# Notice to Bidder

## To comply with the ENGINEER ACT, B.E. 2542 FOR THE CONSTRUCTION WORK RELATED TO DESIGN OR CONSTRUCTION SUPERVISION WORK

The Contractors should be aware of the following:

- 1. The Contractor who is a juristic person is required to obtain a License to Practice the Controlled Engineering Profession issued by the Council of Engineers Thailand.
- 2. Where the Contractor is a joint venture or consortium, the Contractor shall comply with the following requirements: -
  - 1) In case of a joint venture, the joint venture is required to obtain a License to Practice the Controlled Engineering Profession issued by the Council of Engineers Thailand.
  - 2) In case of a consortium, only the member of the consortium who will be responsible for the Design or Construction Supervision Work is required to obtain a License to Practice the Controlled Engineering Profession issued by the Council of Engineers Thailand.

NOTE : If you have any questions, please contact COUNCIL OF ENGINEERS THAILAND. Address : 1616/1 Ladprao, Wangthonglang, Bangkok, Thailand 10310 Telephone : 1303 Email : coe@saraban.mail.go.th

# ประชาสัมพันธ์ผู้ประกอบการเพื่อทราบ

เพื่อให้การดำเนินงานสำหรับงานจ้างก่อสร้างที่มีลักษณะงานด้านการออกแบบ หรือควบคุมงานก่อสร้าง สอดคล้องกับพระราชบัญญัติวิศวกร พ.ศ. 2542 จึงขอแจ้งแนวทาง ในการดำเนินงาน ดังนี้

 ผู้รับจ้างที่เป็นนิติบุคคล ต้องเป็นผู้ที่ได้รับใบอนุญาตประกอบวิชาชีพวิศวกรรมควบคุม สำหรับนิติบุคคลจากสภาวิศวกร

2. ผู้รับจ้างที่ดำเนินการในรูปแบบของ "กิจการร่วมค้า"

(1) กรณีที่กิจการร่วมค้าได้จดทะเบียนเป็นนิติบุคคลใหม่ กิจการร่วมค้านั้นต้องเป็น ผู้ที่ได้รับใบอนุญาตประกอบวิชาชีพวิศวกรรมควบคุมสำหรับนิติบุคคลจากสภาวิศวกร

(2) กรณีที่กิจการร่วมค้าไม่ได้จดทะเบียนเป็นนิติบุคคลใหม่ เฉพาะนิติบุคคลที่มีหน้าที่ เป็นผู้รับผิดชอบงานวิศวกรรมออกแบบหรือควบคุม ต้องเป็นผู้ที่ได้รับใบอนุญาตประกอบวิชาชีพ วิศวกรรมควบคุมสำหรับนิติบุคคลจากสภาวิศวกร

**หมายเหตุ** หากมีข้อสงสัย โปรดติดต่อ สภาวิศวกร ที่อยู่ : 1616/1 ถนนลาดพร้าว แขวงวังทองหลาง เขตวังทองหลาง กรุงเทพมหานคร 10310 เบอร์ติดต่อ : 1303 อีเมล : <u>coe@saraban.mail.go.th</u>

## EGAT's Privacy Notice on Procurement, Inventory Management and Contract Administration

**Electricity Generating Authority of Thailand** (EGAT) has performed the protection of the Personal Data regarding procurement, inventory management and contract administration to be in accordance with **the Personal Data Protection Act B.E. 2562** (the "2019 PDPA"), which comes into effect on June 1, 2022.

Details about EGAT's Privacy Notice on Procurement, Inventory Management and Contract Administration are available for you at <u>https://www.egat.co.th/privacy-notice-procurement\_en.html</u> or the below QR Code.



## The Redaction of Sensitive Personal Data

EGAT has announced the Privacy Notice on Procurement, Inventory Management and Contract Administration for the collection, use or disclosure of Personal Data, excluding the Sensitive Personal Data.

Should the documents you wish to submit to EGAT contain the Sensitive Personal Data as defined in Section 26 of the 2019 PDPA, pertaining to racial, ethnic origin, political opinions, cult, religious or philosophical beliefs, sexual behavior, criminal records, health data, disability, trade union information, genetic data, biometric data, or of any data which may affect you in the same manner, you shall redact or conceal such data before submitting to EGAT.

# <u>ประกาศความเป็นส่วนตัว (Privacy Notice) สำหรับการจัดซื้อจัดจ้าง การบริหารพัสดุ และการบริหาร</u> <u>สัญญาของ กฟผ.</u>

**การไฟฟ้าฝ่ายผลิตแห่งประเทศไทย** (กฟผ.) ได้ดำเนินการคุ้มครองข้อมูลส่วนบุคคลสำหรับการจัดซื้อจัดจ้าง การบริหารพัสดุ และการบริหารสัญญา เพื่อให้เป็นไปตาม**พระราชบัญญัติคุ้มครองข้อมูลส่วนบุคคลของ ประเทศไทย พ.ศ. 2562** (PDPA) ซึ่งมีผลบังคับใช้อย่างครบถ้วน ตั้งแต่วันที่ 1 มิถุนายน 2565 ทั้งนี้ ท่านสามารถศึกษารายละเอียดประกาศความเป็นส่วนตัว (Privacy Notice) สำหรับการจัดซื้อจัดจ้าง การบริหารพัสดุ และการบริหารสัญญา ได้ที่ <u>https://www.egat.co.th/privacy-notice-procurement.html</u> หรือที่ QR Code ด้านล่าง



# <u>การขีดฆ่าข้อมูลส่วนบุคคลอ่อนไหว</u>

กฟผ. มีประกาศความเป็นส่วนตัว (Privacy Notice) สำหรับการจัดซื้อจัดจ้าง การบริหารพัสดุ และการบริหาร สัญญา เพื่อใช้ในการเก็บรวบรวม ใช้ หรือเปิดเผย ข้อมูลส่วนบุคคล แต่ไม่เก็บข้อมูลส่วนบุคคลอ่อนไหว หากเอกสารของท่านที่ต้องส่งมอบให้ กฟผ. มีข้อมูลส่วนบุคคลอ่อนไหวตามที่ถูกบัญญัติไว้ในมาตรา 26 ของ PDPA ดังนี้ เชื้อชาติ เผ่าพันธุ์ ความคิดเห็นทางการเมือง ความเชื่อในลัทธิ ศาสนาหรือปรัชญา พฤติกรรมทางเพศ ประวัติอาชญากรรม ข้อมูลสุขภาพ ความพิการ ข้อมูลสหภาพแรงงาน ข้อมูลพันธุกรรม ข้อมูลชีวภาพ หรือ ข้อมูลอื่นใด ซึ่งกระทบต่อเจ้าของข้อมูลส่วนบุคคลในทำนองเดียวกันรวมอยู่ด้วย ขอให้ท่านขีดฆ่า หรือปกปิด ข้อมูลดังกล่าว ก่อนส่งมอบให้แก่ กฟผ.

## Notice to Bidder

## Subject : Online Payment for Purchase of Bidding Documents

Please be informed of the online payment for purchase of biding documents as follows:

- Download the Registration Form and fill out all necessary information <u>by typing</u>. (Complete data is required.)
- 2) Payment shall be made by bank transfer or telegraphic transfer to EGAT's account no. 109-6-01958-2 (swift code : KRTHTHBK), Krung Thai Bank Public Company Limited, Bangkruai Branch, Nonthaburi.

All bank charges and fees incurred by the payment of bidding documents shall be under the buyer's responsibility.

- 3) Submit the fill-out Registration Form and the proof of payment from 1) to the email address of the in-charge officer and <u>procurement.tse@egat.co.th</u> in the CC. <u>before 15.00 hrs. Bangkok Standard Time</u>.
- 4) After the payment has been verified for approximately 3 working days, the in-charge officer will send the link for downloading the bidding documents together with the receipt to the purchaser's email address in the Registration Form.

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# **Registration Form**

Invitation to Bid No. TS12-L-22

Supply and Construction of Transmission Line for

## Sectionalizing of 230 kV Rangsit - Nava Nakhon to Sam Khok Substation

## Transmission System Expansion Project No.12

## (Pre-Qualification)

Available Duration for Purchasing : January 26, 2024 - February 28, 2024

Price of Bidding Documents : USD 270.- or THB 8,000.-

## Instructions

- 1) Fill out this Registration Form in English by typing. (Complete data is required.)
- 2) Payment shall be made by bank transfer or telegraphic transfer to EGAT's account no. 109-6-01958-2 (swift code : KRTHTHBK), Krung Thai Bank Public Company Limited, Bangkruai Branch, Nonthaburi.
- 3) Submit the filled-out Registration Form and the proof of payment to the in-charge officer via email (with cc. procurement.tse@egat.co.th) <u>before 15.00 hrs.</u> Bangkok Standard Time.
- 4) The in-charge officer will send the link for downloading the bidding documents together with the receipt to the purchaser's email address in the Registration Form, which will take approximately 3 working days.

For Purchaser				TAX ID :
No. Receipt No	D. :		Date :	
Bidder's Name				
Address				-
				Country :
Name of Contact Person	ר:		Tel.	Mobile No.
Email Address :				
Local Representative				
Address				
				Tax ID :
Name of Contact Person	ו:		Tel.	Mobile No.
Email Address :				
For Procurement Office	r	Cha	inge of Bidder's Name	TAX ID:
Bidder's Letter No. :				Dated :
New Bidder's Name				
Address				
			Country :	
Name of Contact Person	n :		Tel.	Mobile No.
Email Address :				
Contact Information of	In-charge Officer			
Name	Chalita Pengnoo			
Email address	chalita.pengnoo@egat.co.th			
Telephone No.	66 2436 0347			
Mobile No.	669 5429 3721			



#### Invitation to Bid No. TS12-L-22

## Supply and Construction of Transmission Line for Sectionalizing of 230 kV Rangsit - Nava Nakhon to Sam Khok Substation

#### Transmission System Expansion Project No.12

(Pre-Qualification)

The Electricity Generating Authority of Thailand (EGAT) is calling for the subject Invitation to Bid to be financed by EGAT's fund. The escalation factor (K) for price adjustment is applied to this Bid.

<u>Place of Construction</u> from Sam Khok Junction to Sam Khok Substation (approx. 17.3 kilometers)

#### Medium Cost (including Value Added Tax and other expenses) :

THB 616,500,000.- (excluding cost of the Dismantled Equipment to be purchased by Bidder)

#### Eligibility of Bidders

- 1. The Bidder and the Equipment shall be named in EGAT Accepted List as specified in the bidding documents.
- 2. The Bidder shall be a juristic person who provides such services and shall not be named in the List of Work Abandoners published by the Permanent Secretary, Ministry of Finance, and/or in the Debarment List and/or in the List of Work Abandoners declared by EGAT.
- 3. The Bidder shall not be a Jointly Interested Bidder with other Bidders as from the date of EGAT's issuance of the Invitation, or shall not be a person who undertakes any action as an "Obstruction of Fair Price Competition" for this Invitation.
- 4. The Bidder shall not either be EGAT's consultant or involve in EGAT's consultancy company under this Invitation to Bid, or shall not have EGAT's personnel involved in his business as shareholder having voting right that can control his business, director, manager, officer, employee, agent, or consultant except those who are officially ordered by EGAT to act or participate therein.
- 5. The Bidder shall not be the person who is privileged or protected not to be taken any legal proceedings under Thai Court; Provided that such Bidder's government declares that such special privilege is waived.
- 6. The Bidder who is a joint venture or consortium shall carry out all the work under such formation from the time of bidding until the fulfillment of the Contract.

#### Availability of Bidding Documents

Bidding Documents will be available for online purchase during 8:00 hrs. to 15:00 hrs., Bangkok Standard Time, as from January 26, 2024 to February 28, 2024 at USD 270.- or THB 8,000.- per copy, non-refundable.

Please find more details for online purchasing process at <u>http://www4.egat.co.th/fprocurement/biddingeng/</u> or contact for further information at telephone no. 66 2436 0342 or <u>procurement.tse@egat.co.th</u>.

Chettiyer C.

#### **Delivery of Bids**

Bids shall be submitted at Bidding Room, 1<sup>st</sup> Floor, Tor 082 Building during 09:30 hrs. to 10:00 hrs., Bangkok Standard Time, March 28, 2024 and will be opened publicly at 10:00 hrs.

ELECTRICITY GENERATING AUTHORITY OF THAILAND

January 26, 2024

Chattiya C.

(Miss Chattiya Chandhanayingyong) Chief, International Procurement Department – Transmission Segment



## ประกาศการไฟฟ้าฝ่ายผลิตแห่งประเทศไทย เรื่อง ประกวดราคาจ้าง เลขที่ TS12-L-22 (Pre-Qualification)

การไฟฟ้าฝ่ายผลิตแห่งประเทศไทย (กฟผ.) มีความประสงค์จะจัดซื้อและจ้างก่อสร้างตัดสายส่งไฟฟ้าแรงสูง 230 kV รังสิต - นวนคร ลงที่สถานีไฟฟ้าแรงสูงสามโคก สำหรับโครงการขยายระบบส่งไฟฟ้าระยะที่ 12 โดยทำสัญญาแบบปรับราคาได้ (ค่า k) โดย ใช้งบประมาณ กฟผ.

<u>สถานที่ก่อสร้าง</u> : จากจุดแยกสามโคก ถึง สถานีไฟฟ้าแรงสูงสามโคก (ระยะทางประมาณ 17.3 กิโลเมตร)

<u>ราคากลาง (รวมภาษีมูลค่าเพิ่มและค่าใช้จ่ายอื่นๆ)</u>: 616,500,000.- บาท (ไม่รวมราคาอุปกรณ์รื้อถอนที่กำหนดให้ผู้เสนอราคารับซื้อจาก กฟผ.)

## <u>คุณสมบัติของผู้เสนอราคา</u>

- 1. ต้องเป็นผู้ประกอบการและพัสดุที่ผ่านการคัดเลือกคุณสมบัติเบื้องต้นตามบัญชีรายชื่อที่ระบุในเอกสารประกวดราคา
- ต้องเป็นนิติบุคคลผู้มีอาซีพรับจ้างตามประกวดราคาจ้างดังกล่าว และต้องไม่เป็นผู้ทิ้งงานซึ่งปลัดกระทรวงการคลังได้แจ้งเวียนซื่อไว้ หรือต้องไม่เป็นผู้ที่ กฟผ. ห้ามติดต่อหรือห้ามเข้าเสนอราคา หรือต้องไม่เป็นผู้ที่ได้รับผลของการสั่งให้นิติบุคคลหรือบุคคลอื่นเป็นผู้ทิ้ง งานตามคำสั่ง กฟผ.
- ต้องไม่เป็นผู้มีผลประโยชน์ร่วมกันกับผู้เสนอราคารายอื่น ณ วันประกาศประกวดราคาครั้งนี้เป็นต้นไป หรือต้องไม่เป็นผู้กระทำการ อันเป็นการขัดขวางการแข่งขันราคาอย่างเป็นธรรมในการดำเนินการประกวดราคาครั้งนี้
- ต้องไม่เป็นที่ปรึกษาของ กฟผ. หรือมีส่วนร่วมในบริษัทที่ปรึกษาของ กฟผ. ในงานนี้ หรือต้องไม่มีผู้ปฏิบัติงาน กฟผ. เข้าไปมีส่วนร่วม ในกิจการของผู้เสนอราคา ไม่ว่าจะในฐานะผู้ถือหุ้นที่มีสิทธิควบคุมการจัดการ กรรมการ ผู้อำนวยการ ผู้จัดการ พนักงาน ลูกจ้าง ตัวแทน หรือที่ปรึกษา ยกเว้น ในกรณีที่ผู้ปฏิบัติงานได้รับคำสั่งอย่างเป็นทางการจาก กฟผ. ให้ไปปฏิบัติงานหรือเข้าร่วมในกิจการของผู้เสนอราคา
- ต้องไม่เป็นผู้ได้รับเอกสิทธิ์หรือความคุ้มกัน ซึ่งอาจปฏิเสธไม่ยอมขึ้นศาลไทย เว้นแต่รัฐบาลของผู้เสนอราคาได้มีคำสั่งให้สละสิทธิ์และ ความคุ้มกันเช่นว่านั้น
- ผู้ประสงค์เข้าประกวดราคาในนามของกิจการร่วมค้าหรือกิจการค้าร่วม (Joint Venture or Consortium) จะต้องดำเนินการ ทุกขั้นตอนของการประกวดราคา ในนามของกิจการร่วมค้าหรือกิจการค้าร่วม ตั้งแต่การเสนอราคาจนสิ้นสุดข้อผูกพันกับ กฟผ.

