

## Amendment No. 1

OCB No.: PMD/PTDSSP/KBL-75/76-01" Design, Supply, Installation and Commissioning of 400 kV Gas Insulated Substations (GIS) at New Khimti, Barhabise and Lapsipedi"

In accordance with the ITB 8.1 of the bidding document for OCB no. PMD/PTDSSP/KBL-75/76-01" Design, Supply, Installation and Commissioning of 400 kV Gas insulated Substations (GIS) at New Khimti, Barhabise and Lapsipedi", the following amendments have been made in bidding document

S.N.	Clause Ref	Existing	Amendment
1	Vol I, Section 2 Bid data Sheet, Clause ITB 21.1.	The Bidder shall furnish a bid security in the amount of: US\$ 1,058,000.00 or an equivalent amount in Nepalese Rupees (NRs)	The Bidder shall furnish a bid security in the amount of: <b>US\$ 1,220,000.00</b> or an equivalent amount in Nepalese Rupees (NRs)
2	Section 3 - Evaluation and Qualification Criteria Clause 2.5 Subcontractors, Item no.1 Power Transformer (400 kV or higher voltage class)	<p>iv) Must have successfully carried out the complete type test including Dynamic Short Circuit (DSC) test as per IEC over last <b>7 years</b> period as on the originally scheduled date of bid opening in Short-Circuit Testing Liaison (STL) - Accredited Laboratory on :</p> <p>- 400 kV voltage class, three phase 315 MVA (or single phase 3 X 105 MVA ) Transformer</p> <p>(a) However, IF the Bidder/Manufacturer has not conducted the complete type tests including DSC in Short-Circuit Testing Liaison (STL) - Accredited Laboratory THEN the bidder has to submit undertaking letter along with bid to carry out the complete type test on the above mentioned ratings of transformers including DSC in Short-Circuit Testing Liaison (STL)-Accredited Laboratory without any extra cost to the employer.</p> <p>(b) However, IF the Bidder/Manufacturer has conducted the type test including DSC in STL but it is beyond the <b>7 years</b> as on the date of bid opening and or of the higher rating of Transformer THEN the bidder has to submit undertaking letter along with bid to carry out the complete type test on the above mentioned ratings of transformers including DSC in Short-Circuit Testing Liaison (STL)-Accredited Laboratory or in NABL Accredited Laboratory witnessed by - authorized STL and NEA authorized representatives without any extra cost to the Employer.</p>	<p>iv) Must have successfully carried out the complete type test including Dynamic Short Circuit (DSC) test as per IEC over last <b>10 years</b> period as on the originally scheduled date of bid opening in Short-Circuit Testing Liaison (STL) - Accredited Laboratory on :</p> <p>- 400 kV voltage class, three phase 315 MVA (or single phase 3 X 105 MVA ) Transformer</p> <p>(a) However, IF the Bidder/Manufacturer has not conducted the complete type tests including DSC in Short-Circuit Testing Liaison (STL) - Accredited Laboratory THEN the bidder has to submit undertaking letter along with bid to carry out the complete type test on the above mentioned ratings of transformers including DSC in Short-Circuit Testing Liaison (STL)-Accredited Laboratory without any extra cost to the employer.</p> <p>(b) However, IF the Bidder/Manufacturer has conducted the type test including DSC in STL but it is beyond the <b>10 years</b> as on the date of bid opening and or of the higher rating of Transformer THEN the bidder has to submit undertaking letter along with bid to carry out the complete type test on the above mentioned ratings of transformers including DSC in Short-Circuit Testing Liaison (STL)-Accredited Laboratory or in NABL Accredited Laboratory witnessed by - authorized STL and NEA authorized representatives without any extra cost to the Employer.</p>
