

# 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](mailto:coe@saraban.mail.go.th)

## ประชาสัมพันธ์ผู้ประกอบการเพื่อทราบ

เพื่อให้การดำเนินงานสำหรับงานจ้างก่อสร้างที่มีลักษณะงานด้านการออกแบบหรือควบคุมงานก่อสร้าง สอดคล้องกับพระราชบัญญัติวิศวกร พ.ศ. 2542 จึงขอแจ้งแนวทางในการดำเนินงาน ดังนี้

1. ผู้รับจ้างที่เป็นนิติบุคคล ต้องเป็นผู้ที่ได้รับใบอนุญาตประกอบวิชาชีพวิศวกรรมควบคุมสำหรับนิติบุคคลจากสภาวิศวกร
2. ผู้รับจ้างที่ดำเนินการในรูปแบบของ “กิจการร่วมค้า”
  - (1) กรณีที่กิจการร่วมค้าได้จดทะเบียนเป็นนิติบุคคลใหม่ กิจการร่วมค่านั้นต้องเป็นผู้ที่ได้รับใบอนุญาตประกอบวิชาชีพวิศวกรรมควบคุมสำหรับนิติบุคคลจากสภาวิศวกร
  - (2) กรณีที่กิจการร่วมค้าไม่ได้จดทะเบียนเป็นนิติบุคคลใหม่ เฉพาะนิติบุคคลที่มีหน้าที่เป็นผู้รับผิดชอบงานวิศวกรรมออกแบบหรือควบคุม ต้องเป็นผู้ที่ได้รับใบอนุญาตประกอบวิชาชีพวิศวกรรมควบคุมสำหรับนิติบุคคลจากสภาวิศวกร

หมายเหตุ หากมีข้อสงสัย โปรดติดต่อ สภาวิศวกร

ที่อยู่ : 1616/1 ถนนลาดพร้าว แขวงวังทองหลาง เขตวังทองหลาง กรุงเทพมหานคร 10310

เบอร์ติดต่อ : 1303

อีเมล : [coe@saraban.mail.go.th](mailto:coe@saraban.mail.go.th)

## **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 [https://www.egat.co.th/privacy-notice-procurement\\_en.html](https://www.egat.co.th/privacy-notice-procurement_en.html) 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.

## ประกาศความเป็นส่วนตัว (Privacy Notice) สำหรับการจัดซื้อจัดจ้าง การบริหารพัสดุ และการบริหารสัญญาของ กฟผ.

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



### การขิดฆ่าข้อมูลส่วนบุคคลอ่อนไหว

กฟผ. มีประกาศความเป็นส่วนตัว (Privacy Notice) สำหรับการจัดซื้อจัดจ้าง การบริหารพัสดุ และการบริหารสัญญา เพื่อใช้ในการเก็บรวบรวม ใช้ หรือเปิดเผย ข้อมูลส่วนบุคคล แต่ไม่เก็บข้อมูลส่วนบุคคลอ่อนไหว หากเอกสารของท่านที่ต้องส่งมอบให้ กฟผ. มีข้อมูลส่วนบุคคลอ่อนไหวตามที่ถูกบัญญัติไว้ในมาตรา 26 ของ PDPA ดังนี้ เชื้อชาติ เผ่าพันธุ์ ความคิดเห็นทางการเมือง ความเชื่อในลัทธิ ศาสนาหรือปรัชญา พฤติกรรมทางเพศ ประวัติอาชญากรรม ข้อมูลสุขภาพ ความพิการ ข้อมูลสหภาพแรงงาน ข้อมูลพันธุกรรม ข้อมูลชีวภาพ หรือข้อมูลอื่นใด ซึ่งกระทบต่อเจ้าของข้อมูลส่วนบุคคลในทำนองเดียวกันรวมอยู่ด้วย ขอให้ท่านขิดฆ่า หรือปกปิดข้อมูลดังกล่าว ก่อนส่งมอบให้แก่ กฟผ.

## Notice to Bidder

### Subject : Online Payment for Purchase of Bidding Documents

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

- 1) Download the Registration Form and fill out all necessary information 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.

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 [procurement.tse@egat.co.th](mailto:procurement.tse@egat.co.th) in the CC. before 15.00 hrs. Bangkok Standard Time.
- 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. TIPE-L-06

Supply and Construction of Transmission Lines

230 kV Rayong 2 – Bang Lamung 2 Junction and 230 kV Ao Phai – Bo Win

Transmission System Improvement Project in Eastern Region to Enhance System Security

Available Duration for Purchasing : June 11, 2024 - July 11, 2024

Price of Bidding Documents : USD 100.- or THB 3,000.-

## 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 [aradee.s@egat.co.th](mailto:aradee.s@egat.co.th) (with cc. [procurement.tse@egat.co.th](mailto:procurement.tse@egat.co.th)) before 15.00 hrs. 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. :	Date :	
Bidder's Name			
Address			
		Country :	
Name of Contact Person :		Tel.	Mobile No.
Email Address :			
Local Representative			
Address			
		Tax ID :	
Name of Contact Person :		Tel.	Mobile No.
Email Address :			
For Procurement Officer		Change of Bidder's Name	TAX ID :
Bidder's Letter No. :		Dated :	
New Bidder's Name			
Address			
		Country :	
Name of Contact Person :		Tel.	Mobile No.
Email Address :			
<u>Contact Information of In-charge Officer</u>			
Name	Ms. Aradee Srisomon		
Email address	<a href="mailto:aradee.s@egat.co.th">aradee.s@egat.co.th</a>		
Telephone No.	66 2 436 0342		
Mobile No.	669 6186 5269		



Invitation to Bid No. TIPE-L-06

Supply and Construction of Transmission Lines  
230 kV Rayong 2 – Bang Lamung 2 Junction and 230 kV Ao Phai – Bo Win

Transmission System Improvement Project in Eastern Region 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.

**Place of Construction :**

- From Rayong 2 Substation to Bang Lamung 2 Junction (approx. 26.7 kilometers)
- From Sectionalizing at the 230 kV Ao Phai – Rayong 2 Transmission Line and Sectionalizing of the 230 kV Rayong 2 – Bo Win Transmission Line on the new right-of-way to be connected to the 230 kV Ao Phai – Bo Win circuit no. 3 and 4 (approx. 1.0 kilometers)

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

THB 182,100,000.- (excluding cost of the Dismantled Equipment to be purchased by Bidder)

**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 June 11, 2024 to July 11, 2024 at USD 100.- or Baht 3,000.- per copy, non-refundable.

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

**Delivery of Bids**

Bids shall be submitted at Bidding Room, 1<sup>st</sup> Floor, Tor 082 Building during 9:30 hrs. to 10:00 hrs., Bangkok Standard Time, September 3, 2024 and will be opened publicly at 10:00 hrs.

ELECTRICITY GENERATING AUTHORITY OF THAILAND

June 11, 2024

*Chattiya C.*

(Miss Chattiya Chandhanayingyong)

Chief,

International Procurement Department - Transmission Segment



## ประกาศการไฟฟ้าฝ่ายผลิตแห่งประเทศไทย เรื่อง ประกวดราคาจ้าง เลขที่ TIPE-L-06

การไฟฟ้าฝ่ายผลิตแห่งประเทศไทย (กฟผ.) มีความประสงค์จะจัดซื้อและจ้างก่อสร้างสายส่งไฟฟ้าแรงสูง 230 kV ระยะ 2 - บริเวณจุดแยกบางละมุง 2 และ 230 kV อ่าวไผ่ - บ่อวิน สำหรับโครงการปรับปรุงระบบส่งไฟฟ้าบริเวณภาคตะวันออกเพื่อเสริมความมั่นคงระบบไฟฟ้า โดยทำสัญญาแบบปรับราคาได้ (ค่า k) โดยใช้ประมาณ กฟผ.

### สถานที่ก่อสร้าง :

- จากสถานีไฟฟ้าแรงสูงระยะ 2 ถึง จุดแยกบางละมุง 2 (ระยะทางประมาณ 26.7 กิโลเมตร)
- ตัดสายส่งไฟฟ้าแรงสูงบริเวณ 230 kV อ่าวไผ่ - ระยะ 2 และ 230 kV ระยะ 2 - บ่อวิน ในแนว right-of-way ใหม่ เพื่อเชื่อมกับสายส่งไฟฟ้าแรงสูง 230 kV อ่าวไผ่ - บ่อวิน วงจรที่ 3 และ 4 (ระยะทางประมาณ 1.0 กิโลเมตร)

### ราคากลาง (รวมภาษีมูลค่าเพิ่มและค่าใช้จ่ายอื่นๆ) :

182,100,000.- บาท (ไม่รวมราคาอุปกรณ์หรือถอนที่กำหนดให้ผู้เสนอราคาปรับซื้อจาก กฟผ.)

### คุณสมบัติของผู้เสนอราคา

1. ต้องเป็นนิติบุคคลผู้มีอาชีพรับจ้างตามประกวดราคาจ้างดังกล่าว และต้องไม่เป็นผู้ทำงานซึ่งปลัดกระทรวงการคลังได้แจ้งเวียนชื่อไว้ หรือต้องไม่เป็นผู้ที่ กฟผ. ห้ามติดต่อหรือห้ามเข้าเสนอราคา หรือต้องไม่เป็นผู้ที่ได้รับผลของการสั่งให้นิติบุคคลหรือบุคคลอื่นเป็นผู้ทำงานตามคำสั่ง กฟผ.
2. ต้องไม่เป็นผู้มีผลประโยชน์ร่วมกันกับผู้เสนอการรายอื่น ณ วันประกาศประกวดราคาครั้งนี้เป็นต้นไป หรือต้องไม่เป็นผู้กระทำการอันเป็นการขัดขวางการแข่งขันราคาอย่างเป็นธรรมในการดำเนินการประกวดราคาครั้งนี้
3. ต้องไม่เป็นที่ปรึกษาของ กฟผ. หรือมีส่วนร่วมในบริษัทที่ปรึกษาของ กฟผ. ในงานนี้ หรือต้องไม่มีผู้ปฏิบัติงาน กฟผ. เข้าไปมีส่วนร่วมในกิจการของผู้เสนอราคา ไม่ว่าจะในฐานะผู้ถือหุ้นที่มีสิทธิควบคุมการจัดการ กรรมการ ผู้อำนวยการ ผู้จัดการ พนักงาน ลูกจ้าง ตัวแทน หรือที่ปรึกษา ยกเว้น ในกรณีที่ผู้ปฏิบัติงานได้รับคำสั่งอย่างเป็นทางการจาก กฟผ. ให้ไปปฏิบัติงานหรือเข้าร่วมในกิจการของผู้เสนอราคา
4. ต้องไม่เป็นผู้ได้รับสิทธิหรือความคุ้มกัน ซึ่งอาจปฏิเสธไม่ยอมขึ้นศาลไทย เว้นแต่รัฐบาลของผู้เสนอราคาได้มีคำสั่งให้สละสิทธิและความคุ้มกันเช่นนั้น
5. ผู้ประสงค์เข้าประกวดราคาในนามของกิจการร่วมค้าหรือกิจการร่วม (Joint Venture or Consortium) จะต้องดำเนินการทุกขั้นตอนของการประกวดราคา ในนามของกิจการร่วมค้าหรือกิจการร่วม ตั้งแต่การเสนอราคาจนสิ้นสุดข้อผูกพันกับ กฟผ.

