Notice to Bidder

Subject : Online Payment for Purchase of Bidding Documents

Due to the outbreak of COVID-19 in Thailand, please be informed of the online payment for purchase of biding documents as follows:

1) 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.

2) Download the Registration Form and fill out all necessary information by typing. (Complete data is required.)

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 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.

***** Please note that this online payment process is a temporary measure due to the COVID-19 outbreak. The online payment process will be available until further notice from EGAT *****

****

Registration Form

Invitation to Bid No. TIPN-L-03

Supply and Construction of Transmission Line 500 kV Mae Moh 3 – Lamphun 3
(from KM.76 to Lamphun 3)

Transmission System Improvement Project in Upper Northern Region

to Enhance System Security

Available Duration for Purchasing : February 28, 2022 - March 28, 2022

Price of Bidding Documents : USD 500.- or THB 15,000.-

Instructions

1) 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.
2) Fill out this Registration Form in English by typing. (Complete data is required.)
3) Submit the filled-out Registration Form and the proof of payment to the in-charge officer via email aradee.s@egat.co.th
(with cc. 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 :				

Contact Information of In-charge Officer	
Name	Ms. Aradee Srisom-on
Email address	aradee.s@egat.co.th
Telephone No.	66 2436 3342
Mobile No.	669 0280 1433

Invitation to Bid No. TIPN-L-03

Supply and Construction of Transmission Line 500 kV Mae Moh 3 – Lamphun 3 (from KM.76 to Lamphun 3)

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

Two-Envelope (Pre-Qualification)

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

Place of Construction : from KM.76 to Lamphun 3 Substation (approx. 76 kilometers)

Medium Cost (including Value Added Tax and other expenses) : THB 1,236,400,000.-

Eligibility of Bidders

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

Availability of Bidding Documents

Bidding Documents in CD-ROM will be available for examination of Bidder's Qualifications and purchase during 08:00 hrs. to 15:00 hrs., Bangkok Standard Time, as from February 28, 2022 to March 28, 2022 at USD 500.- or THB 15,000.- per copy, non-refundable, at the following address :

International Procurement Department - Transmission Segment
(Room No. 301, 3rd Floor, Tor 082 Building)
Procurement and Inventory Management Division
Electricity Generating Authority of Thailand
Bangkruai, Nonthaburi 11130, Thailand
Telephone no. 66 2436 0342
E-mail : procurement.tse@egat.co.th

Please find more details and download Registration Form for purchasing Bidding Documents at http://www4.egat.co.th/fprocurement/biddingeng/.

Kanmika Dhachalupat

Payment can be made by a certified cheque or money order payable to EGAT or by a telegraphic transfer to EGAT's current 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.

Bidding Documents in CD-ROM will be either airmailed or airfreighted to the buyer at EGAT's expense upon receipt of the relevant remittance. In case the buyer requires the Bidding Documents to be sent by Express Mail Service (EMS), the charge will be at the buyer's expense.

Delivery of Bids

Price and Technical Proposals shall be submitted at ***Bidding Room, 1st Floor, Tor 082 Building*** during 09:30 hrs. to 10:00 hrs., Bangkok Standard Time, April 26, 2022 and Technical Proposal will be opened publicly at 10:00 hrs.

ELECTRICITY GENERATING AUTHORITY OF THAILAND

February 21, 2022

Kannika Dhachalupat

(Mrs. Kannika Dhachalupat)

Chief, International Procurement Department - Transmission Segment

ประกาศการไฟฟ้าฝ่ายผลิตแห่งประเทศไทย
เรื่อง ประกวดราคาจ้าง เลขที่ TIPN-L-03
ประกวดราคา 2 ซอง (Pre-Qualification)

การไฟฟ้าฝ่ายผลิตแห่งประเทศไทย (กฟผ.) มีความประสงค์จะจัดหาและจ้างก่อสร้างสายส่งไฟฟ้าแรงสูง 500 kV แม่เมาะ 3 - ลำพูน 3 (จากกิโลเมตรที่ 76 ถึง สถานีไฟฟ้าแรงสูงลำพูน 3) สำหรับโครงการปรับปรุงระบบส่งไฟฟ้าบริเวณภาคเหนือตอนบนเพื่อเสริมความมั่นคงระบบไฟฟ้า โดยทำสัญญาแบบปรับราคาได้ (ค่า k) โดยใช้งบประมาณ กฟผ.

