

EXPRESSION OF INTEREST (EOI)

Project	CERES
Company / Client	Perdaman Chemicals and Fertilisers Pty Ltd
Material Requisition Number	0000-EA-E-40200
Package Title	PREFABRICATED SUBSTATIONS
1. SUBMISSION PROCEDURE	
EOI Instructions	<p>Supplier(s) are invited to express interest by registering on ICN Gateway where competency and previous positive experiences of similar supply of goods / services can be demonstrated.</p> <p>When submitting interest registrants will be asked to complete an expression of interest document. The registrant's response will form their Expression of Interest (EOI) for material and/or services.</p> <p>Suppliers will only be considered for Prequalification should they satisfy stated criteria, including but not limited to Health, Safety & Environmental Management, Quality management, financial standing, relevant experience and availability.</p>
EOI Closing Date	Please submit by close of business on 28/12/2023
Returnable Schedules	Where the EOI calls for any Returnable Schedules, please ensure all schedules are submitted.
Contact	<p>All initial enquiries should be made through the Industry Capability Network Western Australia (ICNWA).</p> <p>Andie Pfaff Andie.pfaff@icnwa.org.au +61 (08) 9365 7442</p>
URL	<p>For more information regarding the Perdaman, refer</p> <ul style="list-style-type: none"> https://www.perdamanindustries.com.au/scjv/
2. INDICATIVE SCOPE OF WORK	
Package Description	<p>Overview Saipem Australia Pty Ltd and Clough Projects Australia Pty Ltd Joint Venture (herein referred to as the "CONTRACTOR") has reached an agreement with Perdaman Chemicals and Fertilisers Pty Ltd (herein referred to as the "OWNER") for the Engineering, Procurement, Construction and Commissioning of the PROJECT CERES located in Burrup Strategic Industrial Area, Burrup Peninsula, Western Australia.</p> <p>Perdaman Chemicals and Fertilisers Pty Ltd (OWNER) is focused on the development of Perdaman - Project CERES which shall be the world's largest gas stream ammonia-urea plant with a production capacity of 2.14 MMTPA granular urea.</p>

	<p>General Scope of Supply / Services</p> <p>Supplies shall include, but not be limited to engineering, procurement, manufacture, testing, packaging and shipment to project site of all Pre-fabricated substations complete with all the relevant electrical and facilities equipment (HVAC, lighting and small power system, earthing system, lightning protection system, F&G, IRP, VESDA System, etc..) as required in accordance with specification and Scope of Supply as defined in ATTACHMENT-1.</p> <p>Further inclusions consist of provision of management, design, calculation, procurement, fabrication, testing and certification to satisfy the scope of supply.</p> <p>The following must be provided:</p> <ul style="list-style-type: none"> • Technical deviations list • Special tools list • Schedule of rates • Spares list • Quality assurance <p>Responsibilities will include <i>inter alia</i>:</p> <ul style="list-style-type: none"> • The VENDOR shall assure responsibility for the entire package, including each sub-supply and components indicated in this specification. • Project management, reporting, attending meetings, participation in risk assessment workshops • Comply with site mobilisation and site requirements • Delivering work in a safe manner and to the required standards • Whole Guarantee and responsibility for assembling and good operation of the complete unit.
Standards	Compliance with National, International and Industry Standards, Australian and WA Regulatory requirements.
Key Dates	Tender planned to be issued during end December 2023
Point of Delivery	Perdaman Project Site, Western Australia.
3. RETURNABLE DOCUMENTS	
List of Returnable Schedules	List of experience on similar equipment supply projects
4. DISCLAIMER	
<p>This Expression of Interest to gain an insight into the capabilities of potential suppliers and/or service providers and not a Tender Invitation or offer - the schedule and content of this work is subject to change pending project demand and timelines.</p>	

ATTACHMENT 1

<u>Attachment 1</u>			
No.	Description	Tag Number	Quantity
2000-ER-0001 - UREA-1 SUBSTATION			
<i>(For Equipment)</i>			
A	*SUB TOTAL OF MAIN EQUIPMENT AND DEVICES:		
1	MV SWITCHGEAR 6.6kV	2000-SWG-0001	1
2	LV SWITCHGEAR / MCC 400V	2000-MCC-0001	1
3	LV SWITCHGEAR / MCC 400V	2000-MCC-0003	1
4	MV BUS DUCT INCLUDING SUPPORTS AND FITTINGS (Complete Routing Indoor+Outdoor)	2000-BD-0001	1
5	MV BUS DUCT INCLUDING SUPPORTS AND FITTINGS (Complete Routing Indoor+Outdoor)	2000-BD-0002	1
6	LV BUS DUCT INCLUDING SUPPORTS AND FITTINGS (Complete Routing Indoor+Outdoor)	2000-BD-0003	1
7	LV BUS DUCT INCLUDING SUPPORTS AND FITTINGS (Complete Routing Indoor+Outdoor)	2000-BD-0004	1
8	LV BUS DUCT INCLUDING SUPPORTS AND FITTINGS (Complete Routing Indoor+Outdoor)	2000-BD-0009	1
9	LV BUS DUCT INCLUDING SUPPORTS AND FITTINGS (Complete Routing Indoor+Outdoor)	2000-BD-0010	1
10	INTERPOSING RELAY PANEL	2000-ZZE-0004	1
11	VESDA PANEL	2000-ZZE-0001	1
12	BATTERY BANK -A FOR 110VDC	2000-BAT-0001A	1
13	BATTERY BANK -B FOR 110V DC	2000-BAT-0001B	1
14	SMALL POWER DISTRIBUTION PANEL	TBD	1
15	NORMAL LIGHTING PANEL	TBD	1
16	NON UPS POWER DISTRIBUTION PANEL	TBD	1
17	SPACE HATER DISTRIBUTION PANEL	TBD	1
18	EMERGENCY LIGHTING PANEL	TBD	1
19	UPS DISTRIBUTION BOARD, 400/230VAC	2000-UPD-0001	1
20	BATTERY CHARGER	2000-BAC-0001	1
21	110V DC DISTRIBUTION BOARD	2000-PDC-0001	1
22	LOCKOUT STATION	TBD	1
23	TAGGING STATION	TBD	1
24	PMS PANEL	TBD	1
19	FIRE ALARM PANEL	TBD	1
20	LV VARIABLE FREQUENCY DRIVE	TBD	36
21	HVAC POWER DISTRIBUTION PANEL	TBD	1
22	HVAC CONTROL PANEL	2000-CP-0001	1
23	BATTERY DISCONNECTOR SWITCH - A	2000-DS-0001	1
24	BATTERY DISCONNECTOR SWITCH - B	2000-DS-0002	1
25	TOOLS/SPARE CABINET	TBD	1
26	STORAGE CABINET	TBD	1
27	PHONE & DRAWING TABLE	TBD	1
28	CORK BOARD	TBD	1
29	POWER FACTOR CORRECTION/ HARMONIC FILTER PANEL-1	2000-HF-0001	1
30	POWER FACTOR CORRECTION/ HARMONIC FILTER PANEL-2	2000-HF-0002	1
31	DISPLAY CASES FOR SUBSTATION'S SINGLE LINE DIAGRAMS (Laminated SLD - to refer sheet 1 - Attachment 01)	-	1 lot
32	LIFTING DEVICE FOR MV PANELS CIRCUIT BREAKER	-	1
33	LIFTING DEVICE FOR LV PANELS CIRCUIT BREAKER AND DRAWERS	-	1
34	LIFTING DEVICE FOR BATTERIES	-	1
35	TOOLS FOR MAINTENANCE CABINET	TBD	1 lot
36	FOPP PANEL	TBD	1

<u>No.</u>	<u>Description</u>	<u>Tag Number</u>	<u>Quantity</u>
2000-ER-0001 - UREA-1 SUBSTATION			
(For Equipment)			
B	*SUB TOTAL COMPLETE BUILDING INCLUSIVE OF BUT NOT LIMITED TO:		
1	PREFAB. BUILDING - SUB VENDOR PRICE	2000-ER-0001	1 lot
	PREFAB. BUILDING - BIDDER FEE		
2	COMPLETE HVAC SYSTEM (INCLUDING DUCTING, WIRING PANEL BOARD, UCP, ETC..) ROOF MOUNTED. COMPLETE WITH ROOF ACCESS (ONE STAIRS+CAGE LADDERS)	TBD	1 lot
3	SMALL POWER DISTRIBUTION PANEL	TBD	1
4	INDOOR NORMAL LIGHTING PANEL (NO PHOTOCCELL CONTROLLED, INCLUDING LIGHTING FIXTURES AND JBs)	TBD	1
5	INDOOR NORMAL LIGHTING PANEL (PHOTOCCELL CONTROLLED, INCLUDING LIGHTING FIXTURES AND JBs)	TBD	1
6	INDOOR ESSENTIAL LIGHTING PANEL (NO PHOTOCCELL CONTROLLED, INCLUDING LIGHTING FIXTURES AND JBs)	TBD	1
7	INDOOR ESSENTIAL LIGHTING PANEL (PHOTOCCELL CONTROLLED, INCLUDING LIGHTING FIXTURES AND JBs)	TBD	1
8	EXIT LIGHTS	TBD	1 lot
9	F&G ALARM PANEL&COMPLETE SYSTEM	TBD	1
10	HIGH SENSIVITY SMOKE DETECTION PANEL (VESDA)	TBD	2
11	TELECOM EQUIPMENT INSTALLATION ACCORDING TO CCSJV-TITB-027 AND RELEVANT LAYOUTS	-	1 lot
12	EXTERNAL MODULE PLATFORM AND WALKWAYS, INCLUDING STAIRS, HANDRAILS, ETC..	-	1 lot
13	INSTALLATION AND TESTING OF FREE ISSUE EQUIPMENT PROVIDED BY OTHERS (GCP, PDP, TELECOM PANELS, ETC..) - ITEM LIST ACCORDING TO ATTACHMENT 9	-	1 lot
14	EYE WASH	TBD	1
15	OUTDOOR BUS DUCT SUPPORTS	-	1 lot
16	INTERNAL/ EXTERNAL LIGHTING INCLUDING WIRING & CABLING	-	1 lot
17	SUBSTATION INTERNAL GROUNDING & LIGHTINING SYSTEM	-	1 lot
18	SUBSTATIONS INTERNAL POWER AND CONTROL CABLING INTERCONNECTING PESB EQUIPMENTS (INCLUDING THOSE FOR SHIP LOOSE ITEMS)	-	1 lot
19	COMPLETE CABLE TRAYS SYSTEM INCLUDING SUPPORTS FITTINGS, ETC..	-	1 lot
20	SUBSTATIONS GLAND BOXES (INCLUDING NON-MAGNETIC PLATE), SUPPLY AND INSTALLATION FOR CABLE ENTRY INCLUDING ANY RACKS/SUPPORTS FOR CABLES FIXING COMING FROM FIELD	-	1 lot
21	INTEGRATED TEST AT SUBSTATION YARD	-	1 lot
22	AIR LOCK	-	1 lot
25	SEAWORTHY PACKING	-	1 lot
C	*SUB TOTAL INSTALLATION AND COMMISSIONING SPARE PART:		
1	SET OF COMMISSIOING SPARES MV 6.6KV	-	1 lot
2	SET OF COMMISSIONING SPARES LV SWITCHGEAR MCC	-	1 lot
3	SET OF COMMISSIONING SPARES PESB (BUILDING)	-	1 lot
4	SET OF COMMISSIONING SPARES DC CHARGER	-	1 lot
5	SET OF COMMISSIONING SPARES FOR DISTRIBUTION BOARD	-	1 lot
6	SET OF COMMISSIONING SPARES FOR MV AND LV BUSDUCT	-	1 lot
7	SET OF COMMISSIONING SPARES FOR PMS	-	1 lot

