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.

Registration Form

Invitation to Bid No. TIEC-L-18

Supply and Construction of Transmission Line for Reconductoring of 230 kV Bang Pakong – Khlong Mai

Transmission System Improvement Project in Northeastern, Lower Northern, Central Regions and Bangkok Area to Enhance System Security

Available Duration for Purchasing : September 13, 2024 - October 15, 2024

Price of Bidding Documents : USD 35.- or THB 1,000.-

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	р. :		Date :	
Bidder's Name				
Address				
				Country :
Name of Contact Persor	n:		Tel.	Mobile No.
Email Address :				
Local Representative				
Address				
				Tax ID :
Name of Contact Persor	n:		Tel.	Mobile No.
Email Address :				
For Procurement Office	r	Cha	ange 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. TIEC-L-18

(Revision 1)

Supply and Construction of Transmission Line for Reconductoring of 230 kV Bang Pakong – Khlong Mai

Transmission System Improvement Project in Northeastern, Lower Northern, Central Regions and Bangkok Area to Enhance System Security

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> : 230 kV Bang Pakong – Khlong Mai Transmission Line (approx. 8 kilometers)

<u>Medium Cost</u> (including Value Added Tax and other expenses) :

THB 44,700,000.- (excluding cost of the Dismantled Equipment to be purchased by Bidder) *(Details of medium cost are revised.)*

Eligibility of Bidders

- 1. 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.
- 2. 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.
- 3. 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.
- 4. 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.
- 5. 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 are available for online purchase during 8:00 hrs. to 15:00 hrs., Bangkok Standard Time, as from September 13, 2024 to October 15, 2024 at USD 35.- or THB 1,000.- 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>.

Delivery of Bids

Bids shall be submitted at Bidding Room, 1st Floor, Tor 082 Building during 09:30 hrs. to 10:00 hrs., Bangkok Standard Time, November 5, 2024 and will be opened publicly at 10:00 hrs.

ELECTRICITY GENERATING AUTHORITY OF THAILAND

October 17, 2024

Kannika Dhachalupat

(Mrs. Kannika Dhachalupat)

Chief

International Procurement Department - Transmission Segment



ประกาศการไฟฟ้าฝ่ายผลิตแห่งประเทศไทย เรื่อง ประกวดราคาจ้าง เลขที่ TIEC-L-18

(ฉบับแก้ไข ครั้งที่ 1)

การไฟฟ้าฝ่ายผลิตแห่งประเทศไทย (กฟผ.) มีความประสงค์จะจัดซื้อและจ้างก่อสร้างเปลี่ยนตัวนำสายส่ง 230 kV บางปะกง - คลองใหม่ สำหรับโครงการปรับปรุงระบบส่งไฟฟ้าบริเวณภาคตะวันออกเฉียงเหนือ ภาคเหนือตอนล่าง ภาคกลาง และกรุงเทพมหานคร เพื่อเสริมความมั่นคงระบบไฟฟ้า โดยทำสัญญาแบบปรับราคาได้ (ค่า k) โดยใช้งบประมาณ กฟผ.

สถานที่ก่อสร้าง : สายส่งไฟฟ้าแรงสูง 230 kV บางปะกง – คลองใหม่ (ระยะทางประมาณ 8 กิโลเมตร)

<u>ราคากลาง (รวมภาษีมูลค่าเพิ่มและค่าใช้จ่ายอื่นๆ)</u> :

44,700,000.- บาท (ไม่รวมราคาอุปกรณ์รื้อถอนที่กำหนดให้ผู้เสนอราคารับซื้อจาก กฟผ.)

(แก้ไขรายละเอียดราคากลางราย Items)

<u>คุณสมบัติของผู้เสนอราคา</u>

- ต้องเป็นนิติบุคคลผู้มีอาชีพรับจ้างตามประกวดราคาจ้างดังกล่าว และต้องไม่เป็นผู้ทิ้งงานซึ่งปลัดกระทรวงการคลังได้แจ้งเวียนชื่อไว้ หรือต้องไม่เป็นผู้ที่ กฟผ. ห้ามติดต่อหรือห้ามเข้าเสนอราคา หรือต้องไม่เป็นผู้ที่ได้รับผลของการสั่งให้นิติบุคคลหรือบุคคลอื่นเป็นผู้ทิ้งงาน ตามคำสั่ง 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
- 5. ผู้ประสงค์เข้าประกวดราคาในนามของกิจการร่วมค้าหรือกิจการค้าร่วม (Joint Venture or Consortium) จะต้องดำเนินการทุก ขั้นตอนของการประกวดราคา ในนามของกิจการร่วมค้าหรือกิจการค้าร่วม ตั้งแต่การเสนอราคาจนสิ้นสุดข้อผูกพันกับ กฟผ.

<u>การขายเอกสารประกวดราคา</u>

ผู้สนใจติดต่อซื้อเอกสารประกวดราคา ในราคาชุดละ 1,000.- บาท ในวันทำการระหว่างเวลา 08:00 น. ถึง 15:00 น. ตั้งแต่วันที่ 13 กันยายน 2567 ถึงวันที่ 15 ตุลาคม 2567 ทั้งนี้ สามารถดูรายละเอียดการซื้อเอกสารประกวดราคาได้ที่เว็บไซต์ <u>http://www4.egat.co.th/fprocurement/biddingeng/</u> หรือสอบถามข้อมูลเพิ่มเติมได้ทางโทรศัพท์ หมายเลข 0 2436 0342 หรือ อีเมล <u>procurement.tse@egat.co.th</u>