<u>สถานที่ก่อสร้าง</u> : จากกิโลเมตรที่ 76 ถึง สถานีไฟฟ้าแรงสูงลำพูน 3 (ระยะทางประมาณ 76 กิโลเมตร)

<u>ราคากลาง (รวมภาษีมูลค่าเพิ่มและค่าใช้จ่ายอื่นๆ)</u> : 1,236,400,000.- บาท

<u>คุณสมบัติของผู้เสนอราคา</u>

1. **ต้องเป็นผู้ประกอบการและพัสดุที่ผ่านการคัดเลือกคุณสมบัติเบื้องต้นตามบัญชีรายชื่อที่ระบุในเอกสารประกวดราคา**
2. ต้องเป็นนิติบุคคลผู้มีอาชีพรับจ้างตามประกวดราคาจ้างดังกล่าว และต้องไม่เป็นผู้ทิ้งงานซึ่งปลัดกระทรวงการคลังได้แจ้งเวียนชื่อไว้ หรือต้องไม่เป็นผู้ที่ กฟผ. ห้ามติดต่อหรือห้ามเข้าเสนอราคา หรือต้องไม่เป็นผู้ที่ได้รับผลของการสั่งให้นิติบุคคลหรือบุคคลอื่นเป็นผู้ทิ้งงานตามคำสั่ง กฟผ.
3. ต้องไม่เป็นผู้มีผลประโยชน์ร่วมกันกับผู้เสนอราคารายอื่น ณ วันประกาศประกวดราคาครั้งนี้เป็นต้นไป หรือต้องไม่เป็นผู้กระทำการอันเป็นการขัดขวางการแข่งขันราคาอย่างเป็นธรรมในการดำเนินการประกวดราคาครั้งนี้
4. ต้องไม่เป็นที่ปรึกษาของ กฟผ. หรือมีส่วนร่วมในบริษัทที่ปรึกษาของ กฟผ. ในงานนี้ หรือต้องไม่มีผู้ปฏิบัติงาน กฟผ. เข้าไปมีส่วนร่วมในกิจการของผู้เสนอราคา ไม่ว่าจะในฐานะผู้ถือหุ้นที่มีสิทธิควบคุมการจัดการ กรรมการ ผู้อำนวยการ ผู้จัดการ พนักงาน ลูกจ้าง ตัวแทน หรือที่ปรึกษา ยกเว้น ในกรณีที่ผู้ปฏิบัติงานได้รับคำสั่งอย่างเป็นทางการจาก กฟผ. ให้ไปปฏิบัติงานหรือเข้าร่วมในกิจการของผู้เสนอราคา
5. ต้องไม่เป็นผู้ได้รับเอกสิทธิ์หรือความคุ้มกัน ซึ่งอาจปฏิเสธไม่ยอมขึ้นศาลไทย เว้นแต่รัฐบาลของผู้เสนอราคาได้มีคำสั่งให้สละสิทธิ์และความคุ้มกันเช่นว่านั้น
6. ผู้ประสงค์เข้าประกวดราคาในนามของกิจการร่วมค้าหรือกิจการค้าร่วม (Joint Venture or Consortium) จะต้องดำเนินการทุกขั้นตอนของการประกวดราคาในนามของกิจการร่วมค้าหรือกิจการค้าร่วม ตั้งแต่การเสนอราคาจนสิ้นสุดข้อผูกพันกับ กฟผ.

<u>การขายเอกสารประกวดราคา</u>

ผู้สนใจติดต่อขอทราบรายละเอียด เพื่อตรวจสอบคุณสมบัติของผู้เสนอราคา และขอซื้อเอกสารประกวดราคาในราคาชุดละ 15,000.- บาท ได้ที่ แผนกจัดจ้างต่างประเทศสายงานระบบส่ง ***(ห้อง 301 ชั้น 3 อาคารฝ่ายจัดซื้อจัดจ้างและบริหารพัสดุ ท.082)*** กองจัดซื้อจัดจ้างต่างประเทศสายงานระบบส่ง ฝ่ายจัดซื้อจัดจ้างและบริหารพัสดุ การไฟฟ้าฝ่ายผลิตแห่งประเทศไทย เชิงสะพานพระราม 7 จังหวัดนนทบุรี ในวันทำการระหว่างเวลา 08:00 น. ถึง 15:00 น. ตั้งแต่วันที่ 28 กุมภาพันธ์ 2565 ถึงวันที่ 28 มีนาคม 2565 หรือสอบถามทางโทรศัพท์ หมายเลข 0 2436 0342 หรืออีเมล procurement.tse@egat.co.th ทั้งนี้ สามารถ download แบบฟอร์มลงทะเบียนผู้ซื้อเอกสารประกวดราคาได้ที่เว็บไซต์ http://www4.egat.co.th/fprocurement/biddingeng/