<u>No.</u>	<u>Description</u>	<u>Tag Number</u>	<u>Quantity</u>
2000-ER-0001 - UREA-1 SUBSTATION			
<i>(For Equipment)</i>			
D	SET OF SPECIAL TOOLS FOR EQUIPMENT INSTALLED IN PESB		1 lot
E	COMPLETE SET OF PESB LIFTING GEAR (SPREADER BARS, LIFTING TOOLS,ETC.)		1 lot

No.	Description	Tag Number	Quantity
2000-ER-0002 - UREA-2 SUBSTATION			
(For Equipment)			
A	*SUB TOTAL OF MAIN EQUIPMENT AND DEVICES:		
1	MV SWITCHGEAR 6.6kV	2000-SWG-0002	1
2	LV SWITCHGEAR / MCC 400V	200-MCC-0002	1
3	MV BUS DUCT INCLUDING SUPPORTS AND FITTINGS (Complete Routing Indoor+Outdoor)	2000-BD-0005	1
4	MV BUS DUCT INCLUDING SUPPORTS AND FITTINGS (Complete Routing Indoor+Outdoor)	2000-BD-0006	1
5	LV BUS DUCT INCLUDING SUPPORTS AND FITTINGS (Complete Routing Indoor+Outdoor)	2000-BD-0007	1
6	LV BUS DUCT INCLUDING SUPPORTS AND FITTINGS (Complete Routing Indoor+Outdoor)	2000-BD-0008	1
7	POWER FACTOR FILTER CORRECTION/HARMONIC FILTER PANEL-3	2000-HF-0003	1
8	POWER FACTOR FILTER CORRECTION/HARMONIC FILTER PANEL-4	2000-HF-0004	1
9	SMALL POWER DISTRIBUTION PANEL. 400/230VAC	TBD	1
10	NORMAL LIGHTING PANEL, 400/230VAC	TBD	1
11	NON UPS POWER DISTRIBUTION PANEL 400/230VAC	TBD	1
12	SPACE HEATER DISTRIBUTION PANEL	TBD	1
13	EMERGENCY LIGHTING PANEL 400/230VAC	TBD	1
14	UPS DISTRIBUTION BOARD, 400/230VAC	TBD	1
15	BATTERY CHARGER	2000-BAC-0002	1
16	110V DC DISTRIBUTION BOARD	2000-PDC-0002	1
17	BATTERY BANK- A FOR 110VDC	2000-BAT-0002A	1
18	BATTERY BANK- B FOR 110VDC	2000-BAT-0002B	1
19	LOCKOUT STATION	TBD	1
20	TAGGING STATION	TBD	1
21	PMS PANEL	TBD	1
22	FIRE ALARM PANEL	TBD	1
23	VESDA PANEL	2000-ZZE-0005	1
24	HVAC POWER DISTRIBUTION PANEL	TBD	1
25	INTERPOSING RELAY PANEL	2000-ZZE-0008	1
26	HVAC CONTROL PANEL	2000-CP-005	1
27	BATTERY DISCONNECTOR SWITCH - A	2000-DS-0003	1
28	BATTERY DISCONNECTOR SWITCH - B	2000-DS-0004	1
29	TOOLS/SPARE CABINET	TBD	1
30	STORAGE CABINET	TBD	1
31	PHONE & DRAWING TABLE	TBD	1
32	CORK BOARD	TBD	1
33	LV VARIABLE FREQUENCY DRIVE	TBD	11
34	DISPLAY CASES FOR SUBSTATION'S SINGLE LINE DIAGRAMS (Laminated SLD - to refer sheet 1 - Attachment 01)	-	1 lot
35	LIFTING DEVICE FOR MV PANELS CIRCUIT BREAKER	-	1
36	LIFTING DEVICE FOR LV PANELS CIRCUIT BREAKER AND DRAWERS	-	1
37	LIFTING DEVICE FOR BATTERIES	-	1
38	TOOLS FOR MAINTENANCE CABINET	TBD	1 lot
39	FOPP PANEL	TBD	1

No.	Description	Tag Number	Quantity
2000-ER-0002 - UREA-2 SUBSTATION			
(For Equipment)			
B	*SUB TOTAL COMPLETE BUILDING INCLUSIVE OF BUT NOT LIMITED TO:		
1	PREFAB. BUILDING - SUB VENDOR PRICE	2000-ER-0002	1 lot
	PREFAB. BUILDING - BIDDER FEE		
2	COMPLETE HVAC SYSTEM (INCLUDING DUCTING, WIRING PANEL BOARD, UCP, ETC..) ROOF MOUNTED. COMPLETE WITH ROOF ACCESS (ONE STAIRS+CAGE LADDERS)	TBD	1 lot
3	SMALL POWER DISTRIBUTION PANEL	TBD	1
4	INDOOR NORMAL LIGHTING PANEL (NO PHOTOCCELL CONTROLLED, INCLUDING LIGHTING FIXTURES AND JBs)	TBD	1
5	INDOOR NORMAL LIGHTING PANEL (PHOTOCCELL CONTROLLED, INCLUDING LIGHTING FIXTURES AND JBs)	TBD	1
6	INDOOR ESSENTIAL LIGHTING PANEL (NO PHOTOCCELL CONTROLLED, INCLUDING LIGHTING FIXTURES AND JBs)	TBD	1
7	INDOOR ESSENTIAL LIGHTING PANEL (PHOTOCCELL CONTROLLED, INCLUDING LIGHTING FIXTURES AND JBs)	TBD	1
8	EXIT LIGHTS	TBD	1 lot
9	F&G ALARM PANEL&COMPLETE SYSTEM	TBD	1
10	HIGH SENSIVITY SMOKE DETECTION PANEL (VESDA)	TBD	2
11	TELECOM EQUIPMENT INSTALLATION ACCORDING TO CCSJV-TITB-027 AND RELEVANT LAYOUTS	-	1 lot
12	EXTERNAL MODULE PLATFORM AND WALKWAYS, INCLUDING STAIRS, HANDRAILS, ETC..	-	1 lot
13	INSTALLATION AND TESTING OF FREE ISSUE EQUIPMENT PROVIDED BY OTHERS (GCP, PDP, TELECOM PANELS, ETC..) - ITEM LIST ACCORDING TO ATTACHMENT 9	-	1 lot
14	EYE WASH	TBD	1
15	OUTDOOR BUS DUCT SUPPORTS	-	1 lot
16	INTERNAL/ EXTERNAL LIGHTING INCLUDING WIRING & CABLING	-	1 lot
17	SUBSTATION INTERNAL GROUNDING & LIGHTNING SYSTEM	-	1 lot
18	SUBSTATIONS INTERNAL POWER AND CONTROL CABLING INTERCONNECTING PESB EQUIPMENTS (INCLUDING THOSE FOR SHIP LOOSE ITEMS)	-	1 lot
19	COMPLETE CABLE TRAYS SYSTEM INCLUDING SUPPORTS FITTINGS, ETC..	-	1 lot
20	SUBSTATIONS GLAND BOXES (INCLUDING NON-MAGNETIC PLATE), SUPPLY AND INSTALLATION FOR CABLE ENTRY INCLUDING ANY RACKS/SUPPORTS FOR CABLES FIXING COMING FROM FIELD	-	1 lot
21	INTEGRATED TEST AT SUBSTATION YARD	-	1 lot
22	AIR LOCK	-	1 lot
25	SEAWORTHY PACKING	-	1 lot
C	*SUB TOTAL INSTALLATION AND COMMISSIONING SPARE PART:		
1	SET OF COMMISSIOING SPARES MV 6.6KV	-	1 lot
2	SET OF COMMISSIONING SPARES LV SWITCHGEAR MCC	-	1 lot
3	SET OF COMMISSIONING SPARES PESB (BUILDING)	-	1 lot
4	SET OF COMMISSIONING SPARES DC CHARGER	-	1 lot
5	SET OF COMMISSIONING SPARES FOR DISTRIBUTION BOARD	-	1 lot
6	SET OF COMMISSIONING SPARES FOR MV AND LV BUSDUCT	-	1 lot
7	SET OF COMMISSIONING SPARES FOR PMS	-	1 lot