## <u>การขายเอกสารประกวดราคา</u>

ผู้สนใจติดต่อซื้อเอกสารประกวดราคา ในราคาชุดละ 8,000.- บาท ในวันทำการระหว่างเวลา 08:00 น. ถึง 15:00 น. ตั้งแต่วันที่ 26 มกราคม 2567 ถึงวันที่ 28 กุมภาพันธ์ 2567 ทั้งนี้ สามารถดูรายละเอียดการซื้อเอกสารประกวดราคาได้ที่เว็บไซต์ <u>http://www4.egat.co.th/fprocurement/biddingeng/</u> หรือสอบถามข้อมูลเพิ่มเติมได้ทางโทรศัพท์ หมายเลข 0 2436 0342 หรืออีเมล <u>procurement.tse@egat.co.th</u>

sorte

## <u>การยื่นซองประกวดราคา</u>

กำหนดยื่นซองประกวดราคา ในวันที่ 28 มีนาคม 2567 เวลา 09:30 น. ถึง 10:00 น. และเปิดซองประกวดราคาเวลา 10:00 น. ณ ห้องประกวดราคา ชั้น 1 อาคารฝ่ายจัดซื้อจัดจ้างและบริหารพัสดุ ท.082 การไฟฟ้าฝ่ายผลิตแห่งประเทศไทย เชิงสะพาน พระราม 7 จังหวัดนนทบุรี

ประกาศ ณ วันที่ 26 มกราคม 2567

about Amile

(นางสาวฉัตติยา จันทนยิ่งยง) หัวหน้ากองจัดซื้อจัดจ้างต่างประเทศสายงานระบบส่ง

# ตารางแสดงวงเงินงบประมาณที่ได้รับจัดสรรและราคากลาง (ราคาอ้างอิง) ในการจัดซื้อจัดจ้างที่มิใช่งานก่อสร้าง

	Bid No. TS12-L-22	
	การจัดซื้อและจ้างก่อสร้างตัดสายส่ง 230 k	√ รังสิต - นวนคร ลงที่ สถานีไฟฟ้าสามโคก
	โครงการขยายระบบส่งไฟฟ้าระยะที่ 12	
/หน่วยงานเจ้าของ	<b>งโครงการ</b> ฝ่ายแผนงานและโครงการระบบส่ง ก	ารไฟฟ้าฝ่ายผลิตแห่งประเทศไทย
2. วงเงินงบประมาณ	ที่ได้รับจัดสรร	
	โครงการขยายระบบส่งไฟฟ้าระยะที่ 12	
	งบประมาณ 60,000 ล้านบาท	
<ol> <li>วันที่กำหนดราคาก</li> </ol>	<b>าลาง 19 ตุลาคม 2566</b> (วันที่ ชสค. ทำการแทน	า รวส. อนุมัติ )
ราคารวมภาษีมูลค่	<mark>่าเพิ่มและค่าใช้จ่ายอื่นๆ เป็นเงิน</mark> 616,500,000	0.00 บาท <b>ราคา/หน่วย</b> ตามเอกสารแนบ
		0.00 บาท <b>ราคา/หน่วย</b> ตามเอกสารแนบ
4. แหล่งที่มาของราค	ากลาง	
<ol> <li>แหล่งที่มาของราค</li> </ol>		
<ol> <li>แหล่งที่มาของราค</li> </ol>	<b>ากลาง</b> หนดราคากลางการจัดซื้อและจัดจ้างงานก่อสร้าง	
<ol> <li>แหล่งที่มาของราค</li> <li>หลักเกณฑ์การกำห</li> </ol>	<b>ากลาง</b> หนดราคากลางการจัดซื้อและจัดจ้างงานก่อสร้าง	
<ol> <li>แหล่งที่มาของราค หลักเกณฑ์การกำห</li> <li>รายชื่อเจ้าหน้าที่ผู้เ</li> </ol>	<b>ากลาง</b> เนดราคากลางการจัดซื้อและจัดจ้างงานก่อสร้าง <b>กำหนดราคากลาง</b>	ระบบส่งไฟฟ้าของสายงานระบบส่ง
<ol> <li>แหล่งที่มาของราค หลักเกณฑ์การกำห</li> <li>รายชื่อเจ้าหน้าที่ผู้ 5.1 นายศุภกฤษ</li> </ol>	<b>ากลาง</b> เนดราคากลางการจัดซื้อและจัดจ้างงานก่อสร้าง <mark>กำหนดราคากลาง</mark> สุจารีรัตนพงษ์ ตันสัจจา	ระบบส่งไฟฟ้าของสายงานระบบส่ง นวส-วข., กวสส-ส.
<ol> <li>แหล่งที่มาของราค หลักเกณฑ์การกำห</li> <li>รายชื่อเจ้าหน้าที่ผู้เ</li> <li>5.1 นายศุภกฤษ</li> <li>5.2 นางสิรินยา</li> <li>5.3 นายฐกานต์</li> </ol>	<b>ากลาง</b> เนดราคากลางการจัดซื้อและจัดจ้างงานก่อสร้าง <mark>กำหนดราคากลาง</mark> สุจารีรัตนพงษ์ ตันสัจจา	ระบบส่งไฟฟ้าของสายงานระบบส่ง นวส-วข., กวสส-ส. วศ.8 หปส-ส. กวสส-ส. วศ.4 หปส-ส. กวสส-ส.

หจตส-ห. 26 ม.ค. 67

## DETAILS OF THE MEDIUM COST FOR BID NO. TS12-L-22

SCHEDULE 1 : SECTIONALIZING OF 230 KV RANGSTI - NAVA NAKHON	Total
Description	Total
	(Baht)
1A : PRELIMINARY WORK	6,483,720.00
1B : TOWER FOUNDATIONS	250,696,080.00
1C : TOWERS	230,889,560.00
1D : INSULATOR STRING AND OVERHEAD GROUND WIRE ASSEMBLIES	57,191,340.00
1E : CONDUCTOR AND OVERHEAD GROUND WIRE	15,748,800.00
1F : LINE ACCESSORIES	5,165,880.00
1G : GROUNDING MATERIALS	814,360.00
1H : OPTICAL FIBER AND LINE ACCESSORIES	6,074,000.00
11 : DISMANTLING WORK	121,280.00
1L : AIR NAVIGATION OBSTRUCTION MARKING AND LIGTING	215,250.00
1N : TEST OF EQUIPMENT	452,100.00
10 : SUPPLY OF SERVICE OF VEHICLES	2,315,460.00
Total for Schedule 1	576,167,830.00
Adjusted Price (Import Duty & Tax + VAT)	40,331,748.10
Total Price Schedule 1	616,499,578.10

#### SCHEDULE 1 : SECTIONALIZING OF 230 kV RANGSIT - NAVA NAKHON TO SAM KHOK SUBSTATION (17.3 km)

MEDIUM COST OF BID NO. TS12-L-22

616,500,000.00

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นางสาวเบญญาลักษณ์ ศรลัมพ์ หจตส-ห. 26 ม.ค. 67

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นายประวิทย์ เลิศโกวิทย์ ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง 20 Oct 2023

		Supply of Faultyman'	Sumply of Fastingers					
		Supply of Equipment Foreign Supply	Supply of Equipment Local Supply	Foreign Currency	Local Currency	Local Transportation	Local Transportation, Construction and	Purchase Price Offered for
		0 11 0	Ex-works Price	· ·		-	Installation	Dismantled Equipment
Description	Currency	CIF Thai Port	( excluding VAT )		( excluding VAT )	( excluding VAT )	( excluding VAT )	(including VAT)
			Baht		Baht	Baht	Baht	Baht
		Amount	Amount	Amount	Amount	Amount	Amount	Amount
1A : PRELIMINARY WORK							6,483,720.00	
							0,405,720.00	
1B : TOWER FOUNDATIONS			30,538,400.00				220,157,680.00	
IC : TOWERS			201,146,250.00				29,743,310.00	
			201,110,220100				2,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
			-					
1D : INSULATOR STRING AND OVERHEAD GROUND WIRE ASSEMBLIES	THB	33,647,940.00	23,543,400.00					
1E : CONDUCTOR AND OVERHEAD GROUND WIRE			56,000.00				15,692,800.00	
			,				, ,	
			-					
1F : LINE ACCESSORIES			4,978,450.00				187,430.00	
1G : GROUNDING MATERIALS			599,200.00				215,160.00	
			277,200100				210,100.00	
			-					
IH : OPTICAL FIBER AND LINE ACCESSORIES	THB	4,641,200.00					1,432,800.00	
In : OF FICAL FIBER AND LINE ACCESSORIES	іпь	4,041,200.00					1,432,800.00	
1I : DISMANTLING WORK							121,280.00	
					1			
			·					
					1			
1L : AIR NAVIGATION OBSTRUCTION MARKING AND LIGHTING							215,250.00	
			•		1			
					1			
							2 mc	
IN : TEST OF EQUIPMENT	THB			452,100.00				
					1	. <u>/</u> a	นางสาวเบญญาลักษณ์	ศรลัมพ์
						Are go		
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Г	r							
		Supply of Equipment	Supply of Equipment				Local Transportation,	Purchase Price Offered for
		Foreign Supply	Local Supply	Foreign Currency	Local Currency	Local Transportation	Construction and	Dismantled Equipment
Description	Currency		Ex-works Price				Installation	
Description	Currency	CIF Thai Port	( excluding VAT )		( excluding VAT )	( excluding VAT )	( excluding VAT )	(including VAT)
			Baht		Baht	Baht	Baht	Baht
		Amount	Amount	Amount	Amount	Amount	Amount	Amount
10 : SUPPLY OF SERVICE OF VEHICLES							2,315,460.00	
					-			
					-			
	тнв	38,289,140.00	Baht	452,100.00	Baht	Baht	Baht	Baht
TOTAL PRICE			260,861,700.00				276,564,890.00	
TOTALIRCE								
1Z : DISMANTLED EQUIPMENT TO BE PURCHASED BY THE CONTRACTOR							Baht	-105,300.00
-								, i i i i i i i i i i i i i i i i i i i

- Project 1-1C2 -

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นางสาวเบญญาลักษณ์ ศรลัมพ์

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นายประวิทย์ เลิศโกวิทย์ ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง 20 Oct 2023

TS12-L-22-1 (Sec. 230 kV RS-NV to SKK)

Item No.	Description	Estimated Qty.	Unit	Local Transp Constructi Installa ( excluding Bah	ion and ation g VAT ) at
				Unit Price	Amount
1A1	Check survey and staking of tower locations (Approximately 17.3 km in transmission line distance)	lump sum	each	572,200.00	572,200.00
	Clearing right-of-way of 20 meters on each side of center line of the transmission line from 230 kV Sam Khok Junction to Samkhok Substation (Approximately 17.3 km in transmission line distance)	lump sum	each	476,840.00	476,840.00
1A3	Subsoil test by Dutch cone penetration test method and preliminary measurement of ground resistance and earth resistivity to be performed at the depth and tower locations directed by EGAT (Approximately 66 bores)	F			
		1320	m	3,860.00	5,095,200.00
1A4	Boundary post along boundary line of right-of-way	123	post	2,760.00	339,480.00
	Total Price for 1A		I	Baht	6,483,720.00

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นางสาวเบญญาลักษณ์ ศรลัมพ์ หจตส-ห. 26 ม.ค. 67

ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง 20 Oct 2023

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นางสาวเบญญาลักษณ์ ศรลัมพ์ FM-TL06 Rev.0 30/09/2557

#### หจตส-ห. 26 ม.ค. 67

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					Supply of	f Equipment	Supply of	Equipment	Local Trai	sportation,
					Foreig	gn Supply	Local	Supply	Constru	ction and
Item No.	Description	Estimated Qty.	Unit	Currency	CIF	Thai Port	( exclud	rks Price ing VAT ) Baht	( exclud	llation ing VAT ) aht
					Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
1B1	Foundation for tower type QWA1									
1B1.1	Stub angle and pile foundation type CLPI-D (4 or 5 pile cluster), exclusive of cost of driven piles and their installation									
121.0		4	tower	-	XXXXX	XXXXX	123,600.00	494,400.00	286,730.00	1,146,920.0
1B1.2	Stub angle and pile foundation type CLPI-F (7 or 8 or 9 pile cluster), exclusive of cost of driven piles and their installation	4	tower		XXXXX	xxxxx	123,600.00	494,400.00	528,750.00	2,115,000.0
1B1.3	Stub angle and pile foundation type CLPI-D (4 or 5 pile cluster), exclusive of cost of bored piles and their installation		tower				123,000.00	494,400.00	526,750.00	2,113,000.0
		5	tower		XXXXX	XXXXX	123,600.00	618,000.00	522,570.00	2,612,850.0
1B1.4	Stub angle and pile foundation type CLPI-F (7 or 8 or 9 pile cluster), exclusive of cost of bored piles and their installation									
		3	tower		XXXXX	XXXXX	123,600.00	370,800.00	816,830.00	2,450,490.0
1B2	Foundation for tower type QWC2									
1B2.1	Stub angle and pile foundation type CLPI-F (7 or 8 or 9 pile cluster), exclusive of cost of driven piles and their installation									
102.2		1	tower		XXXXX	XXXXX	456,000.00	456,000.00	597,400.00	597,400.0
1B2.2	Stub angle and pile foundation type CLPI-G (12 or 16 pile cluster), exclusive of cost of driven piles and their installation									
1B2.3	Stub angle and pile foundation type CLPI-F (7 or 8 or 9 pile	2	tower		XXXXX	XXXXX	456,000.00	912,000.00	1,045,510.00	2,091,020.0
102.5	cluster), exclusive of cost of bored piles and their installation									
102.4	Stub angle and pile foundation type CLPI-G (12 or 16 pile	1	tower		XXXXX	XXXXX	456,000.00	456,000.00	921,540.00	921,540.0
1B2.4	cluster), exclusive of cost of bored piles and their installation						15 ( 000 00	454 000 00	1 (21 (70 00	1 (21 (70)
1B3	Foundation for tower type QWD2	1	tower		XXXXX	XXXXX	456,000.00	456,000.00	1,621,670.00	1,621,670.0
1B3.1	Stub angle and pile foundation type CLPI-F (7 or 8 or 9 pile									
1,0,1	cluster), exclusive of cost of driven piles and their installation									
	Да	5	tower		XXXXX	XXXXX	676,000.00	3,380,000.00	664,330.00	3,321,650.0

(1) นายประวิทย์ เลิศโกวิทย์ ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง 20 Oct 2023

**2./m**C . นางสาวเบญญาลักษณ์ ศรลัมพ์

FM-TL06 Rev.0 30/09/2557

#### หจตส-ห. 26 ม.ค. 67

					Supply o	of Equipment	Supply of	f Equipment	Local Tra	nsportation,
					Forei	gn Supply	Loca	l Supply	Constru	ction and
Item No.	Description	Estimated Qty.	Unit	Currency	CIF <sup>*</sup>	Thai Port	( exclud	rks Price ling VAT ) Baht	( exclud	<b>illation</b> ing VAT ) Baht
					Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
1B3.2	Stub angle and pile foundation type CLPI-G (12 or 16 pile cluster), exclusive of cost of driven piles and their installation									
172.0.0		5	tower		XXXXX	XXXXX	676,000.00	3,380,000.00	1,162,200.00	5,811,000.00
1B3.3	Stub angle and pile foundation type CLPI-H (20 or 25 pile cluster), exclusive of cost of driven piles and their installation									
		1	tower		XXXXX	XXXXX	676,000.00	676,000.00	1,818,120.00	1,818,120.00
1B3.4	Stub angle and pile foundation type CLPI-F (7 or 8 or 9 pile cluster), exclusive of cost of bored piles and their installation									
		4	tower		XXXXX	XXXXX	676,000.00	2,704,000.00	1,024,400.00	4,097,600.00
1B3.5	Stub angle and pile foundation type CLPI-G (12 or 16 pile cluster), exclusive of cost of bored piles and their installation									
		5	tower		XXXXX	XXXXX	676,000.00	3,380,000.00	1,802,320.00	9,011,600.00
1B4	Foundation for tower type QWDE									
1B4.1	Stub angle and pile foundation type CLPI-G (12 or 16 pile cluster), exclusive of cost of driven piles and their installation									
		3	tower		XXXXX	XXXXX	676,000.00	2,028,000.00	1,162,200.00	3,486,600.00
1B4.2	Stub angle and pile foundation type CLPI-H (20 or 25 pile cluster), exclusive of cost of driven piles and their installation				~~~~~~		(7( 000 00	2 020 000 00	1 010 120 00	5 454 2 60 00
1B4.3	Stub angle and pile foundation type CLPI-G (12 or 16 pile	3	tower		XXXXX	XXXXX	676,000.00	2,028,000.00	1,818,120.00	5,454,360.00
104.3	cluster), exclusive of cost of bored piles and their installation									
1B5	Foundation for tower type QWDE(90)	3	tower		XXXXX	XXXXX	676,000.00	2,028,000.00	1,802,320.00	5,406,960.00
1B5.1	Stub angle and pile foundation type CLPI-F (7 or 8 or 9 pile cluster), exclusive of cost of driven piles and their installation									
		1	tower		XXXXX	XXXXX	748,000.00	748,000.00	600,360.00	600,360.00
1B5.2	Stub angle and pile foundation type CLPI-G (12 or 16 pile cluster), exclusive of cost of driven piles and their installation									
		1	tower		XXXXX	XXXXX	748,000.00	748,000.00	1,058,970.00	1,058,970.00

- Project 1-1C5 -



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					Supply of	Equipment	Supply of	Equipment	Local Tra	nsportation,
						n Supply		Supply		ction and
Item No.	Description	Estimated Qty.	Unit	Currency	CIF T	'hai Port	( exclud	rks Price ing VAT ) Baht	( exclud	<b>illation</b> ing VAT ) Baht
					Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
1B5.3	Stub angle and pile foundation type CLPI-H (20 or 25 pile cluster), exclusive of cost of driven piles and their installation									
		1	tower		XXXXX	XXXXX	748,000.00	748,000.00	1,812,940.00	1,812,940.0
1B5.4	Stub angle and pile foundation type CLPI-F (7 or 8 or 9 pile cluster), exclusive of cost of bored piles and their installation									
1B5.5	Stub angle and pile foundation type CLPI-G (12 or 16 pile	1	tower		XXXXX	XXXXX	748,000.00	748,000.00	924,380.00	924,380.
	cluster), exclusive of cost of bored piles and their installation	1	tower		XXXXX	XXXXX	748,000.00	748,000.00	1,802,320.00	1,802,320.
1B6	Foundation for tower type SWDE						,	,,	-,,	-,,.
1B6.1	Stub angle and pile foundation type CLPI-D (4 or 5 pile cluster), exclusive of cost of driven piles and their installation									
		2	tower		XXXXX	XXXXX	179,600.00	359,200.00	353,650.00	707,300.
1B6.2	Stub angle and pile foundation type CLPI-F (7 or 8 or 9 pile cluster), exclusive of cost of driven piles and their installation									
		2	tower		XXXXX	XXXXX	179,600.00	359,200.00	533,440.00	1,066,880
1B6.3	Stub angle and pile foundation type CLPI-D (4 or 5 pile cluster), exclusive of cost of bored piles and their installation	2	tower		XXXXX	XXXXX	179,600.00	359,200.00	562,330.00	1,124,660
1B6.4	Stub angle and pile foundation type CLPI-F (7 or 8 or 9 pile cluster), exclusive of cost of bored piles and their installation	2	tower		xxxxx	xxxxx	179,600.00	359,200.00	821,520.00	1,643,040
1B7	Foundation for tower type SKKJW(90)	L	tower				179,000.00	557,200.00	021,520.00	1,043,040.
1B7.1	Stub angle and pile foundation type CLPI-G (12 or 16 pile cluster), exclusive of cost of bored piles and their installation									
1B8	Foundation for tower type SKKCW1	1	tower		XXXXX	XXXXX	750,000.00	750,000.00	1,802,320.00	1,802,320.
1B8.1	Stub angle and pile foundation type CLPI-G (12 or 16 pile cluster), exclusive of cost of driven piles and their installation									
	Airy 2	1	tower		XXXXX	xxxxx	375,000.00	375,000.00	1,162,200.00	1,162,200.