กมลทิพา สหลุภัญ

<u>การยื่นซองประกวดราคา</u>

กำหนดยื่นซองข้อเสนอด้านเทคนิคพร้อมซองราคา ในวันที่ 26 เมษายน 2565 เวลา 09:30 น. ถึง 10:00 น. และเปิดซองข้อเสนอด้านเทคนิคเวลา 10:00 น. ณ ***ห้องประกวดราคา ชั้น 1 อาคารฝ่ายจัดซื้อจัดจ้างและ บริหารพัสดุ ท.082*** การไฟฟ้าฝ่ายผลิตแห่งประเทศไทย เชิงสะพานพระราม 7 จังหวัดนนทบุรี

ประกาศ ณ วันที่ 21 กุมภาพันธ์ 2565

กรรณิกา ธชาลุภัฏ

(นางกรรณิกา ธชาลุภัฏ)

หัวหน้ากองจัดซื้อจัดจ้างต่างประเทศสายงานระบบส่ง

ตารางแสดงวงเงินงบประมาณที่ได้รับจัดสรรและราคากลาง(ราคาอ้างอิง)

ในการจัดซื้อจัดจ้างที่มิใช่งานก่อสร้าง

1. **ชื่อโครงการ** Bid No. TIPN-L-03

งานจัดหาและจ้างก่อสร้างสายส่ง 500 kV แม่เมาะ 3 – ลำพูน 3

(จากกิโลเมตรที่ 76 ถึง สฟ.ลำพูน 3)

โครงการปรับปรุงระบบส่งไฟฟ้าบริเวณภาคเหนือตอนบนเพื่อเสริมความมั่นคงระบบไฟฟ้า

/หน่วยงานเจ้าของโครงการ ฝ่ายแผนงานและโครงการระบบส่ง การไฟฟ้าฝ่ายผลิตแห่งประเทศไทย

2. **วงเงินงบประมาณที่ได้รับจัดสรร**

โครงการปรับปรุงระบบส่งไฟฟ้าบริเวณภาคเหนือตอนบนเพื่อเสริมความมั่นคงระบบไฟฟ้า

งบประมาณ 12,240 ล้านบาท

3. **วันที่กำหนดราคากลาง** 25 มกราคม 2565 (วันที่ รวส. อนุมัติ)

ราคารวมภาษีมูลค่าเพิ่มและค่าใช้จ่ายอื่นๆ เป็นเงิน 1,236,400,000.00 บาท **ราคา/หน่วย** ตามเอกสารแนบ

4. **แหล่งที่มาของราคากลาง**

หลักเกณฑ์การกำหนดราคากลางการจัดซื้อและจัดจ้างงานก่อสร้างระบบส่งไฟฟ้าของสายงานระบบส่ง

5. **รายชื่อเจ้าหน้าที่ผู้กำหนดราคากลาง**

5.1 นางสาวสุจรรยา กิรติรัตนพฤกษ์ กวสส-ส.

5.2 นายสมปอง บวรธีระกิจชัย หปส-ส. กวสส-ส.

5.3 นายฐกานต์ นิโครวนจำรัส วศ.4 หปส-ส. กวสส-ส.

<u>หมายเหตุ</u> ค่าใช้จ่ายอื่นๆ ได้แก่ ค่าใช้จ่ายที่ กฟผ. ต้องจ่ายตามวิธีการพิจารณาเปรียบเทียบราคาที่กำหนดไว้ในเอกสารประกวดราคา เช่น อากรขาเข้า เป็นต้น

อาสยา ช่างวิทยาการ

นางสาวอาสยา ช่างวิทยาการ

หจตส-ห.

21 ก.พ. 2565

อวส.-อผค.

DETAILS OF THE MEDIUM COST FOR BID NO. TIPN-L-03

SCHEDULE 1 : 500 kV Mae Moh 3 - Lamphun 3 (from KM.76 - Lamphun 3) (76 km)

Description	Total (Baht)
1A : PRELIMINARY WORK	10,862,100.00
1B : TOWER FOUNDATIONS	216,438,000.00
1C : TOWERS	668,672,740.00
1D : INSULATOR STRING AND OVERHEAD GROUND WIRE ASSEMBLIES	159,162,900.00
1E : CONDUCTOR AND OVERHEAD GROUND WIRE	46,531,000.00
1F : LINE ACCESSORIES	21,196,900.00
1G : GROUNDING MATERIALS	4,929,080.00
1H : OPTICAL FIBER AND LINE ACCESSORIES	20,064,000.00
1N : TEST OF EQUIPMENT	2,840,000.00
1O : SUPPLY OF SERVICE OF VEHICLES	4,800,000.00
Total for Schedule 1	**1,155,496,720.00**
Adjusted Price (Import Duty & Tax + VAT)	80,884,770.40
Total Price Schedule 1	**1,236,381,490.40**

MEDIUM COST OF BID NO. TIPN-L-03	**1,236,400,000.00**

อาสยา ช่างวิทยาการ
นางสาวอาสยา ช่างวิทยาการ
หจตส-ห.
21 ก.พ. 2565

นางสุดารัตน์ ไชยพันธุ์
ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง
26 Jan 2022