<u>No.</u>	<u>Description</u>	<u>Tag Number</u>	<u>Quantity</u>
2000-ER-0002 - UREA-2 SUBSTATION			
<i>(For Equipment)</i>			
D	SET OF SPECIAL TOOLS FOR EQUIPMENT INSTALLED IN PESB	-	1 lot
E	COMPLETE SET OF PESB LIFTING GEAR (SPREADER BARS, LIFTING TOOLS,ETC.)		1 lot

No.	Description	Tag Number	Quantity
2000-ER-0003 - Complete RIE & Ammonia Heater			
(For Equipment)			
A	*SUB TOTAL OF MAIN EQUIPMENT AND DEVICES:		
1	LIGHTING/SMALL POWER DISTRIBUTION PANEL 400/230V AC	TBD	1
2	NON UPS POWER DISTRIBUTION BOARD 400/230V AC	TBD	1
3	EMERGENCY LIGHTING PANEL 400/230V AC	TBD	1
4	UPS POWER DISTRIBUTION BOARD 400/230V AC	TBD	1
5	HVAC POWER DISTRIBUTION/CONTROL PANEL	TBD	1
6	SPACE HEATER DISTRIBUTION PANEL	TBD	1
7	VESDA PANEL	2000-ZZE-0009	1
8	CIRCUIT BREAKER REMOVABLE TRUCK	TBD	1
9	FIRE ALARM PANEL	TBD	1
10	TOOLS/SPARE CABINET	TBD	1
11	STORAGE CABINET	TBD	1
12	CORK BOARD	TBD	1
13	LOCKOUT STATION	TBD	1
14	TAGGING UNIT	TBD	1
15	TOOLS FOR MAINTENANCE CABINET	TBD	1 lot
16	FOPP PANEL	TBD	1
17	DISPLAY CASES FOR SUBSTATION'S SINGLE LINE DIAGRAMS (Laminated SLD - to refer sheet 1 - Attachment 01)	TBD	1
B	*SUB TOTAL COMPLETE BUILDING INCLUSIVE OF BUT NOT LIMITED TO:		
1	PREFAB. BUILDING - SUB VENDOR PRICE	2000-ER-0003	1 lot
	PREFAB. BUILDING - BIDDER FEE		
2	COMPLETE HVAC SYSTEM (INCLUDING DUCTING, WIRING PANEL BOARD, UCP, ETC..) ROOF MOUNTED. COMPLETE WITH ROOF ACCESS (ONE STAIRS+CAGE LADDERS)	TBD	1 lot
3	SMALL POWER DISTRIBUTION PANEL	TBD	1
4	INDOOR NORMAL LIGHTING PANEL (NO PHOTOCELL CONTROLLED, INCLUDING LIGHTING FIXTURES AND JB's)	TBD	1
5	INDOOR NORMAL LIGHTING PANEL (PHOTOCELL CONTROLLED, INCLUDING LIGHTING FIXTURES AND JB's)	TBD	1
6	INDOOR ESSENTIAL LIGHTING PANEL (NO PHOTOCELL CONTROLLED, INCLUDING LIGHTING FIXTURES AND JB's)	TBD	1
7	INDOOR ESSENTIAL LIGHTING PANEL (PHOTOCELL CONTROLLED, INCLUDING LIGHTING FIXTURES AND JB's)	TBD	1
8	EXIT LIGHTS	TBD	1 lot
9	F&G ALARM PANEL&COMPLETE SYSTEM	TBD	1
10	HIGH SENSIVITY SMOKE DETECTION PANEL (VESDA)	TBD	2
11	TELECOM EQUIPMENT INSTALLATION ACCORDING TO CCSJV-TITB-027 AND RELEVANT LAYOUTS	-	1 lot
12	EXTERNAL MODULE PLATFORM AND WALKWAYS, INCLUDING STAIRS, HANDRAILS, ETC..	-	1 lot
13	INSTALLATION AND TESTING OF FREE ISSUE EQUIPMENT PROVIDED BY OTHERS (GCP, PDP, TELECOM PANELS, ETC..) - ITEM LIST ACCORDING TO ATTACHMENT 9	-	1 lot
14	EYE WASH	TBD	1
15	OUTDOOR BUS DUCT SUPPORTS	-	1 lot
16	INTERNAL/ EXTERNAL LIGHTING INCLUDING WIRING & CABLING	-	1 lot
17	SUBSTATION INTERNAL GROUNDING & LIGHTNING SYSTEM	-	1 lot
18	SUBSTATIONS INTERNAL POWER AND CONTROL CABLING INTERCONNECTING PESB EQUIPMENTS (INCLUDING THOSE FOR SHIP LOOSE ITEMS)	-	1 lot
19	COMPLETE CABLE TRAYS SYSTEM INCLUDING SUPPORTS FITTINGS, ETC..	-	1 lot
20	SUBSTATIONS GLAND BOXES (INCLUDING NON-MAGNETIC PLATE), SUPPLY AND INSTALLATION FOR CABLE ENTRY INCLUDING ANY RACKS/SUPPORTS FOR CABLES FIXING COMING FROM FIELD	-	1 lot
21	INTEGRATED TEST AT SUBSTATION YARD	-	1 lot
22	AIR LOCK	-	1 lot
25	SEAWORTHY PACKING	-	1 lot
C	*SUB TOTAL INSTALLATION AND COMMISSIONING SPARE PART:		

<u>No.</u>	<u>Description</u>	<u>Tag Number</u>	<u>Quantity</u>
2000-ER-0003 - Complete RIE & Ammonia Heater			
<i>(For Equipment)</i>			
1	SET OF COMMISSIONING SPARES PESB (BUILDING)	-	1 lot
2	SET OF COMMISSIONING SPARES DC CHARGER	-	1 lot
3	SET OF COMMISSIONING SPARES FOR DISTRIBUTION BOARD	-	1 lot
4	SET OF COMMISSIONING SPARES FOR PMS	-	1 lot
D	SET OF SPECIAL TOOLS FOR EQUIPMENT INSTALLED IN PESB	-	1 lot
E	COMPLETE SET OF PESB LIFTING GEAR (SPREADER BARS, LIFTING TOOLS,ETC.)		1 lot

No.	Description	Tag Number	Quantity
3000-ER-0001 - Complete 33kV Substation			
<u>(For Equipment)</u>			
A	*SUB TOTAL OF MAIN EQUIPMENT AND DEVICES:		
1	33kV GIS SWITCHGEAR	3000-SWG-0001	1
2	INTERPOSING RELAY PANEL	3000-ZZE-0004	1
3	POWER PLANT MANAGEMENT SYSTEM	3000-PMS-0001	1
4	BATTERY CHARGER	3000-BAC-0001	1
5	UPS DISTRIBUTIOON BOARD< 400/230VAC	3000-UPD-0001	1
6	CORK BOARD	TBD	1
7	BATTERY BANK-A FOR 110VDC	3000-BAT-0001A	1
8	BATTERY BANK-B FOR 110VDC	3000-BAT-0001B	1
9	110V DC DISTRIBUTION BOARD	3000-PDC-0001	1
10	SMALL POWER DISTRIBUTION PANEL, 400/230V AC	3000-DP-1001	1
11	NORMAL LIGHTING PANEL, 400/230V AC	3000-NLP-1001	1
12	NON UPS POWER DISTRIBUTION PANEL, 400/230V AC	3000-DP-1002	1
13	ESSENTIAL LIGHTING PANEL, 400/230VAC	3000-ELP-1001	1
14	FIRE ALARM PANEL	3000-FCP-0001	1
15	PMS OPERATOR WORK STATION (OWS)	TBD	1
16	HVAC CONTROL PANEL	3000-CP-0001	1
17	LOCKOUT STATION	TBD	1
18	TAGGING STATION	TBD	1
19	HVAC POWER DISTRIBUTION PANEL, 400/230V AC	3000-DP-1004	1
20	SPACE HEATER DISTRIBUTION PANEL	3000-DP-1003	1
21	VESDA PANEL	3000-ZZE-0001	1
22	SHOCK RESUSCITATION CHART (DRSABCD)	TBD	1
23	TOOLS/SPARE CABINET	TBD	1
24	BATTERY DISCONNECTOR SWITCH-A	3000-DS-0001	1
25	BATTERY DISCONNECTOR SWITCH-B	3000-DS-0002	1
26	STORAGE CABINET	TBD	1
27	PHONE & DRAWING TABLE	TBD	1
28	DISPLAY CASES FOR SUBSTATION'S SINGLE LINE DIAGRAMS (Laminated SLD - to refer sheet 1 - Attachment 01)	-	1 lot
29	LIFTING DEVICE FOR MV PANELS CIRCUIT BREAKER	-	1
30	LIFTING DEVICE FOR BATTERIES	-	1
31	TOOLS FOR MAINTENANCE CABINET	TBD	1 lot
32	FIBER OPTIC (FOPP) PANEL	TBD	1