3	Section 3 - Evaluation and Qualification Criteria Clause 2.5 Subcontractors, Item no.2, GIS (400 kV voltage class)	<p>iv) Must have successfully carried out the complete type test as per IEC over last <b>7 years</b> period as on the originally scheduled date of bid opening in Short-Circuit Testing Liaison (STL) – Accredited Laboratory on 400 kV voltage class GIS Switchgears (Circuit Breaker, Disconnector, Grounding Switches, Instrument Transformers, SF6/Air &amp; Oil Bushing etc.);.</p> <p>However if the manufacturer has not conducted complete type tests in Short-Circuit Testing Liaison (STL)–Accredited Laboratory over last <b>seven (7) years</b> as on the originally scheduled date of bid opening, bidder has to submit undertaking letter along with bid to carry out the complete type test in Short-Circuit Testing Liaison (STL) – Accredited Laboratory from offered Manufacturer without any extra cost to Employer.</p>	<p>iv) Must have successfully carried out the complete type test as per IEC over last <b>10 years</b> period as on the originally scheduled date of bid opening in Short-Circuit Testing Liaison (STL) – Accredited Laboratory on 400 kV voltage class GIS Switchgears (Circuit Breaker, Disconnector, Grounding Switches, Instrument Transformers, SF6/Air &amp; Oil Bushing etc.);.</p> <p>However if the manufacturer has not conducted complete type tests in Short-Circuit Testing Liaison (STL)–Accredited Laboratory over last <b>Ten (10) years</b> as on the originally scheduled date of bid opening, bidder has to submit undertaking letter along with bid to carry out the complete type test in Short-Circuit Testing Liaison (STL) – Accredited Laboratory from offered Manufacturer without any extra cost to Employer.</p>
4	Section 3 - Evaluation and Qualification Criteria Clause 2.5 Subcontractors, Item no.4, Reactors(400 kV or higher voltage class)	<p>iv) Must have successfully carried out the complete type test as per IEC over last <b>7 years</b> period as on the originally scheduled date of bid opening in Reputed Independent International Accredited Testing Laboratory.</p>	<p>iv) Must have successfully carried out the complete type test as per IEC over last <b>10 years</b> period as on the originally scheduled date of bid opening in Reputed Independent International Accredited Testing Laboratory.</p>



		Item No.	Description	Qty	Unit	Item No.	Description	Qty	Unit
5	Vol III, BPS, New Khimti Substation, Price Schedule No. 1 & 4(a): Item no. C) 1,2,3	C)	<b>105 MVA,400/√3 /220/√3/33 kV Single Phase Auto Transformer as specified below</b>			C)	<b>105 MVA,400/√3 /220/√3/33 kV Single Phase Auto Transformer as specified below</b>		
		1	105 MVA,400/√3 /220/√3/33 kV Single Phase Auto Transformer outdoor type, complete with all fittings and accessories including Main Control Cabinet, cooling control cabinet, RTCC panel, OLTC, and On line Dissolved Gas ( Multi Gas) Analysis and moisture monitoring system, online insulating oil drying system (Cartridge type) with optical temperature sensor,necessary arrangement for Delta formation of LV winding & Neutral Formation and Earthing Arrangement, surge protection device and all fittings & accessories as specified/ required for completion of the scope of works as per technical specification (without transformer Oil)	4	Nos.	1	105 MVA,400/√3 /220/√3/33 kV Single Phase Auto Transformer outdoor type, complete with all fittings and accessories including Main Control Cabinet, cooling control cabinet, RTCC panel, OLTC, and On line Dissolved Gas ( Multi Gas) Analysis and moisture monitoring system, online insulating oil drying system (Cartridge type) with optical temperature sensor,necessary arrangement for Delta formation of LV winding & Neutral Formation and Earthing Arrangement, surge protection device and all fittings & accessories as specified/ required for completion of the scope of works as per technical specification (without transformer Oil)	7	Nos.
		2	Insulating oil for 105 MVA,400/√3 /220/√3/33 kV Single Phase Autotransformer (* 1Lot = Oil for 1 Autotransformers )	4	Lot*	2	Insulating oil for 105 MVA,400/√3 /220/√3/33 kV Single Phase Autotransformer (* 1Lot = Oil for 1 Autotransformers )	7	Lot*
		3	33kV Current transformer (NCT) for autotransformer	1	Nos.	3	33kV Current transformer (NCT) for autotransformer	2	Nos.
