## **Supplemental Notice No. 2**

#### **Invitation to Bid No. TIPN-S-05**

# Supply and Construction of 500/230 kV Lamphun 3 (GIS) and 500 kV Mae Moh 3 (GIS) Substations

# Transmission System Improvement Project in Upper Northern Region to Enhance System Security

(Two-Envelope)	

The attached Supplemental Notice shall be considered as part of the bidding documents No. TIPN-S-05.

As acknowledgement of receipt that all additions, deletions and revisions contained in this Supplemental Notice are incorporated into the above bidding documents, Bidder is requested to sign and return this acknowledgement via email address: pirada.s@egat.co.th within three (3) days from the date of the announcement of this Supplemental Notice on http://www4.egat.co.th/fprocurement/biddingeng/.

The original acknowledgement which is manually signed in ink by a person or persons duly authorized shall be included in the proposal to be submitted on the bid opening date.

### ELECTRICITY GENERATING AUTHORITY OF THAILAND

July 20, 2022

#### ACKNOWLEDGEMENT

This undersigned Bidder hereby certifies that the additions, deletions and revisions set forth in this Supplemental Notice to Invitation to Bid No. TIPN-S-05 are incorporated as part of the above bidding documents and will be fully included in any bids which he may submit.

Signed	
Title	
Company	
Date	

อผค.-อวส. FM-PM06

#### ELECTRICITY GENERATING AUTHORITY OF THAILAND

#### SUPPLEMENTAL NOTICE NO. 2

#### **INVITATION TO BID NO. TIPN-S-05**

# SUPPLY AND CONSTRUCTION OF 500/230 kV LAMPHUN 3 (GIS) AND 500 kV MAE MOH 3 (GIS) SUBSTATIONS

# TRANSMISSION SYSTEM IMPROVEMENT PROJECT IN UPPER NORTHERN REGION TO ENHANCE SYSTEM SECURITY

The following supplemental information is hereby given for the above described Invitation:

### **Volume I of IV**

Section A: Invitation to Bid

Replace the following Documents with the revised ones with (Rev. June 2022) attached.

- 1. EGAT Accepted Surge Arrester List
- 2. EGAT Accepted Gas Insulated Switchgear List
- 3. EGAT Accepted Power Circuit Breaker List
- 4. EGAT Accepted Disconnecting Switch List

Bid submitted must be in accordance with this Notice. Receipt of this Notice shall be acknowledged by the Bidder on the proposal included in the Bidding Documents in the space provided on page Part 3 - C22, Article C-5 Supplemental Notices.

ELECTRICITY GENERATING AUTHORITY OF THAILAND

July 20 , 2022

**EGAT Accepted Surge Arrester List** 

Description	Manufacturer / Country	Type / Model		
396 kV SA (Porcelain)	Toshiba Hamakawasaki Factory / Japan	RVLQB-396HY		
	Hubbell Power Systems Inc. / USA	VN/215516-9141		
	Hitachi Energy Sweden AB / Sweden	EXLIM P396-GH550		
	Tridelta Meidensha GmbH / Germany	SB 396/20.4-I		
192 kV SA (Porcelain)	Toshiba Hamakawasaki Factory / Japan	RVLQC-192VY		
	Siemens Aktiengesellschaft / Germany	3EP4 192-2PE32		
	Hubbell Power Systems Inc. / USA	MVN192BB152AA		
	Hitachi Energy Sweden AB / Sweden	EXLIM Q192-EH245		
	Tridelta Meidensha GmbH / Germany	SB 192/10.3-0		
108 kV SA (Porcelain)	Toshiba Hamakawasaki Factory / Japan	RVLQC-108VY		
	Siemens Aktiengesellschaft / Germany	3EP4 108-2PE31		
	Hubbell Power Systems Inc. / USA	MVN108BB088AA		
	Hitachi Energy Sweden AB / Sweden	EXLIM Q108-EH123		
	Tridelta Meidensha GmbH / Germany	SB 108/10.3-0		



J.