### การขายเอกสารประกวดราคา

ผู้สนใจติดต่อซื้อเอกสารประกวดราคา ในราคาชุดละ 3,000.- บาท ในวันทำการระหว่างเวลา 08:00 น. ถึง 15:00 น. ตั้งแต่วันที่ 11 มิถุนายน 2567 ถึงวันที่ 11 กรกฎาคม 2567 ทั้งนี้ สามารถดูรายละเอียดการซื้อเอกสารประกวดราคาได้ที่เว็บไซต์ <http://www4.egat.co.th/fprocurement/biddingeng/> หรือสอบถามข้อมูลเพิ่มเติมได้ทางโทรศัพท์ หมายเลข 0 2436 0342 หรืออีเมล [procurement.tse@egat.co.th](mailto:procurement.tse@egat.co.th)

### การยื่นซองประกวดราคา

กำหนดยื่นซองประกวดราคา ในวันที่ 3 กันยายน 2567 เวลา 09:30 น. ถึง 10:00 น. และเปิดซองประกวดราคาเวลา 10:00 น. ณ ห้องประกวดราคา ชั้น 1 อาคารฝ่ายจัดซื้อจัดจ้างและบริหารพัสดุ ท.082 การไฟฟ้าฝ่ายผลิตแห่งประเทศไทย เชียงสะพานพระราม 7 จังหวัดนนทบุรี

ประกาศ ณ วันที่ 11 มิถุนายน 2567

(นางสาวนัตติยา จันทนยิ่งยง)

หัวหน้ากองจัดซื้อจัดจ้างต่างประเทศสายงานระบบส่ง



ตารางแสดงวงเงินงบประมาณที่ได้รับจัดสรรและราคากลาง(ราคาอ้างอิง)  
ในการจัดซื้อจัดจ้างที่มีใช้งานก่อสร้าง

1. ชื่อโครงการ Bid No. TIPE-L-06  
การจัดซื้อและจ้างก่อสร้างสายส่ง 230 KV ระยะยง 2 - บริเวณจุดแยกบางละมุง 2 และ 230 KV อ่าวไผ่ - บ่อวิน  
โครงการปรับปรุงระบบส่งไฟฟ้าบริเวณภาคตะวันออกเพื่อเสริมความมั่นคงระบบไฟฟ้า  
/หน่วยงานเจ้าของโครงการ ฝ่ายแผนงานและโครงการระบบส่ง การไฟฟ้าฝ่ายผลิตแห่งประเทศไทย
2. วงเงินงบประมาณที่ได้รับจัดสรร  
โครงการปรับปรุงระบบส่งไฟฟ้าบริเวณภาคตะวันออกเพื่อเสริมความมั่นคงระบบไฟฟ้า  
งบประมาณ 21,000 ล้านบาท
3. วันที่กำหนดราคากลาง 22 มีนาคม 2567 (วันที่ ชสพ. อนุมัติ )  
ราคารวมภาษีมูลค่าเพิ่มและค่าใช้จ่ายอื่นๆ เป็นเงิน 182,100,000.00 บาท ราคา/หน่วย ตามเอกสารแนบ
4. แหล่งที่มาของราคากลาง  
หลักเกณฑ์การกำหนดราคากลางการจัดซื้อและจัดจ้างงานก่อสร้างระบบส่งไฟฟ้าของสายงานระบบส่ง
5. รายชื่อเจ้าหน้าที่ผู้กำหนดราคากลาง
  - 5.1 นายวิฑูรย์ บรรตาศักดิ์ นวส-นร. กวสส-ส.
  - 5.2 นางสาวสิรินยา ตันสังจา ทปส-ส. กวสส-ส.
  - 5.3 นายฐกานต์ นิโครวนจำรัส วศ.4 ทปส-ส. กวสส-ส.

หมายเหตุ ค่าใช้จ่ายอื่นๆ ได้แก่ ค่าใช้จ่ายที่ กฟผ. ต้องจ่ายตามวิธีการพิจารณาเปรียบเทียบราคาที่กำหนดไว้ในเอกสารประกวดราคา เช่น อกรักษาเข้า เป็นต้น

นางสาวเบญญาลักษณ์ ศรีลัมพ์

ทจตส-ท.

11 มี.ย. 67

**DETAILS OF MEDIUM COST FOR BID NO. TIPE-L-06****SCHEDULE 1 : 230 KV RAYONG 2 - BANG LAMUNG 2 JUNCTION (26.7 KM)**

Description	Total (THB)
1A : PRELIMINARY WORK	1,421,900.00
1B : TOWER FOUNDATIONS	22,213,250.00
1C : TOWERS	83,220,585.60
1D : INSULATOR STRING AND OVERHEAD GROUND WIRE ASSEMBLIES	21,311,160.00
1E : CONDUCTOR AND OVERHEAD GROUND WIRE	10,875,300.00
1F : LINE ACCESSORIES	6,665,200.00
1G : GROUNDING MATERIALS	872,000.00
1H : OPTICAL FIBER AND LINE ACCESSORIES	4,764,250.00
1I : DISMANTLING WORK	6,497,500.00
1N : TEST OF EQUIPMENT	604,000.00
1O : SUPPLY OF SERVICE OF VEHICLES	2,100,000.00
<b>Total price for Schedule 1 (After 1st adjusted)</b>	<b>160,545,145.60</b>

**SCHEDULE 2 : 230 KV AO PHAI - BO WIN (1 KM)**

Description	Total (THB)
2A : PRELIMINARY WORK	87,800.00
2B : TOWER FOUNDATIONS	2,614,500.00
2C : TOWERS	4,700,371.20
2D : INSULATOR STRING AND OVERHEAD GROUND WIRE ASSEMBLIES	1,471,400.00
2E : CONDUCTOR AND OVERHEAD GROUND WIRE	516,000.00
2F : LINE ACCESSORIES	95,200.00
2G : GROUNDING MATERIALS	65,600.00
2I : DISMANTLING WORK	30,000.00
<b>Total price for Schedule 2 (After 1st adjusted)</b>	<b>9,580,871.20</b>

<b>Total price for All Schedule (After 1st adjusted)</b>	<b>170,126,016.80</b>
<b>Adjusted Price (Import Duty &amp; Tax + VAT)</b>	<b>11,908,821.18</b>
<b>Total Price for All Schedule (All factor included + Import duty &amp; Tax + VAT)</b>	<b>182,034,837.98</b>

<b>MEDIUM COST OF BID NO. TIPE-L-06</b>	<b>182,100,000.00</b>
---	-----------------------

นางสาวเบญญลักษณ์ ศรีสัมพันธ์

หจตส-ท.

11 มี.ย. 67

นายประวิทย์ เลิศโกวิท  
ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง  
22 Mar 2024

INVITATION TO BID NO. TIPE-L-06  
 TOTAL PRICE FOR SCHEDULE NO. 1  
 230 KV RAYONG 2 - BANG LAMUNG 2 JUNCTION  
 Line Length 26.7 KM.

SUPPLY AND CONSTRUCTION OF TRANSMISSION LINE 230 KV RAYONG 2 - BANG LAMUNG 2 JUNCTION  
 TRANSMISSION SYSTEM IMPROVEMENT PROJECT IN EASTERN REGION TO ENHANCE SYSTEM SECURITY

Description	Currency	Supply of Equipment		Foreign Currency	Local Currency	Local Transportation	Local Transportation, Construction and Installation	Purchase Price Offered for Dismantled Equipment
		Foreign Supply	Local Supply					
		Ex-works Price	Ex-works Price					
		Amount	Amount					
1A : PRELIMINARY WORK							1,421,900.00	
1B : TOWER FOUNDATIONS			3,804,250.00				18,409,000.00	
1C : TOWERS			73,386,375.00				9,834,210.60	
1D : INSULATOR STRING AND OVERHEAD GROUND WIRE ASSEMBLIES	THB	12,520,860.00	8,790,300.00					
1E : CONDUCTOR AND OVERHEAD GROUND WIRE			756,000.00				10,119,300.00	
1F : LINE ACCESSORIES			6,495,200.00				170,000.00	
1G : GROUNDING MATERIALS			662,000.00				210,000.00	
1H : OPTICAL FIBER AND LINE ACCESSORIES	THB	4,764,250.00						
1I : DISMANTLING WORK							6,497,500.00	

*Ime*  
 นางสาวเบญญาลักษณ์ ศรีลัมพ์  
 หจตส-ท.  
 11 มี.ย. 67

*นางสาว*  
 นายประวิทย์ เลิศโกวิทย์  
 ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง  
 22 Mar 2024

Description	Currency	Supply of Equipment	Supply of Equipment	Foreign Currency	Local Currency	Local Transportation	Local Transportation, Construction and Installation	Purchase Price Offered for Dismantled Equipment
		Foreign Supply	Local Supply					
		CIF Thai Port	Ex-works Price ( excluding VAT ) Baht					
		Amount	Amount					
IN : TEST OF EQUIPMENT	THB			604,000.00				
IO : SUPPLY OF SERVICE OF VEHICLES						2,100,000.00		
<b>TOTAL PRICE</b>	<b>THB</b>	<b>17,285,110.00</b>	<b>Baht 93,894,125.00</b>	<b>604,000.00</b>	<b>Baht</b>	<b>Baht</b>	<b>Baht 48,761,910.60</b>	<b>Baht</b>
<b>IZ : DISMANTLED EQUIPMENT TO BE PURCHASED BY THE CONTRACTOR</b>							<b>Baht</b>	<b>-20,110,000.00</b>