6	Vol III, BPS, New Khimti Substation, Price Schedule No. 1 & 4(a): Item no. I) 1.1(b) & 1.3	I	<b>CONTROL RELAY AND PROTECTION PANELS (WITH AUTOMATION)</b>			I	<b>CONTROL RELAY AND PROTECTION PANELS (WITH AUTOMATION)</b>		
		1	400kV			1	400kV		
		1.1	Circuit Breaker Relay Panel			1.1	Circuit Breaker Relay Panel		
		b	CB Relay Panel With out Auto Reclose	3	Sets	b	CB Relay Panel With out Auto Reclose	4	Sets
		1.3	Transformer Protection Panel (For both HV & MV side) as per Specification	1	Sets	1.3	Transformer Protection Panel (For both HV & MV side) as per Specification	2	Sets
7	Vol III, BPS, New Khimti Substation, Price Schedule No. 1 & 4(a): Item no. O) e(i)	O	<b>Fire Protection System</b>			O	<b>Fire Protection System</b>		
		e	HVV spray system, Hydrant system and complete U/G & O/G piping and accessories etc. out side the pump house for Transformer / Reactor :			e	HVV spray system, Hydrant system and complete U/G & O/G piping and accessories etc. out side the pump house for Transformer / Reactor :		
		i	105 MVA , 400/220 KV, 1-phase Autotransformer	4	nos	i	105 MVA , 400/220 KV, 1-phase Autotransformer	7	nos
8	Vol III, BPS, New Khimti Substation, Price Schedule No. 1 & 4(a): Item no. Q) 1.1 & 1.2	Q	<b>Cables along with clamps, glands, lugs and straight joints etc.</b>			Q	<b>Cables along with clamps, glands, lugs and straight joints etc.</b>		
		1	220 kV Cable			1	220 kV Cable		
		1.1	220 kV grade 1 core, 1200sq.mm.XLPE insulated copper cable as per technical specification	1.50	km	1.1	220 kV grade 1 core, 1200sq.mm.XLPE insulated copper cable as per technical specification	2.40	km
		1.2	Cable end termination(s) on Gantry/Tower as per technical specification	6	nos.	1.2	Cable end termination(s) on Gantry/Tower as per technical specification	12	nos.
9	Vol III, BPS, New Khimti Substation, Price Schedule No. 1: Item no. Y), i(a,b)	Y	<b>PRE-ENGINEERED BUILDINGS</b>			Y	<b>PRE-ENGINEERED BUILDINGS</b>		
		i)	400 kV GIS Building including all supply materials from abroad except civil works and for civil works refer schedule 4(a)			i)	400 kV GIS Building including all supply materials from abroad except civil works and for civil works refer schedule 4(a)		
		(a)	400 kV GIS Hall	600	Sq. M.	(a)	400 kV GIS Hall	700	Sq. M.
		(b)	AHU/ Panels Room	450	Sq. M.	(b)	AHU/ Panels Room	350	Sq. M.



10	Vol III, BPS, New Khimti Substation, Price Schedule No. 4(a): Civil Construction Works (As per technical specifications), Item no. 23, i(a,b)	23.0	PRE ENGINEERED BUILDINGS			23.0	PRE ENGINEERED BUILDINGS		
		i)	400 KV GIS BUILDING All civil works related to pre-engineered 400 kv GIS Buliding to be supplied as per schedule 1 including internal cable trench, finishing(external & Internal) etc. complete as per technical specification and approved drawings, excluding excavation, PCC, RCC and reinforcement steel which shall be measured and paid seperately under respective items of BPS.			j)	400 KV GIS BUILDING All civil works related to pre-engineered 400 kv GIS Buliding to be supplied as per schedule 1 including internal cable trench, finishing(external & Internal) etc. complete as per technical specification and approved drawings, excluding excavation, PCC, RCC and reinforcement steel which shall be measured and paid seperately under respective items of BPS.		
		(a)	GIS Hall	600	Sq. M.	(a)	GIS Hall	700	Sq. M.
		(b)	AHU/ Panels Room	450	Sq. M.	(b)	AHU/ Panels Room	350	Sq. M.