<u>การยื่นซองประกวดราคา</u>

กำหนดยื่นซองประกวดราคา ในวันที่ 5 พฤศจิกายน 2567 เวลา 09:30 น. ถึง 10:00 น. และเปิดซองประกวดราคา เวลา 10:00 น. ณ ห้องประกวดราคา ชั้น 1 อาคารฝ่ายจัดซื้อจัดจ้างและบริหารพัสดุ ท.082 การไฟฟ้าฝ่ายผลิตแห่งประเทศไทย เชิงสะพานพระราม 7 จังหวัดนนทบุรี

ประกาศแก้ไข ณ วันที่ *17 ตุลาคม 2567*

กรรณิกา ธชาลุภัฎ) (นางกรรณิกา ธชาลุภัฏ)

(นางกรรณิกา ธซาลุภัฏ) หัวหน้ากองจัดซื้อจัดจ้างต่างประเทศสายงานระบบส่ง

(ฉบับแก้ไข)

ตารางแสดงวงเงินงบประมาณที่ได้รับจัดสรรและราคากลาง(ราคาอ้างอิง) ในการจัดซื้อจัดจ้างที่มิใช่งานก่อสร้าง

1. ชื่อโครงการ Bid No. TIEC-L-18 การจัดซื้อและจ้างก่อสร้างเปลี่ยนสายตัวนำของสายส่ง 230 kV บางปะกง - คลองใหม่ โครงการปรับปรุงระบบส่งไฟฟ้าบริเวณภาคตะวันออกเฉียงเหนือ ภาคเหนือตอนล่าง ภาคกลาง และกรุงเทพมหานคร เพื่อเสริมความมั่นคงระบบไฟฟ้า /หน่วยงานเจ้าของโครงการ ฝ่ายแผนงานและโครงการระบบส่ง การไฟฟ้าฝ่ายผลิตแห่งประเทศไทย 2. วงเงินงบประมาณที่ได้รับจัดสรร โครงการปรับปรุงระบบส่งไฟฟ้าบริเวณภาคตะวันออกเฉียงเหนือ ภาคเหนือตอนล่าง ภาคกลาง และกรุงเทพมหานคร เพื่อเสริมความมั่นคงระบบไฟฟ้า งบประมาณ 94.040 ล้านบาท วันที่กำหนดราคากลาง 21 กันยายน 2567 (วันที่ อวส. อนุมัติ) ราคารวมภาษีมูลค่าเพิ่มและค่าใช้จ่ายอื่นๆ เป็นเงิน 44,700,000.00 บาท ราคา/หน่วย ตามเอกสารแนบ 4. แหล่งที่มาของราคากลาง หลักเกณฑ์การกำหนดราคากลางการจัดซื้อและจัดจ้างงานก่อสร้างระบบส่งไฟฟ้าของสายงานระบบส่ง 5. รายชื่อเจ้าหน้าที่ผู้กำหนดราคากลาง 5.1 นางกุลวดี สุขแดง นสส-วส. กวสส-ส. 5.2 นางสิรินยา ตันสัจจา หปส-ส. กวสส-ส. ปรมวรตระกูล วศ.8 หปส-ส. กวสส-ส. 5.3 นายทรงธรรม <u>หมายเหต</u> ค่าใช้จ่ายอื่นๆ ได้แก่ ค่าใช้จ่ายที่ กฟผ. ต้องจ่ายตามวิธีการพิจารณาเปรียบเทียบราคาที่กำหนดไว้ ในเอกสารประกวดราคา เช่น อากรขาเข้า เป็นต้น

24mc ⁻ นางสาวเบญญาลักษณ์ ศรลัมพ์ หจตส-ห. 17 ต.ค. 67

DETAILS OF MEDIUM COST FOR BID NO. TIEC-L-18

SCHEDULE 1 : RECONDUCTORING OF 230 kV BANK PAKONG - KHLONG MAI (8 km)

DESCRIPTION	TOTAL
	(THB)
1A : PRELIMINARY WORK	37,905.00
1C : TOWERS	59,115.00
1D : INSULATOR STRING AND OVERHEAD GROUND WIRE ASSEMBLIES	5,478,165.00
1E : CONDUCTOR AND OVERHEAD GROUND WIRE	28,128,681.00
1F : LINE ACCESSORIES	2,196,810.00
1H : OPTICAL FIBER AND LINE ACCESSORIES	2,801,940.12
1I : DISMANTLING WORK	1,268,664.60
1N : TEST OF EQUIPMENT	528,675.00
10 : SUPPLY OF SERVICE OF VEHICLES	1,260,000.00
TOTAL PRICE FOR SCHEDULE 1	41,759,955.72
ADJUSTED PRICE (IMPORT DUTY AND TAX + VAT 7%)	2,923,196.90
TOTAL PRICE	44,683,152.62

MEDIUM COST OF BID NO. TIEC-L-18	44,700,000.00

2mc นางสาวเบญญาลักษณ์ ศรลัมพ์ หจตส-ห. 17 ต.ค. 67

Acre

นายประวิทย์ เลิศโกวิทย์ ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง 04 Jul 2024

INVITATION TO BID NO. TIEC-L-18 TOTAL PRICE FOR SCHEDULE NO. 1 RECONDUCTORING OF 230 KV BANG PAKONG - KHLONG MAI Line Length 8 KM

SUPPLY AND CONSTRUCTION OF TRANSMISSION LINE FOR RECONDUCTORING OF 230 KV BANG PAKONG - KHLONG MAI

TRANSMISSION SYSTEM IMPROVEMENT PROJECT IN NORTHEASTERN, LOWER NORTHERN, CENTRAL REGIONS AND BANGKOK AREA TO ENHANCE SYSTEM SECURITY

		Supply of Equipment	Supply of Equipment				Local	Purchase Price
		Foreign Supply	Local Supply	Foreign Currency	Local Currency	Local Transportation	Transportation, Construction and	Offered for Dismantled
Description	Currency		Ex-works Price			11 unsportation	Installation	Equipment
2 torripron	,	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							37,905.00	
1C : TOWERS							59,115.00	
1D : INSULATOR STRING AND OVERHEAD GROUND				~~~~~~				
WIRE ASSEMBLIES	THB	3,213,315.00	2,264,850.00					
1E : CONDUCTOR AND OVERHEAD GROUND WIRE	THB	23,391,081.00					4,737,600.00	
1F : LINE ACCESSORIES			2,018,310.00				178,500.00	

2hm6 นางสาวเบญญาลักษณ์ ศรลัมพ์ หจตส-ห.