อาสยา ช่างวิทยาการ
นางสาวอาสยา ช่างวิทยาการ
หจตส-ห.
21 ก.พ. 2565

MEDIUM COST FOR BID NO. TIPN-L-03

Description	Currency	Supply of Equipment Foreign Supply CIF Thai Port Amount	Supply of Equipment Local Supply Ex-works Price (excluding VAT) Baht Amount	Foreign Currency Amount	Local Currency (excluding VAT) Baht Amount	Local Transportation (excluding VAT) Baht Amount	Local Transportation, Construction and Installation (excluding VAT) Baht Amount
1A : PRELIMINARY WORK							10,862,100.00
1B : TOWER FOUNDATIONS							216,438,000.00
1C : TOWERS			603,949,800.00				64,722,940.00
1D : INSULATOR STRING AND OVERHEAD GROUND WIRE ASSEMBLIES	THB	92,142,500.00	67,020,400.00				
1E : CONDUCTOR AND OVERHEAD GROUND WIRE			2,340,000.00				44,191,000.00
1F : LINE ACCESSORIES			21,006,900.00				190,000.00
1G : GROUNDING MATERIALS			4,163,660.00				765,420.00

นางสุดารัตน์ ไชยพันธุ์
ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง
26 Jan 2022

อสรา ช่างวิทยาการ
นางสาวอาสยา ช่างวิทยาการ
หจตส-ห.
21 ก.พ. 2565

MEDIUM COST FOR BID NO. TIPN-L-03

Description	Currency	Supply of Equipment Foreign Supply CIF Thai Port Amount	Supply of Equipment Local Supply Ex-works Price (excluding VAT) Baht Amount	Foreign Currency Amount	Local Currency (excluding VAT) Baht Amount	Local Transportation (excluding VAT) Baht Amount	Local Transportation, Construction and Installation (excluding VAT) Baht Amount
1H : OPTICAL FIBER AND LINE ACCESSORIES	THB	10,032,000.00	4,180,000.00				5,852,000.00
1N : TEST OF EQUIPMENT	THB			2,840,000.00			
1O : SUPPLY OF SERVICE OF VEHICLES							4,800,000.00
TOTAL PRICE	**THB**	**102,174,500.00**	**Baht** **702,660,760.00**	**2,840,000.00**	**Baht**	**Baht**	**Baht** **347,821,460.00**

นางสุดารัตน์ ไชยพันธุ์
ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง
26 Jan 2022

อาสยา ช่างวิทยาการ
นางสาวอาสยา ช่างวิทยาการ
หจตส-ห.
21 ก.พ. 2565

MEDIUM COST FOR BID NO. TIPN-L-03

Item No.	Description	Estimated Qty.	Unit	Local Transportation, Construction and Installation (excluding VAT) Baht	
				Unit Price	Amount
1A1	Check survey and staking of tower locations (Approximately 76 km in transmission line distance)	lump sum	each	2,508,000.00	2,508,000.00
1A2	Clearing right-of-way of 30 meters on each side of center line of the transmission line from KM. 76 to Lamphun 3 (Approximately 76 km in transmission line distance)	lump sum	each	2,280,000.00	2,280,000.00
1A3	Subsoil tests and preliminary measurement of ground electrical resistance and earth resistivity (to be performed at tower locations directed by EGAT)				
1A3.1	Light ram sound tests with hand auger and preliminary measurement of ground electrical resistance and earth resistivity from ground surface to 7 meters in depth	119	bore	6,900.00	821,100.00
1A3.2	Standard penetration tests and preliminary measurement of ground electrical resistance and earth resistivity at the depth and locations as directed by EGAT (Approximately 90 bores)	1350	m	3,300.00	4,455,000.00
1A4	Boundary post along boundary line of right-of-way	420	post	1,900.00	798,000.00
Total Price for 1A				**Baht**	**10,862,100.00**

นางสุดารัตน์ ไชยพันธุ์
ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง
26 Jan 2022