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					Supply o	of Equipment	Supply of	Equipment	Local Tra	nsportation,
					Forei	gn Supply	Local	Supply	Constru	ction and
Item No.	Description	Estimated	Unit	Currency	CIF Thai Port		( exclud	rks Price ling VAT )	Installation ( excluding VAT )	
		Qty.			Unit Price	Amount	Unit Price	Baht Amount	Unit Price	aht Amount
1B8.2	Stub angle and pile foundation type CLPI-G (12 or 16 pile cluster), exclusive of cost of bored piles and their installation				Unit Flice	Amount	Unit Frice	Amount	Omt Phee	Amount
		1	tower		XXXXX	XXXXX	375,000.00	375,000.00	1,802,320.00	1,802,320.00
1B9	Concrete piles									
1B9.1	Furnishing concrete pile min 160 cm. effective perimeter									
		27300	m		XXXXX	XXXXX	XXXXX	XXXXX	1,990.00	54,327,000.00
1B9.2	Installation of precast prestressed concrete piles 160 cm. effective perimeter									, ,
		27090	m		XXXXX	XXXXX	XXXXX	XXXXX	670.00	18,150,300.00
1B9.3	Furnishing and installation of cast-in-place concrete pile 50 cm. diameter (bored piles) with seismic test									
		19140	m		XXXXX	XXXXX	XXXXX	XXXXX	4,190.00	80,196,600.00
1B10	Additional foundation work									
1B10.1	Additional earth excavation and backfilling including dewatering									
		1	cubic meter		XXXXX	XXXXX	XXXXX	XXXXX	830.00	830.00
1B10.2	Additional reinforced concrete work including forms									
		1	cubic meter		XXXXX	XXXXX	XXXXX	XXXXX	10,480.00	10,480.00
			·			-	Baht		Baht	
	Total Price for 1B						30,538,400.0			220,157,680.00

2mc นางสาวเบญญาลักษณ์ ศรลัมพ์ หจตส-ห. 26 ม.ค. 67

นายประวิทย์ เลิศโกวิทย์ ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง 20 Oct 2023

2 mc

## MEDIUM COST FOR BID NO. TS12-L-22

นางสาวเบญญาลักษณ์ ศรลัมพ์ FM-TL06 Rev.0 30/09/2557 หจตส-ห.

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					Supply o	f Equipment	Supply of	Equipment	Local Tran	sportation,
					Forei	gn Supply	Local	Supply	Construc	ction and
Item No.	Description	Estimated	stimated Unit C				Ex-wor	Ex-works Price		llation
				5	CIF	Thai Port	( excluding VAT ) Baht		( excluding VAT ) Baht	
		Qty.								
		_			Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
1C1	Tower type QWA1									
1C1.1	Basic body (230-2x1272 QWA1)									
1C1.2	Body extension 7.0 m (230-2x1272 QWA1)	15	body		XXXXX	XXXXX	1,380,000.00	20,700,000.00	202,000.00	3,030,000.00
101.2										
		5	body		XXXXX	XXXXX	373,000.00	1,865,000.00	54,600.00	273,000.00
1C1.3	Leg extension 2.0 m (230-2x1272 QWA1)									
		4	leg		XXXXX	XXXXX	29,300.00	117,200.00	4,200.00	16,800.00
1C1.4	Leg extension 4.0 m (230-2x1272 QWA1)									
		4	lag		XXXXX	xxxxx	39,600.00	158 400 00	5,700.00	22,800.00
1C1.5	Leg extension 5.0 m (230-2x1272 QWA1)	4	leg		ΛΛΛΛΛ	ΛΛΛΛΛ	39,000.00	158,400.00	5,700.00	22,800.00
101.6	L (0.0 (000 0.1070 ON(41))	4	leg		XXXXX	XXXXX	46,900.00	187,600.00	6,800.00	27,200.00
1C1.6	Leg extension 6.0 m (230-2x1272 QWA1)									
		8	leg		XXXXX	XXXXX	52,800.00	422,400.00	7,700.00	61,600.00
1C1.7	Leg extension 7.0 m (230-2x1272 QWA1)									
		20	leg		XXXXX	xxxxx	59,300.00	1,186,000.00	8,600.00	172,000.00
1C1.8	Leg extension 9.0 m (230-2x1272 QWA1)	20	105			AMAAA	37,500.00	1,100,000.00	0,000.00	172,000.00
1C2	Tower type QWC2	20	leg		XXXXX	XXXXX	75,500.00	1,510,000.00	11,000.00	220,000.00
1C2.1	Basic body (230-2x1272 QWC2)	5	body		XXXXX	XXXXX	2,192,000.00	10,960,000.00	320,900.00	1,604,500.00
1C2.2	Body extension 7.0 m (230-2x1272 QWC2)									
		2	1		VVVVV	VVVVV	522 000 00	1.000.000.00	78 000 00	150 000 00
1C2.3	Leg extension 6.0 m (230-2x1272 QWC2)	2	body		XXXXX	XXXXX	533,000.00	1,066,000.00	78,000.00	156,000.00
10210										
100.4		8	leg		XXXXX	XXXXX	83,100.00	664,800.00	12,100.00	96,800.00
1C2.4	Leg extension 7.0 m (230-2x1272 QWC2)									
		4	leg		XXXXX	XXXXX	102,000.00	408,000.00	14,900.00	59,600.00
1C2.5	Leg extension 9.0 m (230-2x1272 QWC2)									
	ЛО	8	leg		XXXXX	XXXXX	124,000.00	992,000.00	18,100.00	144,800.00
	Level V		leg		ΛΛΛΛΛ	ΛΛΛΛΛ	124,000.00	<i>792</i> ,000.00	16,100.00	144,000.00

(1) นายประวิทย์ เลิศโกวิทย์ ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง 20 Oct 2023

# 2mc

นางสาวเบญญาลักษณ์ ศรลัมพ์ FM-TL06 Rev.0 30/09/2557

#### หจตส-ห. 26 ม.ค. 67

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						f Equipment		Equipment	Local Tran		
					Foreig	gn Supply	Local	Supply	Construction and		
Item No.	Description	Estimated	Unit	Currency			Ex-works Price		Installation		
				5	CIF Thai Port		( excludi	ng VAT )	( excluding VAT )		
		Qty.					Baht		Baht		
				Unit Price	Amount	Unit Price	Amount	Unit Price	Amount		
1C3	Tower type QWD2										
1C3.1	Basic body (230-2x1272 QWD2)	20	body		XXXXX	XXXXX	3,208,000.00	64,160,000.00	469,600.00	9,392,000.00	
1C3.2	Body extension 7.0 m (230-2x1272 QWD2)	20	body		ллллл	лллл	3,208,000.00	04,100,000.00	409,000.00	9,392,000.00	
1C3.3	Leg extension 1.0 m (230-2x1272 QWD2)	6	body		XXXXX	XXXXX	888,000.00	5,328,000.00	130,000.00	780,000.00	
103.5	Leg extension 1.0 in $(230-2x1272 \text{ QWD}2)$										
		4	leg		XXXXX	XXXXX	61,500.00	246,000.00	9,000.00	36,000.00	
1C3.4	Leg extension 2.0 m (230-2x1272 QWD2)										
		4	leg		XXXXX	XXXXX	71,600.00	286,400.00	10,400.00	41,600.00	
1C3.5	Leg extension 3.0 m (230-2x1272 QWD2)										
		12	leg		XXXXX	xxxxx	85,400.00	1,024,800.00	12,500.00	150,000.00	
1C3.6	Leg extension 4.0 m (230-2x1272 QWD2)	12	icg				85,400.00	1,024,800.00	12,500.00	150,000.00	
1C3.7	Leg extension 5.0 m (230-2x1272 QWD2)	20	leg		XXXXX	XXXXX	97,100.00	1,942,000.00	14,200.00	284,000.00	
105.7	Leg extension 5.0 in $(250-2x1272 \text{ QWD}2)$										
		4	leg		XXXXX	XXXXX	109,000.00	436,000.00	15,900.00	63,600.00	
1C3.8	Leg extension 6.0 m (230-2x1272 QWD2)										
		12	leg		XXXXX	XXXXX	138,000.00	1,656,000.00	20,200.00	242,400.00	
1C3.9	Leg extension 7.0 m (230-2x1272 QWD2)		0					,,	.,	,	
		0	1		XXXXX	XXXXX	150,000.00	1 200 000 00	21 000 00	175,200.00	
1C3.10	Leg extension 8.0 m (230-2x1272 QWD2)	8	leg		λλλλλ		150,000.00	1,200,000.00	21,900.00	175,200.00	
100110											
		4	leg	*****	XXXXX	XXXXX	166,000.00	664,000.00	24,300.00	97,200.00	
1C3.11	Leg extension 9.0 m (230-2x1272 QWD2)										
		12	leg		XXXXX	XXXXX	182,000.00	2,184,000.00	26,600.00	319,200.00	
1C4	Tower type QWDE										
1C4.1	Basic body (230-2x1272 QWDE)				3/3/3/3/3/	3/3/3/3/3/3/3/	2 200 000 00	20.072.000.00	460 600 00	1 22 4 400 00	
1C4.2	Body extension 7.0 m (230-2x1272 QWDE)	9	body		XXXXX	XXXXX	3,208,000.00	28,872,000.00	469,600.00	4,226,400.00	
104.2	$\frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}$										
	10 47/	2	body		XXXXX	XXXXX	888,000.00	1,776,000.00	130,000.00	260,000.00	



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# 2./..... นางสาวเบญญาลักษณ์ ศรลัมพ์ FM-TI 06

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#### มสาวเบญญาลักษณ์ ศรลัมพ์ FM-TL06 Rev.0 30/09/2557 หจตส-ห.

## 26 ม.ค. 67

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					Supply of	f Equipment	Supply of	Equipment	Local Tran	sportation,
					Foreig	gn Supply	Local	Supply	Construc	ction and
Item No.	Description	Estimated Qty.	Unit	Currency	CIF	Гhai Port	( exclud	rks Price ling VAT ) Baht	( excludi	l <b>lation</b> ng VAT ) aht
					Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
1C4.3	Leg extension 1.0 m (230-2x1272 QWDE)									
		4	leg		XXXXX	XXXXX	61,500.00	246,000.00	9,000.00	36,000.00
1C4.4	Leg extension 3.0 m (230-2x1272 QWDE)									
104.5	L	4	leg	-	XXXXX	XXXXX	85,400.00	341,600.00	12,500.00	50,000.00
1C4.5	Leg extension 7.0 m (230-2x1272 QWDE)	12	leg		XXXXX	XXXXX	150,000.00	1,800,000.00	21,900.00	262,800.00
1C4.6	Leg extension 9.0 m (230-2x1272 QWDE)	12	105				120,000.00	1,000,000.00	21,900.00	202,000.00
		16	leg		XXXXX	XXXXX	182,000.00	2,912,000.00	26,600.00	425,600.00
1C5	Tower type QWDE90									
1C5.1	Basic body (230-2x1272 QWDE90)	5	body		XXXXX	XXXXX	3,758,000.00	18,790,000.00	550,200.00	2,751,000.00
1C5.2	Body extension 7.0 m (230-2x1272 QWDE90)									
		2	body		XXXXX	XXXXX	696,000.00	1,392,000.00	101,900.00	203,800.00
1C5.3	Leg extension 1.0 m (230-2x1272 QWDE90)							·····		
		8	leg		xxxxx	XXXXX	45,600.00	364,800.00	6,600.00	52,800.00
1C5.4	Leg extension 7.0 m (230-2x1272 QWDE90)									
		8	leg		XXXXX	XXXXX	146,000.00	1,168,000.00	21,300.00	170,400.00
1C5.5	Leg extension 9.0 m (230-2x1272 QWDE90)		U.S.							
		4	leg		XXXXX	xxxxx	166,000.00	664,000.00	24,300.00	97,200.00
1C6	Tower type SWDE									
1C6.1	Basic body (230-2x1272 SWDE)	8	body		XXXXX	XXXXX	899,000.00	7,192,000.00	131,600.00	1,052,800.00
1C6.2	Leg extension 4.0 m (230-2x1272 SWDE)									
		24	leg		XXXXX	xxxxx	27,700.00	664,800.00	4,000.00	96,000.00
1C6.3	Leg extension 7.0 m (230-2x1272 SWDE)									
		8	leg		XXXXX	XXXXX	45,900.00	367,200.00	6,700.00	53,600.00
1C7	Tower type SKKJW90									
1C7.1	Basic body (230-2x1272 SKKJW90)	1	body		XXXXX	xxxxx	5,775,000.00	5,775,000.00	845,500.00	845,500.00

- Project 1-1C10 -

					Supply of	f Equipment	Supply o	f Equipment	Local Tran	sportation,
					Foreig	gn Supply	Loca	ll Supply	Constru	ction and
Item No.	Description	Estimated	Unit	Currency				orks Price		llation
		05			CIF 1	Thai Port		ding VAT ) Daht		ng VAT ) aht
		Qty.			Unit Price	Amount	Unit Price	Baht Amount	Unit Price	Amount
1C7.2	Leg extension 9.0 m (230-2x1272 SKKJW90)					Timount		Thirount		Timount
107.2	Leg extension 9.0 m (250-2x1272 SKKJ w 90)									
1.00		4	leg		XXXXX	XXXXX	118,750.00	475,000.00	17,300.00	69,200.00
	Tower type SKKCW1									
1C8.1	Basic body (230-2x1272 SKKCW)	2	body		XXXXX	XXXXX	3,125,000.00	6,250,000.00	457,500.00	915,000.00
1C8.2	Body extension 20.0 m (230-2x1272 SKKCW1)									
		2	body		XXXXX	XXXXX	1,125,000.00	2,250,000.00	164,700.00	329,400.00
1C8.3	Leg extension 9.0 m (230-2x1272 SKKCW1)		oody				1,123,000.00	2,230,000.00	101,700.00	529,100.00
		0			~~~~~	XXXXXX	50 275 00	475 000 00	8 (00 00	(0.000.00
1C9	Tower signs	8	leg		XXXXX	XXXXX	59,375.00	475,000.00	8,600.00	68,800.00
1C9.1	Circuit name signs									
		8	set		XXXXX	XXXXX	included in installation work	included in installation work	6,000.00	48,000.00
1C9.2	Aerial patrol signs	20	set		XXXXX	XXXXX	included in installation work	included in installation work	2,700.00	54,000.00
1C9.3	Phasing signs (3 pieces per set)	12	set		XXXXX	XXXXX	included in installation work	included in installation work	7,100.00	85,200.00
1C9.4	Warning signs	8	set	****	XXXXX		included in installation work			35,200.00
1C9.5	Danger signs		Set			ЛЛЛЛЛ	included in installation work	included in instantation work	4,400.00	55,200.00
1.010		26	set		XXXXX	XXXXX	included in installation work	included in installation work	3,300.00	85,800.00
1C10	Additional tower work									
1C10.1	Additional galvanized steel work									
1C10.2	Additional paint with two coats of bituminous paint	0.1	ton		XXXXX	XXXXX	62,500.00	6,250.00	9,100.00	910.00
1010.2	Additional paint with two coats of ortunninous paint									
		1	sq. meter		XXXXX	XXXXX	included in installation work	included in installation work	1,600.00	1,600.00
	1						Baht	1	Baht	
								201,146,250.00		29,743,310.00
	Total Price for 1C							· ·		

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- Project 1-1C11 -

TS12-L-22-1 (Sec. 230 kV RS-NV to SKK)

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นายประวิทย์ เลิศโกวิทย์

ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง 20 Oct 2023

					Supply o	of Equipment	Supply of	Equipment	Local Tra	nsportation,
					Forei	gn Supply	Local	Supply	Constru	uction and
Item No.	Description	Estimated Qty.	Unit	Currency	CIF	Thai Port	( exclud	rks Price ing VAT ) 8aht	( exclue	<b>allation</b> ding VAT ) Baht
					Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
	230 kV Sam Khok Junction - Sam Khok Transmission Line									
1D1	Single string suspension insulator assemblies with armor rods for two-bundled 1272 MCM ACSR/GA conductor, 16300 kg ultimate strength, coupling type K (without insulator and arcing horn)									
		60	set		XXXXX	XXXXX	10,000.00	600.000.00	included in stringing work	included in stringing work
1D2	Double string suspension insulator assemblies with armor rods for two-bundled 1272 MCM ACSR/GA conductor, 16300 kg ultimate strength, coupling type K (without insulator and arcing horn)									
100		120	set		XXXXX	XXXXX	12,000.00	1,440,000.00	included in stringing work	included in stringing work
1D3	V string suspension insulator assemblies with armor rods for two- bundled 1272 MCM ACSR/GA conductor, 13000 kg ultimate strength, coupling type J (without insulator and arcing horn)									
		48	set		XXXXX	XXXXX	15,000.00	720.000.00	included in stringing work	included in stringing work
1D4	Bypass string suspension insulator assemblies for two-bundled 1272 MCM ACSR/GA conductor, 12000 kg ultimate strength, coupling type J (without insulator and arcing horn)						10,000,000	,20,000100	norace noracy for	annaec in sunging with
		330	set		XXXXX	xxxxx	9,000.00	2,970,000,00	included in stringing work	included in stringing work
1D5	Single string tension insulator assemblies for two-bundled 1272 MCM ACSR/GA conductor, 13000 kg ultimate strength, coupling type J (without insulator and arcing horn)	550			MAAA		7,000,00	2,570,000.00	incodeu in sunging work	newdo in sunging work
	2 hours	212	set		XXXXX	xxxxx	14,000.00	2,968,000.00	included in stringing work	included in stringing work
	นางสาวเบญญาลักษณ์ ศรลัมพ์ หจตส-ห.					Acre	NO V			