17 ต.ค. 67

นายประวิทย์ เลิศโกวิทย์ ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง 17 Sep 2024

filename : TIEC-L-18-1 (230 kV BPK - KLM).xlsx

Rev.16

- Project 1-1C1 -

		Supply of Equipment	Supply of Equipment				Local	Purchase Price
		Foreign Supply	Local Supply	Foreign Currency	Local Currency	Local Transportation	Transportation, Construction and	Offered for Dismantled
Description	Currency		Ex-works Price			1 ransportation	Installation	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
1H : OPTICAL FIBER AND LINE ACCESSORIES	THB	820,024.80	958,127.52				1,023,787.80	
		,						
1I : DISMANTLING WORK							1,268,664.60	
IN : TEST OF EQUIPMENT	THB			317,100.00	211,575.00			
	IIID			517,100.00	211,575.00			
							1 2 60 000 00	
10 : SUPPLY OF SERVICE OF VEHICLES							1,260,000.00	
	ТНВ	27,424,420.80	Baht	317,100.00	Baht	Baht	Baht	Baht
TOTAL DRIGE	1110	27,121,120.00	5,241,287.52		211,575.00		8,565,572.40	
TOTAL PRICE								
1Z : DISMANTLED EQUIPMENT TO BE							Baht	-10,776,500.00
PURCHASED BY THE CONTRACTOR								

2.hmCั นางสาวเบญญาลักษณ์ ศรลัมพ์ หจตส-ห. 17 ต.ค. 67

นายประวิทย์ เลิศโกวิทย์ ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง 17 Sep 2024

1A : PRELIMINARY WORK

IMPORTANT :

Item No.	Description	Estimated Qty.	Unit		tion and
1A1	Boundary posts along boundary line of right-of-way				
		38	post	997.50	37,905.00
	Total Price for 1A	1	1	Baht	37,905.00

2m6 นางสาวเบญญาลักษณ์ ศรลัมพ์ หจตส-ห.

17 ต.ค. 67

นายประวิทย์ เลิศโกวิทย์ ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง 17 Sep 2024

1C : TOWERS

					Supply of	Equipment	Supply of	Equipment	Local	
					Foreig	Foreign Supply CIF Thai Port		Supply	Transportation, Construction and Installation (excluding VAT) Baht	
Item No.	Description	Estimated Qty.	Unit	Currency	CIF T			CIF Thai Port Ex-works Price (excluding VAT) Baht		
					Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
1C1	Tower signs									
1C1.1	Aerial patrol signs	8	piece		XXXXX	XXXXX	XXXXX	XXXXX	2,625.00	21,000.00
1C1.2	Phasing signs (3 pieces per set)	2	set		XXXXX	XXXXX	XXXXX	XXXXX	6,825.00	13,650.00
1C1.3	Danger signs	2	piece		XXXXX	XXXXX	XXXXX	XXXXX	3,150.00	6,300.00
1C1.4	Circuit name signs	2	piece		XXXXX	XXXXX	XXXXX	XXXXX	5,775.00	11,550.00
1C1.5	Re-tower number signs	lump sum	each		XXXXX	XXXXX	XXXXX	XXXXX	6,615.00	6,615.00
	Total Price for 1C						Baht		Baht	59,115.00

2m6 นางสาวเบญญาลักษณ์ ศรลัมพ์ หจตส-ห. 17 ต.ค. 67

1D : INSULATOR STRING AND OVERHEAD GROUND WIRE ASSEMBLIES

					Supply of	f Equipment	Supply of	Equipment	Local Transportation	
					Foreig	gn Supply	Local	l Supply	Transportation, Construction and	
Item No.	Description	Estimated Qty.		Currency	CIF 1	Thai Port	Ex-works Price (excluding VAT) Baht		Installation (excluding VAT) Baht	
					Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
	Single string suspension insulator assemblies with armor rods for two-bundled Invar conductor, 16300 kg ultimate strength, coupling type K (without insulator and arcing horn)	72	set		XXXXX	XXXXX	10,500.00	756,000.00	included in stringing wo	k included in stringing work
	Double string suspension insulator assemblies with armor rods for two-bundled Invar conductor, 16300 kg ultimate strength, coupling type K (without insulator and arcing horn)	18	set		XXXXX	XXXXX	12,600.00			a included in stringing work
	Bypass string suspension insulator assemblies for two-bundled Invar conductor, 12000 kg ultimate strength, coupling type J (without insulator and arcing horn)	15	set		XXXXX	XXXXX	9,450.00	141,750.00	included in stringing wo	t included in stringing work

2 mc

นางสาวเบญญาลักษณ์ ศรลัมพ์

หจตส-ห. 17 ต.ค. 67

นายประวิทย์ เลิศโกวิทย์ ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง 17 Sep 2024