อาสยา ช่างวิทยาการ
นางสาวอาสยา ช่างวิทยาการ
หจตส-ห.
21 ก.พ. 2565

MEDIUM COST FOR BID NO. TIPN-L-03

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
1B1	Foundation for tower type DQV3									
1B1.1	Pad Foundation type CS	15	tower		XXXXX	XXXXX	XXXXX	XXXXX	1,070,000.00	16,050,000.00
1B1.2	Pad Foundation type CIII	70	tower		XXXXX	XXXXX	XXXXX	XXXXX	930,000.00	65,100,000.00
1B1.3	Pad Foundation type CIV	40	tower		XXXXX	XXXXX	XXXXX	XXXXX	650,000.00	26,000,000.00
1B1.4	Pad Foundation type CV	18	tower		XXXXX	XXXXX	XXXXX	XXXXX	504,000.00	9,072,000.00
1B1.5	Pile foundation type 6-Pile Cluster (exclusive of cost of piles and pile driving)	2	tower		XXXXX	XXXXX	XXXXX	XXXXX	440,000.00	880,000.00
1B1.6	Pile foundation type 9-Pile Cluster (exclusive of cost of piles and pile driving)	1	tower		XXXXX	XXXXX	XXXXX	XXXXX	634,000.00	634,000.00
1B2	Foundation for tower type DQV9									
1B2.1	Pad Foundation type CS	2	tower		XXXXX	XXXXX	XXXXX	XXXXX	1,100,000.00	2,200,000.00
1B2.2	Pad Foundation type CIII	2	tower		XXXXX	XXXXX	XXXXX	XXXXX	1,040,000.00	2,080,000.00
1B2.3	Pad Foundation type CIV	2	tower		XXXXX	XXXXX	XXXXX	XXXXX	706,000.00	1,412,000.00
1B2.4	Pad Foundation type CV	2	tower		XXXXX	XXXXX	XXXXX	XXXXX	538,000.00	1,076,000.00

นางสุดารัตน์ ไชยพันธุ์
ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง
26 Jan 2022

อาสยา ช่างวิทยาการ
นางสาวอาสยา ช่างวิทยาการ
หจตส-ห.
21 ก.พ. 2565

MEDIUM COST FOR BID NO. TIPN-L-03

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
1B2.5	Pile foundation type 9-Pile Cluster (exclusive of cost of piles and pile driving)	1	tower		XXXXX	XXXXX	XXXXX	XXXXX	634,000.00	634,000.00
1B3	Foundation for tower type DQTR									
1B3.1	Pad Foundation type CS	1	tower		XXXXX	XXXXX	XXXXX	XXXXX	1,070,000.00	1,070,000.00
1B3.2	Pad Foundation type CIII	1	tower		XXXXX	XXXXX	XXXXX	XXXXX	930,000.00	930,000.00
1B3.3	Pad Foundation type CV	1	tower		XXXXX	XXXXX	XXXXX	XXXXX	572,000.00	572,000.00
1B4	Foundation for tower type DQT20									
1B4.1	Pad Foundation type CS	3	tower		XXXXX	XXXXX	XXXXX	XXXXX	1,700,000.00	5,100,000.00
1B4.2	Pad Foundation type CIII	9	tower		XXXXX	XXXXX	XXXXX	XXXXX	1,600,000.00	14,400,000.00
1B4.3	Pad Foundation type CIV	2	tower		XXXXX	XXXXX	XXXXX	XXXXX	986,000.00	1,972,000.00
1B4.4	Pad Foundation type CV	3	tower		XXXXX	XXXXX	XXXXX	XXXXX	762,000.00	2,286,000.00
1B4.5	Pile foundation type 12-Pile Cluster (exclusive of cost of piles and pile driving)	1	tower		XXXXX	XXXXX	XXXXX	XXXXX	827,000.00	827,000.00

นางสุดารัตน์ ไชยพันธุ์
ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง
26 Jan 2022

นางสาวอาสยา ช่างวิทยาการ
หจตส-ห.
21 ก.พ. 2565

MEDIUM COST FOR BID NO. TIPN-L-03

Item No.	Description	Estimated Qty.	Unit	Currency	Supply of Equipment Foreign Supply CIF Thai Port Unit Price	Supply of Equipment Foreign Supply CIF Thai Port Amount	Supply of Equipment Local Supply Ex-works Price (excluding VAT) Baht Unit Price	Supply of Equipment Local Supply Ex-works Price (excluding VAT) Baht Amount	Local Transportation, Construction and Installation (excluding VAT) Baht Unit Price	Local Transportation, Construction and Installation (excluding VAT) Baht Amount
1B5	Foundation for tower type DQT40									
1B5.1	Pad Foundation type CS	3	tower		XXXXX	XXXXX	XXXXX	XXXXX	2,020,000.00	6,060,000.00
1B5.2	Pad Foundation type CIII	6	tower		XXXXX	XXXXX	XXXXX	XXXXX	1,700,000.00	10,200,000.00
1B5.3	Pad Foundation type CIV	3	tower		XXXXX	XXXXX	XXXXX	XXXXX	1,160,000.00	3,480,000.00
1B5.4	Pad Foundation type CV	4	tower		XXXXX	XXXXX	XXXXX	XXXXX	941,000.00	3,764,000.00
1B5.5	Pile foundation type 12-Pile Cluster (exclusive of cost of piles and pile driving)	1	tower		XXXXX	XXXXX	XXXXX	XXXXX	827,000.00	827,000.00
1B6	Foundation for tower type DQT60									
1B6.1	Pad Foundation type CS	3	tower		XXXXX	XXXXX	XXXXX	XXXXX	2,390,000.00	7,170,000.00
1B6.2	Pad Foundation type CIII	5	tower		XXXXX	XXXXX	XXXXX	XXXXX	2,050,000.00	10,250,000.00
1B6.3	Pad Foundation type CIV	3	tower		XXXXX	XXXXX	XXXXX	XXXXX	1,360,000.00	4,080,000.00
1B6.4	Pad Foundation type CV	2	tower		XXXXX	XXXXX	XXXXX	XXXXX	1,090,000.00	2,180,000.00
1B6.5	Pile foundation type 12-Pile Cluster (exclusive of cost of piles and pile driving)	1	tower		XXXXX	XXXXX	XXXXX	XXXXX	827,000.00	827,000.00