No.	Description	Tag Number	Quantity
3000-ER-0001 - Complete 33kV Substation			
<i>(For Equipment)</i>			
B	*SUB TOTAL COMPLETE BUILDING INCLUSIVE OF BUT NOT LIMITED TO:		
1	PREFAB. BUILDING - SUB VENDOR PRICE	3000-ER-0001	1 lot
	PREFAB. BUILDING - BIDDER FEE		
2	COMPLETE HVAC SYSTEM (INCLUDING DUCTING, WIRING PANEL BOARD, UCP, ETC..) ROOF MOUNTED. COMPLETE WITH ROOF ACCESS (ONE STAIRS+CAGE LADDERS)	TBD	1 lot
3	SMALL POWER DISTRIBUTION PANEL	TBD	1
4	INDOOR NORMAL LIGHTING PANEL (NO PHOTOCELL CONTROLLED, INCLUDING LIGHTING FIXTURES AND JBs)	TBD	1
5	INDOOR NORMAL LIGHTING PANEL (PHOTOCELL CONTROLLED, INCLUDING LIGHTING FIXTURES AND JBs)	TBD	1
6	INDOOR ESSENTIAL LIGHTING PANEL (NO PHOTOCELL CONTROLLED, INCLUDING LIGHTING FIXTURES AND JBs)	TBD	1
7	INDOOR ESSENTIAL LIGHTING PANEL (PHOTOCELL CONTROLLED, INCLUDING LIGHTING FIXTURES AND JBs)	TBD	1
8	EXIT LIGHTS	TBD	1 lot
9	F&G ALARM PANEL&COMPLETE SYSTEM	TBD	1
10	HIGH SENSIVITY SMOKE DETECTION PANEL (VESDA)	TBD	2
11	TELECOM EQUIPMENT INSTALLATION ACCORDING TO CCSJV-TITB-027 AND RELEVANT LAYOUTS	-	1 lot
12	EXTERNAL MODULE PLATFORM AND WALKWAYS, INCLUDING STAIRS, HANDRAILS, ETC..	-	1 lot
13	INSTALLATION AND TESTING OF FREE ISSUE EQUIPMENT PROVIDED BY OTHERS (GCP, PDP, TELECOM PANELS, ETC..) - ITEM LIST ACCORDING TO ATTACHMENT 9	-	1 lot
14	EYE WASH	TBD	1
15	OUTDOOR BUS DUCT SUPPORTS	-	1 lot
16	INTERNAL/ EXTERNAL LIGHTING INCLUDING WIRING & CABLING	-	1 lot
17	SUBSTATION INTERNAL GROUNDING & LIGHTNING SYSTEM	-	1 lot
18	SUBSTATIONS INTERNAL POWER AND CONTROL CABLING INTERCONNECTING PESB EQUIPMENTS (INCLUDING THOSE FOR SHIP LOOSE ITEMS)	-	1 lot
19	COMPLETE CABLE TRAYS SYSTEM INCLUDING SUPPORTS FITTINGS, ETC..	-	1 lot
20	SUBSTATIONS GLAND BOXES (INCLUDING NON-MAGNETIC PLATE), SUPPLY AND INSTALLATION FOR CABLE ENTRY INCLUDING ANY RACKS/SUPPORTS FOR CABLES FIXING COMING FROM FIELD	-	1 lot
21	INTEGRATED TEST AT SUBSTATION YARD	-	1 lot
22	AIR LOCK	-	1 lot
25	SEAWORTHY PACKING	-	1 lot
C	*SUB TOTAL INSTALLATION AND COMMISSIONING SPARE PART:		
1	SET OF COMMISSIOING SPARES MV 33KV	-	1 lot
2	SET OF COMMISSIONING SPARES PESB (BUILDING)	-	1 lot
3	SET OF COMMISSIONING SPARES DC CHARGER	-	1 lot
4	SET OF COMMISSIONING SPARES FOR DISTRIBUTION BOARD	-	1 lot
5	SET OF COMMISSIONING SPARES FOR PMS	-	1 lot

<u>No.</u>	<u>Description</u>	<u>Tag Number</u>	<u>Quantity</u>
3000-ER-0001 - Complete 33kV Substation			
<i>(For Equipment)</i>			
D	SET OF SPECIAL TOOLS FOR EQUIPMENT INSTALLED IN PESB	-	1 lot
E	COMPLETE SET OF PESB LIFTING GEAR (SPREADER BARS, LIFTING TOOLS,ETC.)		1 lot

No.	Description	Tag Number	Quantity
3000-ER-0002 - Complete U&O Substation			
<i>(For Equipment)</i>			
A	*SUB TOTAL OF MAIN EQUIPMENT AND DEVICES:		
1	MV SWITCHGEAR 6,6kV	3000-SWG-0002	1
2	LV SWITCHGEAR / MCC 400V	3000-MCC-0001	1
3	LV SWITCHGEAR / MCC 400V	3000-MCC-0002	1
4	LV SWITCHGEAR / MCC 400V	3000-MCC-0003	1
5	ISOLATED PHASE BUS DUCT	3000-BD-0001	1
6	ISOLATED PHASE BUS DUCT	3000-BD-0002	1
7	NON PHASE SEGREGATED BUS DUCT	3000-BD-0003	1
8	NON PHASE SEGREGATED BUS DUCT	3000-BD-0004	1
9	NON PHASE SEGREGATED BUS DUCT	3000-BD-0005	1
10	NON PHASE SEGREGATED BUS DUCT	3000-BD-0006	1
11	NON PHASE SEGREGATED BUS DUCT	3000-BD-0007	1
12	NON PHASE SEGREGATED BUS DUCT	3000-BD-0008	1
13	BATTERY CHARGER	3000-BAC-0002	1
14	110V DC DISTRIBUTION BOARD	3000-PDC-0002	1
15	SMALL POWER DISTRIBUTION PANEL, 400/230VAC	3000-DP-2001	1
16	NORMAL LIGHTING PANEL, 400/230VAC	3000-NLP-2001	1
17	NON UPS POWER DISTRIBUTION PANEL, 400/230VAC	3000-DP-2002	1
18	SPACE HEATER DISTRIBUTION PANEL	3000-DP-2003	1
19	ESSENTIAL LIGHTING PANEL, 400/230VAC	3000-ELP-2001	1
20	LOCKOUT STATION	TBD	1
21	TAGGING STATION	TBD	1
22	FIRE ALARM PANEL	3000-FCP-0002	1
23	CORK BOARD	TBD	1
24	LV VARIABLE FREQUENCY DRIVE	TBD	10
25	VESDA PANEL	3000-ZZE-0005	1
26	HVAC POWER DISTRIBUTION PANEL	3000-DP-2004	1
27	SHOCK RESUSCITATION CHART (DRSABCD)	TBD	1
28	INTERPOSING RELAY PANEL	3000-ZZE-0008	1
29	HVAC CONTROL PANEL	3000-CP-0002	1
30	TOOLS/SPARE CABINET	TBD	1
31	STORAGE CABINET	TBD	1
32	PHONE & DRAWING TABLE	TBD	1
33	POWER MANAGEMENT SYSTEM CABINET	3000-PMS-0001	
34	BATTERY DISCONNECTOR SWITCH A FOR 110VDC UPS	3000-DS-0004A/B	2
35	BATTERY DISCONNECTOR SWITCH A FOR 400V AC UPS	3000-DS-0003A/B	2
36	UNINTERRUPTED POWER SUPPLY (UPS)	3000-UPS-0001	1
37	UPS DISTRIBUTION BOARD, 400/230VAC	3000-UPD-0001	1
38	CORK BOARD	TBD	1
39	BATTERY FOR 400VAC UPS	3000-BAT-0003A/B	2
40	BATTERY FOR 110VDC UPS	3000-BAT-0004A/B	2
41	DISPLAY CASES FOR SUBSTATION'S SINGLE LINE DIAGRAMS (Laminated SLD - to refer sheet 1 - Attachment 01)	-	1 lot
42	LIFTING DEVICE FOR MV PANELS CIRCUIT BREAKER	-	1
43	LIFTING DEVICE FOR LV PANELS CIRCUIT BREAKER	-	1
44	LIFTING DEVICE FOR BATTERIES	-	1
45	TOOLS FOR MAINTENANCE CABINET	TBD	1 lot
46	FIBER OPTIC PANEL (FOPP)	TBD	1