- Project 1-1C5 -

					Supply of	Equipment	Supply of	Equipment		ocal		
					Foreig	n Supply	Local	Supply	-	ortation, ction and		
Item No.	Description	Estimated Qty.			Unit Currency		CIF T	'hai Port	(exclud	rks Price ing VAT) aht	Insta (exclud	Illation ing VAT) Baht
					Unit Price	Amount	Unit Price	Amount	Unit Price	Amount		
	Single string tension insulator assemblies for two-bundled Invar conductor, 13000 kg ultimate strength, coupling type J (without insulator and arcing horn)	12	set		XXXXX	XXXXX	14,700.00	176.400.00	included in stringing work	included in stringing work		
	Double string tension insulator assemblies for two-bundled Invar conductor, 26000 kg ultimate strength, coupling type K (without insulator and arcing horn)	54	set		XXXXX	XXXXX	17,850.00	963,900.00		included in stringing work		
	Porcelain or glass insulator ANSI CLASS 52-5 (25,000 lbs) with corrosion proof type pin	350	disc	THB	724.50	253,575.00	XXXXX	XXXXX	included in stringing work	included in stringing work		
	Porcelain or glass insulator ANSI CLASS 52-8 (36,000 lbs) with corrosion proof type pin	3132	disc	THB	945.00	2,959,740.00	XXXXX			included in stringing work		
							D-1-4		D-14			
	Total Price for 1D	10		THB		3,213,315.00	Baht	2,264,850.00	Baht			



17 ต.ค. 67



filename : TIEC-L-18-1 (230 kV BPK - KLM).xlsx

1E : CONDUCTOR AND OVERHEAD GROUND WIRE

					Supply of	f Equipment	Supply of	Equipment		ocal
					Foreig	gn Supply	Local	Supply	-	ortation, ction and
Item No.	Description	Estimated Qty.	Unit	Currency	CIF Thai Port (exclud		rks Price ing VAT) Baht	Insta (exclud	Illation ing VAT) Baht	
					Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
1E1	Invar conductor									
1E1.1	Furnishing Invar conductor for item 1E1.2 to 1E1.4 (to be supplied by EGAT, see IMPORTANT), approx. 4.9 km in transmission line distance		1							
151.0			km		XXXXX	XXXXX	XXXXX	XXXXX	included in stringing work	included in stringing work
1E1.2	Stringing of conductor by controlled tension method, double circuit, 3 phases, twin- bundled conductor per phase, measured based on horizontal distance of line route from the deadend Tower No. 0/1 type WDE at Bang Pakong substation to Tower No.4/3 type WDE (Including connecting loop of Tower No.0/1 Type WDE)	4.9	km		XXXXX	XXXXX	XXXXX	XXXXX	525,000.00	2,572,500.00
1E1.3	Installation of conductor, double circuit, 3 phases, twin-bundled conductor per phase, between the deadend Tower No.0/1 type WDE and take-off structure at Bang Pakong substation, approximately 0.2 kilometer in transmission line distance									
	A	lump sum	each		XXXXX	XXXXX	XXXXX	XXXXX	268,800.00	268,800.00
	2									
Rev	หจตส-ห. นายประวิทย์ เลิศโกวิทย์ ผู้อำนวยการฝ่ายวิศวกรรมระบ 7.16 17 ต.ค. 67 17 Sep 2024	บส่ง		- Proiec	t 1-1C7 -	filer	name · TIFC-	L-18-1 (230 kV	BPK - KU	M) xlsx

					Supply of	f Equipment	Supply of	Equipment		ocal
					Foreig	gn Supply	Local	Supply	-	ortation, ction and
Item No.	Description	Estimated Qty.	Unit	nit Currency CIF Thai Port		(exclud	·ks Price ing VAT) aht	Installation (excluding VAT) Baht		
					Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
1E1.4	Installation of conductor, double circuit, 3 phases, twin-bundled conductor per phase, between the deadend Tower No.7/3 type WDE(90) and take-off structure at Khlong Mai substation, approximately 0.1 kilometer in transmission line distance				VVVVV	VVVVV	VVVVV	VVVVV	268 800 00	268 800 00
1E2	Invar conductor	lump sum	each		XXXXX	XXXXX	XXXXX	λλλλλ	268,800.00	268,800.00
1E2.1	Furnishing Invar conductor for item 1E2.2, approx. 3.1 km in transmission line distance	3.1	km	THB	7,545,510.00	23,391,081.00	XXXXX	XXXXX	included in stringing work	included in stringing work
1E2.2	Stringing of conductor by controlled tension method, double circuit, 3 phases, twin- bundled conductor per phase, measured based on horizontal distance of line route from the Tower No.4/3 type WDE to the deadend tower No. 7/3 type WDE(90) at Khlong Mai Substation									
		3.1	km		XXXXX	XXXXX	XXXXX	XXXXX	525,000.00	1,627,500.00
				ТНВ		23,391,081.00	Baht		Baht	
	Total Price for 1E	, La								4,737,600.00
		มายประวิทย์ เลิศโก่	วิทย์	1					I	
Rev.16 17 ต.ค. 67 ผู้อำนวยการฝ่ายวิหวกรรมระบบเ 17 Sep 2024				- Projec	xt 1-1C8 -	filer	name : TIEC-	L-18-1 (230 kV	BPK - KL	M).xlsx

1F : LINE ACCESSORIES

					Supply of	f Equipment	Supply of	Equipment		ocal
					Foreig	Foreign Supply		Supply	-	ortation, Iction and
Item No.	Description	Estimated Qty.			CIF T	CIF Thai Port		rks Price ing VAT) Saht	Installation (excluding VAT) Baht	
					Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
1F1	Spacer damper for two-bundled Invar conductors (for double circuit, approx. 8 km in transmission line distance)	lump sum	each		XXXXX	XXXXX	1,848,000.00	1,848,000.00		
1F2	Rigid type spacer for two-bundled Invar conductors	72	set		XXXXX	XXXXX	630.00			included in stringing work
1F3	Tension sleeve for Invar conductor	85	set		XXXXX	XXXXX	1,470.00	124,950.00		included in stringing work
1F4	Field test of spacer damper for two-bundled Invar conductor as per Specifications No.TL-03	1	test		XXXXX	XXXXX	XXXXX	XXXXX	178,500.00	178,500.00
	Total Price for 1F						Baht	2,018,310.00	Baht	178,500.00