- Project 1-1C12 -

26 ม.ค. 67

นายประวิทย์ เลิศโกวิทย์ ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง 20 Oct 2023

					Supply o	of Equipment	Supply of	f Equipment	Local Tra	ansportation,
					Forei	gn Supply	Loca	l Supply	Constr	uction and
Item No.	Description	Estimated Qty.	Unit	Currency	CIF	Thai Port	( exclud	rks Price ling VAT ) 3aht	( exclu	t <b>allation</b> ding VAT ) Baht
		- •			Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
	Double string tension insulator assemblies for two-bundled 1272 MCM ACSR/GA conductor, 26000 kg ultimate strength, coupling type K (without insulator and arcing horn)									
		792	set		XXXXX	XXXXX	17,000.00	13,464,000.00	included in stringing work	k included in stringing work
	Single string tension inverted insulator assemblies for two-bundled 1272 MCM ACSR/GA conductor, 13000 kg ultimate strength, coupling type J (without insulator and arcing horn)									
		28	set		XXXXX	XXXXX	14,000.00	392.000.00	included in stringing work	k included in stringing work
	Double string tension inverted insulator assemblies for two- bundled 1272 MCM ACSR/GA conductor, 26000 kg ultimate strength, coupling type K (without insulator and arcing horn)	24	set		XXXXX	XXXXX	17,000.00			included in stringing work
	Overhead ground wire tension assemblies for 3/8" high strength, galvanized steel overhead ground wire, 5000 kg ultimate strength	32	set		XXXXX	XXXXX	700.00			included in stringing work
1D11	Porcelain or glass insulator ANSI CLASS 52-5 (25,000 lbs) with corrosion proof type pin						, 30,00			
1D12	Porcelain or glass insulator ANSI CLASS 52-8 (36,000 lbs) with	8226	disc	THB	690.00	5,675,940.00			included in stringing work	k included in stringing work
	corrosion proof type pin	30024	disc	THB	900.00	27,021,600.00				e included in stringing work

- Project 1-1C13 -

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นางสาวเบญญาลักษณ์ ศรลัมพ์ หจตส-ห.

0 (w) นายประวิทย์ เลิศโกวิทย์

นายบระวทย เลศเกวทย ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง 20 Oct 2023

NO

26 ม.ค. 67

					Supply o	of Equipment	Supply of	f Equipment	Local Tra	nsportation,
					Forei	gn Supply	Loca	l Supply	Constru	iction and
Item No.	Description	Estimated Qty.	Unit	Currency	CIF	Thai Port	( exclud	rks Price ling VAT ) 3aht	( exclue	allation ling VAT ) Baht
					Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
1D13	Overhead ground wire tension assemblies for 3/8" high strength, galvanized steel overhead ground wire, 5000 kg ultimate strength to be employed for the installation with insulators supplied under Item 1D11 on take-off structures									
		6	set		XXXXX	XXXXX	700.00	4,200.00	included in stringing work	included in stringing work
	230 kV Nava Nakhon - Rang Sit Transmission Line (at Sam Khok Junction)									~ ~
1D14	Double string suspension insulator assemblies with armor rods for two-bundled 1272 MCM ACSR/GA conductor, 16300 kg ultimate strength, coupling type K (without insulator and arcing horn)									
		12	set		XXXXX	XXXXX	12,000.00	144,000.00	included in stringing work	included in stringing work
1D15	Double string tension insulator assemblies for two-bundled 1272 MCM ACSR/GA conductor, 26000 kg ultimate strength, coupling type K (without insulator and arcing horn)									
1D16	Overhead ground wire suspension assemblies with armor rod for 3/8" high strength, galvanized steel overhead ground wire, 5000 kg ultimate strength	24	set		XXXXX		17,000.00	408,000.00	included in stringing work	included in stringing work
		1	set		XXXXX	XXXXX	1,400.00	1,400.00	included in stringing work	included in stringing work
1D17	Overhead ground wire tension assemblies for 3/8" high strength, galvanized steel overhead ground wire, 5000 kg ultimate strength									
		2	set		XXXXX	XXXXX	700.00	1,400.00	included in stringing work	included in stringing work

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26 ม.ค. 67

นางสาวเบญญาลักษณ์ ศรลัมพ์ หจตส-ห.

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- Project 1-1C14 -

					Supply o	f Equipment	Supply of	f Equipment	Local Tra	nsportation,
					Forei	gn Supply	Loca	l Supply	Constru	iction and
Item No.	Description	Estimated	Unit	Currency			Ex-wo	orks Price	Inst	allation
		Estimated		5	CIF	Thai Port	( exclud	ling VAT )	( exclud	ling VAT )
		Qty.			The second se		I	Baht	I	Baht
					Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
1D18	Porcelain or glass insulator ANSI CLASS 52-8 (36,000 lbs) with corrosion proof type pin									
		1056	disc	THB	900.00	950,400.00			included in stringing work	included in stringing work
				THB		33,647,940.00	Baht		Baht	
	Total Price for 1D				23,543,4		23,543,400.00			

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นางสาวเบญญาลักษณ์ ศรลัมพ์ หจตส-ห. 26 ม.ค. 67

					Supply o	of Equipment	Supply of	f Equipment	Local Tra	nsportation,
					Forei	ign Supply	Loca	l Supply	Constru	iction and
Item No.	Description	Estimated Qty.	Unit	Currency	CIF	Thai Port	( exclud	rks Price ling VAT ) 3aht	( exclud	allation ling VAT ) 3aht
					Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
	230 kV Sam Khok Junction - Sam Khok Transmission Line									
1E1	1272 MCM ACSR/GA Conductor									
1E1.1	1272 MCM ACSR/GA Conductor, furnishing conductor for Item 1E1.2, 1E1.3, 1E1.4 and 1E1.5 (to be supplied by EGAT, see Article F-3, approx. 17.3 km in transmission line distance)									
			km		XXXXX	xxxxx	XXXXX	XXXXX	included in stringing work	included in stringing work
1E1.2	Stringing of conductor by controlled tension method, four circuits, 3 phase, twin-bundled conductor per phase, measured based on horizontal distance of line route from the new deadend Tower No. 1 type SKKJW(90) at Sam Khok Junction to the new deadend Tower No. 61 type QWDE at Sam Khok Substation, (Including connecting loop of Tower No.1 Type SKKJW(90), upper and lower circuits on the same side at Sam Khok Junction to be 230 kV RS-SKK Transmission Line and 230 kV NV-SKK Transmission Line, as per Dwg. No. T04-001)									
1E1.3	Stringing of conductor by controlled tension method, double circuits, 3 phase, twin-bundled conductor per phase, measured based on horizontal distance of line route from the new Tower No. 22 type QWDE to the new Tower No. 25 type QWDE, two transmission line (left and right), each having a distance of approximately 0.4 kilometer at KM.6 (Including connecting loop of Tower No. 22 and Tower No. 25) as per Dwg. No. T04-002 : crossing 500 kV SNO-WNO point no. 1	16.2	km		XXXXX	XXXXX	XXXXX	XXXXX	846,700.00	13,716,540.00
		0.8	km		XXXXX	XXXXX	XXXXX	XXXXX	390,200.00	312,160.00

- Project 1-1C16 -

2mc นางสาวเบญญาลักษณ์ ศรลัมพ์

26 ม.ค. 67

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นายประวิทย์ เลิศโกวิทย์ ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง 20 Oct 2023

					Supply o	of Equipment	Supply o	f Equipment	Local Tra	nsportation,
					Forei	ign Supply	Loca	l Supply	Constru	iction and
Item No.	Description	Estimated Qty.	Unit	Currency	CIF	Thai Port	Ex-works Price ( excluding VAT ) Baht		( exclud	<b>allation</b> ling VAT ) Baht
					Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
1E1.4	Stringing of conductor by controlled tension method, double circuits, 3 phase, twin-bundled conductor per phase, measured based on horizontal distance of line route from the new Tower No. 32 type QWDE to the new Tower No. 35 type QWDE, two transmission line (left and right), each having a distance of approximately 0.6 kilometer at KM.9 (Including connecting loop of Tower No. 32 and Tower No. 35) as per Dwg. No. T04-004 : crossing 500 kV SNO-WNO point no. 2									
		1.2	km		XXXXX	XXXXX	XXXXX	XXXXX	390,200.00	468,240.00
1E1.5	Installation of conductor, four circuit, 3 phase, twin-bundled conductor per phase, between the new deadend Tower No. 61 type QWDE and take-off structure at Sam Khok Substation, approx. 0.1 km. in transmission line distance									
		lump sum	each		XXXXX	XXXXX	XXXXX	XXXXX	443,200.00	443,200.00
1E2	3/8" nominal diameter, high strength galvanized steel overhead ground wire, Class A coating									
1E2.1	3/8" High strength galvanized steel wire, furnishing for Item 1E2.2, 1E2.3 and 1E2.4 based on linear length (Linear length = No. of overhead ground wire x horizontal distance of line route + 1.5%)									
		2	km		XXXXX	XXXXX	28,000.00	56,000.00	included in stringing work	included in stringing work

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หจตส-ห. 26 ม.ค. 67

นายประวิทย์ เลิศโกวิทย์ ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง 20 Oct 2023

					Supply o	f Equipment	Supply of	f Equipment	Local Tra	nsportation,
					Foreig	gn Supply	Loca	l Supply	Constru	ction and
Item No.	Description	Estimated Qty.	Unit	Currency	CIF	Thai Port	( exclud	rks Price ling VAT ) 3aht	( exclud	Illation ling VAT ) Baht
					Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
1E2.2	Stringing of two overhead ground wire by controlled tension method, measured based on horizontal distance of line route from the new Tower No. 22 type QWDE to the new Tower No. 25 type QWDE, as per Dwg. No. T04-002, approx. 0.4 km. in transmission line distance									
		lump sum	each		XXXXX	XXXXX	XXXXX	XXXXX	13,700.00	13,700.00
1E2.3	Stringing of two overhead ground wire by controlled tension method, measured based on horizontal distance of line route from the new Tower No. 32 type QWDE to the new Tower No. 35 type QWDE, as per Dwg. No. T04-004, approx. 0.6 km. in transmission line distance									
		lump sum	each		XXXXX	XXXXX	XXXXX	XXXXX	16,500.00	16,500.00
1E2.4	Installation of four overhead ground wires between the new deadend Tower No. 61 type QWDE and take-off structure at Sam Khok Substation, approx. 0.1 km. in transmission line distance	lump sum	each		XXXXX	XXXXX	XXXXX	XXXXX	27,500.00	27,500.00
	230 kV Rang Sit - Nava Nakhon Transmission Line	Tump Sum	caen		АЛЛАЛ		Алла	АЛЛА	27,500.00	27,500.00
1E3	1272 MCM ACSR/GA Conductor									
1E3.1	1272 MCM ACSR/GA Conductor, furnishing conductor for Item 1E3.2 (to be supplied by EGAT, see Article F-3, approx. 0.8 km in transmission line distance)									
			km		XXXXX	XXXXX	XXXXX	XXXXX	included in stringing work	included in stringing work
	1	0.					ЛА			

2mc นางสาวเบญญาลักษณ์ ศรลัมพ์

26 ม.ค. 67

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นายประวิทย์ เลิศโกวิทย์

ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง 20 Oct 2023

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TS12-L-22-1 (Sec. 230 kV RS-NV to SKK)

Rev.16

- Project 1-1C18 -

					Supply o	of Equipment	Supply o	f Equipment	Local Tra	nsportation,
					Forei	ign Supply	Loca	l Supply	Constru	iction and
Item No.	Description	Estimated Qty.	Unit	Currency	CIF	Thai Port	( exclud	orks Price ding VAT ) Baht	( exclud	<b>allation</b> ling VAT ) Baht
					Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
1E3.2	Stringing of conductor by controlled tension method, four circuits, 3 phase, twin-bundled conductor per phase, measured based on horizontal distance of line route from Tower No. 34/1 type QWA1 to Tower No. 34/3 type QWA1 at Sam Khok Junction									
		0.8	km		XXXXX	XXXXX	using existing conductor	using existing conductor	846,700.00	677,360.00
1E4	3/8" nominal diameter, high strength galvanized steel overhead ground wire, Class A coating									
1E4.1	3/8" High strength galvanized steel wire, furnishing for Item 1E4.2 based on linear length (Linear length = No. of overhead ground wire x horizontal distance of line route + 1.5%)									
		0.8	km		XXXXX	XXXXX	XXXXX	XXXXX	included in stringing work	included in stringing work
1E4.2	Stringing of one overhead ground wire by controlled tension method, measured based on horizontal distance of line route from Tower No. 34/1 type QWA1 to the Tower No. 34/3 type QWA1 at Sam Khok juction									
		0.8	km		XXXXX	XXXXX	using existing OHGW	using existing OHGW	22,000.00	17,600.00
	Total Price for 1E						Baht	56,000.00	Baht	15,692,800.00

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26 ม.ค. 67

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นายป์ระวิทย์ เลิศโกวิทย์ ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง 20 Oct 2023

- Project 1-1C19 -

					Supply o	f Equipment	Supply of	Equipment	Local Tra	nsportation,
					Forei	gn Supply	Local	Supply	Constru	iction and
Item No.	Description	Estimated Qty.	Unit	Currency	CIF '	Thai Port	( exclud	rks Price ing VAT ) 8aht	( exclud	<b>allation</b> ling VAT ) Baht
					Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
1F1	Spacer damper for two-bundled 1272 MCM ACSR/GA conductor (for four circuit, 230 kV SKK Junction - SKK, approx. 17.3 km in transmission line distance)									
		lump sum	each		XXXXX	XXXXX	4,152,000.00	4,152,000.00	included in stringing work	included in stringing work
1F2	Spacer damper for two-bundled 1272 MCM ACSR/GA conductor (for four circuit, 230 kV NV-RS, approx. 0.8 km in transmission line distance)									
		lump sum	each		XXXXX	XXXXX	192,000.00	192,000.00	included in stringing work	included in stringing work
1F3	Rigid type spacer for two-bundled 1272 MCM ACSR/GA conductor									
1F4	Vibration damper for 3/8" high strength galvanized steel overhead	1026	set		XXXXX	XXXXX	600.00	615,600.00	included in stringing work	included in stringing work
164	ground wire									
1F5	Field test of spacer damper for two-bundled 1272 MCM	29	set		XXXXX	XXXXX	650.00	18,850.00	included in stringing work	included in stringing work
115	ACSR/GA conductor as per Specifications No.TL-03									
		1	set		XXXXX	XXXXX	XXXXX	XXXXX	187,430.00	187,430.00
							Baht		Baht	
	Total Price for 1F							4,978,450.00		187,430.00

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นางสาวเบญญาลักษณ์ ศรลัมพ์ หจตส-ห.

นายประวิทย์ เลิศโกวิทย์ ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง 20 Oct 2023

- Project 1-1C20 -

					Supply o	of Equipment	Supply of	f Equipment	Local Tra	nsportation,
					Forei	gn Supply		l Supply	Constru	ction and
Item No.	Description	Estimated Qty.	Unit	Currency	CIF	Thai Port	( exclud	rks Price ling VAT ) Baht	( exclud	Illation ing VAT ) Baht
					Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
	230 kV Sam Khok Junction - Sam Khok Transmission Line									
	1.6 cm. nominal diameter x 3.0 m. (5/8" diameter x 10') copper- covered steel single length sectional ground rod with ground rod clamp, ground connecting wire and stub angle connector									
		264	set				1,200.00	316,800.00	230.00	60,720.00
	1.6 cm. nominal diameter x 1.8 m. (5/8" diameter x 6') copper- covered steel sectional ground rod with coupling									
		28	set				800.00	22,400.00	230.00	6,440.00
	Connector set (No.4 AWG annealed copper ground connecting wire 0.6 m. long with stub angle connector)									
		80	set				300.00	24,000.00	120.00	9,600.00
	Counterpoise No.2 AWG solid copper-clad steel wire 30% conductivity	1200	m				180.00	216,000.00	100.00	120.000.00
1G5	Heavy duty exothermic or compression type connector	1200	111				130.00	210,000.00	100.00	120,000.00
		80	set				250.00	20,000.00	230.00	18,400.00
							D. L.			
	Total Price for 1G						Baht	599,200.00	Baht	215,160.00

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นางสาวเบญญาลักษณ์ ศรลัมพ์ หจตส-ห.