*2km5*  
 นางสาวเบญญาลักษณ์ ศรีลัมพ์  
 หจตส-ท.  
 11 มี.ย. 67

*Dr. G. G.*  
 นายประวิทย์ เลิศโกวิทย์  
 ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง  
 22 Mar 2024

1A : PRELIMINARY WORK

Item No.	Description	Estimated Qty.	Unit	Local Transportation, Construction and Installation ( excluding VAT ) Baht	
				Unit Price	Amount
1A1	Check survey and staking of tower location (Approximately 26.7 kilometers in transmission line distance)	lump sum	each	801,000.00	801,000.00
1A2	Subsoil tests and preliminary measurement of ground resistance and earth resistivity (to be performed at tower locations directed by EGAT)				
1A2.1	Light ram sound tests with hand auger and preliminary measurement of ground resistance and earth resistivity from ground surface to 5 meters in depth	39	bore	6,300.00	245,700.00
1A2.2	Light ram sound tests with hand auger and preliminary measurement of ground resistance and earth resistivity from ground surface to 7 meters in depth	34	bore	6,900.00	234,600.00
1A3	Boundary post along boundary line of right-of-way	148	post	950.00	140,600.00
<b>Total Price for 1A</b>				<b>Baht</b>	<b>1,421,900.00</b>

  
 นางสาวเบญญาลักษณ์ ศรีสัมพันธ์  
 หจตส-ท.  
 11 มี.ย. 67

  
 นายประวิทย์ เลิศโกวิทย์  
 ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง  
 22 Mar 2024

**1B : TOWER FOUNDATIONS**

Item No.	Description	Estimated Qty.	Unit	Currency	Supply of Equipment		Supply of Equipment		Local Transportation, Construction and Installation	
					Foreign Supply		Local Supply		( excluding VAT ) Baht	
					CIF Thai Port		Ex-works Price			
					Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
1B1	Foundation for Tower Type WA1									
1B1.1	Stub type CS (230-2x1272 WA1) and pad foundation type CS	6	tower		XXXXX	XXXXX	37,250.00	223,500.00	262,000.00	1,572,000.00
1B1.2	Stub type CIII (230-2x1272 WA1) and pad foundation type CIII	17	tower		XXXXX	XXXXX	37,250.00	633,250.00	214,000.00	3,638,000.00
1B1.3	Stub type CIV (230-2x1272 WA1) and pad foundation type CIV	17	tower		XXXXX	XXXXX	36,062.50	613,062.50	146,000.00	2,482,000.00
1B1.4	Stub type CV (230-2x1272 WA1) and pad foundation type CV	12	tower		XXXXX	XXXXX	36,062.50	432,750.00	101,000.00	1,212,000.00
1B2	Foundation for Tower Type WB2									
1B2.1	Stub type CS (230-2x1272 WB2) and pad foundation type CS	1	tower		XXXXX	XXXXX	58,750.00	58,750.00	411,000.00	411,000.00
1B2.2	Stub type CIII (230-2x1272 WB2) and pad foundation type CIII	2	tower		XXXXX	XXXXX	56,312.50	112,625.00	368,000.00	736,000.00
1B2.3	Stub type CIV (230-2x1272 WB2) and pad foundation type CIV	1	tower		XXXXX	XXXXX	56,312.50	56,312.50	225,000.00	225,000.00
1B2.4	Stub type CV (230-2x1272 WB2) and pad foundation type CV	2	tower		XXXXX	XXXXX	54,500.00	109,000.00	164,000.00	328,000.00
1B3	Foundation for Tower Type WC2									
1B3.1	Stub type CS (230-2x1272 WC2) and pad foundation type CS	1	tower		XXXXX	XXXXX	90,000.00	90,000.00	556,000.00	556,000.00
1B3.2	Stub type CIII (230-2x1272 WC2) and pad foundation type CIII	3	tower		XXXXX	XXXXX	88,750.00	266,250.00	497,000.00	1,491,000.00
1B3.3	Stub type CIV (230-2x1272 WC2) and pad foundation type CIV	1	tower		XXXXX	XXXXX	85,000.00	85,000.00	333,000.00	333,000.00
1B3.4	Stub type CV (230-2x1272 WC2) and pad foundation type CV	2	tower		XXXXX	XXXXX	84,375.00	168,750.00	230,000.00	460,000.00

นางสาวเบญญาลักษณ์ ศรีลัมพ์  
 หจตส.ท.  
 11 มี.ย. 67

นายประวิทย์ เลิศโกวิทย์  
 ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง  
 22 Mar 2024

Item No.	Description	Estimated Qty.	Unit	Currency	Supply of Equipment		Supply of Equipment		Local Transportation, Construction and Installation (excluding VAT) Baht	
					Foreign Supply		Local Supply			
					CIF Thai Port		Ex-works Price (excluding VAT) Baht			
					Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
1B4	Foundation for Tower Type WD2									
1B4.1	Stub type CIII (230-2x1272 WD2) and pad foundation type CIII	1	tower		XXXXX	XXXXX	121,250.00	121,250.00	741,000.00	741,000.00
1B5	Foundation for Tower Type WDE									
1B5.1	Stub type CIII (230-2x1272 WDE) and pad foundation type CIII	1	tower		XXXXX	XXXXX	121,250.00	121,250.00	741,000.00	741,000.00
1B5.2	Stub type CIV (230-2x1272 WDE) and pad foundation type CIV	1	tower		XXXXX	XXXXX	113,125.00	113,125.00	521,000.00	521,000.00
1B5.3	Stub type CV (230-2x1272 WDE) and pad foundation type CV	1	tower		XXXXX	XXXXX	113,125.00	113,125.00	366,000.00	366,000.00
1B6	Foundation for Tower Type WDE90									
1B6.1	Stub type CIII (230-2x1272 WDE90) and pad foundation type CIII	2	tower		XXXXX	XXXXX	125,000.00	250,000.00	810,000.00	1,620,000.00
1B6.2	Stub type CIV (230-2x1272 WDE90) and pad foundation type CIV	1	tower		XXXXX	XXXXX	118,125.00	118,125.00	579,000.00	579,000.00
1B6.3	Stub type CV (230-2x1272 WDE90) and pad foundation type CV	1	tower		XXXXX	XXXXX	118,125.00	118,125.00	397,000.00	397,000.00
<b>Total Price for 1B</b>							<b>Baht 3,804,250.00</b>		<b>Baht 18,409,000.00</b>	

  
 นางสาวเบญญลักษณ์ ครลัมภ์  
 หจตส-ท.  
 11 มี.ย. 67

  
 นายประวิทย์ เลิศโกวิทย์  
 ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง  
 22 Mar 2024

1C : TOWERS

Item No.	Description	Estimated Qty.	Unit	Currency	Supply of Equipment		Supply of Equipment		Local Transportation, Construction and Installation	
					Foreign Supply		Local Supply		( excluding VAT ) Baht	
					CIF Thai Port		Ex-works Price ( excluding VAT ) Baht			
					Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
1C1	Tower type WA1									
1C1.1	Basic body (230-2x1272 WA1)	52	body		XXXXX	XXXXX	599,375.00	31,167,500.00	79,597.00	4,139,044.00
1C1.2	Body extension 7.0 m (230-2x1272 WA1)	35	body		XXXXX	XXXXX	211,875.00	7,415,625.00	28,137.00	984,795.00
1C1.3	Leg extension 1.0 m (230-2x1272 WA1)	8	leg		XXXXX	XXXXX	7,750.00	62,000.00	1,029.20	8,233.60
1C1.4	Leg extension 2.0 m (230-2x1272 WA1)	8	leg		XXXXX	XXXXX	11,625.00	93,000.00	1,543.80	12,350.40
1C1.5	Leg extension 3.0 m (230-2x1272 WA1)	12	leg		XXXXX	XXXXX	16,750.00	201,000.00	2,224.40	26,692.80
1C1.6	Leg extension 4.0 m (230-2x1272 WA1)	68	leg		XXXXX	XXXXX	20,562.50	1,398,250.00	2,730.70	185,687.60
1C1.7	Leg extension 5.0 m (230-2x1272 WA1)	40	leg		XXXXX	XXXXX	25,812.50	1,032,500.00	3,427.90	137,116.00
1C1.8	Leg extension 6.0 m (230-2x1272 WA1)	24	leg		XXXXX	XXXXX	29,375.00	705,000.00	3,901.00	93,624.00
1C1.9	Leg extension 7.0 m (230-2x1272 WA1)	16	leg		XXXXX	XXXXX	36,375.00	582,000.00	4,830.60	77,289.60
1C1.10	Leg extension 9.0 m (230-2x1272 WA1)	32	leg		XXXXX	XXXXX	44,937.50	1,438,000.00	5,967.70	190,966.40
1C2	Tower type WB2									
1C2.1	Basic body (230-2x1272 WB2)	6	body		XXXXX	XXXXX	750,000.00	4,500,000.00	99,600.00	597,600.00
1C2.2	Body extension 7.0 m (230-2x1272 WB2)	2	body		XXXXX	XXXXX	212,500.00	425,000.00	28,220.00	56,440.00
1C2.3	Leg extension 3.0 m (230-2x1272 WB2)	4	leg		XXXXX	XXXXX	19,187.50	76,750.00	2,548.10	10,192.40
1C2.4	Leg extension 4.0 m (230-2x1272 WB2)	4	leg		XXXXX	XXXXX	22,625.00	90,500.00	3,004.60	12,018.40
1C2.5	Leg extension 5.0 m (230-2x1272 WB2)	4	leg		XXXXX	XXXXX	28,875.00	115,500.00	3,834.60	15,338.40
1C2.6	Leg extension 9.0 m (230-2x1272 WB2)	12	leg		XXXXX	XXXXX	50,375.00	604,500.00	6,689.80	80,277.60

  
นางสาวเบญญาลักษณ์ ศรีสัมพันธ์

หจตส-ห.  
11 มี.ย. 67

  
นายประวิทย์ เลิศโกวิทย์  
ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง  
22 Mar 2024