11	Vol III, BPS, New Khimti Substation, Price Schedule No. 1 & 4(e): Type Test Charges for Type Tests to be conducted abroad.(Common for all	SI.N.	Description of Tests	Testing Location	TEST CHARGES	SI.N.	Description of Tests	Testing Location	TEST CHARGES
					Currency	Amount			Currency
		1	400 kv GIS Equipment- 400 kv Gas Insulated Switchgear tests to be conducted as per relevant IEC				Deleted		
12	Vol III, BPS, Barhabise Substation, Price Schedule No. 1 & 4(a): Item no. C) 1,2,3	Item No.	Description	Qty	Unit	Item No.	Description	Qty	Unit
		C)	53.33 MVA,400/√3 /220/√3/33 kV Single Phase Auto Transformer as specified below			C)	53.33 MVA,400/√3 /220/√3/33 kV Single Phase Auto Transformer as specified below		
		1	53.33 MVA,400/√3 /220/√3/33 kV Single Phase Auto Transformer outdoor type, complete with all fittings and accessories including Main Control Cabinet, cooling control cabinet, RTCC panel, OLTC, and On line Dissolved Gas ( Multi Gas) Analysis and moisture monitoring system, online insulating oil drying system (Cartridge type) with optical temperature sensor,necessary arrangement for Delta formation of LV winding & Neutral Formation and Earthing Arrangement, surge protection device and all fittings & accessories as specified/ required for completion of the scope of works as per technical specification (without transformer Oil)	4	Nos.	1	53.33 MVA,400/√3 /220/√3/33 kV Single Phase Auto Transformer outdoor type, complete with all fittings and accessories including Main Control Cabinet, cooling control cabinet, RTCC panel, OLTC, and On line Dissolved Gas ( Multi Gas) Analysis and moisture monitoring system, online insulating oil drying system (Cartridge type) with optical temperature sensor,necessary arrangement for Delta formation of LV winding & Neutral Formation and Earthing Arrangement, surge protection device and all fittings & accessories as specified/ required for completion of the scope of works as per technical specification (without transformer Oil)	7	Nos.
		2	Insulating oil for 53.33 MVA,400/√3 /220/√3/33 kV Single Phase Autotransformer (* 1Lot = Oil for 1 Autotransformers )	4	Lot*	2	Insulating oil for 53.33 MVA,400/√3 /220/√3/33 kV Single Phase Autotransformer (* 1Lot = Oil for 1 Autotransformers )	7	Lot*
		3	33kV Current transformer (NCT) for autotransformer	1	Nos.	3	33kV Current transformer (NCT) for autotransformer	2	Nos.
13	Vol III, BPS, Barhabise Substation, Price Schedule No. 1 & 4(a): Item no. J) 1.1(b) & 1.3	J	CONTROL RELAY AND PROTECTION PANELS (WITH AUTOMATION)			J	CONTROL RELAY AND PROTECTION PANELS (WITH AUTOMATION)		
		1	400kV			1	400kV		
		1.1	Circuit Breaker Relay Panel			1.1	Circuit Breaker Relay Panel		
		b	CB Relay Panel With out Auto Reclose	6	Sets	b	CB Relay Panel With out Auto Reclose	7	Sets
		1.3	Transformer Protection Panel (For both HV & MV side) as per Specification	1	Sets	1.3	Transformer Protection Panel (For both HV & MV side) as per Specification	2	Sets



14	Vol III, BPS, <b>Barhabise Substation</b> , Price Schedule No. 1 & 4(a): Item no. P) f(i)	<b>P</b>	<b>Fire Protection System</b>			<b>P</b>	<b>Fire Protection System</b>		
		f	HVVV spray system, Hydrant system and complete U/G & O/G piping and accessories etc. out side the pump house for Transformer / Reactor :			f	HVVV spray system, Hydrant system and complete U/G & O/G piping and accessories etc. out side the pump house for Transformer / Reactor :		
		i	53.33 MVA , 400/220 KV, 1-phase Autotransformer	<b>4</b>	nos	i	53.33 MVA , 400/220 KV, 1-phase Autotransformer	<b>7</b>	nos
15	Vol III, BPS, <b>Barhabise Substation</b> , Price Schedule No. 1 & 4(a): Item no. R) 1.1 & 1.2	<b>R</b>	<b>Cables along with clamps, glands, lugs and straight joints etc.</b>			<b>R</b>	<b>Cables along with clamps, glands, lugs and straight joints etc.</b>		
		1	220 kV Cable			1	220 kV Cable		
		1.1	220 kV grade 1 core, <b>1200sq.mm.XLPE insulated copper cable</b> as per technical specification	<b>1.50</b>	km	1.1	220 kV grade 1 core, <b>1200sq.mm.XLPE insulated copper cable</b> as per technical specification	<b>2.40</b>	km
		1.2	Cable end termination(s) on Gantry/Tower as per technical specification	<b>6</b>	nos.	1.2	Cable end termination(s) on Gantry/Tower as per technical specification	<b>12</b>	nos.