นางสุดารัตน์ ไชยพันธุ์
ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง
26 Jan 2022

อาสยา ช่างวิทยาการ
นางสาวอาสยา ช่างวิทยาการ
หจตส-ห.
21 ก.พ. 2565

MEDIUM COST FOR BID NO. TIPN-L-03

Item No.	Description	Estimated Qty.	Unit	Currency	Supply of Equipment Foreign Supply CIF Thai Port		Supply of Equipment Local Supply Ex-works Price (excluding VAT) Baht		Local Transportation, Construction and Installation (excluding VAT) Baht	
					Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
1B6.6	Pile foundation type 16-Pile Cluster (exclusive of cost of piles and pile driving)	1	tower		XXXXX	XXXXX	XXXXX	XXXXX	1,086,000.00	1,086,000.00
1B7	Foundation for tower type DQT90									
1B7.1	Pad Foundation type CIII	1	tower		XXXXX	XXXXX	XXXXX	XXXXX	2,870,000.00	2,870,000.00
1B8	Precast prestressed concrete piles									
1B8.1	Furnishing precast prestressed concrete piles min 160 cm. effective perimeter	4900	m		XXXXX	XXXXX	XXXXX	XXXXX	1,700.00	8,330,000.00
1B8.2	Installation of precast prestressed concrete piles 160 cm. effective perimeter	4600	m		XXXXX	XXXXX	XXXXX	XXXXX	600.00	2,760,000.00
1B9	Additional foundation work									
1B9.1	Additional earth excavation and backfilling including dewatering	50	cubic meter		XXXXX	XXXXX	XXXXX	XXXXX	500.00	25,000.00
1B9.2	Additional ordinary concrete work including forms	20	cubic meter		XXXXX	XXXXX	XXXXX	XXXXX	11,000.00	220,000.00

นางสุดารัตน์ ไชยพันธุ์
ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง
26 Jan 2022

อาสยา ช่างวิทยาการ
นางสาวอาสยา ช่างวิทยาการ
หจตส-ห.
21 ก.พ. 2565

MEDIUM COST FOR BID NO. TIPN-L-03

Item No.	Description	Estimated Qty.	Unit	Currency	Supply of Equipment Foreign Supply CIF Thai Port		Supply of Equipment Local Supply Ex-works Price (excluding VAT) Baht		Local Transportation, Construction and Installation (excluding VAT) Baht	
					Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
1B9.3	Additional steel reinforcement bars	0.5	ton		XXXXX	XXXXX	XXXXX	XXXXX	28,000.00	14,000.00
Total Price for 1B							**Baht**		**Baht**	**216,438,000.00**

นางสุดารัตน์ ไชยพันธุ์
ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง
26 Jan 2022