Item No.	Description	Estimated Qty.	Unit	Currency	Supply of Equipment		Supply of Equipment		Local Transportation, Construction and Installation	
					Foreign Supply		Local Supply		( excluding VAT ) Baht	
					CIF Thai Port		Ex-works Price			
					Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
1C3	Tower type WC2									
1C3.1	Basic body (230-2x1272 WC2)	7	body		XXXXX	XXXXX	1,043,750.00	7,306,250.00	138,610.00	970,270.00
1C3.2	Body extension 7.0 m (230-2x1272 WC2)	4	body		XXXXX	XXXXX	387,500.00	1,550,000.00	51,460.00	205,840.00
1C3.3	Leg extension 4.0 m (230-2x1272 WC2)	12	leg		XXXXX	XXXXX	30,500.00	366,000.00	4,050.40	48,604.80
1C3.4	Leg extension 6.0 m (230-2x1272 WC2)	8	leg		XXXXX	XXXXX	43,187.50	345,500.00	5,735.30	45,882.40
1C3.5	Leg extension 7.0 m (230-2x1272 WC2)	4	leg		XXXXX	XXXXX	50,125.00	200,500.00	6,656.60	26,626.40
1C3.6	Leg extension 9.0 m (230-2x1272 WC2)	4	leg		XXXXX	XXXXX	64,375.00	257,500.00	8,549.00	34,196.00
1C4	Tower type WD2									
1C4.1	Basic body (230-2x1272 WD2)	1	body		XXXXX	XXXXX	1,106,250.00	1,106,250.00	146,910.00	146,910.00
1C4.2	Body extension 7.0 m (230-2x1272 WD2)	1	body		XXXXX	XXXXX	367,500.00	367,500.00	48,804.00	48,804.00
1C4.3	Leg extension 6.0 m (230-2x1272 WD2)	4	leg		XXXXX	XXXXX	53,562.50	214,250.00	7,113.10	28,452.40
1C5	Tower type WDE									
1C5.1	Basic body (230-2x1272 WDE)	3	body		XXXXX	XXXXX	1,093,750.00	3,281,250.00	145,250.00	435,750.00
1C5.2	Body extension 7.0 m (230-2x1272 WDE)	1	body		XXXXX	XXXXX	367,500.00	367,500.00	48,804.00	48,804.00
1C5.3	Leg extension 8.0 m (230-2x1272 WDE)	4	leg		XXXXX	XXXXX	71,250.00	285,000.00	9,462.00	37,848.00
1C5.4	Leg extension 9.0 m (230-2x1272 WDE)	12	leg		XXXXX	XXXXX	78,125.00	937,500.00	10,375.00	124,500.00
1C6	Tower type WDE(90)									
1C6.1	Basic body (230-2x1272 WDE90)	4	body		XXXXX	XXXXX	1,312,500.00	5,250,000.00	174,300.00	697,200.00
1C6.2	Leg extension 4.0 m (230-2x1272 WDE90)	4	leg		XXXXX	XXXXX	51,062.50	204,250.00	6,781.10	27,124.40

*2hm*  
นางสาวเบญญาลักษณ์ ศรีรัมย์

หจตส-ห.  
11 มิ.ย. 67

*Dr. G. G.*  
นายประวิทย์ เลิศโกวิทย์  
ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง  
22 Mar 2024

Item No.	Description	Estimated Qty.	Unit	Currency	Supply of Equipment		Supply of Equipment		Local Transportation, Construction and Installation (excluding VAT) Baht	
					Foreign Supply		Local Supply			
					CIF Thai Port		Ex-works Price (excluding VAT) Baht			
					Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
1C6.3	Leg extension 6.0 m (230-2x1272 WDE90)	4	leg		XXXXX	XXXXXX	71,250.00	285,000.00	9,462.00	37,848.00
1C6.4	Leg extension 9.0 m (230-2x1272 WDE90)	12	leg		XXXXX	XXXXXX	96,250.00	1,155,000.00	12,782.00	153,384.00
1C7	Tower signs									
1C7.1	Aerial patrol signs	25	set		XXXXX	XXXXXX	XXXXX	XXXXXX	2,500.00	62,500.00
1C7.2	Phasing signs (3 pieces per set)	4	set		XXXXX	XXXXXX	XXXXX	XXXXXX	6,500.00	26,000.00
<b>Total Price for 1C</b>							<b>Baht 73,386,375.00</b>		<b>Baht 9,834,210.60</b>	

  
 นางสาวเบญญาลักษณ์ ครสั้มพ์  
 หจตส-ท.  
 11 มี.ย. 67

  
 นายประวิทย์ เลิศโกวิทย์  
 ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง  
 22 Mar 2024

**1D : INSULATOR STRING AND OVERHEAD GROUND WIRE ASSEMBLIES**

Item No.	Description	Estimated Qty.	Unit	Currency	Supply of Equipment		Supply of Equipment		Local Transportation, Construction and Installation	
					Foreign Supply		Local Supply		( excluding VAT ) Baht	
					CIF Thai Port		Ex-works Price			
					Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
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)	210	set		XXXXX	XXXXX	10,000.00	2,100,000.00	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)	102	set		XXXXX	XXXXX	12,000.00	1,224,000.00	included in stringing work	included in stringing work
1D3	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)	75	set		XXXXX	XXXXX	9,000.00	675,000.00	included in stringing work	included in stringing work
1D4	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)	67	set		XXXXX	XXXXX	14,000.00	938,000.00	included in stringing work	included in stringing work
1D5	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)	210	set		XXXXX	XXXXX	17,000.00	3,570,000.00	included in stringing work	included in stringing work
1D6	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)	5	set		XXXXX	XXXXX	14,000.00	70,000.00	included in stringing work	included in stringing work

  
 นางสาวเบญจลักษณ์ ศรีลัมภ์  
 หจตส-ท.  
 11 มิ.ย. 67

  
 นายประวิทย์ เลิศโกวิทย์  
 ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง  
 22 Mar 2024

Item No.	Description	Estimated Qty.	Unit	Currency	Supply of Equipment		Supply of Equipment		Local Transportation, Construction and Installation (excluding VAT) Baht	
					Foreign Supply		Local Supply			
					CIF Thai Port		Ex-works Price (excluding VAT) Baht			
					Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
1D7	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)	6	set		XXXXX	XXXXX	17,000.00	102,000.00	included in stringing work	included in stringing work
1D8	Overhead ground wire suspension assemblies with armor rod for 3/8" high strength, galvanized steel overhead ground wire, 5000 kg ultimate strength	52	set		XXXXX	XXXXX	1,400.00	72,800.00	included in stringing work	included in stringing work
1D9	Overhead ground wire tension assemblies for 3/8" high strength, galvanized steel overhead ground wire, 5000 kg ultimate strength	52	set		XXXXX	XXXXX	700.00	36,400.00	included in stringing work	included in stringing work
1D10	Porcelain or glass insulator ANSI CLASS 52-5 (25,000 lbs) with corrosion proof type pin	2134	disc	THB	690.00	1,472,460.00			included in stringing work	included in stringing work
1D11	Porcelain or glass insulator ANSI CLASS 52-8 (36,000 lbs) with corrosion proof type pin	12276	disc	THB	900.00	11,048,400.00			included in stringing work	included in stringing work
1D12	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 1D9 on take-off structures	3	set		XXXXX	XXXXX	700.00	2,100.00	included in stringing work	included in stringing work
<b>Total Price for 1D</b>				<b>THB</b>	<b>12,520,860.00</b>		<b>Baht</b>		<b>Baht</b>	
							<b>8,790,300.00</b>			

  
นางสาวเบญญาลักษณ์ ศรีลัมพ์

หจตส-ท.  
11 มิ.ย. 67

  
นายประวิทย์ เลิศโกวิท  
ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง  
22 Mar 2024

**1E : CONDUCTOR AND OVERHEAD GROUND WIRE**

Item No.	Description	Estimated Qty.	Unit	Currency	Supply of Equipment		Supply of Equipment		Local Transportation, Construction and Installation	
					Foreign Supply		Local Supply		( excluding VAT ) Baht	
					CIF Thai Port		Ex-works Price			
					Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
1E1	1272 MCM ACSR/GA Conductor									
1E1.1	1272 MCM ACSR/GA Conductor, furnishing conductor for Item 1E1.2 (to be supplied by EGAT, see Article F-3, approx. 26.7 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, double circuit, 3 phase, twin-bundled conductor per phase, measured based on horizontal distance of line route from the existing STR.No.2/4 type QWDE to the existing deadend STR.No.28/2 type QWDE(90) at Bang Lamung 2 junction (including connecting loop circuit No.3&4 at STR.No.2/4 and STR.No.28/2, as per drawing No.T04-001 and T04-002)	26.7	km		XXXXX	XXXXX	XXXXX	XXXXX	354,000.00	9,451,800.00

  
 นางสาวเบญจลักษณ์ ศรีลัมพ์  
 หจตส-ท.  
 11 มี.ย. 67

  
 นายประวิทย์ เลิศโกวิทย์  
 ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง  
 22 Mar 2024

Item No.	Description	Estimated Qty.	Unit	Currency	Supply of Equipment		Supply of Equipment		Local Transportation, Construction and Installation (excluding VAT) Baht			
					Foreign Supply		Local Supply					
					CIF Thai Port		Ex-works Price (excluding VAT) Baht					
					Unit Price	Amount	Unit Price	Amount	Unit Price	Amount		
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 based on linear length (Linear length = No. of overhead ground wire x horizontal distance of line route + 1.5%)	27	km					28,000.00	756,000.00	included in stringing work		
1E2.2	Stringing of one overhead ground wire by running line method, measured based on horizontal distance of line route from the existing STR.No.2/4 type QWDE to the existing deadend STR.No.28/2 type QWDE(90) at Bang Lamung 2 junction (including connecting loop circuit No.3&4 at STR.No.2/4 and STR.No.28/2, as per drawing No.T04-001 and T04-002)	26.7	km			XXXXX	XXXXX	XXXXX	XXXXX	25,000.00		
<b>Total Price for 1E</b>									<b>Baht</b>	<b>756,000.00</b>	<b>Baht</b>	<b>10,119,300.00</b>