16	Vol III, BPS, <b>Barhabise Substation</b> , Price Schedule No. 1 : Item no. Z), i(a,b)	<b>Z</b>	<b>PRE-ENGINEERED BUILDINGS</b>			<b>Z</b>	<b>PRE-ENGINEERED BUILDINGS</b>		
		i)	400 kV GIS Building including all supply materials from abroad except civil works and for civil works refer schedule 4(a)			i)	400 kV GIS Building including all supply materials from abroad except civil works and for civil works refer schedule 4(a)		
		(a)	400 kV GIS Hall	<b>700</b>	Sq. M.	(a)	400 kV GIS Hall	<b>800</b>	Sq. M.
		(b)	AHU/ Panels Room	<b>500</b>	Sq. M.	(b)	AHU/ Panels Room	<b>400</b>	Sq. M.
17	Vol III, BPS, <b>Barhabise Substation</b> , Price Schedule No. 4(a): Civil Construction Works (As per technical specifications), Item no. 23, i(a,b)	23.0	<b>PRE ENGINEERED BUILDINGS</b>			23.0	<b>PRE ENGINEERED BUILDINGS</b>		
		i)	<b>400 KV GIS BUILDING</b> All civil works related to pre-engineered 400 kV GIS Bulding to be supplied as per schedule 1 including internal cable trench, finishing(external & Internal) etc. complete as per technical specification and approved drawings, excluding excavation, PCC, RCC and reinforcement steel which shall be measured and paid seperately under respective items of BPS.			i)	<b>400 KV GIS BUILDING</b> All civil works related to pre-engineered 400 kV GIS Bulding to be supplied as per schedule 1 including internal cable trench, finishing(external & Internal) etc. complete as per technical specification and approved drawings, excluding excavation, PCC, RCC and reinforcement steel which shall be measured and paid seperately under respective items of BPS.		
		(a)	GIS Hall	<b>700</b>	Sq. M.	(a)	GIS Hall	<b>800</b>	Sq. M.
		(b)	AHU/ Panels Room	<b>500</b>	Sq. M.	(b)	AHU/ Panels Room	<b>400</b>	Sq. M.
18	Vol III, BPS, <b>Lapsipedi Substation</b> , Price Schedule No. 1 & 4(a): Item no. C) 1,2	Item No.	Description	Qty	Unit	Item No.	Description	Qty	Unit
		<b>C)</b>	<b>53.33 MVA,400/√3 /220/√3/33 kV Single Phase Auto Transformer as specified below</b>			<b>C)</b>	<b>105 MVA,400/√3 /220/√3/33 kV Single Phase Auto Transformer as specified below</b>		
		1	<b>53.33 MVA,400/√3 /220/√3/33 kV Single Phase Auto Transformer</b> outdoor type, complete with all fittings and accessories including Main Control Cabinet, cooling control cabinet, RTCC panel, OLTC, and On line Dissolved Gas ( Multi Gas) Analysis and moisture monitoring system, online insulating oil drying system (Cartridge type) with optical temperature sensor,necessary arrangement for Delta formation of LV winding & Neutral Formation and Earthing Arrangement, surge protection device and all fittings & accessories as specified/ required for completion of the scope of works as per technical specification (without transformer Oil)	4	Nos.	1	<b>105 MVA,400/√3 /220/√3/33 kV Single Phase Auto Transformer</b> outdoor type, complete with all fittings and accessories including Main Control Cabinet, cooling control cabinet, RTCC panel, OLTC, and On line Dissolved Gas ( Multi Gas) Analysis and moisture monitoring system, online insulating oil drying system (Cartridge type) with optical temperature sensor,necessary arrangement for Delta formation of LV winding & Neutral Formation and Earthing Arrangement, surge protection device and all fittings & accessories as specified/ required for completion of the scope of works as per technical specification (without transformer Oil)	4	Nos.