No.	Description	Tag Number	Quantity
3000-ER-0002 - Complete U&O Substation			
<i>(For Equipment)</i>			
B	*SUB TOTAL COMPLETE BUILDING INCLUSIVE OF BUT NOT LIMITED TO:		
1	PREFAB. BUILDING - SUB VENDOR PRICE	3000-ER-0002	1 lot
	PREFAB. BUILDING - BIDDER FEE		
2	COMPLETE HVAC SYSTEM (INCLUDING DUCTING, WIRING PANEL BOARD, UCP, ETC..) ROOF MOUNTED. COMPLETE WITH ROOF ACCESS (ONE STAIRS+CAGE LADDERS)	TBD	1 lot
3	SMALL POWER DISTRIBUTION PANEL	TBD	1
4	INDOOR NORMAL LIGHTING PANEL (NO PHOTOCELL CONTROLLED, INCLUDING LIGHTING FIXTURES AND JBs)	TBD	1
5	INDOOR NORMAL LIGHTING PANEL (PHOTOCELL CONTROLLED, INCLUDING LIGHTING FIXTURES AND JBs)	TBD	1
6	INDOOR ESSENTIAL LIGHTING PANEL (NO PHOTOCELL CONTROLLED, INCLUDING LIGHTING FIXTURES AND JBs)	TBD	1
7	INDOOR ESSENTIAL LIGHTING PANEL (PHOTOCELL CONTROLLED, INCLUDING LIGHTING FIXTURES AND JBs)	TBD	1
8	EXIT LIGHTS	TBD	1 lot
9	F&G ALARM PANEL&COMPLETE SYSTEM	TBD	1
10	HIGH SENSIVITY SMOKE DETECTION PANEL (VESDA)	TBD	2
11	TELECOM EQUIPMENT INSTALLATION ACCORDING TO CCSJV-TITB-027 AND RELEVANT LAYOUTS	-	1 lot
12	EXTERNAL MODULE PLATFORM AND WALKWAYS, INCLUDING STAIRS, HANDRAILS, ETC..	-	1 lot
13	INSTALLATION AND TESTING OF FREE ISSUE EQUIPMENT PROVIDED BY OTHERS (GCP, PDP, TELECOM PANELS, ETC..) - ITEM LIST ACCORDING TO ATTACHMENT 9	-	1 lot
14	EYE WASH	TBD	1
15	OUTDOOR BUS DUCT SUPPORTS	-	1 lot
16	INTERNAL/ EXTERNAL LIGHTING INCLUDING WIRING & CABLING	-	1 lot
17	SUBSTATION INTERNAL GROUNDING & LIGHTNING SYSTEM	-	1 lot
18	SUBSTATIONS INTERNAL POWER AND CONTROL CABLING INTERCONNECTING PESB EQUIPMENTS (INCLUDING THOSE FOR SHIP LOOSE ITEMS)	-	1 lot
19	COMPLETE CABLE TRAYS SYSTEM INCLUDING SUPPORTS FITTINGS, ETC..	-	1 lot
20	SUBSTATIONS GLAND BOXES (INCLUDING NON-MAGNETIC PLATE), SUPPLY AND INSTALLATION FOR CABLE ENTRY INCLUDING ANY RACKS/SUPPORTS FOR CABLES FIXING COMING FROM FIELD	-	1 lot
21	INTEGRATED TEST AT SUBSTATION YARD	-	1 lot
22	AIR LOCK	-	1 lot
25	SEAWORTHY PACKING	-	1 lot
C	*SUB TOTAL INSTALLATION AND COMMISSIONING SPARE PART:		
1	SET OF COMMISSIOING SPARES MV 6.6KV	-	1 lot
2	SET OF COMMISSIONING SPARES LV SWITCHGEAR MCC	-	1 lot
3	SET OF COMMISSIONING SPARES PESB (BUILDING)	-	1 lot
4	SET OF COMMISSIONING SPARES DC CHARGER	-	1 lot
5	SET OF COMMISSIONING SPARES FOR DISTRIBUTION BOARD	-	1 lot
6	SET OF COMMISSIONING SPARES FOR MV AND LV BUSDUCT	-	1 lot
7	SET OF COMMISSIONING SPARES FOR PMS	-	1 lot

No.	Description	Tag Number	Quantity
3000-ER-0002 - Complete U&O Substation			
<i>(For Equipment)</i>			
D	SET OF SPECIAL TOOLS FOR EQUIPMENT INSTALLED IN PESB		1 lot
E	COMPLETE SET OF PESB LIFTING GEAR (SPREADER BARS, LIFTING TOOLS,ETC.)		1 lot

No.	Description	Tag Number	Quantity
4100-ER-0001 - Complete Urea Storage			
(For Equipment)			
A	*SUB TOTAL OF MAIN EQUIPMENT AND DEVICES:		
1	LV SWITCHGEAR / MCC 400V	4100-MCC-0001	1
2	NON PHASE SEGREGATED BUS DUCT	4100-BD-0001	1
3	NON PHASE SEGREGATED BUS DUCT	4100-BD-0002	1
4	SMALL POWER DISTRIBUTION PANEL, 400/230VAC	TBD	1
5	NORMAL LIGHTING PANEL, 400/230VAC	TBD	1
6	UPS DISTRIBUTION PANEL, 400/230VAC	TBD	1
7	110V DC DISTRIBUTION BOARD	TBD	1
8	BATTERY CHARGER	4100-BAC-0001	1
9	BATTERY BANK-A FOR 110VDC	4100-BAT-0001A	1
10	BATTERY BANK-B FOR 110VDC	4100-BAT-0001B	1
11	LOCKOUT STATION	TBD	1
12	CIRCUIT BREAKER REMOVABLE TRUCK	TBD	1
13	TAGGING UNIT	TBD	1
14	PMS PANEL	TBD	1
15	LV VARIABLE FREQUENCY DRIVE	TBD	14
16	INTERPOSING RELAY PANEL	4100-ZZE-0002	1
17	NON UPS POWER DISTRIBUTION BOARD 400/230V AC	TBD	1
18	SPACE HEATER DISTRIBUTION PANEL	TBD	1
19	EMERGENCY LIGHTING PANEL < 400/230VAC	TBD	1
20	VESDA PANEL	4100-ZZE-0001	1
21	FIRE ALARM PANEL	4100-FCP-0001	1
22	HVAC CONROL PANEL	4100-CP-0001	1
23	BATTERY DISCONNECTOR SWITCH-A	4100-DS-0001	1
24	BATTERY DISCONNECTOR SWITCH-B	4100-DS-0002	1
25	TOOLS/SPARE CABINET	TBD	1
26	STORAGE CABINET	TBD	10
27	PHONE & DRAWING TABLE	TBD	1
28	CORK BOARD	TBD	1
29	HVAC POWER DISTRIBUTION PANEL	TBD	1
30	DISPLAY CASES FOR SUBSTATION'S SINGLE LINE DIAGRAMS (Laminated SLD - to refer sheet 1 - Attachment 01)	-	1 lot
31	LIFTING DEVICE FOR LV PANELS CIRCUIT BREAKER	-	1
32	LIFTING DEVICE FOR BATTERIES	-	1
33	TOOLS FOR MAINTENANCE CABINET	TBD	1 lot
34	FOPP PANEL	TBD	1
B	*SUB TOTAL COMPLETE BUILDING INCLUSIVE OF BUT NOT LIMITED TO:		
1	PREFAB. BUILDING - SUB VENDOR PRICE	4100-ER-0001	1 lot
	PREFAB. BUILDING - BIDDER FEE		
2	COMPLETE HVAC SYSTEM (INCLUDING DUCTING, WIRING PANEL BOARD, UCP, ETC..) ROOF MOUNTED. COMPLETE WITH ROOF ACCESS (ONE STAIRS+CAGE LADDERS)	TBD	1 lot
3	SMALL POWER DISTRIBUTION PANEL	TBD	1
4	INDOOR NORMAL LIGHTING PANEL (NO PHOTOCELL CONTROLLED, INCLUDING LIGHTING FIXTURES AND JBs)	TBD	1
5	INDOOR NORMAL LIGHTING PANEL (PHOTOCELL CONTROLLED, INCLUDING LIGHTING FIXTURES AND JBs)	TBD	1
6	INDOOR ESSENTIAL LIGHTING PANEL (NO PHOTOCELL CONTROLLED, INCLUDING LIGHTING FIXTURES AND JBs)	TBD	1
7	INDOOR ESSENTIAL LIGHTING PANEL (PHOTOCELL CONTROLLED, INCLUDING LIGHTING FIXTURES AND JBs)	TBD	1
8	EXIT LIGHTS	TBD	1 lot
9	F&G ALARM PANEL&COMPLETE SYSTEM	TBD	1
10	HIGH SENSIVITY SMOKE DETECTION PANEL (VESDA)	TBD	2
11	TELECOM EQUIPMENT INSTALLATION ACCORDING TO CCSJV-TITB-027 AND RELEVANT LAYOUTS	-	1 lot
12	EXTERNAL MODULE PLATFORM AND WALKWAYS, INCLUDING STAIRS, HANDRAILS, ETC..	-	1 lot
13	INSTALLATION AND TESTING OF FREE ISSUE EQUIPMENT PROVIDED BY OTHERS (GCP, PDP, TELECOM PANELS, ETC..) - ITEM LIST ACCORDING TO ATTACHMENT 9	-	1 lot

No.	Description	Tag Number	Quantity
4100-ER-0001 - Complete Urea Storage			
(For Equipment)			
14	EYE WASH	TBD	1
15	OUTDOOR BUS DUCT SUPPORTS	-	1 lot
16	INTERNAL/ EXTERNAL LIGHTING INCLUDING WIRING & CABLING	-	1 lot
17	SUBSTATION INTERNAL GROUNDING & LIGHTNING SYSTEM	-	1 lot
18	SUBSTATIONS INTERNAL POWER AND CONTROL CABLING INTERCONNECTING PESB EQUIPMENTS (INCLUDING THOSE FOR SHIP LOOSE ITEMS)	-	1 lot
19	COMPLETE CABLE TRAYS SYSTEM INCLUDING SUPPORTS FITTINGS, ETC..	-	1 lot
20	SUBSTATIONS GLAND BOXES (INCLUDING NON-MAGNETIC PLATE), SUPPLY AND INSTALLATION FOR CABLE ENTRY INCLUDING ANY RACKS/SUPPORTS FOR CABLES FIXING COMING FROM FIELD	-	1 lot
21	INTEGRATED TEST AT SUBSTATION YARD	-	1 lot
22	AIR LOCK	-	1 lot
25	SEAWORTHY PACKING	-	1 lot
C	*SUB TOTAL INSTALLATION AND COMMISSIONING SPARE PART:		
1	SET OF COMMISSIONING SPARES LV SWITCHGEAR MCC	-	1 lot
2	SET OF COMMISSIONING SPARES PESB (BUILDING)	-	1 lot
3	SET OF COMMISSIONING SPARES DC CHARGER	-	1 lot
4	SET OF COMMISSIONING SPARES FOR DISTRIBUTION BOARD	-	1 lot
5	SET OF COMMISSIONING SPARES FOR MV AND LV BUSDUCT	-	1 lot
6	SET OF COMMISSIONING SPARES FOR PMS	-	1 lot
D	SET OF SPECIAL TOOLS FOR EQUIPMENT INSTALLED IN PESB	-	1 lot
E	COMPLETE SET OF PESB LIFTING GEAR (SPREADER BARS, LIFTING TOOLS,ETC.)		1 lot