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นายป์ระวิทย์ เลิศโกวิทย์ ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง 20 Oct 2023

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## MEDIUM COST FOR BID NO. TS12-L-22

นางสาวเบญญาลักษณ์ ศรลัมพ์ FM-TL06

FM-TL06 Rev.0 30/09/2557

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Item No.	Description	Estimated Qty.		Currency	Supply of Equipment		Supply of Equipment		Local Transportation, Construction and Installation ( excluding VAT ) Baht	
			Unit		CIF Thai Port		Local Supply Ex-works Price ( excluding VAT ) Baht			
					1H1	Composite overhead ground wire with 36 core optical fibers (OPGW) route from Nava Nakhon to Sam Khok for circuit no.1 (referred section F-4.3)				
1H1.1	11.4mm dia. Composite Overhead Ground Wire with Optical Fiber (OPGW)		,	TUD	2 220 600 00	2 220 (00 00				
1H1.2	Stringing by controlled tension method, one OPGW measured based on horizontal distance of line route from Tower No. 34/1 (SKK Junction) to Nava Nakhon T.O.S. (SKK Substation) on circuit no.1	lump sum	lump sum	THB	2,320,600.00	2,320,600.00			Included in Item 1H1.2	Included in Item 1H1.
		18	km		XXXXX	XXXXX	XXXXX	XXXXX		
1H2	Joint box for optical fiber cable									
1H2.1	2-way joint box with accessories for two OPGW cables (including splicing work)								(72,200,00	(70,000,00
1H2.2	2-way joint box with accessories for OPGW and OPGW cable on tower no.34/1 at Sam Khok junction (including splicing work) for circuit no.1	lump sum	set						672,300.00	672,300.00
1H2.3	2-way joint box with insulator and accessories for OPGW and 36 core non-metallic optical fiber cable at Nava Nakhon take-off structure (SKK substation)(including splicing work) for circuit no.1	-								
1H3	Hardware assembly for OPGW	1	set							
1H3.1	OPGW suspension (Grounded) assembly 22 with armor rods (excluding vibration damper)		1		VVVVV	VVVVV				
1H3.2	OPGW tension (Grounded) assembly 24 with armor rods (excluding vibration damper)	lump sum			XXXXX	XXXXX				
1H3.3	OPGW tension with accessories and insulator to be used at Nava Nakhon take-off structure (SKK substation) for circuit no.1	lump sum			XXXXX					
1H4	Line accessories	1	set							
1H4.1	Vibration damper assembly with accessories	lump sum	lump sum		xxxxx	xxxxx				



					Supply of	f Equipment	Supply of	f Equipment	Local Tra	nsportation,
	Description	Estimated Qty.	Unit	Currency	Foreign Supply CIF Thai Port		Local Supply Ex-works Price ( excluding VAT ) Baht		Construction and Installation ( excluding VAT ) Baht	
Item No.										
					Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
1H4.2	Parallel groove clamps	lump sum	lump sum							
1H4.3	Grounding clamps	lump sum	lump sum							
1H4.4	1-wire cleat with accessories for OPGW down-lead to joint box									
1H4.5	2-wire cleats with accessories for OPGW down-lead to joint box	lump sum	lump sum							
1H4.6	6-wire cleats with accessories for OPGW down-lead to joint box	lump sum	lump sum							
1114.0	o-whe clears with accessings for or own down-lead to joint box	lump sum	lump sum							
1H4.7	1-wire cleat with insulator and accessories for OPGW down-lead to joint box to be used at the Nava Nakhon take-off structure (SKK S/S) for circuit no.1									
1H4.8	6-wire cleats with insulator and accessories for OPGW down-lead to joint box to be used at the Nava Nakhon take-off structure (SKK S/S) for circuit no.1		set							
1H4.9	Porcelain or glass insulator ANSI CLASS 52-5 (25,000 lbs) with corrosion proof type pin	4 lump sum	set							
1H4.10	3/8" High strength galvanized steel wire for grounding OPGW to towers	lump sum			XXXXX	xxxxx				
1H5	Field testing for optical fiber for item 1H1	lump sum				XXXX	XXXXX	XXXXX	44,100.00	44,100.00
1H6	Composite overhead ground wire with 36 core optical fibers (OPGW) route from Rangsit to Sam Khok for circuit no.1 (referred section F-4.3)		1						,	
1H6.1	11.4mm dia. Composite Overhead Ground Wire with Optical Fiber (OPGW)									
		lump sum	lump sum	THB	2,320,600.00	2,320,600.00			Included in Item 1H6.2	Included in Item 1H6.2

- Project 1-1C23 -



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นางสาวเบญญาลักษณ์ ศรลัมพ์

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## MEDIUM COST FOR BID NO. TS12-L-22

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นางสาวเบญญาลักษณ์ ศรลัมพ์ FM-TL06 Rev.0 30/09/2557

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Item No.	Description	Estimated U: Qty.			Supply of Equipment Foreign Supply CIF Thai Port		Supply of Equipment           Local Supply           Ex-works Price           ( excluding VAT )           Baht		Local Transportation, Construction and Installation ( excluding VAT ) Baht	
			Unit	Currency						
					1H6.2	Stringing by controlled tension method, one OPGW measured based on horizontal distance of line route from Tower no.34/3 (SKK junction) to Rangsit T.O.S. (SKK substation) on circuit no.1				
		18	km		XXXXX	XXXXX	XXXXX	XXXXX		
1H7	Joint box for optical fiber cable									
1H7.1	2-way joint box with accessories for two OPGW cables (including splicing work)									
			,						(72 200 00	(72.200.0
1H7.2	2-way joint box with accessories for OPGW and OPGW cable on tower no.34/3 at Sam	lump sum	lump sum	1					672,300.00	672,300.0
	Khok junction (including splicing work) for circuit no.1									
1117.0		1	set							
1H7.3	2-way joint box with insulator and accessories for OPGW and 36 core non-metallic optical fiber cable at Rangsit take-off structure (SKK substation) for circuit no.1									
****		1	set						****	
1H8	Hardware assembly for OPGW									
1H8.1	OPGW suspension (Grounded) assembly 22 with armor rods (excluding vibration damper)									
1H8.2	OPGW tension (Grounded) assembly 24 with armor rods (excluding vibration damper)	lump sum	lump sum	1	XXXXX	XXXXX				
1110.2	OPOw tension (Grounded) asseniory 24 with armor rods (excluding vioration damper)	lump sum	lump sum	1	xxxxx	XXXXX				
1H8.3	OPGW tension with accessories and insulator to be used at Rangsit take-off structure (SKK substation) for circuit no.1									
1H9	Line accessories	1	set		XXXXX	XXXXX				
1119										
1H9.1	Vibration damper assembly with accessories									
1H9.2	Parallel groove clamps	lump sum	lump sum	1	XXXXX	XXXXX				
111).2	a and 50000 damps	lump sum	lump sum	1						
1H9.3	Grounding clamps									
		lump sum	lump sum	l .						l



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					Supply of	f Equipment	Supply of	f Equipment	Local Tra	insportation,
					Foreig	n Supply	Local	Supply	Constru	Construction and Installation
Item No.	Description	Estimated Qty.	Unit	Currency	CIF T	CIF Thai Port		Ex-works Price ( excluding VAT ) Baht		<b>allation</b> ling VAT ) 3aht
					Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
1H9.4	1-wire cleat with accessories for OPGW down-lead to joint box									
		lump sum	lump sum							
1H9.5	2-wire cleats with accessories for OPGW down-lead to joint box									
		lump sum	lump sum							
1H9.6	6-wire cleats with accessories for OPGW down-lead to joint box									
		lump sum	lump sum							
	1-wire cleat with insulator and accessories for OPGW down-lead to joint box to be used at the Rangsit take-off structure (SKK S/S) for circuit no.1	A								
		15	set							
	6-wire cleats with insulator and accessories for OPGW down-lead to joint box to be used at the Rangsit take-off structure (SKK S/S) for circuit no.1									
		4	set							ļ
	Porcelain or glass insulator ANSI CLASS 52-5 (25,000 lbs) with corrosion proof type pin									
1H9.10	3/8" High strength galvanized steel wire for grounding OPGW to towers	lump sum	lump sum							
1H10	Field testing for optical fiber for item 1H6	lump sum	lump sum		XXXXX	XXXXX				
11110	The desting for option not for term into	lump sum	lump sum		XXXXX	XXXXX	XXXXX	XXXXX	44,100.00	44,100.00
				THB		4,641,200.00	Baht		Baht	
	Total Price for 1H									1,432,800.00

2hm6 นางสาวเบญญาลักษณ์ ศรลัมพ์ หจตส-ห. 26 ม.ค. 67

นายประวิทย์ เลิศโกวิทย์ ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง 20 Oct 2023

Item No.	Description	Estimated Qty.	Unit	Local Transportation, Construction and Installation ( excluding VAT ) Baht	
				Unit Price	Amount
111	Dismantling of the existing 230 kV Nava Nakhon - Rangsit Transmission Line which is four circuit, twin-bundled conductor per phase from Str. No. 34/1 type QWA1 to Str. No. 34/3 type QWA1 at Samkhok Junction, approx. 0.8 km in transmission line distance.				
		lump sum	each	121,280.00	121,280.00
				Baht	
	Total Price for 11				121,280.00

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หจตส-ห. 26 ม.ค. 67

นายป์ระวิทย์ เลิศโกวิทย์ ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง 20 Oct 2023

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						Supply of Equipment Foreign Supply		<b>f Equipment</b> ll Supply	Local Transportation, Construction and	
Item No.	Description	Estimated Unit Qty.		Currency	CIF Thai Port		Ex-wc ( exclud	orks Price ding VAT ) Baht	Insta ( exclud	ing VAT )
					Unit Price	Unit Price Amount		Amount	Unit Price	Amount
1L1 1L1.1	Air navigation obstruction marking of OPGW as per drawing No.XXX Fiber glass sphere with armor rod for OPGW	21	set						10,250.00	215,250.00
	Total Price for 1L	<u> </u>				<u> </u>	Baht	<u> </u>	Baht	215,250.00

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หจตส-ห.

26 ม.ค. 67

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นายประวิทย์ เลิศโกวิทย์ ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง 20 Oct 2023 อวส.-อผค.

Item No.	Description	Estimated Qty.	Unit	Currency	Foreign Currency		( excludi	al Currency uding VAT ) Baht	
					Unit Price	Amount	Unit Price	Amount	
1N1	Steep front wave impulse test on insulator ANSI Class 52-5 (25,000 lbs), as per Specification No. TL-01 (Rev. 2)			THD	150 700 00	150 700 00			
1N2	Stern Grant music test an insulator ANSI Class 52.8 (26,000 lbs) as non	1	test	THB	150,700.00	150,700.00	******		
INZ	Steep front wave impulse test on insulator ANSI Class 52-8 (36,000 lbs), as per Specification No. TL-01 (Rev. 2)	1	test	THB	150,700.00	150,700.00			
1N3	Laboratory test of spacer damper for two-bundled 1272 MCM ACSR/GA Conductor as per Specification No. TL-03 (Rev.0)	1		IIID	150,700.00	150,700.00			
		1	test	THB	150,700.00	150,700.00			
				ТНВ		452,100.00	Baht		
	Total Price for 1N								

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นายประวิทย์ เลิศโกวิทย์ ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง 20 Oct 2023

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นางสาวเบญญาลักษณ์ ศรลัมพ์ หจตส-ห. 26 ม.ค. 67

Item No.	Description	Estimated Qty.	Unit	Construc Install ( excludin Ba	Local Transportation, Construction and Installation ( excluding VAT ) Baht	
101	Services of four-wheel-driven vehicle (for Specifications and requirements of Vehicles, refer to Article G-6. Housing and			Unit Price	Amount	
	Other Facilities.)	42	car-month	55,130.00	2,315,460.00	
	Total Price for 1O				2,315,460.00	

2m5 นางสาวเบญญาลักษณ์ ศรลัมพ์ หจตส-ห. 26 ม.ค. 67

นายประวิทย์ เลิศโกวิทย์ ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง 20 Oct 2023

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Item No.	Description	Estimated Qty.	Unit	Dismantled ( includi	ce Offered for Equipment ng VAT ) aht
1Z1	Dismantled Equipment of the existing 230 kV Nava Nakhon - Rangsit Transmission Line which is four circuit, twin-bundled conductor per phase from Str. No. 34/1 type QWA1 to Str. No. 34/3 type QWA1 at Sam Khok Junction, approx. 0.8 km in transmission line distance.			Unit Price	Amount
	Total Price for 1Z		Baht	105,300.00	

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นายประวิทย์ เลิศโกวิทย์ ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง 20 Oct 2023

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# **Important Information**

for

# Invitation to Bid No. TS12-L-22

The purpose of this section is to inform the Bidders to **carefully study** the details of the revised terms and conditions in the bidding documents. The following provisions have been **recently revised** as stated hereunder:

## **Additional Regulation**

Information to be submitted with Bid as required in Item 3.2 has been revised.

The following paragraph in Remarks Item 4. of page 11 of Additional Regulation has been deleted :-

"In case that any Major Shareholder(s) of the Bidder is (are) juristic person(s), and such juristic person(s) has (have) Major Shareholder(s) who is (are) juristic person(s), the Bidder shall submit the list of the Major Shareholder(s)/ the Names of Manager/ Managing Partner/ Managing Director/ Executive/ Person Who Is Authorized to Manage the Business/ Partner/ Partner with Unlimited Liability/ of such juristic person(s) as per page 10-11 of this Additional Regulation. The requirement of submission of list of the Major Shareholder(s)/ the Names of Manager/ Managing Partner/ Managing Director/ Executive/ Person Who Is Authorized to Manage the Business/ Partner with Unlimited Liability/ of such juristic person(s) as per page 10-11 of this Additional Regulation. The requirement of submission of list of the Major Shareholder(s)/ the Names of Manager/ Managing Partner/ Managing Director/ Executive/ Person Who Is Authorized to Manage the Business/ Partner with Unlimited Liability/ of such juristic person(s) shall apply to 2 tiers of Major Shareholder(s) who is(are) juristic person(s)."

# Article A-3. <u>Eligibility of Bidders: General Requirements</u> and Article B-8. <u>Information</u> to be Submitted with Bid

Bidders shall provide written anti-corruption policies and guidelines as specified in Data Sheet.

## Article A-4. Eligibility of Bidders: Technical Requirements

The Bidder shall be named in EGAT Accepted Bidders List for Supply and Construction of Transmission Line attached at the end of Section A. Invitation to Bid.

Some of the Equipment to be proposed by the Bidder shall be only those specified in EGAT Accepted List for such Equipment as attached at the end of Section A. Invitation to Bid. The Bidder shall carefully study Article A-4. Eligibility of Bidders: Technical Requirements and make sure to propose Equipment correctly.

#### Article B-3. <u>Bid Security</u>

Terms and conditions regarding the forms of bid security have been revised.

#### Article E-15. Performance Security and Specimen of Performance Security

Terms and conditions regarding the forms and the amount of performance security have been revised.

#### Article E-16. Inspection and Tests

Terms and conditions regarding inspection and tests have been revised.

#### Article E-36. Advance Payment Security

Terms and conditions regarding the forms of advance payment security have been revised.

#### Article F-8. Drawings and Data to be Furnished by the Contractor

Terms and conditions regarding EGAT's document management system in item d. have been added and the number of copies of the drawings and documents in Print and CD-ROM has been revised.

#### Article F-12. Liquidated Damages for Late Completion and Late Delivery

The total amount of liquidated damages shall not exceed ten (10) per cent of the total Contract Price, thereafter EGAT shall have the right, at its sole discretion, to terminate the Contract.

## Article F-17. Maintenance Guarantee and Article F-18. Maintenance Security

In case all obligations on the part of the Contractor for the work under separated guarantee period under the Contract have been fulfilled, the Contractor is entitled to request EGAT to return the maintenance security guaranteed for such work regardless of the non-issuance of the Final Acceptance Certificate.

## Article F-18. Maintenance Security and Specimen of Maintenance Guarantee

Terms and conditions regarding the forms and the amount of maintenance security have been revised.

## Article G-3. <u>Safety Program</u>

Safety terms and conditions have been revised. The Contractor shall observe and comply with the revised terms and conditions including Table 1. Safety Criteria and Conditions, Table 2. Contractor's Safety Information, and Table 3. Contractor Safety Evaluation Checklist which have been added at the end of Section G.

# **DATA SHEET**

# for

# Invitation to Bid No. TS12-L-22

This Section consists of provisions that are specific to each procurement and supplement the information or requirements included in Bidding Documents.

1. Article A-3. Eligibility of Bidders: General Requirements

The following requirement shall be added to item I.:

" j. Bidders shall provide written anti-corruption policies and guidelines with respect to procurement and supplies according to the Notification of the Anti-Corruption Co-Operation Committee Concerning Minimum Standards of the Anti-Corruption Policies and Guidelines in Relation to Procurement and Supplies Required to be Implemented by the Business Operator, Section 19 of the Government Procurement and Supplies Management Act B.E. 2560 (A.D. 2017)."

2. Article B-3. <u>Bid Security</u>

The amount of bid security shall be USD 954,580.- or THB 34,300,000.-.

3. Article B-4. <u>Validity of Bids</u>

The validity of the bid shall be for two hundred and ten (210) Days from the date specified for opening of bid.

4. Article B-8. Information to be Submitted with Bid

The following document shall be added to Article B-8. <u>Information to be Submitted with</u> <u>Bid</u>:

y. Bidder's anti-corruption policies and guidelines in relation to procurement and supplies together with the completely filled out Anti-Corruption Compliance Checklist as provided.

# 5. Article B-12. Evaluation and Comparison of Bids

Evaluation and comparison of Bids shall be as specified in Article B-12. Evaluation and Comparison of Bids.

# Anti-Corruption Compliance Checklist (Consortium)

Bidders shall provide written anti-corruption policies and guidelines with respect to procurement and supplies pursuant to the Notification of the Anti-Corruption Co-Operation Committee Concerning Minimum Standards of the Anti-Corruption Policies and Guidelines in Relation to Procurement and Supplies Required to be Implemented by the Business Operator, in accordance with Section 19 of the Government Procurement and Supplies Management Act B.E. 2560 (A.D. 2017). This checklist shall be submitted with Bids.