2	Insulating oil for <b>53.33 MVA,400/√3 /220/√3/33 kV Single Phase Autotransformer</b> (* 1Lot = Oil for 1 Autotransformers )	4	Lot*	2	Insulating oil for <b>105 MVA,400/√3 /220/√3/33 kV Single Phase Autotransformer</b> (* 1Lot = Oil for 1 Autotransformers )	4	Lot*		



19	Vol III, BPS, Lapsipedi Substation, Price Schedule No. 1 & 4(a): Item no. O) e(i)	<b>O</b>	<b>Fire Protection System</b>			<b>P</b>	<b>Fire Protection System</b>						
		e	HVW spray system, Hydrant system and complete U/G & O/G piping and accessories etc. out side the pump house for Transformer / Reactor :			e	HVW spray system, Hydrant system and complete U/G & O/G piping and accessories etc. out side the pump house for Transformer / Reactor :						
		i	53.33 MVA , 400/220 KV, 1-phase Autotransformer			4	nos	i	105 MVA , 400/220 KV, 1-phase Autotransformer			4	nos
20	Vol III, BPS, Lapsipedi Substation, Price Schedule No. 1 : Item no. Y), i(a,b)	<b>Y</b>	<b>PRE-ENGINEERED BUILDINGS</b>			<b>Y</b>	<b>PRE-ENGINEERED BUILDINGS</b>						
		i)	400 kV GIS Building including all supply materials from abroad except civil works and for civil works refer schedule 4(a)					i)	400 kV GIS Building including all supply materials from abroad except civil works and for civil works refer schedule 4(a)				
		(a)	400 kV GIS Hall			700	Sq. M.	(a)	400 kV GIS Hall			800	Sq. M.
		(b)	AHU/ Panels Room			500	Sq. M.	(b)	AHU/ Panels Room			400	Sq. M.
21	Vol III, BPS, Lapsipedi Substation, Price Schedule No. 4(a): Civil Construction Works (As per technical specifications), Item no. 23, i(a,b)	23.0	<b>PRE ENGINEERED BUILDINGS</b>					23.0	<b>PRE ENGINEERED BUILDINGS</b>				
		i)	400 KV GIS BUILDING All civil works related to pre-engineered 400 kV GIS Bulding to be supplied as per schedule 1 including internal cable trench, finishing(external & Internal) etc. complete as per technical specification and approved drawings, excluding excavation, PCC, RCC and reinforcement steel which shall be measured and paid seperately under respective items of BPS.					i)	400 KV GIS BUILDING All civil works related to pre-engineered 400 kV GIS Bulding to be supplied as per schedule 1 including internal cable trench, finishing(external & Internal) etc. complete as per technical specification and approved drawings, excluding excavation, PCC, RCC and reinforcement steel which shall be measured and paid seperately under respective items of BPS.				
		(a)	GIS Hall			700	Sq. M.	(a)	GIS Hall			800	Sq. M.
		(b)	AHU/ Panels Room			500	Sq. M.	(b)	AHU/ Panels Room			400	Sq. M.
22	Vol II, Chapter 1, Project Specific Requirements(PSR)					According to above changes in Price Schedule, Project Specific Requirements(PSR) has been amended and attached.							
23	Vol II, Chapter 21, Drawings					According to above changes(changes in numbers and rating of Autotransformer) in Price Schedule, Relevent drawings have been amended and attached.							