No.	Description	Tag Number	Quantity
4140-ER-0001 - Complete Port Substation			
(For Equipment)			
A	*SUB TOTAL OF MAIN EQUIPMENT AND DEVICES:		
1	MV SWITCHGEAR 6.6kV	4140-SWG-0001	1
2	LV SWITCHGEAR / MCC 400V	4140-MCC-0001	1
3	LV SWITCHGEAR / MCC 400V	4130-MCC-0001	1
4	LV SWITCHGEAR / MCC 400V	4130-MCC-0002	1
5	LV SWITCHGEAR / MCC 400V	4130-MCC-0003	1
6	NON PHASE SEGREGATED BUS DUCT	4140-BD-0001	1
7	CIRCUIT BREAKER REMOVABLE TRUCK	4140-BCP-0001	1
8	UNINTERRUPTED POWER SUPPLY (UPS)	4140-UPS-0001	1
9	UPS DISTRIBUTION BOARD, 400/230VAC	4140-UPD-0001	1
10	JB FOR TEMPORARY DG	TBD	1
11	BATTERY BANK-A FOR 400VAC UPS	4140-BAT-0001A	1
12	BATTERY BANK-B FOR 400VAC UPS	4140-BAT-0001B	1
13	BATTERY CHARGER	4140-BAC-0001	1
14	BATTERY BANK-A FOR 110VDC	4100-BAT-0002A	1
15	BATTERY BANK-B FOR 110VDC	4100-BAT-0002B	1
16	110V DC DISTRIBUTION BOARD	4140-PDC-0001	1
17	SMALL POWER DISTRIBUTION PANEL, 400/230VAC	TBD	1
18	NORMAL LIGHTING PANEL, 400/230VAC	TBD	1
19	NON UPS POWER DISTRIBUTION BOARD 400/230V AC	TBD	1
20	SPACE HEATER DISTRIBUTION PANEL	TBD	1
21	EMERGENCY LIGHTING PANEL < 400/230VAC	TBD	1
22	LV VARIABLE FREQUENCY DRIVE	TBD	5
23	LOCKOUT STATION	TBD	1
24	PMS PANEL	TBD	1
25	FIRE ALARM PANEL	4140-FCP-0001	1
26	INTERPOSING RELAY PANEL	4140-ZZE-0002	1
27	VESDA PANEL	4140-ZZE-0001	1
28	HVAC CONROL PANEL	410-40-CP-0001	1
29	BATTERY DISCONNECTOR SWITCH-A (AC UPS)	4140-DS-0001	1
30	BATTERY DISCONNECTOR SWITCH-B (AC UPS)	4140-DS-0002	1
31	TOOLS/SPARE CABINET	TBD	1
32	STORAGE CABINET	TBD	1
33	PHONE & DRAWING TABLE	TBD	1
34	CORK BOARD	TBD	1
35	TAGGING STATION	TBD	1
36	HVAC POWER DISTRIBUTION PANEL	TBD	1
37	BATTERY DISCONNECTOR SWITCH-A (DC UPS)	4140-DS-0003	1
38	BATTERY DISCONNECTOR SWITCH-B (DC UPS)	4140-DS-0004	1
39	DISPLAY CASES FOR SUBSTATION'S SINGLE LINE DIAGRAMS (Laminated SLD - to refer sheet 1 - Attachment 01)	-	1 lot
40	LIFTING DEVICE FOR MV PANELS CIRCUIT BREAKER	-	1
41	LIFTING DEVICE FOR LV PANELS CIRCUIT BREAKER	-	1
42	LIFTING DEVICE FOR BATTERIES	-	1
43	TOOLS FOR MAINTENANCE CABINET	TBD	1 lot
44	FOPP PANEL	TBD	1

No.	Description	Tag Number	Quantity
4140-ER-0001 - Complete Port Substation			
<i>(For Equipment)</i>			
B	*SUB TOTAL COMPLETE BUILDING INCLUSIVE OF BUT NOT LIMITED TO:		
1	PREFAB. BUILDING - SUB VENDOR PRICE	4140-ER-0001	1 lot
	PREFAB. BUILDING - BIDDER FEE		
2	COMPLETE HVAC SYSTEM (INCLUDING DUCTING, WIRING PANEL BOARD, UCP, ETC..) ROOF MOUNTED. COMPLETE WITH ROOF ACCESS (ONE STAIRS+CAGE LADDERS)	TBD	1 lot
3	SMALL POWER DISTRIBUTION PANEL	TBD	1
4	INDOOR NORMAL LIGHTING PANEL (NO PHOTOCELL CONTROLLED, INCLUDING LIGHTING FIXTURES AND JBs)	TBD	1
5	INDOOR NORMAL LIGHTING PANEL (PHOTOCELL CONTROLLED, INCLUDING LIGHTING FIXTURES AND JBs)	TBD	1
6	INDOOR ESSENTIAL LIGHTING PANEL (NO PHOTOCELL CONTROLLED, INCLUDING LIGHTING FIXTURES AND JBs)	TBD	1
7	INDOOR ESSENTIAL LIGHTING PANEL (PHOTOCELL CONTROLLED, INCLUDING LIGHTING FIXTURES AND JBs)	TBD	1
8	EXIT LIGHTS	TBD	1 lot
9	F&G ALARM PANEL&COMPLETE SYSTEM	TBD	1
10	HIGH SENSIVITY SMOKE DETECTION PANEL (VESDA)	TBD	2
11	TELECOM EQUIPMENT INSTALLATION ACCORDING TO CCSJV-TITB-027 AND RELEVANT LAYOUTS	-	1 lot
12	EXTERNAL MODULE PLATFORM AND WALKWAYS, INCLUDING STAIRS, HANDRAILS, ETC..	-	1 lot
13	INSTALLATION AND TESTING OF FREE ISSUE EQUIPMENT PROVIDED BY OTHERS (GCP, PDP, TELECOM PANELS, ETC..) - ITEM LIST ACCORDING TO ATTACHMENT 9	-	1 lot
14	EYE WASH	TBD	1
15	OUTDOOR BUS DUCT SUPPORTS	-	1 lot
16	INTERNAL/ EXTERNAL LIGHTING INCLUDING WIRING & CABLING	-	1 lot
17	SUBSTATION INTERNAL GROUNDING & LIGHTNING SYSTEM	-	1 lot
18	SUBSTATIONS INTERNAL POWER AND CONTROL CABLING INTERCONNECTING PESB EQUIPMENTS (INCLUDING THOSE FOR SHIP LOOSE ITEMS)	-	1 lot
19	COMPLETE CABLE TRAYS SYSTEM INCLUDING SUPPORTS FITTINGS, ETC..	-	1 lot
20	SUBSTATIONS GLAND BOXES (INCLUDING NON-MAGNETIC PLATE), SUPPLY AND INSTALLATION FOR CABLE ENTRY INCLUDING ANY RACKS/SUPPORTS FOR CABLES FIXING COMING FROM FIELD	-	1 lot
21	INTEGRATED TEST AT SUBSTATION YARD	-	1 lot
22	AIR LOCK	-	1 lot
25	SEAWORTHY PACKING	-	1 lot
C	*SUB TOTAL INSTALLATION AND COMMISSIONING SPARE PART:		
1	SET OF COMMISSIOING SPARES MV 6.6KV	-	1 lot
2	SET OF COMMISSIONING SPARES LV SWITCHGEAR MCC	-	1 lot
3	SET OF COMMISSIONING SPARES PESB (BUILDING)	-	1 lot
4	SET OF COMMISSIONING SPARES DC CHARGER	-	1 lot
5	SET OF COMMISSIONING SPARES FOR DISTRIBUTION BOARD	-	1 lot
6	SET OF COMMISSIONING SPARES FOR MV AND LV BUSDUCT	-	1 lot
7	SET OF COMMISSIONING SPARES FOR PMS	-	1 lot

<u>No.</u>	<u>Description</u>	<u>Tag Number</u>	<u>Quantity</u>
4140-ER-0001 - Complete Port Substation			
<i>(For Equipment)</i>			
D	SET OF SPECIAL TOOLS FOR EQUIPMENT INSTALLED IN PESB	-	1 lot
E	COMPLETE SET OF PESB LIFTING GEAR (SPREADER BARS, LIFTING TOOLS,ETC.)		1 lot