1/1 Jun 2022

#### EGAT Accepted Gas Insulated Switchgear List

			Equip	Equipment Rating Type of Mechanism		Referenced GIS Component					
Description	Manufacturer / Country	Type/Model	kV	A	kA	Spring	100000000000000000000000000000000000000	Hydraulic-Spring	CT Manufacturer / Country	VT Manufacturer / Country	Bushing (Porcelain)  Manufacturer / Country
	Hitachi Energy Switzerland Ltd. / Switzerland	ELK-3	550	4000	63	Spring	riyaraune	rydraune-spring	Pfiffner/Switzerland	Trench/Germany Ritz/Germany Pfiffner/Switzerland	LAPP/Germany XD/China
	Siemens AG / Germany	8DQ1P2	550	4000	50	1			Trench/Germany	Trench/Germany	HSP/Germany
	GE Grid Solutions / France	T155	550	4000	50	<b>V</b>			Pfiffner/Switzerland ENPAY/Turkey	GE/France Ritz/Germany	PPC/Austria Ceralep/France
550 kV, 4000 A, 50 kA GIS	Hitachi Ltd. / Japan	IFT	550	6300	63		~		Hitachi/Japan Meiden Chemical/Japan	Nissin/Japan Toko/Japan	N.G.K./Japan
	Hyundai Heavy Industries Co., Ltd. / Korea	550SR	550	4000	63		~		Daeyoung/Korea Hyundai/Korea	Nissin/Japan TOKO/Japan Trench/Germany	PPC/Germany PPC/Sweden TYCO/Switzerland N.G.K/Japan
	Mitsubishi Electric Corporation / Japan	500-GPS	550	4000	50	<b>V</b>			Melco/Japan	Melco/Japan	N.G.K./Japan
	New Northeast Electric Group High Voltage Switchgear Co., Ltd./ China	ZF15-550	550	4000	63		~		Liaoning Xinming Instrument Transformer Co., Ltd./China	Liaoning Xinming Instrument Transformer Co.,Ltd./China	Liling Huaxin Insulator Technology Cp.,Ltd./China
	Hitachi Energy Switzerland Ltd. / Switzerland	ELK-14	245	4000	63 50				Pfiffner/Switzerland ABB Czech	Pfiffner/Switzerland Trench/Germany	LAPP/Germany XD/China
	GE Grid Solutions / France	B105	245	4000	50	1			ENPAY/Turkey ALCE/Turkey GE/France	GE/France	PPC Insulators/Austria Ceralep/France GE/France
	Hyosung Corporation / Korea	HSG-305B	300	4000	50	1	1		Hyosung/Korea	Nissin/Japan Toko/Japan	LAPP/Germany
245 kV, 4000 A, 50 kA GIS	Xian XD Switchgear Electric Co., Ltd./ China	ZF9-252	245	4000	50	K			XD/China Nanjing Zhida Electric/China	XD/China	XD/China
	New Northeast Electric Group High Voltage Switchgear Co., Ltd./ China	ZFW20-252	245	4000	50	1			Liaoning Xinming Instrument Transformer Co.,Ltd./China	Liaoning Xinming Instrument Transformer Co.,Ltd./China	Liling Huaxin Insulator Technology Cp.,Ltd./China
	GE High Voltage Switchgear (Suzhou) Co., Ltd / China	B105	245	4000	50	<b>4</b>			Nanjimg Zhida / China	Suzhou TOKO / China	Liling Huaxin Insulator Technology Cp.,Ltd./China
	ABB High Voltage Switchgear (Xiamen) Co., Ltd. / China	ELK-04	145	3150	40			¥	Pfiffner/Switzerland Sihui/China ABB Jingke / China	Pfiffner/Switzerland Sieyuan/China ABB Jingke / China Pfiffner / Germany	XD/China
	Hyundai Heavy Industries Co., Ltd. / Korea	145SP-1	123	3150	40	~			Dongwoo/Korea	Nissin/Japan	LAPP/Germany
	Hyosung Corporation / Korea	HSG-144D	145	3150	40	1			Hyosung / Korea	Nissin/Japan	LAPP/Germany
123 kV, 3150/2000 A, 40 kA GIS Main bus 3150 A Feeder 2000 A	New Northeast Electric Group High Voltage Switchgear Co., Ltd./ China	ZFW20-145	145	3150	40	<b>v</b>			Liaoning Xinming Instrument Transformer Co.,Ltd./China	Liaoning Xinming Instrument Transformer Co.,Ltd./China	Liling Huaxin Insulator Technology Cp.,Ltd./China
	ILJIN Electric Co., Ltd. / Korea	IJS 1440	145	3150	40	1			Samnung / Korea	Toko Takaoka Korea / Korea	Lapp / Romania
	TOSPIBA Energy Systems & Solutions Corporation/ Japan	G3A-b	145	3150	40	1			TOSHIBA / Japan	TOSHIBA / Japan	TOSHIBA / Japan
	Shanghai Sieyuan High Voltage Switchgear Co., Ltd. / China	ZF28A-145	145	3150	40	¥			Shanghai Sieyuan High Voltage Switchgear Co., Ltd. / China	Jiangsu Sieyuan Hertz Co.,Ltd. / China	XD/China