  
 นางสาวเบญญาลักษณ์ ศรีลัมภ์  
 หจตส-ท.  
 11 มิ.ย. 67

  
 นายประวิทย์ เลิศโกวิทย์  
 ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง  
 22 Mar 2024

1F : LINE ACCESSORIES

Item No.	Description	Estimated Qty.	Unit	Currency	Supply of Equipment		Supply of Equipment		Local Transportation, Construction and Installation	
					Foreign Supply		Local Supply		( excluding VAT ) Baht	
					CIF Thai Port		Ex-works Price			
					Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
1F1	Tension sleeve for 1272 MCM ACSR/GA conductor	285	set		XXXXX	XXXXX	1,400.00	399,000.00	included in stringing work	included in stringing work
1F2	Spacer damper for two-bundled 1272 MCM ACSR/GA conductor (for double circuit, approx. 26.7 km in transmission line distance)	lump sum	each		XXXXX	XXXXX	5,874,000.00	5,874,000.00	included in stringing work	included in stringing work
1F3	Rigid type spacer for two-bundled 1272 MCM ACSR/GA conductor	288	set		XXXXX	XXXXX	600.00	172,800.00	included in stringing work	included in stringing work
1F4	Vibration damper for 3/8" high strength galvanized steel overhead ground wire	76	set		XXXXX	XXXXX	650.00	49,400.00	included in stringing work	included in stringing work
1F5	Field test of spacer damper for two-bundled 1272 MCM ACSR/GA conductor as per Specifications No.TL-03	1	test		XXXXX	XXXXX	XXXXXX	XXXXXX	170,000.00	170,000.00
<b>Total Price for 1F</b>							<b>Baht 6,495,200.00</b>		<b>Baht 170,000.00</b>	

  
 นางสาวเบญจลักษณ์ ศรีลิมพ์  
 หจตส-ท.  
 11 มี.ย. 67

  
 นายประวิทย์ เลิศโกวิทย์  
 ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง  
 22 Mar 2024

1G : GROUNDING MATERIALS

Item No.	Description	Estimated Qty.	Unit	Currency	Supply of Equipment		Supply of Equipment		Local Transportation, Construction and Installation	
					Foreign Supply		Local Supply		( excluding VAT ) Baht	
					CIF Thai Port		Ex-works Price			
					Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
1G1	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	292	set			1,200.00	350,400.00	200.00	58,400.00	
1G2	1.6 cm. nominal diameter x 1.8 m. (5/8" diameter x 6') copper-covered steel sectional ground rod with coupling	32	set			800.00	25,600.00	200.00	6,400.00	
1G3	Connector set (No.4 AWG annealed copper ground connecting wire 0.6 m. long with stub angle connector)	88	set			300.00	26,400.00	100.00	8,800.00	
1G4	Counterpoise No.2 AWG solid copper-clad steel wire 30% conductivity	1320	m			180.00	237,600.00	90.00	118,800.00	
1G5	Heavy duty exothermic or compression type connector	88	set			250.00	22,000.00	200.00	17,600.00	
<b>Total Price for 1G</b>							<b>Baht</b>	<b>662,000.00</b>	<b>Baht</b>	<b>210,000.00</b>

*2km6*  
 นางสาวเบญญาลักษณ์ ศรีลัมพ์  
 หจตส-ท.  
 11 มี.ย. 67

*Dr. G. G.*  
 นายประวิทย์ เลิศโกวิทย์  
 ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง  
 22 Mar 2024



1H : OPTICAL FIBER AND LINE ACCESSORIES

Item No.	Description	Estimated Qty.	Unit	Currency	Supply of Equipment		Supply of Equipment		Local Transportation, Construction and Installation	
					Foreign Supply		Local Supply		( excluding VAT ) Baht	
					CIF Thai Port		Ex-works Price			
					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	13.5mm dia. Composite Overhead Ground Wire with Optical Fiber (OPGW)	lump sum	kilometer	THB	4,764,250.00	4,764,250.00			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 230kV RY2 - BL2(J.) from Tower No. 75 to Banglamung 2 T.O.S. (RY2 S/S) CCT.2 ( RY2 direction to BL2 )	25	kilometer		XXXXX	XXXXX	XXXXX	XXXXX		
1H2	Joint boxes for optical fiber cable									
1H2.1	2-way joint box with accessories for two OPGW cables (including splicing work)	lump sum	set							
1H2.2	2-way joint box with accessories for two OPGW cables at Tower No. 75 (including splicing work) (BL2(J.))	1	set							
1H2.3	2-way joint box with accessories for OPGW cable and 36 cores non-metallic optical fiber cable at Banglamung 2 T.O.S. (including splicing work between optical fiber cable and OPGW) (RY2 S/S)	1	set							
1H3	Hardware assembly for OPGW									
1H3.1	Tension assembly for OPGW with accessories (grounded type)	lump sum	set							
1H3.2	Suspension assembly for OPGW with accessories (grounded type)	lump sum	set							
1H4	Line accessories									
1H4.1	Vibration damper assembly for OPGW with accessories	lump sum	set							
1H4.2	Parallel groove clamps	lump sum	set							
1H4.3	Grounding clamps	lump sum	set							
1H4.4	1-wire cleat with accessories for OPGW down-lead to joint box (Ground)	lump sum	set							
1H4.5	2-wire cleats with accessories for OPGW down-lead to joint box (Ground)	lump sum	set							

นายประวิทย์ เลิศโกวิท  
ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง  
22 Mar 2024

นางสาวเบญญาลักษณ์ ศรีสัมพันธ์

จดส-ท.

11 มี.ย. 67

MEDIUM COST FOR BID NO. TIPE-L-06

Item No.	Description	Estimated Qty.	Unit	Currency	Supply of Equipment		Supply of Equipment		Local Transportation, Construction and Installation (excluding VAT) Baht	
					Foreign Supply		Local Supply			
					CIF Thai Port		Ex-works Price (excluding VAT) Baht			
					Unit Price	Amount	Unit Price	Amount		
1H4.6	6-wire cleats with accessories for OPGW down-lead to joint box (Ground)	lump sum	set							
1H4.7	6-wire cleats with insulator and accessories for OPGW down-lead to joint box at BL2 T.O.S. (RY2 S/S)	4	set							
1H4.8	Porcelain or glass insulator ANSI CLASS 52-3 (15,000 lbs) with corrosion proof type pin	1	each							
1H4.9	3/8" High strength galvanized steel wire for grounding OPGW to towers	lump sum	meter							
1H5	Non-metallic optical fiber cable									
1H5.1	36 Cores Non-metallic Optical Fiber Cable from joint box at Banglamung 2 take-off structure (RY2 S/S) to fiber frame termination cabinet at Rayong 2 control building	450	meter							included in item 1H5.2
1H5.2	Laying of optical fiber cable with accessories for item 1H5.1, 1H5.3 and 1H5.4	450	meter		XXXXX	XXXXX	XXXXX	XXXXX		included in item 1H5.2
1H5.3	Rigid Steel Conduit from take-off structure to cable trench for item 1H5.1	lump sum	meter							included in item 1H5.2
1H5.4	EFLEX and/or HDPE Conduit with Hot-dip galvanized steel clamp for item 1H5.1	lump sum	meter							included in item 1H5.2
1H5.5	Fiber frame termination cabinet with cable tray (PDG Control building-1)	1	set							
1H5.6	36 Pigtailes (1.5 meters) (PDG Control building-1)	1	set							
1H5.7	6-wire cleats with accessories for OFC down-lead to joint box at BL2 T.O.S. (RY2 S/S)	4	set							
1H6	Field testing for optical fiber for OPGW RY2 - BL2	1	job		XXXXX	XXXXX	XXXXX	XXXXX		
<b>Total Price for 1H</b>										
				<b>THB</b>	<b>4,764,250.00</b>		<b>Baht</b>		<b>Baht</b>	

  
 นางสาวเบญญลักษณ์ ครสั้มพ์  
 หจตส-ท.  
 11 มี.ย. 67

  
 นายประวิทย์ เลิศโกวิทย์  
 ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง  
 22 Mar 2024

**II : DISMANTLING WORK**

Item No.	Description	Estimated Qty.	Unit	Local Transportation, Construction and Installation (excluding VAT) Baht	
				Unit Price	Amount
111	Dismantling of the existing 230 kV Ao Phai - Bang Lamung 2 Transmission Line which is double circuit, single conductor per phase from Str. No. 20/1 type DA1 to Str. No. 23/2A type DDE, approx. 3.76 km in transmission line distance.	lump sum	each	10,500.00	10,500.00
112	Dismantling of the existing 230 kV Rayong 2 - Bo Win Transmission Line which is double circuit, single conductor per phase from Str. No.3/1 type WB2 to Str. No.33/1 type WA1, approx. 29.7 km in transmission line distance.	lump sum	each	6,487,000.00	6,487,000.00
<b>Total Price for II</b>				<b>Baht 6,497,500.00</b>	

  
 นางสาวเบญญาลักษณ์ ศรีลัมพ์  
 หจตส-ห.  
 11 มี.ย. 67

  
 นายประวิทย์ เลิศโกวิทย์  
 ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง  
 22 Mar 2024

**1N : TEST OF EQUIPMENT**

Item No.	Description	Estimated Qty.	Unit	Currency	Foreign Currency		Local Currency ( excluding VAT ) Baht	
					Unit Price	Amount	Unit Price	Amount
					1N1	Steep front wave impulse test on insulator ANSI Class 52-3 (18,000 lbs), as per Specification No. TL-01 (Rev. 2)	1	test
1N2	Steep front wave impulse test on insulator ANSI Class 52-5 (25,000 lbs), as per Specification No. TL-01 (Rev. 2)	1	test	THB	151,000.00	151,000.00		
1N3	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	151,000.00	151,000.00		
1N4	Laboratory test of spacer damper for two-bundled 1272 MCM ACSR/GA Conductor as per Specification No. TL-03 (Rev.0)	1	test	THB	151,000.00	151,000.00		
<b>Total Price for 1N</b>				<b>THB</b>	<b>604,000.00</b>		<b>Baht</b>	

  
 นางสาวเบญญลักษณ์ ศรีลัมภ์  
 หจตส-ท.  
 11 มี.ย. 67

  
 นายประวิทย์ เลิศโกวิทย์  
 ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง  
 22 Mar 2024