2 fmt
นางสาวเบญญาลักษณ์ ศรลัมพ์
หจตส-ห.
17 ต.ค. 67

นายป์ระวิทย์ เลิศโกวิทย์ ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง 17 Sep 2024

filename : TIEC-L-18-1 (230 kV BPK - KLM).xlsx

1H : OPTICAL FIBER AND LINE ACCESSORIES

					Supply of Equipment Foreign Supply CIF Thai Port		Supply of	Equipment	Local	
							Ex-works Price		Ex-works PriceConstruction andexcluding VAT)(excluding VAT)	
Item No.	Description	Estimated Qty.	Unit	Currency						
					Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
1H1	Composite overhead ground wire with 36 core optical fibers (OPGW) (referred section F-4.3)									
1H1.1	Furnishing OPGW	lump sum	each	THB	820,024.80	820,024.80			Included in item 1H1.2	Included in item 1H1.2
1H1.2	Stringing by controlled tension method, one OPGW measured based on horizontal distance of line route from 230 kV Bang Pakong - Khlong Mai line no.2 (BPK - KLM CCT.2)		kilometer		XXXXX	XXXXX	XXXXX	XXXXX	91,551.60	732,412.80
1H2	Joint boxes for optical fiber cable, including splicing work									
1H2.1	2-way joint box with accessories for two OPGW cables	lump sum	each							
1H2.2	2-way joint box with insulator and accessories for OPGW cable and 36 core non-metallic optical fiber cable at take-off structure	2	set							
1H2.3	Connecting two OPGW cables for item 1H2.1	lump sum	each		XXXXX	XXXXX	XXXXX	XXXXX		

2hm5 นางสาวเบญญาลักษณ์ ศรลัมพ์ หจตส-ห.

(W/

นายป์ระวิทย์ เลิศโกวิทย์ ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง 17 Sep 2024

17 ต.ค. 67

- Project 1-1C10 -

					Supply of	Supply of Equipment		Equipment	Local Transportation		
					Foreign Supply		Local Supply		Transportation, Construction and		
Item No.	Description	Estimated Qty.	Unit	Currency	CIF T	CIF Thai Port		EIF Thai Port Ex-works Price (excluding VAT) Baht		Installation (excluding VAT) Baht	
					Unit Price	Amount	Unit Price	Amount	Unit Price	Amount	
	Connecting OPGW cable and non-metallic optical fiber cable for item 1H2.2 at take-off structure	2	Job		XXXXX	XXXXX	XXXXX	XXXXX			
1H3	Hardware assembly for OPGW										
1H3.1	Tension assembly with accessories (grounded type) (excluding vibration damper)	lump sum	each				690,167.52	690,167.52			
1H3.2	Suspension assembly with accessories (grounded type) (excluding vibration damper)	lump sum	each								
1H3.3	Tension assembly with accessories and insulator to be used at take-off structure (excluding insulator and vibration damper)	2	set								
1H4	Line accessories										
1H4.1	Vibration damper assembly with accessories	lump sum	each								
1H4.2	Parallel groove clamps	lump sum	each								
1H4.3	Grounding clamps	lump sum	each								
1H4.4	1-wire cleat without insulator for OPGW down-lead to joint box	lump sum	each								



นายประวิทย์ เลิศโกวิทย์ ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง 17 Sep 2024

10

0

- Project 1-1C11 -

filename : TIEC-L-18-1 (230 kV BPK - KLM).xlsx

อวส.-อผค.

					Supply of	Equipment	Supply of	Equipment		ocal	
					Foreign Supply		Local Supply		Transportation, Construction and		
Item No.	Description	Estimated Qty.	Unit	Currency	CIF T	CIF Thai Port		CIF Thai Port Ex-works Price (excluding VAT) Baht		Installation (excluding VAT) Baht	
					Unit Price	Amount	Unit Price	Amount	Unit Price	Amount	
1H4.5	2-wire cleat without insulator for OPGW down-lead to joint box	lump sum	each								
1H4.6	6-wire cleat without insulator for OPGW down-lead to joint box	lump sum	-								
1H4.7	Clevis type insulator ANSI CLASS 52-4 (292 mm minimum leakage distance and 6,800 kg minimum electromechanical failing load) to be used with item 1H4.3	lump sum	each								
1H4.8	3/8" high strength galvanized steel ground wire for grounding OPGW to towers	lump sum	each								
1H5	Non-metallic optical fiber cable										
1H5.1	36 core optical fiber cable from joint box at take-off structure to fiber frame termination cabinet at Bang Pakong substation	400	m				189.00	75,600.00	Included in Item 1H5.4	Included in Item 1H5.4	
1H5.2	Rigid steel conduit from take-off structure to cable trench for item 1H5.1	lump sum	each				2,100.00	2,100.00	Included in Item 1H5.4	Included in Item 1H5.4	
	EFLEX and/or HDPE conduit for item 1H5.1 in cable trench	lump sum					41,580.00			Included in Item 1H5.4	
1H5.4	Laying of optical fiber cable with accessories for item 1H5.1, 1H5.2, 1H5.3	400	m		XXXXX	xxxxx	XXXXX	XXXXX	367.50	147,000.00	

