Received by:

SSEM Representatives

DATE

: November 5, 2016

CIRCUIT NAME

: 69kV UG Cable between Dammam P/P and Ibn Khaldoun BSP

No. of Circuit

: 69kV Line (2 Runs / Phase)

LOCATION

: Ibn Khaldoun BSP

This certifies as a proof that <u>Powerlinks Contracting Co.</u> conducted and completed the End to End Crossbonding Verification test for the above mentioned circuit and submitted the Test report to Mastoura representative.

Received by:

BUGR MAHMOUD AHMED

Mastoura Representative



شركة طاقة الارتباط للمقاولات ذات مسئولية محدودة POWER LINKS CONTRACTING CO. LTD

ACCOMPLISHMENT REPORT

DATE: 17 Jan 2017

NAME OF PROJECT: 230KV 1c x 1000sqmm cable laying at Aramco, Rastanura

P.O NO: MLC/DMM/25122016-032 Dt 25 December 2016

DESCRIPTION: 230 KV Cable 1c x 1000sqmm, approx. 1450 Mtrs- Cable laying, Cable

'ressing Including all Personnel and Equipment's.

LOCATION: Aramco Rastanura

NAME OF CUSTOMER: Multi Lines Construction

NAME OF ENGINEER: Premnath C

This certify as a proof that POWERLINKS conducted and successfully completed the job specified on Purchase order no MLC/DMM/25122016-032 Dt 25 December 2016 for Laying of 230 KV Cable 1c x 1000sqmm,approx. 1450 Mtrs-Cable laying, Cable dressing Including all Personnel and Equipment's, Mobilization and De mobilization as per ARAMCO standard in accordance with e PO issued to PLCC.

Date of Mobilization:

Date of Demobilization:

Prepared by (For Power links Con Co)

Name:- Johnson E Joseph

Signature: Date:-

Approved by (Multi Lines construction Co)