**10 : SUPPLY OF SERVICE OF VEHICLES**

Item No.	Description	Estimated Qty.	Unit	Local Transportation, Construction and Installation ( excluding VAT ) Baht	
				Unit Price	Amount
101	Services of four-wheel-driven vehicle (for Specifications and requirements of Vehicles, refer to Article G-6. Housing and Other Facilities.)	42	car-month	50,000.00	2,100,000.00
<b>Total Price for 10</b>				<b>Baht</b>	<b>2,100,000.00</b>

  
 นางสาวเบญญาลักษณ์ ศรีสัมพันธ์  
 หจตส-ท.  
 11 มิ.ย. 67

  
 นายประวิทย์ เลิศโกวิทย์  
 ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง  
 22 Mar 2024

**1Z : DISMANTLED EQUIPMENT TO BE PURCHASED BY THE CONTRACTOR**

Item No.	Description	Estimated Qty.	Unit	Purchase Price Offered for Dismantled Equipment ( including VAT ) Baht	
				Unit Price	Amount
1Z1	Dismantling equipment of the existing 230 kV Ao Phai - Bang Lamung 2 Transmission Line which is double circuit, single conductor per phase from Str. No. 20/1 type DA1 to Str. No. 23/2A type DDE, approx. 3.76 km in transmission line distance.				
1Z2	Dismantling equipment of the existing 230 kV Rayong 2 - Bo Win Transmission Line which is double circuit, single conductor per phase from Str. No.3/1 type WB2 to Str. No.33/1 type WA1, approx. 29.7 km in transmission line distance.				
<b>Total Price for 1Z</b>				<b>Baht</b>	<b>20,110,000.00</b>



นางสาวเบญญาลักษณ์ ศรีสัมพันธ์  
 หจตส-ท.  
 11 มี.ย. 67



นายประวิทย์ เลิศโกวิทย์  
 ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง  
 22 Mar 2024

**INVITATION TO BID NO. TIPE-L-06**  
**TOTAL PRICE FOR SCHEDULE NO. 2**  
**230 KV AO PHAI - BO WIN**  
**Line Length 1 KM.**

**SUPPLY AND CONSTRUCTION OF TRANSMISSION LINE 230 KV AO PHAI - BO WIN**  
**TRANSMISSION SYSTEM IMPROVEMENT PROJECT IN EASTERN REGION TO ENHANCE SYSTEM SECURITY**

Description	Currency	Supply of Equipment	Supply of Equipment	Foreign Currency	Local Currency	Local Transportation	Local Transportation, Construction and Installation	Purchase Price Offered for Dismantled Equipment
		Foreign Supply	Local Supply					
		CIF Thai Port	Ex-works Price (excluding VAT)					
		Amount	Baht					
2A : PRELIMINARY WORK							87,800.00	
2B : TOWER FOUNDATIONS			262,500.00				2,352,000.00	
2C : TOWERS			4,054,000.00				646,371.20	
2D : INSULATOR STRING AND OVERHEAD GROUND WIRE ASSEMBLIES	THB	794,200.00	677,200.00					
2E : CONDUCTOR AND OVERHEAD GROUND WIRE			28,000.00				488,000.00	

  
 นางสาวเบญญาลักษณ์ ศรีสัมพันธ์  
 หจตส.ห.  
 11 มี.ย. 67

  
 นายประวิทย์ เลิศโกวิทย์  
 ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง  
 22 Mar 2024

Description	Currency	Supply of Equipment	Supply of Equipment	Foreign Currency	Local Currency	Local Transportation	Local Transportation, Construction and Installation	Purchase Price Offered for Dismantled Equipment
		Foreign Supply	Local Supply					
		CIF Thai Port	Ex-works Price (excluding VAT)					
		Amount	Amount					
2F : LINE ACCESSORIES			95,200.00					
2G : GROUNDING MATERIALS			48,400.00			17,200.00		
2I : DISMANTLING WORK						30,000.00		
<b>TOTAL PRICE</b>	<b>THB</b>	<b>794,200.00</b>	<b>Baht</b>		<b>Baht</b>	<b>Baht</b>	<b>Baht</b>	<b>Baht</b>
			<b>5,165,300.00</b>				<b>3,621,371.20</b>	
							<b>Baht</b>	

*2Am5*  
 นางสาวเบญญาลักษณ์ ศรีลัมพ์  
 หจตส-ท.  
 11 มิ.ย. 67

*Dr. G. S.*  
 นายประวิทย์ เลิศโกวิทย์  
 ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง  
 22 Mar 2024



**2A : PRELIMINARY WORK**

Item No.	Description	Estimated Qty.	Unit	Local Transportation, Construction and Installation (excluding VAT) Baht	
				Unit Price	Amount
2A1	Check survey and staking of tower location(Approximately 1 kilometer in transmission line distance)	lump sum	each	30,000.00	30,000.00
2A2	Clearing right-of-way of 20 meters on each side of center line of the transmission line (Approximately 1 km in transmission line distance)	lump sum	each	25,000.00	25,000.00
2A3	Subsoil tests and preliminary measurement of ground resistance and earth resistivity (to be performed at tower locations directed by EGAT)				
2A3.1	Light ram sound tests with hand auger and preliminary measurement of ground resistance and earth resistivity from ground surface to 5 meters in depth	4	bore	6,300.00	25,200.00
2A3.2	Boundary post along boundary line of right-of-way	8	post	950.00	7,600.00
<b>Total Price for 2A</b>				<b>Baht</b>	<b>87,800.00</b>

  
 นางสาวเบญญาลักษณ์ ศรีลัมพ์  
 หจตส-ห.  
 11 มี.ย. 67

  
 นายประวิทย์ เลิศโกวิทย์  
 ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง  
 22 Mar 2024

**2B : TOWER FOUNDATIONS**

Item No.	Description	Estimated Qty.	Unit	Currency	Supply of Equipment		Supply of Equipment		Local Transportation, Construction and Installation (excluding VAT) Baht	
					Foreign Supply		Local Supply		Ex-works Price (excluding VAT) Baht	
					CIF Thai Port					
					Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
2B1	Foundation for Tower Type DDE									
2B1.1	Stub type CIII (230-1x1272 DDE)	1	tower		XXXXX	XXXXX	65,625.00	65,625.00	693,000.00	693,000.00
2B1.2	Stub type CV (230-1x1272 DDE)	1	tower		XXXXX	XXXXX	65,625.00	65,625.00	322,000.00	322,000.00
2B2	Foundation for Tower Type DDE90									
2B2.1	Stub type CIII (230-1x1272 DDE90)	1	tower		XXXXX	XXXXX	65,625.00	65,625.00	919,000.00	919,000.00
2B2.2	Stub type CV (230-1x1272 DDE90)	1	tower		XXXXX	XXXXX	65,625.00	65,625.00	418,000.00	418,000.00
<b>Total Price for 2B</b>								<b>262,500.00</b>	<b>2,352,000.00</b>	

  
 นางสาวเบญญาลักษณ์ ครัลัมพ์  
 หจตส-ท.  
 11 มิ.ย. 67

  
 นายประวิทย์ เลิศโกวิทย์  
 ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง  
 22 Mar 2024

**2C : TOWERS**

Item No.	Description	Estimated Qty.	Unit	Currency	Supply of Equipment		Supply of Equipment		Local Transportation, Construction and Installation (excluding VAT) Baht	
					Foreign Supply		Local Supply		Ex-works Price (excluding VAT) Baht	
					CIF Thai Port					
					Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
2C1	Tower type DDE									
2C1.1	Basic body (230-1x1272 DDE)	2	body		XXXXX XXXXX	868,750.00	1,737,500.00	115,370.00	230,740.00	
2C1.2	Leg extension 4.0 m (230-1x1272 DDE)	4	leg		XXXXX XXXXX	24,875.00	99,500.00	3,303.40	13,213.60	
2C1.3	Leg extension 6.0 m (230-1x1272 DDE)	4	leg		XXXXX XXXXX	36,437.50	145,750.00	4,838.90	19,355.60	
2C2	Tower type DDE(90)									
2C2.1	Basic body (230-1x1272 DDE90)	2	body		XXXXX XXXXX	968,750.00	1,937,500.00	128,650.00	257,300.00	
2C2.2	Leg extension 1.0 m (230-1x1272 DDE90)	4	leg		XXXXX XXXXX	16,187.50	64,750.00	2,149.70	8,598.80	
2C2.3	Leg extension 2.0 m (230-1x1272 DDE90)	4	leg		XXXXX XXXXX	17,250.00	69,000.00	2,290.80	9,163.20	
2C3	Tower signs									
2C3.1	Aerial patrol signs	14	set		XXXXX XXXXX	XXXXX	XXXXX	2,500.00	35,000.00	
2C3.2	Danger signs	4	set		XXXXX XXXXX	XXXXX	XXXXX	3,000.00	12,000.00	

นางสาวเบญญาลักษณ์ ศรีลัมพ์

ทจตส-ท.

11 มี.ย. 67

นายประวิทย์ เลิศโกวิท  
ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง  
22 Mar 2024

MEDIUM COST FOR BID NO. TIPE-L-06

อวส.-อศค.