2.hmc^{*} นางสาวเบญญาลักษณ์ ศรลัมพ์ หจตส-ห. 17 ต.ค. 67

A(4/

นายประวิทย์ เลิศโกวิทย์

ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง 17 Sep 2024

- Project 1-1C12 -

filename : TIEC-L-18-1 (230 kV BPK - KLM).xlsx

Rev.16

			Supply of	Equipment	Supply of	Equipment		ocal
			Foreign Supply		Local	Supply	Transportation, Construction and Installation (excluding VAT) Baht	
Estima		t Currency	CIF T	CIF Thai Port		rks Price ing VAT) aht		
			Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
(including	set				26,250.00	26,250.00	10,500.00	10,500.00
1	set				10,500.00	10,500.00		5,250.00
1	set		XXXXX	XXXXX	XXXXX	XXXXX	10,500.00	10,500.00
e-off								
250) m				189.00	47,250.00	Included in Item 1H6.4	Included in Item 1H6.4
ble trench for	sum eacl	h			2,100.00	2,100.00	Included in Item 1H6.4	Included in Item 1H6.4
n cable trench lump s		h			25,830.00	25,830.00		Included in Item 1H6.4
or item 1H6.1,) m		XXXXX	XXXXX	XXXXX	XXXXX	367.50	91,875.00
(including					26,250.00		10,500.00	10,500.00
1	set				10,500.00			5,250.00
ΛΟ 1	set		XXXXX	XXXXX	XXXXX			10,500.00
		A 1 set	1 set 1 set	1 set XXXXX	1 set XXXXX XXXXX	1 set 10,500.00 1 set XXXXX XXXXX	1 set 10,500.00 1 set XXXXX XXXXX	1 set 10,500.00 10,500.00 5,250.00 1 set XXXXX XXXXX XXXXX 10,500.00 5,250.00

2hm6 นางสาวเบญญาลักษณ์ ศรลัมพ์ หจตส-ห.

17 ต.ค. 67

Rev.16

ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง 17 Sep 2024

นายประวิทย์ เลิศโกวิทย์

- Project 1-1C13 -

filename : TIEC-L-18-1 (230 kV BPK - KLM).xlsx

					Supply of Equipment Foreign Supply		Supply of Equipment Local Supply		Local Transportation, Construction and	
Item No.	Description	Estimated Qty.	Unit	Currency	CIF Thai Port		(exclud	rks Price ing VAT) aht	Insta (exclud	allation ing VAT) Baht
					Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
1H7	Field testing for optical fiber	1	set		XXXXX	XXXXX	XXXXX	XXXXX		
	Total Price for 1H			THB		820,024.80	Baht	958,127.52	Baht	1,023,787.80

2./.... นางสาวเบญญาลักษณ์ ศรลัมพ์ หจตส-ห. 17 ต.ค. 67

0 11/

นายประวิทย์ เลิศโกวิทย์ ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง 17 Sep 2024

Rev.16

1I : DISMANTLING WORK

Item No.	Description	Estimated Qty.	Unit	Local Trans Construc Instal (excludin Ba	tion and lation ng VAT)
				Unit Price	Amount
	Dismantling of the existing 230 kV Bang Pakong - Khlong Mai Transmission Line which is double circuit, twin-bundled conductor per phase from Str. No. 0/1 type WDE to Str. No. 7/3 type WDE(90), approx. 8 km in transmission line distance.				
		lump sum	each	1,268,664.60	1,268,664.60
	Total Price for 1I			Baht	1,268,664.60

2.hm. ⁻ นางสาวเบญญาลักษณ์ ศรลัมพ์ หจตส-ห. 17 ต.ค. 67

· w//

นายประวิทย์ เลิศโกวิทย์ ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง 17 Sep 2024

1N : TEST OF EQUIPMENT

Item No.	Description	Estimated Qty.	Unit	Currency			Ba	ng VAT) ht
					Unit Price	Amount	Unit Price	Amount
	Steep front wave impulse test on insulator ANSI Class 52-5 (25,000 lbs) with corrosion proof type pin as per Specification No.TL-01 (Rev.2) Steep front wave impulse test on insulator ANSI Class 52-8	1	test	THB	158,550.00	158,550.00		
	(36,000 lbs) with corrosion proof type pin as per Specification No.TL-01 (Rev.2)	1	test	THB	158,550.00	158,550.00		
	Laboratory test of spacer damper for two-bundled Invar conductor as per Specification No.TL-03	1	test				211,575.00	211,575.00
	Total Price for 1N	1		THB		317,100.00	Baht	211,575.00

2/กวร นางสาวเบญญาลักษณ์ ศรลัมพ์ หจตส-ห. 17 ต.ค. 67



10 : SUPPLY OF SERVICE OF VEHICLES

Item No.	Description	Estimated Qty.	Unit	Local Transportation, Construction and Installation (excluding VAT) Baht			
				Unit Price	Amount		
101	Service of four-wheel-driven vehicle (Specification of Vehicles refer to Article G-6. Housing and Other Facilities.)						
		24	car-month	52,500.00	1,260,000.00		
	Total Price for 10			Baht	1,260,000.00		

2km6

นายประวิทย์ เลิศโกวิทย์ ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง 17 Sep 2024

0

นางสาวเบญญาลักษณ์ ศรลัมพ์ หจตส-ห. 17 ต.ค. 67

Purchase Price Offered for Dismantled Equipment Description Item No. Unit Estimated (including VAT) Qty. Baht Unit Price Amount Dismantled Equipment of the existing 230 kV Bang Pakong - Khlong Mai Transmission Line 1Z1 which is double circuit, twin-bundled conductor per phase from Str. No. 0/1 type WDE at Bang Pakong Substation to Str. No. 7/3 type WDE(90) at Khlong Mai Substation, approx. 8 km in transmission line distance. Baht 10,776,500.00 **Total Price for 1Z**

1Z: DISMANTLED EQUIPMENT TO BE PURCHASED BY THE CONTRACTOR

2hm

นายประวิทย์ เลิศโกวิทย์ ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง 17 Sep 2024

นางสาวเบญญาลักษณ์ ศรลัมพ์ หจตส-ห. 17 ต.ค. 67

Important Information

for

Invitation to Bid No. TIEC-L-18

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

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

Article E-15. <u>Performance Security</u> 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-10. Payment

After each payment is made, the Contractor or beneficiary shall issue and submit the receipt to EGAT as detailed in the paragraph added at the end of this article.