Project : ..... State Agency: Electricity Generating Authority of Thailand Member No. ... of the consortium:

.....

Item		No	Reference
			(Please specify Article)
1. Bidders have any written anti-corruption			
policies and guidelines which have been			
communicated to all levels of employees.			
2. Bidders impose penalty or regulations against			
corruption.			
3. Bidders have accessible channels or systems			
to report any suspicions or queries related to			
corruption.			
4. Bidders have internal personnel or unit			
explicitly responsible for the prevention of			
corruption.			

We hereby confirm that all above statements are true and correct.

Signed

(Name of Bidder) (Authorized person) Stamp company seal (if any)

# Anti-Corruption Compliance Checklist (Individual Company / Joint Venture)

Bidders shall provide written anti-corruption policies and guidelines with respect to procurement and supplies pursuant to the Notification of the Anti-Corruption Co-Operation Committee Concerning Minimum Standards of the Anti-Corruption Policies and Guidelines in Relation to Procurement and Supplies Required to be Implemented by the Business Operator, in accordance with Section 19 of the Government Procurement and Supplies Management Act B.E. 2560 (A.D. 2017). This checklist shall be submitted with Bids.

Project : ..... State Agency: Electricity Generating Authority of Thailand Bidder Name : ....

Item	Yes	No	Reference (Please specify Article)
1. Bidders have any written anti-corruption			
policies and guidelines which have been			
communicated to all levels of employees.			
2. Bidders impose penalty or regulations against			
corruption.			
3. Bidders have accessible channels or systems			
to report any suspicions or queries related to			
corruption.			
4. Bidders have internal personnel or unit			
explicitly responsible for the prevention of			
corruption.			

We hereby confirm that all above statements are true and correct.

Signed

(Name of Bidder)

(Authorized person)

Stamp company seal (if any)

# ELECTRICITY GENERATING AUTHORITY OF THAILAND

Nonthaburi Thailand

# **INVITATION TO BID NO. TS12-L-22**

#### SUPPLY AND CONSTRUCTION OF TRANSMISSION LINE FOR SECTIONALIZING OF 230 kV RANGSIT - NAVA NAKHON TO SAM KHOK SUBSTATION

# TRANSMISSION SYSTEM EXPANSION PROJECT NO.12

# A-1. <u>Invitation</u>

The Electricity Generating Authority of Thailand (EGAT) hereby invites sealed bids for Supply and Construction of Transmission Line for Sectionalizing of 230 kV Rangsit – Nava Nakhon to Sam Khok Substation under Transmission System Expansion Project No.12 Project in accordance with the Terms and Conditions, Technical Specifications and Drawings described in these Bidding Documents.

# A-2 <u>Work Description</u>

The scope of Work under this Invitation is supply and construction for sectionalizing 230 kV Rangsit – Nava Nakhon Transmission Line to Sam Khok Substation. This line is 50 Hz, 3 phase, twin-bundled conductor per phase on four circuit self-supporting lattice steel towers, extending from Sam Khok Junction to Sam Khok Substation in the central region of Thailand, having a distance of approximately 17.3 kilometers on the new right-of-way with 20 meters in width on each side of the center line of the transmission line.

The conductor to be employed will be 1272 MCM ACSR/GA supplied by EGAT. Two types of overhead ground wires will be employed ; one of which is 3/8 inch nominal diameter, high strength galvanized steel overhead ground wire and the other is composite overhead ground wire with 36-core optical fiber. Both types of overhead ground wires shall be supplied by the Contractor.

The dismantling and reconnecting Work of the existing 230 kV Rangsit - Nava Nakhon Transmission Line at Sam Khok Junction, having a distance of approximately 0.80 kilometer shall also be performed. However, since the reconnecting Work of 230 kV Rangsit – Nava Nakhon Transmission Line shall be executed while the other circuit is being energized, the Contractor shall perform the said Work with full precaution in accordance with the requirements of the Specifications No. TL-06 (Rev. 0) : <u>Stringing of Conductor</u>, <u>Overhead</u> Ground Wire and OPGW Parallel to Live line.

It shall also be noted that the above – mentioned dismantling Work shall be conducted in accordance with the requirements in Specifications No. TL-07 (Rev.3) : <u>Dismantling Work</u>. List of dismantled Equipment to be purchased by the Contractor is shown in Attachment No. 2 : <u>List of Equipment to be Dismantled by the Contractor</u>. Conditions regarding the purchase of the dismantled Equipment are stipulated in Attachment No. 3 : <u>Requirements for Dismantling Work and Conditions of Sale of Dismantled Equipment</u>.

All types of steel towers have already been designed by EGAT except tower type SKKCW1 and SKKJW(90) which shall be designed by the Contractor. However, the fabrication/erection drawings, stub & setting dimensions for all tower types, as well as details & bar bending schedule for all foundation types including pile foundation shall be prepared and submitted for EGAT's approval by the Contractor. It shall also be noted that the modifications and re-design for towers and foundations may be required. In such case, the Contractor shall perform and provide these drawings for EGAT's approval.

Reproducible drawings and CD-ROM of the drawings for towers, stub & setting dimensions, including details & bar bending schedule of foundations as well as for modified and re-designed towers and foundations (if any) shall be required to be submitted to EGAT by the Contractor.

The full responsibility for adequacy and accuracy of all detailed drawings shall rest with the Contractor and he shall have no right to claim for additional compensation as a result of his misinterpretation or failure to check the drawings for compliance with the design requirements, inaccuracies, errors and omissions.

The Contractor shall also be responsible for the design of any other necessary parts for completion of the Work, including the manufacture, supply, testing, construction and installation of the various components of the transmission line. The portion of design and detailing which are provided by EGAT is not under the Contractor's design responsibility.

Services required to complete the Work are shown in the Bid Price Schedules and included in these Bidding Documents.

# A-3. Eligibility of Bidders: General Requirements

I. All Bidders shall meet the following requirements; failure to so comply shall constitute sufficient ground for rejection.

- a. The Bidder shall be a partnership, firm or company, either alone or in joint venture or in consortium.
- b. The Bidder shall be well-established and maintain a permanent place of business.
- c. The Bidder shall not be, or supply the Equipment, from the country under the state of Civil War.

- d. The Bidder shall not be named in the List of Work Abandoners published by the Permanent Secretary, Ministry of Finance and/or in the Debarment List and/or in the List of Work Abandoners declared by EGAT.
- e. The Bidder shall not be a Jointly Interested Bidder with other Bidders as from the date of EGAT's issuance of the Invitation to Bid, or shall not be a person who undertakes any action as an "Obstruction of Fair Price Competition" as defined in Additional Regulation for this Invitation.
- f. The Bidder shall not either be EGAT's consultant or involving in EGAT's consultancy company under this Invitation, or have EGAT's personnel involved in his business as shareholder having voting right that can control his business, director, manager, officer, employee, agent or consultant except the ones who are officially ordered by EGAT to act or participate therein.
- g. The Bidder shall not be the person who is privileged or protected not to be taken any legal proceedings under Thai Court; provided that such Bidder's government declares that such special privilege is waived.
- h. In case of being a joint venture or a consortium, the Bidder shall carry out all the Work under such formation from the time of bidding until the fulfillment of the Contract.
- i. The Bidder must have purchased the bidding documents from EGAT. For a joint venture or a consortium, only one (1) member of the joint venture or consortium is required to purchase the bidding documents.

In case the Bidder's name is not exactly the same as the purchaser's name, the purchaser shall notify EGAT of the name of the Bidder in writing prior to the bid opening time.

II. All Bidders should preferably meet the following requirements; failure to so comply may constitute sufficient ground for rejection.

- a. The Bidder shall have adequate funds to meet financial obligations incidental to this Contract.
- b. The Bidder shall supply documentary evidence established in accordance with Article B-8. Information to be Submitted with Bid to demonstrate adequately that he is eligible to bid and is qualified to perform the Contract if his bid is accepted. Bidder should also demonstrate his capacity to perform the Work either with or without the use of subcontractor.

# A-4. <u>Eligibility of Bidders: Technical Requirements</u>

# I. All Bidders shall meet the following requirements; failure to so comply shall constitute sufficient ground for rejection.

- a. The Bidder shall be named in the Approved List of Bidders for Supply and Construction of Transmission Line : 115 kV or 230 kV Transmission Line for Single & Twin-bundled Conductor (Conventional Type) or 230 kV Transmission Line with Four-bundled Conductor or 500 kV Transmission Line with Four-bundled Conductor. The said Approved List is attached at the end of Section A. <u>Invitation to Bid</u>.
- b. Insulator for conductor manufacturer being named in the Approved List of Manufacturers for Insulator of transmission line for single & twin-bundled conductor (conventional type) having the same voltage level as the Work specified under this Invitation. The said Approved List is attached at the end of Section A. Invitation to Bid.
- c. Proposing towers, conductor, hardware assemblies and line accessories for conductor, dampers and spacer dampers for conductor, and composite overhead ground wire with optical fiber (OPGW) manufactured by regular manufacturers of excellent reputation having significant technical knowledge and at least three (3) years experience in the design, manufacture and testing of such Equipment, having manufacturing capacity available to perform the Work properly and expeditiously within the time specified, and having satisfactory past experience, with additional requirements as follows:
  - 1) Tower manufacturer being an eligible local firm having set up a plant for fabrication of steel towers in Thailand
  - 2) Hardware assemblies and line accessories for conductor manufacturer being an eligible local firm having set up a plant in Thailand
  - 3) Damper and spacer damper for conductor manufacturer being an eligible local firm having set up a plant in Thailand
  - 4) Composite overhead ground wire with optical fiber (OPGW) manufacturer having a record of at least three (3) consecutive years of successful operation/use of the same or similar type as those required under this Invitation in the transmission line having accumulated distance of not less than 20 kilometers

If the manufacturer is a new company formed by acquisition of or merger with other companies or business units, and any of such previous companies or business units has the experience records that meet the requirements set forth herein, such experience records are acceptable as the experience records of the new company, provided that each item of the Equipment to be supplied under this Bid shall be manufactured from the same source of supply as indicated in each of such relevant supply records as described in Item I.c.1) thru I.c.4) above. Otherwise, it shall not be acceptable and shall be sufficient grounds for rejection.

For the avoidance of doubt, it is not allowed to combine the experience records of the previous companies or business units in order to meet the experience requirements.

However, the Bidder may propose any qualified local manufacturer who does not have experiences in design, manufacture and testing as well as a record of successful operation/use of his Equipment as specified above but has obtained special permission from EGAT for manufacture and/or fabrication of the specific Equipment within the scope specified in the letter of permission issued by EGAT, or propose any local manufacturer who is in the list of Eligible Local Manufacturers Accepted by EGAT as shown herein at the end of this Section.

In the event that the Bidder proposes the Equipment of the manufacturer who, at the time of bidding, fails to meet requirements of any contract(s) with EGAT regarding major defects or malfunctioning of such Equipment and such failure has not yet satisfactorily been proved to and/or settled with EGAT, EGAT reserves the right to reject his Bid.

The eligibility will not be applicable for any Equipment which is not required under this Invitation.

# **II.** All Bidders should preferably meet the following technical requirements; failure to so comply may constitute sufficient ground for rejection.

- a. Having sufficient capacity to carry out the Work.
- b. Proposing overhead ground wire, hardware assemblies and line accessories for overhead ground wire and for OPGW, grounding materials, fiber optic transmission system Equipment, and other Equipment manufactured by regular manufacturers of excellent reputation having significant technical knowledge and at least three (3) years experience in the design, manufacture and testing of such Equipment, having manufacturing capacity available to perform the Work properly and expeditiously within the time specified, and having satisfactory past experience, with additional requirements as follows:
  - Manufacturers for overhead ground wire (galvanized steel wire strand), hardware assemblies and line accessories for overhead ground wire and for OPGW, and non-metallic optical fiber cable (OFC) being an eligible local firm having set up a plant in Thailand

If the manufacturer is a new company formed by acquisition of or merger with other companies or business units, and any of such previous companies or business units has the experience records that meet the requirements set forth herein, such experience records are acceptable as the experience records of the new company, provided that each item of the Equipment to be supplied under this Bid shall be manufactured from the same source of supply as indicated in each of such relevant supply records. For the avoidance of doubt, it is not allowed to combine the experience records of the previous companies or business units in order to meet the experience requirements.

However, the Bidder may propose any qualified local manufacturer who does not have experience in design, manufacture and testing as well as a record of successful operating/use of his Equipment as specified above but has obtained special permission from EGAT for manufacture and/or fabrication of the specific Equipment within the scope specified in the letter of permission issued by EGAT, or propose any local manufacturer who is in the list of Eligible Local Manufacturers Accepted by EGAT as shown herein at the end of this Section.

In the event that the Bidder proposes the Equipment of the manufacturer who, at the time of bidding, fails to meet the requirements of any contract(s) with EGAT regarding major defects or malfunctioning of such Equipment, and such failure has not yet satisfactorily been proved to and/or settled with EGAT, EGAT reserves the right to reject his Bid.

The eligibility will not be applicable for any Equipment which is not required under this Invitation.

- c. Proposing reputable subcontractors, for the portion of the Work to be subcontracted, having adequate technical knowledge, ability and capacity and practical experience to perform such work. If any proposed subcontractor(s) is(are) not qualified in the opinion of EGAT, the Bidder is required to select other subcontractor(s) at his own cost to the satisfaction of EGAT.
- d. Having no just or proper claims pending against him with respect to breach in the performance of Contract on other similar works awarded by EGAT. If Bidder is a new company formed by acquisition of or merger with other companies or business units, the pending claim of any of such previous companies or business units shall be considered pending claim of the Bidder.
- e. Himself or his subcontractors, at the time of submitting this proposal, not carrying excessive work or not being in a default position with respect to work with EGAT. Unsatisfactory past performance on contract awarded by EGAT may be a sufficient reason of being disqualified.

Reference records of either the parent or affiliated companies shall not be considered as the records of such Bidder or manufacturers.

## A-5. Joint Venture or Consortium

In the event that the successful Bidder is a joint venture or a consortium formed of two or more companies, EGAT requires that the parties to the joint venture or the consortium accept joint and several liability for all obligations under the Contract.

# A-6. <u>Preparation and Delivery of Bids</u>

Bids shall be prepared in accordance with the Instructions to Bidders contained in the Bidding Documents in one (1) original and three (3) hard copies, in English, on the bid forms included for this purpose and shall be accompanied with a bid security as required under the Article pertaining to Bid Security in Section B : Instructions to Bidders. The bid security in accordance with Article B-3. <u>Bid Security</u> shall be submitted in a separate sealed envelope.

The envelope of the bids will be marked in capital letters in the lower left-hand corner as follows :

# **INVITATION TO BID NO. TS12-L-22**

## SUPPLY AND CONSTRUCTION OF TRANSMISSION LINE FOR SECTIONALIZING OF 230 kV RANGSIT - NAVA NAKHON TO SAM KHOK SUBSTATION

## **TRANSMISSION SYSTEM EXPANSION PROJECT NO.12**

and shall be addressed and delivered to :

International Procurement Department - Transmission Segment Procurement and Inventory Management Division Electricity Generating Authority of Thailand Bangkruai, Nonthaburi 11130 <u>Thailand</u>

on or before 10:00 a.m., Bangkok Standard Time, See Tentative Schedule

If the envelope(s) is not sealed, marked and addressed as required above, EGAT will assume no responsibility for the bid misplacement or premature opening.

Bids will be opened publicly at *Bidding Room, 1<sup>st</sup> floor, Tor 082 Building* and at the time specified above.

Bids received after the time stipulated above shall be rejected and returned unopened.

# A-7. <u>Availability of Bidding Documents</u>

The Bidding Documents in CD-ROM are available for examination and can be obtained from EGAT at the hereunder address upon payment to EGAT, non-refundable, in the amount of USD...270.-...- or Baht...8,000.-..; these prices include the value added tax.

International Procurement Department - Transmission Segment Procurement and Inventory Management Division Electricity Generating Authority of Thailand Bangkruai, Nonthaburi 11130 <u>Thailand</u>

<u>Note</u> : At the time of bidding, EGAT's Specifications and all Drawings need not be submitted, although they are considered as part of the Bidding Documents.