Item No.	Description	Estimated Qty.	Unit	Currency	Supply of Equipment		Supply of Equipment		Local Transportation, Construction and Installation (excluding VAT) Baht		
					Foreign Supply		Local Supply				
					CIF Thai Port		Ex-works Price (excluding VAT) Baht				
					Unit Price	Amount	Unit Price	Amount	Unit Price	Amount	
2C3.3	Circuit name signs	4	set		XXXXX	XXXXX	XXXXX	XXXXX	5,500.00	22,000.00	
2C3.4	Phasing signs (3 pieces per set)	6	set		XXXXX	XXXXX	XXXXX	XXXXX	6,500.00	39,000.00	
<b>Total Price for 2C</b>								<b>Baht</b>	<b>4,054,000.00</b>	<b>Baht</b>	<b>646,371.20</b>

  
 นางสาวเบญญาลักษณ์ ครลีพิมพ์  
 หจคส-ท.  
 11 มี.ย. 67

  
 นายประวิทย์ เลิศโกวิทย์  
 ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง  
 22 Mar 2024

**2D : INSULATOR STRING AND OVERHEAD GROUND WIRE ASSEMBLIES**

Item No.	Description	Estimated Qty.	Unit	Currency	Supply of Equipment		Supply of Equipment		Local Transportation, Construction and Installation (excluding VAT) Baht	
					Foreign Supply		Local Supply		Ex-works Price (excluding VAT) Baht	
					CIF Thai Port					
					Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
2D1	Bypass string suspension insulator assemblies for 1272 MCM ACSR/GA conductor, 8000 kg ultimate strength, coupling type B (without insulator and arcing horn)	18	set		XXXXXX	XXXXXX	6,000.00	108,000.00	included in stringing work	included in stringing work
2D2	Single string tension insulator assemblies for 1272 MCM ACSR/GA conductor, 12000 kg ultimate strength, coupling type B (without insulator and arcing horn)	24	set		XXXXXX	XXXXXX	8,500.00	204,000.00	included in stringing work	included in stringing work
2D3	Single string tension insulator assemblies with arcing horn for 1272 MCM ACSR/GA conductor, 12000 kg ultimate strength, coupling type B (without insulator)	24	set		XXXXXX	XXXXXX	9,000.00	216,000.00	included in stringing work	included in stringing work
2D4	Double string tension insulator assemblies for 1272 MCM ACSR/GA conductor, 14000 kg ultimate strength, coupling type B (without insulator and arcing horn)	6	set		XXXXXX	XXXXXX	11,000.00	66,000.00	included in stringing work	included in stringing work

*2hm*  
 นางสาวเบญญาลักษณ์ ศรีสัมพันธ์  
 หจตส-ท.  
 11 มิ.ย. 67

*นางสาว*  
 นายประวิทย์ เลิศโกวิท  
 ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง  
 22 Mar 2024

MEDIUM COST FOR BID NO. TIPE-L-06

อวส.-อศค.

Item No.	Description	Estimated Qty.	Unit	Currency	Supply of Equipment		Supply of Equipment		Local Transportation, Construction and Installation (excluding VAT) Baht	
					Foreign Supply		Local Supply			
					CIF Thai Port		Ex-works Price (excluding VAT) Baht			
					Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
2D5	Double string tension insulator assemblies with arcing horn for 1272 MCM ACSR/GA conductor, 14000 kg ultimate strength, coupling type B (without insulator)	6	set		XXXXX	XXXXX	12,000.00	72,000.00	included in stringing work	included in stringing work
2D6	Overhead ground wire tension assemblies for 3/8" high strength, galvanized steel overhead ground wire, 5000 kg ultimate strength	16	set		XXXXX	XXXXX	700.00	11,200.00	included in stringing work	included in stringing work
2D7	Porcelain or glass insulator ANSI CLASS 52-3 (18,000 lbs) with corrosion proof type pin	1444	disc	THB	550.00	794,200.00			included in stringing work	included in stringing work
<b>Total Price for 2D</b>				THB	<b>794,200.00</b>		<b>Baht 677,200.00</b>		<b>Baht</b>	

  
 นางสาวเบญญาลักษณ์ ครลัมพ์  
 หจตส-ท.  
 11 มิ.ย. 67

  
 นายประวิทย์ เลิศโกวิทย์  
 ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง  
 22 Mar 2024

**2E : CONDUCTOR AND OVERHEAD GROUND WIRE**

Item No.	Description	Estimated Qty.	Unit	Currency	Supply of Equipment		Supply of Equipment		Local Transportation, Construction and Installation (excluding VAT) Baht	
					Foreign Supply		Local Supply		Ex-works Price (excluding VAT) Baht	
					CIF Thai Port					
					Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
2E1	1272 MCM ACSR/GA Conductor									
2E1.1	1272 MCM ACSR/GA Conductor, furnishing conductor for Item2E1.2 and 2E1.3 (to be supplied by EGAT, see Article F-3, approx. 1 km in transmission line distance)		km		XXXXX	XXXXX	XXXXX	XXXXX	included in stringing work	included in stringing work
2E1.2	Stringing of conductor by controlled tension method, double circuit, 3 phase, single conductor per phase, measured based on horizontal distance of line route from the existing Str. No.19/3 type DA1 to the existing Str. No.20/5 type DA1 to be 230kV Ao Phai - Bowin transmission line(including connecting loop circuit at Tower No 19/3 and 20/5 as per drawing No.T02-001)	1	km		XXXXX	XXXXX	XXXXX	XXXXX	304,000.00	304,000.00

  
นางสาวเบญญลักษณ์ ศรีสัมพันธ์

หจตส-ท.

11 มี.ย. 67

  
นายประวิทย์ เลิศโกวิทย์  
ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง  
22 Mar 2024

MEDIUM COST FOR BID NO. TIPE-L-06

อวส.-อศค.

Item No.	Description	Estimated Qty.	Unit	Currency	Supply of Equipment		Supply of Equipment		Local Transportation, Construction and Installation (excluding VAT) Baht	
					Foreign Supply		Local Supply		Ex-works Price (excluding VAT) Baht	
					CIF Thai Port					
					Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
2E1.3	Installation of conductor, double circuit, 3 phase, single conductor per phase between the existing deadend Str No.32/2 type DDE and take-off structure at Bo Win Substation approx. 0.1 km. in transmission line distance	lump sum	each		XXXXXX	XXXXXX	XXXXXX	XXXXXX	134,000.00	134,000.00
2E2	3/8" nominal diameter, high strength galvanized steel overhead ground wire Class A coating									
2E2.1	3/8" High strength galvanized steel wire furnishing for Item 2E2.2 and 2E2.3 based on linear length (Linear length = No. of overhead ground wire x horizontal distance of line route + 1.5%)	1	km				28,000.00	28,000.00	included in stringing work	included in stringing work
2E2.2	Stringing of one overhead ground wire by running line method measured based on horizontal distance of line route from the existing Tower No.19/3 type DA1 to the existing Tower No.20/5 type DA1, approx. 1 km. in transmission line distance	1	km		XXXXXX	XXXXXX	XXXXXX	XXXXXX	25,000.00	25,000.00

*Signature*

นางสาวเบญญาลักษณ์ ศรีสัมพันธ์

หงตส-ห.

11 มี.ย. 67

*Signature*

นายประวิทย์ เลิศโกวิทย์  
ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง  
22 Mar 2024



MEDIUM COST FOR BID NO. TIPE-L-06

อวส.-อศค.

Item No.	Description	Estimated Qty.	Unit	Currency	Supply of Equipment		Supply of Equipment		Local Transportation, Construction and Installation (excluding VAT) Baht	
					Foreign Supply		Local Supply			
					CIF Thai Port		Ex-works Price (excluding VAT) Baht			
					Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
2E2.3	Installation of three overhead ground wires between the existing deadend Str No.32/2 type DDE and take-off structure at Bo Win Substation, approx. 0.1 km. in transmission line distance	lump sum	each		XXXXX	XXXXX	XXXXX	XXXXX	25,000.00	25,000.00
<b>Total Price for 2E</b>							<b>Baht 28,000.00</b>		<b>Baht 488,000.00</b>	

  
 นางสาวเบญญาลักษณ์ ครลีรัมย์  
 หจคส-ท.  
 11 มิ.ย. 67

  
 นายประวิทย์ เลิศโกวิทย์  
 ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง  
 22 Mar 2024

**2F : LINE ACCESSORIES**

Item No.	Description	Estimated Qty.	Unit	Currency	Supply of Equipment		Supply of Equipment		Local Transportation, Construction and Installation (excluding VAT) Baht	
					Foreign Supply		Local Supply		Ex-works Price (excluding VAT) Baht	
					CIF Thai Port		Ex-works Price (excluding VAT) Baht			
					Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
2F1	Vibration damper for 1272 MCM ACSR/GA conductor	60	set		XXXXX	XXXXX	1,500.00	90,000.00	included in stringing work	included in stringing work
2F2	Vibration damper for 3/8" high strength galvanized steel overhead ground wire	8	set		XXXXX	XXXXX	650.00	5,200.00	included in stringing work	included in stringing work
<b>Total Price for 2F</b>							<b>Baht 95,200.00</b>		<b>Baht</b>	

  
 นางสาวเบญญาลักษณ์ ศรีลัมภ์  
 หจตส-ท.  
 11 มิ.ย. 67

  
 นายประวิทย์ เลิศโกวิทย์  
 ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง  
 22 Mar 2024

**2G : GROUNDING MATERIALS**

Item No.	Description	Estimated Qty.	Unit	Currency	Supply of Equipment		Supply of Equipment		Local Transportation, Construction and Installation (excluding VAT) Baht		
					Foreign Supply		Local Supply		Ex-works Price (excluding VAT) Baht		
					CIF Thai Port						
					Unit Price	Amount	Unit Price	Amount	Unit Price	Amount	
2G1	1.6 cm. nominal diameter x3.0 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	16	set					1,200.00	19,200.00	200.00	3,200.00
2G2	1.6 cm. nominal diameter x1.8 m. (5/8" diameter x 6') copper-covered steel sectional ground rod with coupling	4	set					800.00	3,200.00	200.00	800.00
2G3	Connector set (No.4 AWG annealed copper ground connecting wire0.6 m. long with stub angle connector)	8	set					300.00	2,400.00	100.00	800.00
2G4	Counterpoise No.2 AWG solid copper-clad steel wire 30% conductivity	120	m					180.00	21,600.00	90.00	10,800.00
2G5	Heavy duty exothermic or compression type connector	8	set					250.00	2,000.00	200.00	1,600.00
<b>Total Price for 2G</b>									<b>Baht 48,400.00</b>	<b>Baht 17,200.00</b>	

  
 นางสาวเบญญาลักษณ์ ครสั้มพ์  
 หจตส-ท.  
 11 มิ.ย. 67

  
 นายประวิทย์ เลิศโกวิท  
 ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง  
 22 Mar 2024

**2I : DISMANTLING WORK**

Item No.	Description	Estimated Qty.	Unit	Local Transportation, Construction and Installation (excluding VAT) Baht	
				Unit Price	Amount
2I1	Dismantling of the existing 230 kV Rayong 2 - Bo Win Transmission Line which is double circuit, single conductor per phase from Str No. 45/1 type DDE to take-off structure at Bo Win substation, approx. 0.1 km in transmission line distance	lump sum	each	30,000.00	30,000.00
<b>Total Price for 2I</b>				<b>Baht 30,000.00</b>	

  
 นางสาวเบญญาลักษณ์ ศรีรัมย์  
 หจตส-ท.  
 11 มิ.ย. 67

  
 นายประวิทย์ เลิศโกวิทย์  
 ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง  
 22 Mar 2024

**Important Information**  
**for**  
**Invitation to Bid No. TIPE-L-06**

---

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/ 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. Bid Security**

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. Safety Program**

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. TIPE-L-06**

---

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. Bid Security

The amount of bid security shall be USD 266,860.- or THB 9,600,000.-.