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. <u>Maintenance Security</u> 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. TIEC-L-18

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

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

The amount of bid security shall be USD 64,380.- or THB 2,368,000.-.

2. Article B-4. Validity of Bids

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

3. 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.

ELECTRICITY GENERATING AUTHORITY OF THAILAND

Nonthaburi Thailand

INVITATION TO BID NO. TIEC-L-18

SUPPLY AND CONSTRUCTION OF TRANSMISSION LINE FOR RECONDUCTORING OF 230 kV BANG PAKONG – KHLONG MAI

TRANSMISSION SYSTEM IMPROVEMENT PROJECT IN NORTHEASTERN, LOWER NORTHERN, CENTRAL REGIONS AND BANGKOK AREA TO ENHANCE SYSTEM SECURITY

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

The Electricity Generating Authority of Thailand (EGAT) hereby invites sealed bids for Supply and Construction of Transmission Line for Reconductoring of 230 kV Bang Pakong – Khlong Mai under Transmission System Improvement Project in Northeastern, Lower Northern, Central Regions and Bangkok Area to Enhance System Security 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 reconductoring 230 kV Bang Pakong - Khlong Mai Transmission Line. This line is 50 Hz, 3 phase, twin-bundled conductor per phase on double circuit self-supporting lattice steel towers, constructed in the central region of Thailand, having a distance of approximately 8 kilometers on the existing right-of-way with 20 meters in width on each side of the center line of the transmission line.

The conductor to be employed under this Invitation will be high temperature low sag conductor (Invar). EGAT will supply the Invar conductor for a length of 64.98 kilometers, while the Contractor shall supply the remaining length.

The overhead ground wire to be employed will be composite overhead ground wire with 36-core optical fiber and shall be supplied by the Contractor.

In addition to the stringing of the conductor, the details and data regarding stringing sag and tension table which include the distance from the take-off structure at Bang Pakong Substation to Str. No. 0/1, Str. No. 0/1 to Str. No. 4/3, and Str. No. 7/3 to the take-off structure at Khlong Mai Substation shall be supplied by EGAT. However, the sag and tension table shall be submitted for EGAT's approval by the Contractor prior to the stringing of the remaining Work.

The scope of Work for this Schedule shall also include the dismantling Work of the existing 230 kV Bang Pakong - Khlong Mai Transmission Line which is double circuit, twin-bundled conductor per phase from take-off structure at Bang Pakong Substation to take-off structure at Khlong Mai Substation with a distance of approximately 8 kilometers, except for all towers, insulator discs strung from Str. No. 0/1 to take-off structure at Bang Pakong Substation, and OPGW.

The said dismantling Work shall be conducted in accordance with the requirements in Specifications No. TL-07 (Rev.3) : <u>Dismantling Work</u>. All dismantled Equipment to be purchased by the Contractor has been listed in the Price Schedule and 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>.

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.

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. Himself, or either firm of the joint venture/consortium, having a record of experience in executing at least one turnkey contract as contractor (not as subcontractor) in overseas country (not his own country) or with EGAT at the following voltage levels :
 - 110 kV or higher for the Work of supply and construction of 115 kV transmission line
 - 220 kV or higher for the Work of supply and construction of 230 kV transmission line.

However, the following cases are eligible to the requirement under this Item:

- 1) Having a record of experience in executing at least one (1) turnkey contract as contractor (not as subcontractor) with its overall performance satisfactory to other electricity authorities in Thailand on overhead transmission line at a voltage level of 115 kV or higher is eligible for the requirement for the Work of supply and construction of 115 kV transmission line.
- 2) Having a record of experience in executing at least one (1) turnkey contract as contractor (not as subcontractor) with EGAT on transmission line at a voltage level of 115 kV is eligible for the requirement for the Work of supply and construction of 230 kV transmission line.

Experience record of the Bidder or either firm of the joint venture/consortium, including experience record derived from being a firm of other joint venture or consortium in previous project(s) is acceptable.

- b. Himself, or either firm of the joint venture/consortium or the combination thereof, having excellent reputation and adequate technical knowledge and record(s) of experience on the construction of transmission line at the following voltage levels:
 - 110 kV or higher for the Work of supply and construction of 115 kV transmission line
 - 220 kV or higher for the Work of supply and construction of 230 kV transmission line.

Moreover, the accumulative circuit distance shall be not less than 50 kilometers or not less than the Work specified under this Invitation.

Further to the case mentioned in a.1), the Bidder himself, or either firm of the joint venture/consortium, each having an experience of at least two (2) contracts on the construction of 115 kV transmission line with their overall performance satisfactory to other electricity authorities in Thailand is required. Moreover, accumulative circuit distance of not less than 50 kilometers is required to be eligible for this Item.

However, it is allowed to combine the record(s) of circuit distance in the construction of 115 kV transmission line(s) of each firm of the joint venture/consortium in order to meet the requirements of this item.

Further to the case mentioned in a.2), an experience with EGAT on the construction of 115 kV transmission line having accumulative circuit distance not less than 50 kilometers is required to be eligible for this Item.

c. Himself, or either firm of the joint venture/consortium or his subcontractor or the combination thereof, having adequate technical knowledge and practical experience in stringing of line conductors or overhead ground wire or OPGW parallel to a live line. This eligibility will be applicable in case that scope of work under this Invitation requires stringing of circuit conductor, overhead ground wire and/or OPGW on towers on which the other circuit conductor is under energizing condition while performing such work.

d. Himself, or either firm of the joint venture/consortium or his subcontractor or the combination thereof, having excellent reputation and adequate technical knowledge and having at least three years experience in the construction of transmission line having accumulative distance of overhead ground wire with optical fiber not less than 20 kilometers in length. This eligibility will not be applicable if such Equipment is not required under this Invitation.