รับรองสำนนาโดย <u>พพอ-ส. กสส-ส. อวส.</u> ก่อนนำไปใช้งาน ต้องตรวจสอบ Revision ล่าสุด ผ้ายวิศวกรรมระบบส่ง กฟผ.

12 Jul 2022

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1/1 Jun 2022

## **EGAT Accepted Power Circuit Breaker List**

Description	Manufacturer / Country	Type/Model	1&3 pole	3 pole	Type of Mechanism
550 kV, 4,000 A, 50 kA GCB (Class C1)	Siemens Energy Global GmbH & Co. KG./ Germany	3AP2FI-550kV	Yes	Yes	FA5 (Spring)
	Hitachi Energy Sweden AB / Sweden	HPL550B2	Yes	Yes	BLG1002A (Spring)
	GRID SOLUTIONS SAS / France	GL317	Yes	Yes	FK3-4 (Spring)
245 kV, 4,000 A, 50 kA GCB (Class C1)	Hitachi Energy Sweden AB / Sweden	LTB245E1	Yes	Yes	BLK222 (Spring)
				Yes	BLG1002A (Spring)
	GRID SOLUTIONS SAS / France	GL314	Yes	Yes	FK3-1 (Spring)
				Yes	FK3-4 (Spring)
	Siemens Energy Global GmbH & Co. KG./ Germany	3AP1FI-245	Yes	Yes	FA2 (Spring)
		3AP1FG-245		Yes	FA4 (Spring)
	Jiangsu Rugao High Voltage Electric Apparatus Co. Ltd. / China	LW58-252	Yes	Yes	SRCT36E (Spring)
				Yes	SSCT33 (Spring)
123 kV, 3,150 A, 40 kA GCB (Class C1)	Hitachi Energy Sweden AB / Sweden	LTB145D1/B		Yes	BLK222 (Spring)
	ABB High Voltage Switchgear Co., Ltd. / China	LTB145D1/B		Yes	BLK222 (Spring)
	GE GRID GMBH / Germany	GL312F1/4031P		Yes	FK3-1 (Spring)
	Siemens Energy Global GmbH & Co. KG./ Germany	3AP1FG-123		Yes	FA2 (Spring)
	Siemens Limited / India	3AP1FG-145kV		Yes	FA2 (Spring)
	Jiangsu Rugao High Voltage Electric Apparatus Co. Ltd. / China	LW36-145		Yes	SRCT36E (Spring)

เอกสารควบคุม รับรองสำหนาโดย พพอ-ฮ. กสสุ-ฮ. อาส. ก่อนนำไปใช้งาน ต้องครวงสอบ Revision ล่าสุด ผ้ายวิศวกรรมระบบส่ง กฟผ. J.