No.	Description	Tag Number	Quantity
4400-ER-0001 - Complete SITE F Substation			
(For Equipment)			
A	*SUB TOTAL OF MAIN EQUIPMENT AND DEVICES:		
1	LV SWITCHGEAR / PCC 400V	4400-PCC-0001	1
2	NON PHASE SEGREGATED BUS DUCT	4400-BD-0001	1
3	AC UPS	4400-UPS-0001	1
4	VESDA	4400-ZZE-0001	1
5	LIGHTING AND SMALL POWER DISTRIBUTION PANEL, 400/230VAC	4400-NLP-1001	1
6	UPS DISTRIBUTION PANEL, 400/230VAC	4400-UPD-0001	1
7	BATTERY FOR AC UPS	4400-BAT-0001A	1
8	BATTERY FOR AC UPS	4400-BAT-0001B	1
9	INSTRUMENT PDP PANEL	4400-INST-PDP-0001	1
10	INTERPOSING RELAY PANEL	TBD	1
11	HVAC POWER PANEL	4400-DP-1004	1
12	FIRE ALARM PANEL	4400-FCP_0001	1
13	PMS PANEL	TBD	1
14	LOCKOUT STATION	TBD	1
15	TOOLS/SPARE CABINET	TBD	1
16	STORAGE CABINET	TBD	1
17	PHONE & DRAWING TABLE	TBD	1
18	CORK BOARD	TBD	1
19	TAGGING STATION	TBD	1
20	CIRCUIT BREAKER REMOVABLE TRUCK	TBD	1
21	NON UPS DISTRIBUTION PANEL	4400-DP-1002	1
22	SPACE HEATER DISTRIBUTION PANEL	4400-DP-1003	1
23	HVAC CONTROL PANEL	4400-CP-0001	1
24	BATTERY ISOLATOR	4400-DS-0001	1
25	BATTERY ISOLATOR	4400-DS-0002	1
26	DISPLAY CASES FOR SUBSTATION'S SINGLE LINE DIAGRAMS (Laminated SLD - to refer sheet 1 - Attachment 01)	-	1 lot
27	LIFTING DEVICE FOR LV PANELS CIRCUIT BREAKER	-	1
28	LIFTING DEVICE FOR BATTERIES	-	1
29	TOOLS FOR MAINTENANCE CABINET	TBD	1 lot
30	FOPP PANEL	TBD	1
B	*SUB TOTAL COMPLETE BULDING INCLUSIVE OF BUT NOT LIMITED TO:		
1	PREFAB. BUILDING - SUB VENDOR PRICE	4400-ER-0001	1 lot
	PREFAB. BUILDING - BIDDER FEE		
2	COMPLETE HVAC SYSTEM (INCLUDING DUCTING, WIRING PANEL BOARD, UCP, ETC..) ROOF MOUNTED. COMPLETE WITH ROOF ACCESS (ONE STAIRS+CAGE LADDERS)	TBD	1 lot
3	SMALL POWER DISTRIBUTION PANEL	TBD	1
4	INDOOR NORMAL LIGHTING PANEL (NO PHOTOCCELL CONTROLLED, INCLUDING LIGHTING FIXTURES AND JBs)	TBD	1
5	INDOOR NORMAL LIGHTING PANEL (PHOTOCCELL CONTROLLED, INCLUDING LIGHTING FIXTURES AND JBs)	TBD	1
6	INDOOR ESSENTIAL LIGHTING PANEL (NO PHOTOCCELL CONTROLLED, INCLUDING LIGHTING FIXTURES AND JBs)	TBD	1
7	INDOOR ESSENTIAL LIGHTING PANEL (PHOTOCCELL CONTROLLED, INCLUDING LIGHTING FIXTURES AND JBs)	TBD	1
8	EXIT LIGHTS	TBD	1 lot
9	F&G ALARM PANEL&COMPLETE SYSTEM	TBD	1
10	HIGH SENSIVITY SMOKE DETECTION PANEL (VESDA)	TBD	2
11	TELECOM EQUIPMENT INSTALLATION ACCORDING TO CCSJV-TITB-027 AND RELEVANT LAYOUTS	-	1 lot
12	EXTERNAL MODULE PLATFORM AND WALKWAYS, INCLUDING STAIRS, HANDRAILS, ETC..	-	1 lot
13	INSTALLATION AND TESTING OF FREE ISSUE EQUIPMENT PROVIDED BY OTHERS (GCP, PDP, TELECOM PANELS, ETC..) - ITEM LIST ACCORDING TO ATTACHMENT 9	-	1 lot
14	EYE WASH	TBD	1
15	OUTDOOR BUS DUCT SUPPORTS	-	1 lot
16	INTERNAL/ EXTERNAL LIGHTING INCLUDING WIRING & CABLING	-	1 lot

<u>No.</u>	<u>Description</u>	<u>Tag Number</u>	<u>Quantity</u>
4400-ER-0001 - Complete SITE F Substation			
(For Equipment)			
17	SUBSTATION INTERNAL GROUNDING & LIGHTNING SYSTEM	-	1 lot
18	SUBSTATIONS INTERNAL POWER AND CONTROL CABLING INTERCONNECTING PESB EQUIPMENTS (INCLUDING THOSE FOR SHIP LOOSE ITEMS)	-	1 lot
19	COMPLETE CABLE TRAYS SYSTEM INCLUDING SUPPORTS FITTINGS, ETC..	-	1 lot
20	SUBSTATIONS GLAND BOXES (INCLUDING NON-MAGNETIC PLATE), SUPPLY AND INSTALLATION FOR CABLE ENTRY INCLUDING ANY RACKS/SUPPORTS FOR CABLES FIXING COMING FROM FIELD	-	1 lot
21	INTEGRATED TEST AT SUBSTATION YARD	-	1 lot
22	AIR LOCK	-	1 lot
25	SEAWORTHY PACKING	-	1 lot
C	*SUB TOTAL INSTALLATION AND COMMISSIONING SPARE PART:		
1	SET OF COMMISSIONING SPARES MV 6.6KV	-	1 lot
2	SET OF COMMISSIONING SPARES LV SWITCHGEAR MCC	-	1 lot
3	SET OF COMMISSIONING SPARES PESB (BUILDING)	-	1 lot
4	SET OF COMMISSIONING SPARES DC CHARGER	-	1 lot
5	SET OF COMMISSIONING SPARES FOR DISTRIBUTION BOARD	-	1 lot
6	SET OF COMMISSIONING SPARES FOR MV AND LV BUSDUCT	-	1 lot
7	SET OF COMMISSIONING SPARES FOR PMS	-	1 lot
D	SET OF SPECIAL TOOLS FOR EQUIPMENT INSTALLED IN PESB		
		-	1 lot
E	COMPLETE SET OF PESB LIFTING GEAR (SPREADER BARS, LIFTING TOOLS,ETC.)		
			1 lot

No.	Description	Tag Number	Quantity
3600-ER-0001 - Power Generation Substation			
(For Equipment)			
A	*SUB TOTAL OF MAIN EQUIPMENT AND DEVICES:		
1	MV SWITCHGEAR 6.6KV	3600-SWG-0001	1
2	SPACE HEATER DISTRIBUTION PANEL	TBD	1
3	DISPLAY CASES FOR SUBSTATION'S SINGLE LINE DIAGRAMS (Laminated SLD - to refer sheet 1 - Attachment 01)	-	1 lot
4	LIFTING DEVICE FOR MV PANELS CIRCUIT BREAKER	-	1
5	LIFTING DEVICE FOR BATTERIES	-	1
6	TOOLS FOR MAINTENANCE CABINET	TBD	1 lot
7	FOPP PANEL	TBD	1
B	*SUB TOTAL COMPLETE BUILDING INCLUSIVE OF BUT NOT LIMITED TO:		
1	PREFAB. BUILDING - SUB VENDOR PRICE	3600-ER-0001	1 lot
	PREFAB. BUILDING - BIDDER FEE		
2	COMPLETE HVAC SYSTEM (INCLUDING DUCTING, WIRING PANEL BOARD, UCP, ETC..) ROOF MOUNTED. COMPLETE WITH ROOF ACCESS (ONE STAIRS+CAGE LADDERS)	TBD	1 lot
3	SMALL POWER DISTRIBUTION PANEL	TBD	1
4	INDOOR NORMAL LIGHTING PANEL (NO PHOTOCELL CONTROLLED, INCLUDING LIGHTING FIXTURES AND JBs)	TBD	1
5	INDOOR NORMAL LIGHTING PANEL (PHOTOCELL CONTROLLED, INCLUDING LIGHTING FIXTURES AND JBs)	TBD	1
6	INDOOR ESSENTIAL LIGHTING PANEL (NO PHOTOCELL CONTROLLED, INCLUDING LIGHTING FIXTURES AND JBs)	TBD	1
7	INDOOR ESSENTIAL LIGHTING PANEL (PHOTOCELL CONTROLLED, INCLUDING LIGHTING FIXTURES AND JBs)	TBD	1
8	EXIT LIGHTS	TBD	1 lot
9	F&G ALARM PANEL&COMPLETE SYSTEM	TBD	1
10	HIGH SENSIVITY SMOKE DETECTION PANEL (VESDA)	TBD	2
11	TELECOM EQUIPMENT INSTALLATION ACCORDING TO CCSJV-TITB-027 AND RELEVANT LAYOUTS	-	1 lot
12	EXTERNAL MODULE PLATFORM AND WALKWAYS, INCLUDING STAIRS, HANDRAILS, ETC..	-	1 lot
13	INSTALLATION AND TESTING OF FREE ISSUE EQUIPMENT PROVIDED BY OTHERS (GCP, PDP, TELECOM PANELS, ETC..) - ITEM LIST ACCORDING TO ATTACHMENT 9	-	1 lot
14	EYE WASH	TBD	1
15	OUTDOOR BUS DUCT SUPPORTS	-	1 lot
16	INTERNAL/ EXTERNAL LIGHTING INCLUDING WIRING & CABLING	-	1 lot
17	SUBSTATION INTERNAL GROUNDING & LIGHTNING SYSTEM	-	1 lot
18	SUBSTATIONS INTERNAL POWER AND CONTROL CABLING INTERCONNECTING PESB EQUIPMENTS (INCLUDING THOSE FOR SHIP LOOSE ITEMS)	-	1 lot
19	COMPLETE CABLE TRAYS SYSTEM INCLUDING SUPPORTS FITTINGS, ETC..	-	1 lot
20	SUBSTATIONS GLAND BOXES (INCLUDING NON-MAGNETIC PLATE), SUPPLY AND INSTALLATION FOR CABLE ENTRY INCLUDING ANY RACKS/SUPPORTS FOR CABLES FIXING COMING FROM FIELD	-	1 lot

No.	Description	Tag Number	Quantity
3600-ER-0001 - Power Generation Substation			
<i>(For Equipment)</i>			
21	INTEGRATED TEST AT SUBSTATION YARD	-	1 lot
22	AIR LOCK	-	1 lot
25	SEAWORTHY PACKING	-	1 lot
C	*SUB TOTAL INSTALLATION AND COMMISSIONING SPARE PART:		
1	SET OF COMMISSIONING SPARES MV 6.6KV	-	1 lot
2	SET OF COMMISSIONING SPARES PESB (BUILDING)	-	1 lot
3	SET OF COMMISSIONING SPARES DC CHARGER	-	1 lot
4	SET OF COMMISSIONING SPARES FOR DISTRIBUTION BOARD	-	1 lot
5	SET OF COMMISSIONING SPARES FOR PMS	-	1 lot
D	SET OF SPECIAL TOOLS FOR EQUIPMENT INSTALLED IN PESB		
		-	1 lot
E	COMPLETE SET OF PESB LIFTING GEAR (SPREADER BARS, LIFTING TOOLS,ETC.)		
			1 lot