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

Nonhaburi  
Thailand

## INVITATION TO BID NO. TIPE-L-06

### SUPPLY AND CONSTRUCTION OF TRANSMISSION LINES 230 kV RAYONG 2 – BANG LAMUNG 2 JUNCTION AND 230 kV AO PHAI – BO WIN

#### TRANSMISSION SYSTEM IMPROVEMENT PROJECT IN EASTERN REGION TO ENHANCE SYSTEM SECURITY

---

#### **A-1. Invitation**

The Electricity Generating Authority of Thailand (EGAT) hereby invites sealed bids for Supply and Construction of Transmission Lines 230 kV Rayong2 – Bang Lamung 2 Junction and 230 kV Ao Phai – Bo Win under Transmission System Improvement Project in Eastern Region to Enhance System Security in accordance with the Terms and Conditions, Technical Specifications and Drawings described in these Bidding Documents.

#### **A-2 Work Description**

The scope of Work under this Invitation is supply and construction of 230 kV transmission lines located in the eastern region of Thailand. The Work is composed of two (2) Schedules as described below :

##### Schedule 1: Supply and Construction of 230 kV Rayong 2 – Bang Lamung 2 Junction Transmission Line

The Work for this Schedule is supply and construction of 230 kV transmission line which is 50 Hz, 3 phase, twin-bundled conductor per phase, double circuit self-supporting lattice towers extending from 230 kV Rayong 2 - Bang Lamung 2 Junction, having a distance of approximately 26.7 kilometers on the existing right-of-way with 34 and 40 meters of the transmission line.

The scope of Work for this Schedule shall also include the dismantling Work which consisted of two (2) portions as described below :

Portion 1 : The dismantling Work for this portion is the existing 230 kV Rayong 2 – Bo Win Transmission Line at Rayong 2 Substation which is twin-bundled conductor per phase, double circuit strung with 1272 MCM ACSR/GA conductor, having a distance of approximately 29.70 kilometers.

Portion 2 : The dismantling Work for this portion is the existing 230 kV Ao Phai – Bang Lamung 2 Transmission Line at Ao Phai Substation to Bo Win



Substation which is single conductor per phase, single circuit strung with 1272 MCM ACSR/GA conductor, having a distance of approximately 3.8 kilometers.

The said dismantling Work shall be conducted in accordance with the requirements in Specifications No. TL-07 (Rev.3) : Dismantling Work. All dismantled Equipment to be purchased by the Contractor has been listed in the Price Schedule and Attachment No. 2 : List of Equipment to be Dismantled by the Contractor. Conditions regarding the purchase of the dismantled Equipment are stipulated in Attachment No. 3 : Requirements for Dismantling Work and Conditions of Sale of Dismantled Equipment.

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

#### Schedule 2: Supply and Construction of 230 kV Ao Phai – Bo Win Transmission Line

The Work for this Schedule is supply and construction of 230 kV transmission line which is 50 Hz, 3 phase, single conductor per phase, double circuit self-supporting lattice steel sectionalizing at the 230 kV Ao Phai – Rayong 2 transmission line and the sectionalizing of the 230 kV Rayong 2 – Bo Win transmission line to be connected to the 230 kV Ao Phai – Bo Win circuit no. 3 and 4, having a distance of approximately 1 kilometer on the new right-of-way with 40 meters of the transmission line.

The scope of Work for this Schedule shall also include the dismantling Work of the 230 kV Rayong 2 - Bo Win transmission line which is single conductor per phase, double circuit strung with 1272 MCM ACSR/GA conductor, having a distance of approximately 0.1 kilometer shall also be performed under this Schedule. The said dismantling Work shall be conducted in accordance with the requirements in Specifications No. TL-07 (Rev.3) : Dismantling Work. All dismantled Equipment to be purchased by the Contractor has been listed in the Price Schedule and Attachment No. 2 : List of Equipment to be Dismantled by the Contractor. Conditions regarding the purchase of the dismantled Equipment are stipulated in Attachment No. 3 : Requirements for Dismantling Work and Conditions of Sale of Dismantled Equipment.

The conductor to be employed under this schedule will be 1272 MCM ACSR/GA supplied by EGAT. The shield wire will be employed is 3/8 inch nominal diameter, high strength galvanized steel shield wire. The shield wire shall be supplied by the Contractor.

All types of steel towers have already been designed by EGAT. 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.

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. Eligibility of Bidders: Technical Requirements**

**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 (1) turnkey contract as contractor (not as subcontractor) in overseas country (not his own country) or with EGAT on the construction and installation 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

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 for 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) Insulator for conductor 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 kV transmission line

- 220 kV or higher for the Work of supply and construction of 230 kV transmission line
- 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 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. Preparation and Delivery of Bids**

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. Bid Security 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. TIPE-L-06**

**SUPPLY AND CONSTRUCTION OF TRANSMISSION LINES  
230 kV RAYONG 2 – BANG LAMUNG 2 JUNCTION AND 230 kV  
AO PHAI – BO WIN**

**TRANSMISSION SYSTEM IMPROVEMENT PROJECT IN  
EASTERN REGION 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  
Thailand

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. 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...100.-...- or Baht...3,000.-...; 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  
Thailand

Note : 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



21 กุมภาพันธ์ 2567

2) **HARDWARE ASSEMBLIES AND LINE ACCESSORIES FOR CONDUCTOR, OVERHEAD GROUND WIRE AND OPGW**

**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



21 กุมภาพันธ์ 2567

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



21 กุมภาพันธ์ 2567

**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) **CONDUCTOR**

**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

**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

**เอกสารควบคุม**

รับรองสำเนาโดย ทพอ.ส.กสส.ส. อวส.

ก่อนนำไปใช้งาน

ต้องตรวจสอบ Revision ล่าสุด

ฝ่ายวิศวกรรมระบบส่ง กฟผ.

21 กุมภาพันธ์ 2567

**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,  
Samsenog, 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



21 กุมภาพันธ์ 2567

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.



Bid No. TIPE-L-06



21 กุมภาพันธ์ 2567

**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



**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.

<b><u>Item</u></b>	<b><u>Description</u></b>	<b><u>Estimated Quantity</u></b>
1.	1272 MCM ACSR/GA Conductor as per Schedule 1E Item 1E1.1	325.21 km
2.	1272 MCM ACSR/GA Conductor as per Schedule 2E Item 2E1.1	6.7 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, Plus a 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>	<u>Description</u>	<u>Estimated Quantity</u>
<b>Part 1 :</b>	<b><u>The existing 230 kV Rayong – Bowin Transmission Line</u></b>	
	(The dismantled Equipment as listed below shall be purchased by the Contractor)	
<b>1.1</b>	<b>Steel Tower</b>	
	Tower Type DA1	
	Basic body	54 bodies
	Body extension 7.0 m.	6 bodies
	Leg extension +1.0 m.	12 leg
	Leg extension +2.0 m.	14 legs
	Leg extension +3.0 m.	24 legs
	Leg extension +4.0 m.	6 legs
	Leg extension +5.0 m.	23 legs
	Leg extension +6.0 m.	26 legs
	Leg extension +7.0 m.	48 legs
	Leg extension +8.0 m.	28 legs
	Leg extension +9.0 m.	35 legs
	 Tower type LDA1	
	Basic body	3 bodies
	Leg extension +1.0 m.	4 legs
	Leg extension +3.0 m.	4 legs
	Leg extension +7.0 m.	4 legs
	 Tower type DB2	
	Basic body	7 bodies
	Leg extension +1.0 m.	9 legs
	Leg extension +2.0 m.	4 legs
	Leg extension +3.0 m.	3 legs
	Leg extension +5.0 m.	1 leg
	Leg extension +7.0 m.	11 legs
	 Tower type DC2	
	Basic body	10 bodies
	Leg extension +1.0 m.	16 legs
	Leg extension +3.0 m.	2 legs
	Leg extension +5.0 m.	8 legs
	Leg extension +7.0 m.	14 legs

<u>Item</u>	<u>Description</u>	<u>Estimated Quantity</u>
	Tower type DD2	
	Basic body	6 bodies
	Leg extension +1.0 m.	20 legs
	Leg extension +7.0 m.	4 legs
<b>1.2</b>	<b>Hardware Assemblies</b>	
	Single string suspension insulator assemblies	300 sets
	Double string suspension insulator assemblies	42 sets
	Bypass string suspension insulator assemblies	15 sets
	Double string tension insulator assemblies	264 sets
	Double inverted string tension insulator assemblies	6 sets
	Overhead ground wire suspension assemblies	114 sets
	Overhead ground wire tension assemblies	92 sets
<b>1.3</b>	<b>Line Accessories</b>	
	Spacer damper for conductor	726 sets
	Vibration damper for overhead ground wire	160 sets
<b>1.4</b>	<b>Insulator</b>	
	Insulator ANSI Class 52-3 (18,000 lbs)	14,628 discs
<b>1.5</b>	<b>1272 MCM ACSR/GA Conductor</b>	180.87 km
<b>1.6</b>	<b>3/8 " high strength galvanized steel overhead ground wire</b>	29.7 km
<b>Part 2 :</b>	<b><u>The existing 230 kV Rayong – Ao Phai Transmission Line</u></b>	
	(The dismantled Equipment as listed below shall be purchased by the Contractor)	
<b>2.1</b>	<b>Hardware Assemblies</b>	
	Single string suspension insulator assemblies	12 sets
<b>2.2</b>	<b>Insulator</b>	
	Insulator ANSI Class 52-3 (18,000 lbs)	192 discs
<b>2.3</b>	<b>1272 MCM ACSR/GA Conductor</b>	0.49 km
<b>2.4</b>	<b>3/8 " high strength galvanized steel overhead ground wire</b>	0.08 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) Dismantling Work.

##### **2. Responsibility of Contractor**

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.