1/1 Jun 2022

#### EGAT Accepted Disconnecting Switch List

Description	Manufacturer / Country	Type/Model	Type of Mechanism	
550 kV, 4,000 A air switch (Main blade: Motor operated)	Coelme Costruzioni Elettromeccaniche SpA / Italy	STC	CD101	
	Grid Solution S.p.A. / Italy	S3CD550/4000	CMM	
	Hapam B.V. / The Netherlands	SSBIII-550	MT150	
550 kV, 4,000 A, air switch with grounding blade (Main blade: Motor operated, Grounding blade: Manually operated)	Coelme Costruzioni Elettromeccaniche SpA / Italy	STC-E	CD201	
	Grid Solution S.p.A. / Italy	S3CDT550/4000	CMM for DS and ES	
	Hapam B.V. / The Netherlands	SSBIII-AM-550	MT150 for DS and HAC for ES	
245 kV, 4,000 A, air switch (Main blade: Manually operated)	Coelme Costruzioni Elettromeccaniche SpA / Italy	TCB	CM110	
	Grid Solutions / Italy	S3CD245/4000	CML	
	Hapam B.V. / The Netherlands	SSBIII-245	HAC	
245 kV, 4,000 A, air switch with grounding blade (Main blade: Manually operated, Grounding blade: Manually operated)	Coelme Costruzioni Elettromeccaniche SpA / Italy	ТСВ-Е	CM210	
	Grid Solution S.p.A. / Italy	S3CDT245/4000	CML for DS and ES	
	Hapam B.V. / The Netherlands	SSBIII-AM-245	HAC for DS and ES	
245 kV, 3,150 A air switch (Main blade: Manually operated)	Coelme Costruzioni Elettromeccaniche SpA / Italy	ТСВ	CM110	
	Hapam B.V. / The Netherlands	SSBIII-245	HAC	
	Grid Solution S.p.A. / Italy	S3C245/3150	CML	
245 kV, 3,150 A air switch with grounding blade (Main blade: Manually operated, Grounding blade: Manually operated)	Coelme Costruzioni Elettromeccaniche SpA / Italy	ТСВ-Е	CM210	
	Coelme Costruzioni Elettromeccaniche SpA / Italy	TCB-E Special	CM210	
	Hapam B.V. / The Netherlands	SSBIII-AM-245	HAC for DS and ES	
	Grid Solution S.p.A. / Italy	S3CT245/3150	CML for DS and ES	

**しอกสารควบคุม**รับรองสำเนาโดย <u>พพอ-ส. กสส-ส. อวส.</u>
ก่อนนำไปใช้งาน
ด้องครวจสอบ Revision ล่าสุด
ผ้ายวิศวกรรมระบบส่ง กฟผ.

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#### EGAT Accepted Disconnecting Switch List

Description	Manufacturer / Country	Type/Model	Type of Mechanism
123 kV, 3,150 A air switch (Main blade: Manually operated)	Coelme Costruzioni Elettromeccaniche SpA / Italy	ТСВ	CM110
	Grid Solution S.p.A. / Italy	S3C123/3150	CML
	Hapam B.V. / The Netherlands	SSBIII-123	HAC
123 kV, 3,150 A air switch with grounding blade (Main blade: Manually operated, Grounding blade: Manually operated)	Coelme Costruzioni Elettromeccaniche SpA / Italy	ТСВ-Е	CM210
	Grid Solution S.p.A. / Italy	S3CT123/3150	CML for DS and ES
	Hapam B.V. / The Netherlands	SSBIII-AM-123	HAC for DS and ES
123 kV, 2,000 A air switch (Main blade: Manually operated)	Coelme Costruzioni Elettromeccaniche SpA / Italy	TCB	CM110
	Grid Solution S.p.A. / Italy	S3C123/2000	CML
	Hapam B.V. / The Netherlands	SSBIII-123	HAC
123 kV, 2,000 A air switch with grounding blade (Main blade: Manually operated, Grounding blade: Manually operated)	Coelme Costruzioni Elettromeccaniche SpA / Italy	TCB-E Special	CM210
	Grid Solution S.p.A. / Italy	S3CT123/2000	CML for DS and ES
	Hapam B.V. / The Netherlands	SSBIII-AM-123	HAC for DS and ES

**โอกสารควบคุม**รับรองสำเนาโดย <u>พพล ส. กสละส. อวส.</u>
ก่องนำไปใช้งาน
คืองครวจสอบ Revision คำสุด ผ้ายวิศวกรรมระบบส่ง กฟผ.

12 Jul 2022

2/2 Jun 2022