With respect to item b., c., and d., experience record of the Bidder or either firm of the joint venture/consortium, including experience record derived from being a firm of other joint venture or consortium in previous project(s) is acceptable, provided that there is a letter from the project owner certifying that the Works as described in b., c., and d. above were performed by the Bidder or either firm of the joint venture/consortium of this project.

However, reference records of either the parent or affiliated companies of the Bidder or of either firm of the joint venture/consortium shall not be acceptable. If the Bidder is a new company formed by acquisition of or merger with other companies or business units before submitting the Bid, the experience records of any of such previous companies or business units that meet the requirements set forth herein are acceptable as the experience records of the Bidder.

- e. Proposing towers, conductor, insulators, 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) Insulator manufacturer having a record of a minimum three (3) consecutive years of successful operation/use of at least 10,000 units of insulators of the same or similar ANSI class as those required under this Invitation in any one transmission line operating in the transmission network electric utility in overseas country (not his own country) during the last ten years at the following voltage levels:
 - 110 kV or higher for the Work of supply and construction of 115 transmission line
 - 220 kV or higher for the Work of supply and construction of 230 transmission line
 - 3) HTLS conductor (as Invar or Aluminum Conductor with Composite Core or Aluminum Conductor with Carbon Fiber Reinforced) manufacturer having an experience in design, manufacture, test and supply of at least two hundred (200) kilometers of the same type of

HTLS conductor as specified in the Invitation to Bid with successful operation thereof for a period of at least three (3) years as of the date of the bid opening.

- 4) Hardware assemblies, line accessories, dampers and spacer dampers for HTLS conductor manufacturer having an experience in design, manufacture, test and supply of hardware assemblies, line accessories, dampers and spacer dampers for any type of hightemperature low-sag conductor for at least three (3) years.
- 5) 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.e.1) thru I.e.5) 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 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, 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. TIEC-L-18

SUPPLY AND CONSTRUCTION OF TRANSMISSION LINE FOR RECONDUCTORING OF 230 kV BANG PAKONG – KHLONG MAI

TRANSMISSION SYSTEM IMPROVEMENT PROJECT IN NORTHEASTERN, LOWER NORTHERN, CENTRAL REGIONS AND BANGKOK AREA TO ENHANCE SYSTEM SECURITY

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, <u>See Tentative Schedule</u>

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*, 1st 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. Availability of Bidding Documents

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 35.- or Baht 1,000.- ; 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.

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

<u>เอกสารควบคุม</u>

รับรองสำเนาโดย <u>ทพอ-ส. กสสุ-ส. อาส.</u> *ก่อนนำไปใช้งาน* ด้องดรวจสอบ Revision ล่าสุด ฝ้ายวิศวกรรมระบบส่ง กฟผ.

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, 6th 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

เอกสารควบคม

รับรองสำเนาโดย <u>พพอ-ส. กสสุ-ส. อาส.</u> ก่อนนำไปใช้งาน ด้องดรวจสอบ Revision ลำสุด ผ้ายวิศวกรรมระบบส่ง กฟผ.

- 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. 22nd 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

<u>เอกสารควบคุม</u>

รับรองสำเนาโดย <u>ทพอ-ส. กสสุ-ส. อวส.</u> *ก่อนนำไปใช้งาน* ด้องดรวจสอบ Revision ล่าสุด ฝ้ายวิศวกรรมระบบส่ง กฟผ.

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

16th 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.

27th 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

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

<u>เอกสารควบคุม</u>

รับรองสำนาโดย <u>พพอ-ส. กสส-ส. อวส.</u> ก่อนนำไปใช้งาน ด้องดรวจสอบ Revision ล่าสุด ฝ้ายวิศวกรรมระบบส่ง กฟผ.

New 2

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

<u>เอกสารควบคุม</u>

รับรองสำเนาโดย <u>ทพอ-ส. กสส-ส. อาส.</u> ก่อนนำไปใช้งาน ด้องดรวจสอบ Revision ล่าสุด ฝ้ายวิศวกรรมระบบส่ง กฟผ.

Arry Th

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.

<u>เอกสารควบคม</u>

Acry of

รับรองสำเนาโดย <u>ทพอ-ส. กสสุ-ส. อวส.</u> ก่อนนำไปใช้งาน ด้องดรวจสอบ Revision ล่าสุด ม้ายวิศวกรรมระบบส่ง กฟม.

SECTION H ATTACHMENTS

Attachment No. 1	:	List of Equipment to be Furnished by EGAT (None)
Attachment No. 2	:	List of Equipment to be Dismantled by the Contractor
Attachment No. 3	:	Requirement for Dismantling Work and Conditions of Sale of Dismantled Equipment

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>	Description <u>Estimat</u>		<u>tity</u>		
Part 1 :	<u>The existing 230 kV Bang Pakong – Khlong Mai Transmission Line</u>				
	(The dismantled Equipment as listed below shall be pure	chased by the C	ontractor)		
1.1	Hardware Assemblies				
	Single string suspension insulator assemblies	72	sets		
	Double string suspension insulator assemblies	18	sets		
	Bypass string suspension insulator assemblies	9	sets		
	Single string tension insulator assemblies	12	sets		
	Double string tension insulator assemblies	54	sets		
	Overhead ground wire suspension assemblies	15	sets		
	Overhead ground wire tension assemblies	14	sets		
1.2	Line Accessories				
	Rigid Spacer	60	sets		
	Spacer damper	657	sets		
1.3	Insulator				
	Insulator ANSI Class 52-5 (25,000 lbs)	180	discs		
	Insulator ANSI Class 52-8 (36,000 lbs)	3,258	discs		
1.4	1272 MCM ACSR/GA Conductor	97.07	km		
1.5	3/8 " high strength galvanized steel overhead ground	wire 7.97	km		

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. Scope of Dismantling Work

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. <u>Payment</u>

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.