No.	Description	Tag Number	Quantity
3500-ER-0001 - Complete ASU Substation			
<i>(For Equipment)</i>			
A	*SUB TOTAL OF MAIN EQUIPMENT AND DEVICES:		
1	MV SWITCHGEAR 11kV	3500-SWG-0001	1
2	MV SWITCHGEAR 11kV	3500-SWG-0002	1
3	LV SWITCHGEAR / MCC 400V	3500-MCC-0001	1
4	LV EMERGENCY SWITCHGEAR / MCC 400V	3500-MCC-0002	1
5	BUS DUCT	3500-BD-0001	1
6	BUS DUCT	3500-BD-0002	1
7	BUS DUCT	3500-BD-0003	1
8	LCI STARTING SYSTEM PANEL-1	3500-LCI-0001	1
9	LCI STARTING SYSTEM PANEL-2	3500-LCI-0002	1
10	LCI STEP UP TRANSFORMER-1	3500-TR-0007	1
11	LCI STEP DOWN TRANSFORMER-1	3500-TR-0008	1
12	LCI STEP UP TRANSFORMER-2	3500-TR-0009	1
13	LCI STEP DOWN TRANSFORMER-2	3500-TR-0010	1
14	EXCITER PANEL-1	3500-EXP-0001	1
15	EXCITER PANEL-2	3500-EXP-0002	1
16	EXCITER PANEL-3	3500-EXP-0003	1
17	110V DC DISTRIBUTION BOARD	3500-PDC-0001	1
18	SMALL POWER DISTRIBUTION PANEL, 400/230V AC	TBD	1
19	NORMAL LIGHTING PANEL	TBD	1
20	EMERGENCY LIGHTING PANEL	TBD	1
21	UNINTERRUPTED POWER SUPPLY (UPS)	3500-UPS-0001	1
22	UPS DISTRIBUTION BOARD, 400/230V AC	3500-UPD-0001	1
23	NON UPS POWER DISTRIBUTION PANEL	TBD	1
24	SPACE HEATER DISTRIBUTION PANEL	TBD	1
25	BATTERY FOR 400V AC UPS	3500-BAT-0001A/B	1
26	BATTERY FOR 400V AC UPS	3500-BAT-0002A/B	1
27	BATTERY CHARGER	3500-BAC-0001	1
28	BATTERY ISOLATOR	3500-DS-0001	1
29	BATTERY ISOLATOR	3500-DS-0002	1
30	BUS DUCT	3500-BD-0004	1
31	BUS DUCT	3500-BD-0005	1
32	HVAC POWER DISTRIBUTION PANEL, 400/230V AC	TBD	1
33	HVAC CONTROL PANEL	3500-CP-0001	1
34	VESDA PANEL	3500-ZZE-0001	1
35	INTERPOSING RELAY PANEL	3500-ZZE-0002	1
36	RTCC PANEL FOR 3500-TR-0001	3500-ZZE-0003	1
37	RTCC PANEL FOR 3500-TR-0002	3500-ZZE-0004	1
38	RTCC PANEL FOR 3500-TR-0003	3500-ZZE-0005	1
39	INSTRUMENT PDP PANEL	3500-INST-PDP-0001	1
40	LOCKOUT STATION	TBD	1
41	TAGGING STATION	TBD	1
42	PMS PANEL	TBD	1
43	FIRE ALARM PANEL	3500-FCP-0001	1
44	TELECOMMUNICATION PANEL (3 NUMBERS)	TBD	1
45	REMOTE I/O CABINET (4 NUMBERS)	TBD	1
46	TOOLS/SPARE CABINET	TBD	1
47	STORAGE CABINET	TBD	1
48	PHONE & DRAWING TABLE	TBD	1
49	CIRCUIT BREAKER REMOVABLE TRUCK	TBD	1
50	CORK BOARD	TBD	1
51	SHOCK RESUSCITATION CHART (DRSABCD)	TBD	1
52	LAMINATED SLD	TBD	1
53	BI-DIRECTIONAL AMPLIFIER (BDA)	TBD	1
54	LV VARIABLE FREQUENCY DRIVE	TBD	11
55	BUS DUCT	3500-BD-0006	1
56	BUS DUCT	3500-BD-0007	1
57	DISPLAY CASES FOR SUBSTATION'S SINGLE LINE DIAGRAMS (Laminated SLD - to refer sheet 1 - Attachment 01)	-	1 lot
58	LIFTING DEVICE FOR MV PANELS CIRCUIT BREAKER	-	1
59	LIFTING DEVICE FOR LV PANELS CIRCUIT BREAKER	-	1
60	LIFTING DEVICE FOR BATTERIES	-	1
61	TOOLS FOR MAINTENANCE CABINET	TBD	1 lot

No.	Description	Tag Number	Quantity
3500-ER-0001 - Complete ASU Substation			
(For Equipment)			
62	FOPP PANEL	TBD	1
B	*SUB TOTAL COMPLETE BUILDING INCLUSIVE OF BUT NOT LIMITED TO:		
1	PREFAB. BUILDING - SUB VENDOR PRICE	3500-ER-0001	1 lot
	PREFAB. BUILDING - BIDDER FEE		
2	COMPLETE HVAC SYSTEM (INCLUDING DUCTING, WIRING PANEL BOARD, UCP, ETC..) ROOF MOUNTED. COMPLETE WITH ROOF ACCESS (ONE STAIRS+CAGE LADDERS)	TBD	1 lot
3	SMALL POWER DISTRIBUTION PANEL	TBD	1
4	INDOOR NORMAL LIGHTING PANEL (NO PHOTOCCELL CONTROLLED, INCLUDING LIGHTING FIXTURES AND JBs)	TBD	1
5	INDOOR NORMAL LIGHTING PANEL (PHOTOCCELL CONTROLLED, INCLUDING LIGHTING FIXTURES AND JBs)	TBD	1
6	INDOOR ESSENTIAL LIGHTING PANEL (NO PHOTOCCELL CONTROLLED, INCLUDING LIGHTING FIXTURES AND JBs)	TBD	1
7	INDOOR ESSENTIAL LIGHTING PANEL (PHOTOCCELL CONTROLLED, INCLUDING LIGHTING FIXTURES AND JBs)	TBD	1
8	EXIT LIGHTS	TBD	1 lot
9	F&G ALARM PANEL&COMPLETE SYSTEM	TBD	1
10	HIGH SENSIVITY SMOKE DETECTION PANEL (VESDA)	TBD	2
11	TELECOM EQUIPMENT INSTALLATION ACCORDING TO CCSJV-TITB-027 AND RELEVANT LAYOUTS	-	1 lot
12	EXTERNAL MODULE PLATFORM AND WALKWAYS, INCLUDING STAIRS, HANDRAILS, ETC..	-	1 lot
13	INSTALLATION AND TESTING OF FREE ISSUE EQUIPMENT PROVIDED BY OTHERS (GCP, PDP, TELECOM PANELS, ETC..) - ITEM LIST ACCORDING TO ATTACHMENT 9	-	1 lot
14	EYE WASH	TBD	1
15	OUTDOOR BUS DUCT SUPPORTS	-	1 lot
16	INTERNAL/ EXTERNAL LIGHTING INCLUDING WIRING & CABLING	-	1 lot
17	SUBSTATION INTERNAL GROUNDING & LIGHTNING SYSTEM	-	1 lot
18	SUBSTATIONS INTERNAL POWER AND CONTROL CABLING INTERCONNECTING PESB EQUIPMENTS (INCLUDING THOSE FOR SHIP LOOSE ITEMS)	-	1 lot
19	COMPLETE CABLE TRAYS SYSTEM INCLUDING SUPPORTS FITTINGS, ETC..	-	1 lot
20	SUBSTATIONS GLAND BOXES (INCLUDING NON-MAGNETIC PLATE), SUPPLY AND INSTALLATION FOR CABLE ENTRY INCLUDING ANY RACKS/SUPPORTS FOR CABLES FIXING COMING FROM FIELD	-	1 lot
21	INTEGRATED TEST AT SUBSTATION YARD	-	1 lot
22	AIR LOCK	-	1 lot
25	SEAWORTHY PACKING	-	1 lot
C	*SUB TOTAL INSTALLATION AND COMMISSIONING SPARE PART:		
1	SET OF COMMISSIOING SPARES MV 11KV	-	1 lot
2	SET OF COMMISSIONING SPARES LV SWITCHGEAR MCC	-	1 lot
3	SET OF COMMISSIONING SPARES PESB (BUILDING)	-	1 lot
4	SET OF COMMISSIONING SPARES DC CHARGER	-	1 lot
5	SET OF COMMISSIONING SPARES FOR DISTRIBUTION BOARD	-	1 lot
6	SET OF COMMISSIONING SPARES FOR MV AND LV BUSDUCT	-	1 lot
7	SET OF COMMISSIONING SPARES FOR PMS	-	1 lot
D	SET OF SPECIAL TOOLS FOR EQUIPMENT INSTALLED IN PESB	-	1 lot

<u>No.</u>	<u>Description</u>	<u>Tag Number</u>	<u>Quantity</u>
3500-ER-0001 - Complete ASU Substation			
<i>(For Equipment)</i>			
E	COMPLETE SET OF PESB LIFTING GEAR (SPREADER BARS, LIFTING TOOLS,ETC.)		1 lot