## EGAT Accepted Bidders List

#### for Supply and Construction of Transmission Line

# 230 kV Transmission Line for Single & Twin-bundled Conductor (Conventional Type)

No.	Bidder/Country
1	TSEC (Thailand) Co., Ltd. / Thailand
2	Teda Company Limited / Thailand
3	Sri U-Thong Limited / Thailand
4	RCR Co., Ltd. / Thailand
5	CHC Engineering Co., Ltd. / Thailand
6	DEMCO-COBRA-DEMCO POWER CONSORTIUM
	(Demco Public Company Limited / Thailand, Cobra Instalaciones Y Servicios, S.A. / Spain
	and Demco Power Company Limited / Thailand)
7	The Consortium of Sri U-Thong Limited and Perfect Engineering Service Public Company
	Limited
	(Sri U-Thong Limited / Thailand and Perfect Engineering Service Public Company Limited
	/ Thailand)
8	Loxley - RCR Consortium
	(Loxley Public Company Limited / Thailand and RCR Co., Ltd. / Thailand)
9	Kalpataru Power Transmission Ltd. / India
10	The Consortium of KINDEN CORPORATION and Perfect Engineering Service Public Co.,
	Ltd. (KINDEN CORPORATION / Japan and Perfect Engineering Service Public Co., Ltd. /
	Thailand)
11	KEC INTERNATIONAL LIMITED / India
12	LARSEN & TOUBRO LIMITED / India
13	The Consortium of Vorapatara Engineering Limited Part and Sirakorn Co., Ltd.
	(Vorapatara Engineering Limited Part / Thailand and Sirakorn Co., Ltd. / Thailand)
14	The Consortium of Kinden Corporation and Sirakorn Co., Ltd.
	(Kinden Corporation / Japan and Sirakorn Co., Ltd. / Thailand)
15	SEPCO1 Electric Power Construction Corporation / China
16	The Consortium of Precise System and Project Co., Ltd. and HanBaek Co., Ltd.
	(Precise System and Project Co., Ltd. / Thailand and HanBaek Co., Ltd. / Korea)

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No.	Bidder/Country
17	SINOHYDRO CORPORATION LIMITED / China
18	DEMCO PUBLIC COMPANY LIMITED / Thailand
19	The Consortium of PWH and CHC
	(PWH (Thailand) Company Limited / Thailand and CHC Engineer Co., Ltd. / Thailand)
20	GTH Consortium
	(SINOTEC CO., LTD. / China, GUANGXI TRANSMISSION & SUBSTATION CONSTRUCTION CO.,
	LTD. / China and Hydro Engineering Co., Ltd. / Thailand
21	The Consortium of Uahwatanasakul Co., Ltd. and Panakitkamai Ltd., Part. and
	Panakittrakul Co., Ltd.
	(Uahwatanasakul Co., Ltd. / Thailand, Panakitkamai Ltd., Part. / Thailand and
	Panakittrakul Co., Ltd. / Thailand)
22	Panakitkamai Ltd., Part. / Thailand
23	JOINT VENTURE OF XD AND STC
	(Xian Electric Engineering Co., Ltd. / China and Sinohydro (Thailand) Co., Ltd. / Thailand)
24	JOINT VENTURE OF SINOHYDRO CORPORATION LIMITED AND SINYHYDRO (THAILAND)
	CO., LTD.
	(Sinohydro Corporation Limited / China and Sinohydro (Thailand) Co., Ltd. / Thailand)
25	North China Power Engineering Co., Ltd. of China Power Engineering Consulting Group /
	China
26	Henan Electric Power Transmission & Transformation Construction Co., Ltd. / China
27	Kalpataru Power Transmission Limited / India
28	HS Consortium
	(Hydro Engineering Co., Ltd. / Thailand and Sinotec Co., Ltd. / China)
29	Consortium of Jiangsu Zhongtian Technology Co., Ltd. (ZTT) and China National Electric
	Engineering Co., Ltd. (CNEEC)
	(Jiangsu Zhongtian Technology Co., Ltd. (ZTT) / China and China National Electric
	Engineering Co., Ltd. (CNEEC) / China)
30	PWH (THAILAND) CO., LTD. / Thailand
31	Fujikura Ltd. / Japan
32	SRI U-THONG & LPS CONSORTIUM
	(Sri U-Thong Limited / Thailand and Loxley Power Systems Co., Ltd. / Thailand)

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No.	Bidder/Country
33	LOXLEY POWER SYSTEMS COMPANY LIMITED / Thailand
34	LOXLEY & LPS CONSORTIUM
	(Loxley Public Company Limited / Thailand and Loxley Power Systems Co., Ltd. /
	Thailand)
35	The Consortium of Vorapatana Engineering Limited Part. and Sirakorn Public Co., Ltd.
	(Vorapatana Engineering Limited Part. / Thailand and Sirakorn Public Co., Ltd. / Thailand)
36	Benyapha Power Line Co., Ltd. / Thailand
37	Joint Venture of STC and BENYAPHA
	(Sinohydro (Thailand) Co., Ltd. / Thailand and Benyapha Powerline Co., Ltd. / Thailand)
38	DEMCO POWER CO., LTD. / Thailand
39	CONSORTIUM OF TRANSRAIL LIGHTING LIMITED AND CS POWER AND PROJECT COMPANY
	(TRANSRAIL LIGHTING LIMITED / INDIA AND CS POWER AND PROJECT COMPANY /
	THAILAND)
40	PESTECH SDN. BHD. / MALAYSIA
41	SINOHYDRO (THAILAND) CO., LTD. / THAILAND
42	THE CONSORTIUM OF SHANGHAI ELECTRIC GROUP COMPANY LIMITED & FUTURE
	ELECTRICAL CONTROL COMPANY LIMITED
	(SHANGHAI ELECTRIC GROUP COMPANY LIMITED / CHINA AND FUTURE ELECTRICAL
	CONTROL COMPANY LIMITED / THAILAND
43	CAMCE – SEPEC JV / CHINA
44	JOINT VENTURE OF TBNP
	(TBEA CO.,LTD. / CHINA AND NAPAT POWER CO., LTD. / THAILAND)
45	XIAN ELECTRIC ENGINEERING CO., LTD. / CHINA
46	CGGC-PG Joint Venture
	(China Gezhouba group Company Limited / China and Pinggao Group Company Limited /
	China)
47	Consortium of ITE - NCPE
	(Italthai Engineering Co., Ltd. / Thailand and North China Power Engineering Co., Ltd. of
	China Power Engineering Consulting Group / China)

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No.	Bidder/Country
48	THE JOINT VENTURE OF CHINA NATIONAL HEAVY MACHINERY CORPORATION & FUTURE
	ELECTRICAL CONTROL COMPANY LIMITED
	(CHINA NATIONAL HEAVY MACHINERY CORPORATION / China and FUTURE ELECTRICAL
	CONTROL COMPANY LIMITED / Thailand)
49	Panakittrakul Company Limited / Thailand
50	Consortium of Larsen & Toubro Limited and PPPO Company Limited / India - Thailand
51	Consortium of Larsen & Toubro Limited and EPCC Engineering Co. Ltd. / India - Thailand
52	Consortium of KEC International Limited and CS Power and Project Company Limited / India
	- Thailand
53	Consortium of KEC International Limited and GreenTech Solution Co., Ltd. / India - Thailand
54	Consortium of KEC International Limited and Mega Consultants Company Limited / India -
	Thailand
55	Joint Venture of BYP / Thailand
56	The Consortium of Shanghai Electric Group Company Limited & Yipintsoi Energy Company
	Limited / P.R. China - Thailand
57	Precise System and Project Co., Ltd. / Thailand
58	TNP POWER THAI CO., LTD / Thailand
59	Hydro Engineering Co., Ltd. / Thailand
60	SIRAKORN PUBLIC CO., LTD. / Thailand
61	Vorapatara Engineering Ltd.,Part. / Thailand
62	NEPC POWER CONSTRUCTION CO., LTD / Thailand

<u>Note</u>:

- Additionally, any Bidders named in this accepted list are allowed to form a new consortium or joint venture with other Bidders in this list.
- The Bidders named in EGAT Accepted Bidders List for Supply and Construction of Transmission Line : 230 kV Transmission Line with Four-bundled Conductor or 500 kV Transmission Line with Four-bundled Conductor are also eligible.

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# EGAT Accepted Bidders List

# for Supply and Construction of Transmission Line

# 230 kV Transmission Line with Four-bundled Conductor

No.	Bidder/Country
1	TSEC (Thailand) Co., Ltd. / Thailand
2	Fujikura Ltd. / Japan
3	RCR Co., Ltd. / Thailand
4	KEC INTERNATIONAL LIMITED / India
5	LARSEN & TOUBRO LIMITED / India
6	SEPCO1 Electric Power Construction Corporation / China
7	The Consortium of Precise System and Project Co., Ltd. and HanBaek Co., Ltd.
	(Precise System and Project Co., Ltd. / Thailand and HanBaek Co., Ltd. / Korea)
8	SINOHYDRO CORPORATION LIMITED / China
9	Demco Public Company Limited / Thailand
10	JOINT VENTURE OF XD AND STC
	(Xian Electric Engineering Co., Ltd. / China and Sinohydro (Thailand) Co., Ltd. / Thailand)
11	JOINT VENTURE OF SINOHYDRO CORPORATION LIMITED AND SINOHYDRO (THAILAND)
	CO., LTD.
	(Sinohydro Corporation Limited / China and Sinohydro (Thailand) Co., Ltd. / Thailand)
12	Sri U-Thong Limited / Thailand
13	Henan Electric Power Transmission & Transformation Construction Co., Ltd. / China
14	Kalpataru Power Transmission Limited / India
15	Consortium of Jiangsu Zhongtian Technology Co., Ltd. (ZTT) and China National Electric
	Engineering Co., Ltd. (CNEEC)
	(Jiangsu Zhongtian Technology Co., Ltd. (ZTT) / China and China National Electric
	Engineering Co., Ltd. (CNEEC) / China)
16	CHC Engineering Co., Ltd. / Thailand
17	SRI U-THONG & LPS CONSORTIUM
	(Sri U-Thong Limited / Thailand and Loxley Power Systems Co., Ltd. / Thailand)
18	Benyapha Power Line Co., Ltd. / Thailand
19	Joint Venture of STC and BENYAPHA
	(Sinohydro (Thailand) Co., Ltd. / Thailand and Benyapha Powerline Co., Ltd. / Thailand)

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No.	Bidder/Country
20	Consortium of RCR and Uthai S Engineering
	(R C R Company Limited / Thailand and Uthai S Engineering Company Limited / Thailand)
21	Sinohydro (Thailand) Co., Ltd. / Thailand
22	Teda Company Limited / Thailand
23	Joint Venture of TBNP
	(TBEA CO.,LTD. / China and NAPAT POWER CO., LTD. / Thailand)
24	Consortium of Transrail Lighting Limited and CS Power And Project Company
	(Transrail Lighting Limited / India and CS Power And Project Company / Thailand)
25	XIAN ELECTRIC ENGINEERING CO., LTD. / China
26	THE JOINT VENTURE OF CHINA NATIONAL HEAVY MACHINERY CORPORATION & FUTURE
	ELECTRICAL CONTROL COMPANY LIMITED
	(CHINA NATIONAL HEAVY MACHINERY CORPORATION / China and FUTURE ELECTRICAL
	CONTROL COMPANY LIMITED / Thailand)
27	LOXLEY PUBLIC COMPANY LIMITED / Thailand
28	Consortium of Larsen & Toubro Limited and PPPO Company Limited / India - Thailand
29	Consortium of Larsen & Toubro Limited and EPCC Engineering Co. Ltd. / India - Thailand
30	Consortium of KEC International Limited and CS Power and Project Company Limited /
	India - Thailand
31	Consortium of KEC International Limited and GreenTech Solution Co., Ltd. / India -
	Thailand
32	Consortium of KEC International Limited and Mega Consultants Company Limited / India
	- Thailand
33	Joint Venture of BYP / Thailand
34	Precise System and Project Co., Ltd. / Thailand
35	TNP POWER THAI CO., LTD / Thailand
36	LOXLEY & LPS CONSORTIUM / Thailand - Thailand
37	NEPC POWER CONSTRUCTION CO., LTD / Thailand

Note:

- Additionally, any Bidders named in this accepted list are allowed to form a new consortium or joint venture with other Bidders in this list.
- The Bidders named in EGAT Accepted Bidders List for Supply and Construction of Transmission Line : 500 kV Transmission Line with Four-bundled Conductor are also eligible. September 2023

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## EGAT Accepted Bidders List

## for Supply and Construction of Transmission Line

# 500 kV Transmission Line with Four-bundled Conductor

No.	Bidder/Country			
1	Consortium of J-Power Systems Corporation and Thai Sumiden Engineering and			
	Construction Co., Ltd.			
	(J-Power Systems Corporation / Japan and TSEC (Thailand) Co., Ltd. / Thailand)			
2	Fujikura Ltd. / Japan			
3	The Consortium of Kalpataru and CHC			
	(Kalpataru Power Transmission Ltd. / India and CHC Engineering Co., Ltd. / Thailand)			
4	DEMCO-COBRA-RCR CONSORTIUM			
	(Demco Public Company Limited / Thailand, Cobra Instalaciones Y Servicios, S.A. /			
	Spain and RCR Company Limited / Thailand)			
5	DEMCO-COBRA Consortium			
	(Demco Public Co., Ltd. / Thailand and Cobra Instalaciones Y Servicios, S.A. / Spain)			
6	KEC INTERNATIONAL LIMITED / India			
7	LARSEN & TOUBRO LIMITED / India			
8	SEPCO1 Electric Power Construction Corporation / China			
9	THE CONSORTIUM OF PRECISE SYSTEM AND PROJECT CO., LTD AND THAI SUMIDEN			
	ENGINEERING AND CONSTRUCTION CO., LTD.			
	(PRECISE SYSTEM AND PROJECT CO., LTD / Thailand and TSEC (THAILAND) CO., LTD.			
	/ Thailand)			
10	Hyundai Engineering & Construction Co., Ltd. / Korea			
11	RCR Co., Ltd. / Thailand			
12	The Joint Venture of Hydrochina International Engineering Co., Ltd. and Benyapha			
	Powerline Co., Ltd. and SEPCO1 Electric Power Construction Corporation			
	(Hydrochina International Engineering Co., Ltd. / China, Benyapha Powerline Co., Ltd.			
	/ Thailand and SEPCO1 Electric Power Construction Corporation / China)			
13	TPL-TEDA Consortium			
	(TATA Projects Limited / India and TEDA Company Limited / Thailand)			

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No.	Bidder/Country
14	Joint Venture of SCL and Benyapha and SEPCO1
	(Sinohydro (Thailand) Co., Ltd. / Thailand and Benyapha Powerline Co., Ltd. /
	Thailand and SEPCO1 Electric Power Construction Corporation / China)
15	The Consortium of Kalpataru Power Transmission Limited, Precise System and
	Project Company Limited and Thai Sumiden Engineering and Construction Company
	Limited (Kalpataru Power Transmission Limited / India, Precise System and Project
	Company Limited / Thailand and TSEC (Thailand) Co., Ltd. / Thailand)
16	Consortium of Loxley, Larsen & Toubro and Sri U–Thong
	(Loxley Public Company Limited / Thailand, Larsen & Toubro Limited / India and Sri
	U-Thong Limited / Thailand)
17	Demco - RCR CONSORTIUM
	(Demco Public Company Limited / Thailand and RCR Company Limited / Thailand)
18	Joint Venture of XD-HYPEC-SCL-TNP
	(XIAN ELECTRIC ENGINEERING CO., LTD. / China, HUBEI HONGYUAN POWER
	ENGINEERING CO., LTD. / China, SINOHYDRO (THAILAND) CO., LTD. / Thailand and TNP
	POWER THAI CO., LTD. / Thailand)
19	Consortium of Larsen & Toubro Limited and Sri U-Thong Limited
	(Larsen & Toubro Limited / India and Sri U-Thong Limited / Thailand)
20	CONSORTIUM OF LARSEN & TOUBRO, LPS AND SRI U-THONG
	(LARSEN & TOUBRO LIMITED / India and LOXLEY POWER SYSTEM CO., LTD. / Thailand
	and Sri U-Thong Limited / Thailand)
21	JOINT VENTURE OF STC, XD AND BENYAPHA
	(SINOHYDRO (THAILAND) CO., LTD. / Thailand, XIAN ELECTRIC ENGINEERING CO., LTD.
	/ China and BENYAPHA POWERLINE CO., LTD. / Thailand)
22	TSEC (Thailand) Co., Ltd. / Thailand
23	JOINT VENTURE OF XD AND STC
	(Xian Electric Engineering Co., Ltd / China and Sinohydro (Thailand) Co., Ltd. /
	Thailand)
24	Sri U-Thong Limited / Thailand
25	Henan Electric Power Transmission & Transformation Construction Co., Ltd. / China
26	Kalpataru Power Transmission Limited / India

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No.	Bidder/Country				
27	HS Consortium				
	(Hydro Engineering Co., Ltd. / Thailand and Sinotec Co., Ltd. / China)				
28	SRI U-THONG & LPS CONSORTIUM				
	(Sri U-Thong Limited / Thailand and Loxley Power Systems Co., Ltd. / Thailand)				
29	Benyapha Power Line Co., Ltd. / Thailand				
30	Joint Venture of STC and BENYAPHA				
	(Sinohydro (Thailand) Co., Ltd. / Thailand and Benyapha Powerline Co., Ltd. /				
	Thailand)				
31	Demco Public Company Limited / Thailand				
32	Joint Venture of STC-BENYAPHA-NEPC				
	(Sinohydro (Thailand) Co., Ltd. / Thailand, Benyapha Powerline Co., Ltd. / Thailand				
	and NEPC Power Construction Co., Ltd. / Thailand)				
33	Consortium of Jiangsu Zhongtian Technology Co., Ltd. (ZTT), PNK Transmission Line				
	Co., Ltd. (PNK) and China National Electric Engineering Co., Ltd. (CNEEC)				
	(Jiangsu Zhongtian Technology Co., Ltd. (ZTT) / China and PNK Transmission Line Co.,				
	Ltd. (PNK) / Thailand and China National Electric Engineering Co., Ltd. (CNEEC) /				
	China)				
34	CONSORTIUM OF TSEC (THAILAND) CO., LTD. AND SRICHONLATHORN CO., LTD.				
	(TSEC (THAILAND) CO., LTD. / Thailand and SRICHONLATHORN CO., LTD. / Thailand)				
35	Sinohydro (Thailand) Co., Ltd. / Thailand				
36	Teda Company Limited / Thailand				
37	CHC ENGINEERING CO., LTD. / Thailand				
38	Joint Venture of TBNP				
	(TBEA CO.,LTD. / China and NAPAT POWER CO., LTD. / Thailand)				
39	Tata Projects Limited / India				
40	XIAN ELECTRIC ENGINEERING CO., LTD. / China				
41	Transrail - Hanbaek Consortium				
	(Transrail Lighting Limited / India and Hanbaek Co. Ltd., / Korea)				
42	THE JOINT VENTURE OF CHINA NATIONAL HEAVY MACHINERY CORPORATION &				
	FUTURE ELECTRICAL CONTROL COMPANY LIMITED				
	(CHINA NATIONAL HEAVY MACHINERY CORPORATION / China and FUTURE ELECTRICAL				
	CONTROL COMPANY LIMITED / Thailand)				
500 kV <sup>-</sup>	T/L -3- September 2023				

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No.	Bidder/Country
43	LOXLEY PUBLIC COMPANY LIMITED / Thailand
44	Consortium of Larsen & Toubro Limited and PPPO Company Limited / India -
	Thailand
45	Consortium of Larsen & Toubro Limited and EPCC Engineering Co. Ltd. / India -
	Thailand
46	Consortium of KEC International Limited and CS Power and Project Company Limited
	/ India - Thailand
47	Consortium of KEC International Limited and GreenTech Solution Co., Ltd. / India -
	Thailand
48	Consortium of KEC International Limited and Mega Consultants Company Limited /
	India - Thailand
49	Joint Venture of BYP / Thailand
50	The Consortium of Shanghai Electric Group Company Limited & Yipintsoi Energy
	Company Limited / P.R. China - Thailand
51	Transrail-CSPP Consortium / India - Thailand
52	Precise System and Project Co., Ltd. / Thailand
53	TNP POWER THAI CO., LTD / Thailand
54	LOXLEY & LPS CONSORTIUM / Thailand - Thailand
55	NEPC POWER CONSTRUCTION CO., LTD / Thailand
56	KPTL-TSPG Consortium / India - Thailand

#### <u>Note</u>:

- Additionally, any Bidders named in this accepted list are allowed to form a new consortium or joint venture with other Bidders in this list.