อาสยา ช่างวิทยาการ
นางสาวอาสยา ช่างวิทยาการ
หจตส-ห.
21 ก.พ. 2565

MEDIUM COST FOR BID NO. TIPN-L-03

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
1C1	Tower Type DQV3									
1C1.1	Basic body (500-4x1272 DQV3)	146	body		XXXXX	XXXXX	1,796,000.00	262,216,000.00	191,380.00	27,941,480.00
1C1.2	Body extension 7.5 m (500-4x1272 DQV3)	51	body		XXXXX	XXXXX	459,000.00	23,409,000.00	48,910.00	2,494,410.00
1C1.3	Leg extension 1.5 m (500-4x1272 DQV3)	80	leg		XXXXX	XXXXX	22,800.00	1,824,000.00	2,430.00	194,400.00
1C1.4	Leg extension 3.0 m (500-4x1272 DQV3)	12	leg		XXXXX	XXXXX	30,400.00	364,800.00	3,240.00	38,880.00
1C1.5	Leg extension 4.5 m (500-4x1272 DQV3)	40	leg		XXXXX	XXXXX	37,000.00	1,480,000.00	3,940.00	157,600.00
1C1.6	Leg extension 6.0 m (500-4x1272 DQV3)	52	leg		XXXXX	XXXXX	47,700.00	2,480,400.00	5,080.00	264,160.00
1C1.7	Leg extension 7.5 m (500-4x1272 DQV3)	76	leg		XXXXX	XXXXX	63,200.00	4,803,200.00	6,730.00	511,480.00
1C1.8	Leg extension 9.0 m (500-4x1272 DQV3)	56	leg		XXXXX	XXXXX	75,500.00	4,228,000.00	8,050.00	450,800.00
1C1.9	Leg extension 10.5 m (500-4x1272 DQV3)	268	leg		XXXXX	XXXXX	93,800.00	25,138,400.00	10,000.00	2,680,000.00
1C1.10	Stub type CS (500-4x1272 DQV3)	60	leg		XXXXX	XXXXX	20,800.00	1,248,000.00	2,220.00	133,200.00
1C1.11	Stub type CIII (500-4x1272 DQV3)	280	leg		XXXXX	XXXXX	19,700.00	5,516,000.00	2,100.00	588,000.00
1C1.12	Stub type CIV (500-4x1272 DQV3)	160	leg		XXXXX	XXXXX	17,900.00	2,864,000.00	1,910.00	305,600.00

นางสุดารัตน์ ไชยพันธุ์
ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง
26 Jan 2022

อาสยา ช่างวิทยาการ
นางสาวอาสยา ช่างวิทยาการ
หจตส-ห.
21 ก.พ. 2565

MEDIUM COST FOR BID NO. TIPN-L-03

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
1C1.13	Stub type CV (500-4x1272 DQV3)	72	leg		XXXXX	XXXXX	16,800.00	1,209,600.00	1,790.00	128,880.00
1C1.14	Stub angle (500-4x1272 DQV3) for pile foundation type 6-Pile Cluster	8	leg		XXXXX	XXXXX	11,000.00	88,000.00	1,170.00	9,360.00
1C1.15	Stub angle (500-4x1272 DQV3) for pile foundation type 9-Pile Cluster	4	leg		XXXXX	XXXXX	11,000.00	44,000.00	1,170.00	4,680.00
1C2	Tower Type DQV9									
1C2.1	Basic body with 0°- 3° arm (500-4x1272 DQV9(3))	9	body		XXXXX	XXXXX	2,169,000.00	19,521,000.00	231,120.00	2,080,080.00
1C2.2	Body extension 15.0 m (500-4x1272 DQV9)	6	body		XXXXX	XXXXX	909,000.00	5,454,000.00	96,860.00	581,160.00
1C2.3	Leg extension 1.5 m (500-4x1272 DQV9)	4	leg		XXXXX	XXXXX	28,800.00	115,200.00	3,070.00	12,280.00
1C2.4	Leg extension 7.5 m (500-4x1272 DQV9)	4	leg		XXXXX	XXXXX	79,400.00	317,600.00	8,460.00	33,840.00
1C2.5	Leg extension 10.5 m (500-4x1272 DQV9)	28	leg		XXXXX	XXXXX	111,000.00	3,108,000.00	11,830.00	331,240.00
1C2.6	Stub type CS (500-4x1272 DQV9(9))	8	leg		XXXXX	XXXXX	27,400.00	219,200.00	2,920.00	23,360.00

นางสุดารัตน์ ไชยพันธุ์
ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง
26 Jan 2022

อาสยา ช่างวิทยาการ
นางสาวอาสยา ช่างวิทยาการ
หจตส-ห.
21 ก.พ. 2565

MEDIUM COST FOR BID NO. TIPN-L-03

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
1C2.7	Stub type CIII (500-4x1272 DQV9(9))	8	leg		XXXXX	XXXXX	25,100.00	200,800.00	2,670.00	21,360.00
1C2.8	Stub type CIV (500-4x1272 DQV9(9))	8	leg		XXXXX	XXXXX	23,300.00	186,400.00	2,480.00	19,840.00
1C2.9	Stub type CV (500-4x1272 DQV9(9))	8	leg		XXXXX	XXXXX	22,000.00	176,000.00	2,340.00	18,720.00
1C2.10	Stub angle (500-4x1272 DQV9(9)) for pile foundation type 9-Pile Cluster	4	leg		XXXXX	XXXXX	13,000.00	52,000.00	1,390.00	5,560.00
1C3	Tower Type DQTR									
1C3.1	Basic body (500-4x1272 DQTR)	3	body		XXXXX	XXXXX	2,783,000.00	8,349,000.00	296,550.00	889,650.00
1C3.2	Body extension 7.5 m (500-4x1272 DQTR)	1	body		XXXXX	XXXXX	873,000.00	873,000.00	93,020.00	93,020.00
1C3.3	Leg extension 10.5 m (500-4x1272 DQTR)	12	leg		XXXXX	XXXXX	146,000.00	1,752,000.00	15,560.00	186,720.00
1C3.4	Stub type CS (500-4x1272 DQTR)	4	leg		XXXXX	XXXXX	20,300.00	81,200.00	2,160.00	8,640.00
1C3.5	Stub type CIII (500-4x1272 DQTR)	4	leg		XXXXX	XXXXX	19,200.00	76,800.00	2,050.00	8,200.00
1C3.6	Stub type CV (500-4x1272 DQTR)	4	leg		XXXXX	XXXXX	15,600.00	62,400.00	1,660.00	6,640.00
1C4	Tower Type DQT20									