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# EGAT Accepted Manufacturers List for Insulator

# Standard Type

# 230 kV Transmission Line for Single & Twin-bundled Conductor (Conventional Type)

No.	Manufacturer/Country	ANSI CLASS	Combined M&E Strength, lbs
1	NGK Insulators , LTD. / Japan	52-3	≥ 18000
		52-5	25000
		52-8	36000
2	Sediver S.A. / Italy	52-3	≥ 18000
		52-5	25000
		52-8	36000
3.	Dalian-Lapp Insulator Co., Ltd. / China	52-3	≥ 18000
		52-5	25000
		52-8	36000
4	Sediver (Shanghai) / China	52-3	≥ 18000
		52-5	25000
		52-8	36000
5	VERESCENCE LA GRANJA, S.L. / Spain	52-3	≥ 18000
		52-5	25000
		52-8	36000
6	Dalian Insulator Group T&D Co., Ltd. / China	52-3	≥ 18000
		52-5	25000
		52-8	36000
7	Global Insulator Group (YuAIZ AO) / Russia	52-3	≥ 18000
8	Nanjing Electric Insulator Co., Ltd. / China	52-3	≥ 18000
		52-5	25000
		52-8	36000
9	Yuzhnouralsk Insulators and Fittings Plant AO (YuAIZ AO) / Russia	52-5	25000
		52-8	36000

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# **ELIGIBLE LOCAL MANUFACTURERS ACCEPTED BY EGAT**

The following local manufacturers are eligible for proposing each specific equipment for this Invitation; provided that the scope of their offerings shall be within that specified in the Certificate of Acceptance issued by EGAT.

## 1) STEEL TOWERS

#### Ajikawa & SCI Metal Tech Co., Ltd.

49/1 Moo 9, Marppong Phantong Chonburi 20160 Tel : 038 451 473-6 Fax : 038 451 478

#### Siam Steel Tower Co., Ltd.

9/10 Moo 10 Tambol Koke-Yae Amphur Nong Khae Saraburi 18230, Thailand Tel : (662) 705-8755-63 Fax : (662) 705-8765

#### Thai-Scandic Steel Company Limited

7 I-5 Road, Maptaphut Industrial Estate Amphur Muang Rayong 21150 Tel : (66-38) 683070 Fax : (66-38) 683065

# Sky Tower Public Company Limited

247 Romklao Road Saensaeb Minburi, Bangkok 10510 Thailand Tel 662-543-9020-8 Fax : 662-915-2114, 915-2714, 543-9029

#### **Demco Power Company Limited**

59 Moo 1, Suanphrikthai Muangpathumthani Pathumthani 12000 Tel : 0 2959 5811 Ext.1612 Fax : 0 2959 5915 **เอกสารควบคุม** รับรองสำนนาโดย <u>พพอ-ส. กรสุ- ส. อวส.</u> ก่อนนำไปใช้งาน ด้องครวงสอบ Revision ล่าสุด ฝ้ายวิศวกรรมระบบส่ง กฟผ,

04 Sep 2023

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# 2) <u>HARDWARE ASSEMBLIES AND LINE ACCESSORIES FOR CONDUCTOR,</u> <u>OVERHEAD GROUND WIRE AND OPGW</u>

#### Preformed Line Products (Thailand ) Ltd.

296 Moo 4, Lardkrabang Industrial Estate EPZ 3 Chalongkrung Road Lumpratew, Lardkrabang Bangkok 10520 Tel : 0 2739 4026 Fax : 0 2326 0564

(For 1. Hardware assemblies and line accessories (except damper) for single, twin-bundled and quad-bundled conductor for 115 kV, 230 kV and 500 kV transmission lines

- 2. Hardware assemblies and line accessories (except damper) for overhead ground wire and OPGW
- 3. Vibration dampers for conductor, overhead ground wire and OPGW
- 4. Spacer dampers and rigid spacers for twin-bundled and quad-bundled conductor for 115 kV, 230 kV and 500 kV transmission lines)

#### MacLean - Dulhunty Power (Thailand) Ltd.

3/2 Moo 7 Suwintawong Road Tambon Klongluangphang Amphur Muang Chachoengsao Chachoengsao 24000 Tel : 038 845 675 Fax : 038 845 674

- (For 1. Hardware assemblies and line accessories (except damper) for single, twin-bundled and quad-bundled conductor for 115 kV, 230 kV and 500 kV transmission lines
  - 2. Hardware assemblies and line accessories (except damper) for overhead ground wire and OPGW
  - 3. Vibration dampers for conductor, overhead ground wire and OPGW
  - 4. Spacer dampers and rigid spacers for twin-bundled and quad-bundled conductor for 115 kV, 230 kV and 500 kV transmission lines)

# Mosdorfer (Thailand) Co., Ltd.

10 96 The Trendy Building, 6<sup>th</sup> floor Soi Sukhumvit 13 (Sangjan) Klong Toey Nuea, Wattana Bangkok 10110 Tel : 02 182 8351 Fax : 02 182 8350



- (For 1. Hardware assemblies and line accessories (except damper) for single, twin-bundled and quad-bundled conductor for 115 kV, 230 kV and 500 kV transmission lines
  - 2. Hardware assemblies and line accessories (except damper) for overhead ground wire and OPGW

- 3. Vibration dampers for conductor, overhead ground wire and OPGW
- 4. Spacer dampers and rigid spacers for twin-bundled and quad-bundled conductor for 115 kV, 230 kV and 500 kV transmission lines)

It shall be noted that the spacer damper for quad-bundled conductor for 500 kV transmission line is allowed to be initially supplied to only one contract. Any further contracts shall be allowed after the said Equipment under the first contract has been certified by a certification issued by EGAT for its successful operation in EGAT s transmission line for an appropriate period of time.

#### 3) OVERHEAD GROUND WIRE

#### **Thai Wire Products Public Company Limited**

99/2 MOO 8 ZEER STREET BUILDING 7TH FL Phahonyothin Road, Lamlookka Pathum Thani 12130 Tel : 0 2992 6863-7 Fax : 0 2992 6870-1

## **USHA Siam Steel Industries Public Company Limited**

209/1 K-Tower-B. 22<sup>nd</sup> Floor Unit 3/1 Sukhumvit 21 Road (Asok) Bangkok 10110 Tel : 0 2261 7361-4 Fax : 0 2640 8227

#### Charoong Thai Wire & Cable Public Company Limited

589/71 Central City Tower Floor 12A, Bangna -Trad Road Bangna, Bangna District Bangkok 10260 Tel : 0 2745 6118 Fax : 0 2745 6131-32

# 4) **GROUNDING MATERIALS**

#### K.M.L. Technology Co., Ltd.

100/3 Thasabansongkrow Road Ladyao, Jatujak Bangkok 10900 Tel : 0 2954 3455 Fax : 0 2591 7891 **เอกสารควบคุม** รับรองสำนนาโดย <u>พพละส. กลีสะส. อวส.</u> ก่อนนำไปใช้งาน ด้องครวงสอบ Revision ล่าสุด ฝ่ายวิศวกรรมระบบส่ง กฟผ.

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#### G.K. Assembly Co., Ltd.

110/9-10 Moo 2 Maha Sawat, Bang Kruai District Nonthaburi 11130 Tel: 0 2985 2250-3 Fax. 0 2985 1910

# 5) <u>CONDUCTOR</u>

#### Bangkok Cable Co., Ltd.

187/1 Rajdamri Road Lumpinee, Pathumwan Bangkok 10330 Tel : 0 2254 4550-6 Fax : 0 2253 5973, 0 2253 6028, 0 2254 3859

#### Charoong Thai Wire & Cable Public Company Limited

589/71 Central City Tower Floor 12A, Bangna -Trad Road Bangna, Bangna District Bangkok 10260 Tel : 0 2745 6118 Fax : 0 2745 6131-32

#### Phelps Dodge International (Thailand) Limited

16<sup>th</sup> Floor, Maneeya Center Building 518/5 Ploenchit Road Lumpinee, Pathumwan Bangkok 10330 Tel : 0 2652 0588, 0 2680 5862 Fax : 0 2680 5896

#### Thai-Yazaki Electric Wire Co., Ltd.

27<sup>th</sup> Floor, Two Pacific Place Building 142 Sukhumvit Road Klongtoey District Bangkok 10110 Tel : 0 2653 2550, 0 2463 0058 Ext. 342 Fax : 0 2463 6364, 0 2463 6354-5



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## Venine Cable Electric Wire Company Limited

88/8-9 Moo 2 Ladbualuang-Maitra Rd. Ladbualuang, Ladbualuang Ayutthaya 13230 Tel : 0 3528 0493 Fax : 0 3528 0494

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#### Fuhrer Wire and Cable Co., Ltd.

70 Moo 2, Bankao-Panthong Road Panthong Chonburi 20160 Tel : 0 3845 2906-7 Fax : 0 3845 2899 (For manufacturing of Transmission Line Conductor up to 230 kV)

#### 6) NON-METALLIC OPTICAL FIBER CABLE (OFC)

#### Thai China Fiber Optics Co., Ltd.

488 Soi Ratchadapisek 26, Samsennog, Huaykwang, Bangkok 10310 Tel : 0 2975 9901 Fax : 0 2975 9925

#### Thai Fiber Optics Co., Ltd.

233 Moo 6, Soi Watchangrueng, Suksawat Road, Naiklongbangplakot, Phrasamutchedi, Samutprakarn 10290 Tel : 0 2817 5590-3 Fax : 0 2817 5311

#### HBC Telecom Co., Ltd.

187/1 Rajadamri Road, Lumpinee, Pathumwan Bangkok 10330 Tel : 0 2650 5002 To 3 Ext.111,112 Fax : 0 2651 9261

#### Siam Fiber Optics Co., Ltd.

Floor 12 A, Central City Tower 589/71 Bangna-Trad Road, Km.3 Bangna, Bangna, Bangkok 10260 Tel : 0 2745 6118-30 Fax : 0 2745 6575

**เอกสารควบคุม** รับรองสำหนาโคย <u>พทอส. กสุธ.ส. อวส.</u> ก่อบนำไปใช้งาบ ด้องครวงสอบ Revision ค่าสุด ม้ายวิศวกรรมระบบส่ง กฟม.

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## 7) CROSS-LINKED POLYETHYLENE (XLPE) CABLE

#### Phelps Dodge International (Thailand) Limited

16th Floor, Maneeya Center Building 518/5 Ploenchit Road Lumpinee, Pathumwan Bangkok 10330 Tel : 0 2652 0588, 0 2680 5862 Fax : 0 2680 5896

(For 230 kV Underground Transmission Line with XLPE Cable)

It shall be noted that the 230 kV XLPE Cable is allowed to be supplied to only one contract at the first stage. Any further contracts shall be allowed after the said Equipment under the first contract is certified by a certification letter issued by EGAT that it has been provided at least one (1) year successful operation in EGAT system.

Acu **เอกสารค**วบคม รับรองสำเนาโดย <u>พพอ-ส. กสส-ส. อวส.</u> ก่อนนำไปใช้งาน ด้องตรวจสอบ Revision ล่าสุด ฝ่ายวิศวกรรมระบบส่ง กฟผ. 04 Sep 2023

# SECTION H ATTACHMENTS

Attachment No. 1	:	List of Equipment to be Furnished by EGAT
Attachment No. 2	:	List of Equipment to be Dismantled by the Contractor
Attachment No. 3	:	Requirements for Dismantling Work and Conditions of Sale of Dismantled Equipment

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#### ATTACHMENT NO. 1

#### LIST OF EQUIPMENT TO BE FURNISHED BY EGAT

The Equipment listed herein shall be furnished by EGAT in Bangkok and/or its vicinity, at the point to be designated by EGAT as soon as possible after confirmation of Letter of Award of Contract. Any Equipment not listed herein but required for construction for completion of the Work shall be furnished by the Contractor at his own expenses.

<u>Item</u>	Description	<b>Estimated Quantity</b>
1.	1272 MCM ACSR/GA Conductor as per Schedule 1E Item 1E1.1	421.80 km
2.	1272 MCM ACSR/GA Conductor as per Schedule 1E Item 1E3.1	19.38 km

Note: 1. The estimated quantity of conductor shown above is an approximate amount. The actual quantity of conductor to be furnished by EGAT will be in accordance with the actual horizontal distance of the section to be installed after checking survey and staking have been performed, <u>Plus a</u> Fixed extra of 1.5 percent to cover sag, terrain irregularities and wastage.

2. The conductor furnished will have characteristics as specified in Specifications No. C-2 (Revision 6)

## ATTACHMENT NO. 2

#### LIST OF EQUIPMENT TO BE DISMANTLED BY THE CONTRACTOR

The following are the Equipment to be dismantled under this Contract. Types and quantities shown are approximate and provided as primary information. The Bidder shall be deemed to have carefully examined the exact quantities for his quotation of dismantling services.

<u>Item</u>	<b>Description</b>	<b>Estimated Quantity</b>			
Part 1 :	The existing 230 kV Rangsit – Nava Nakhon Transmission Line (The dismantled Equipment as listed below shall be purchased by the Contractor)				
1.1	<b>Tower Type QWA1</b> Basic body Body extension 7.0 m. Leg extension +6.0 m.	l bod 1 bod 4 legs	ly		
1.2	Hardware Assemblies Single string suspension insulator assemblies OHGW suspension assemblies OPGW suspension assemblies	12 sets 1 set 1 set	5		
1.3	Line Accessories vibration damper for OHGW vibration damper for OPGW	1 set 1 set			
1.4	Insulator Insulator ANSI CLASS 52-5 (25,000 lbs)	168 disc	cs		

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#### ATTACHMENT NO. 3

#### **REQUIREMENTS FOR DISMANTLING WORK AND**

#### **CONDITIONS OF SALE OF DISMANTLED EQUIPMENT**

The requirements for Dismantling Work and Conditions of Sale of Dismantled Equipment shall apply to this Invitation to Bid.

#### 1. <u>Scope of Dismantling Work</u>

The scope of dismantling work shall be as listed in the Price Schedule, which covers the provisions of dismantling and a portion of dismantled Equipment returned to EGAT and dismantling with conditions for the Contractor to purchase the dismantled Equipment, as the case may be, and shall be in accordance with Specifications No. TL-07 (Rev. 3) <u>Dismantling Work</u>.

## 2. <u>Responsibility of Contractor</u>

The Contractor shall be deemed to have carefully inspected and examined all of the conditions and circumstances of the Equipment as appearing in the existing transmission line to be dismantled under this Contract. EGAT will not be responsible for any defect, imperfection or fault of such Equipment.

For dismantled Equipment to be purchased by the Contractor, the Contractor shall, not later than fifteen (15) Days before the day of de-energizing for the dismantling work, pay the value added tax collectible on the payment for the dismantled Equipment to be sold to the Contractor to EGAT. Upon payment of the value added tax by the Contractor to EGAT, EGAT will issue a tax invoice to the Contractor. Ownership of the Equipment to be dismantled shall be transferred to the Contractor when the transmission line is de-energized for the dismantling work.

In the event that the Contractor shall return a portion of the dismantled Equipment to EGAT, the ownership of the dismantled Equipment is the property of EGAT, but this shall not be construed as relieving the Contractor from the sole responsibility as provided under this Contract for the care, protection, and maintenance of the Equipment. The Contractor shall be responsible for any loss or damages of the Equipment until acceptance has been made by EGAT. The submission of the dismantled Equipment to EGAT shall be performed upon completion of each dismantling portion as scheduled.

#### 3. Payment

Ninety (90) per cent of the amount and the adjusted amount due, if any, for the dismantling work will be paid by EGAT to the Contractor after the date of completion of the dismantling work and in case of the returned dismantled Equipment to EGAT after the dismantled Equipment has been delivered at the site(s) specified and acceptance has been made by EGAT.

In case the scope of the Contract requires the Contractor to purchase any item of dismantled Equipment, payment for cost of dismantled Equipment shall be made by the Contractor as scheduled in the Contract Documents regardless of the actual dismantling to be incurred. In case no schedule is set forth, payment shall be made as soon as possible but not later than two (2) Months after completion of each portion of dismantling work. In case no payment is made within the aforementioned period, EGAT reserves the right to claim directly from the Contractor or from the Performance Security or the Maintenance Security, as the case may be, or deduct or set off from any and all money due to the Contractor under this Contract for the amount together with interest at the rate of Minimum Overdraft Rate (MOR) plus two (2) per cent calculated from the due date up to the date the payment is made in full.