นางสุดารัตน์ ไชยพันธุ์
ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง
26 Jan 2022

อาสยา ช่างวิทยาการ
นางสาวอาสยา ช่างวิทยาการ
หจตส-ห.
21 ก.พ. 2565

MEDIUM COST FOR BID NO. TIPN-L-03

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
1C4.1	Basic body (500-4x1272 DQT20)	18	body		XXXXX	XXXXX	3,095,000.00	55,710,000.00	329,800.00	5,936,400.00
1C4.2	Leg extension 3.0 m (500-4x1272 DQT20)	12	leg		XXXXX	XXXXX	57,300.00	687,600.00	6,110.00	73,320.00
1C4.3	Leg extension 4.5 m (500-4x1272 DQT20)	8	leg		XXXXX	XXXXX	70,200.00	561,600.00	7,480.00	59,840.00
1C4.4	Leg extension 7.5 m (500-4x1272 DQT20)	8	leg		XXXXX	XXXXX	102,000.00	816,000.00	10,870.00	86,960.00
1C4.5	Leg extension 9.0 m (500-4x1272 DQT20)	12	leg		XXXXX	XXXXX	130,000.00	1,560,000.00	13,850.00	166,200.00
1C4.6	Leg extension 10.5 m (500-4x1272 DQT20)	32	leg		XXXXX	XXXXX	162,000.00	5,184,000.00	17,260.00	552,320.00
1C4.7	Stub type CS (500-4x1272 DQT20)	12	leg		XXXXX	XXXXX	42,000.00	504,000.00	4,480.00	53,760.00
1C4.8	Stub type CIII (500-4x1272 DQT20)	36	leg		XXXXX	XXXXX	42,000.00	1,512,000.00	4,480.00	161,280.00
1C4.9	Stub type CIV (500-4x1272 DQT20)	8	leg		XXXXX	XXXXX	38,000.00	304,000.00	4,050.00	32,400.00
1C4.10	Stub type CV (500-4x1272 DQT20)	12	leg		XXXXX	XXXXX	36,300.00	435,600.00	3,870.00	46,440.00

นางสุดารัตน์ ไชยพันธุ์
ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง
26 Jan 2022

ดสรา ช่างวิทยาการ
นางสาวอาสยา ช่างวิทยาการ
หจตส-ห.
21 ก.พ. 2565

MEDIUM COST FOR BID NO. TIPN-L-03

Item No.	Description	Estimated Qty.	Unit	Currency	Supply of Equipment Foreign Supply CIF Thai Port Unit Price	Supply of Equipment Foreign Supply CIF Thai Port Amount	Supply of Equipment Local Supply Ex-works Price (excluding VAT) Baht Unit Price	Supply of Equipment Local Supply Ex-works Price (excluding VAT) Baht Amount	Local Transportation, Construction and Installation (excluding VAT) Baht Unit Price	Local Transportation, Construction and Installation (excluding VAT) Baht Amount
1C4.11	Stub angle (500-4x1272 DQT20) for pile foundation type 12-Pile Cluster	4	leg		XXXXX	XXXXX	18,000.00	72,000.00	1,920.00	7,680.00
1C5	Tower Type DQT40									
1C5.1	Basic body (500-4x1272 DQT40)	17	body		XXXXX	XXXXX	3,606,000.00	61,302,000.00	384,250.00	6,532,250.00
1C5.2	Leg extension 3.0 m (500-4x1272 DQT40)	16	leg		XXXXX	XXXXX	66,800.00	1,068,800.00	7,120.00	113,920.00
1C5.3	Leg extension 4.5 m (500-4x1272 DQT40)	12	leg		XXXXX	XXXXX	77,500.00	930,000.00	8,260.00	99,120.00
1C5.4	Leg extension 6.0 m (500-4x1272 DQT40)	8	leg		XXXXX	XXXXX	99,400.00	795,200.00	10,590.00	84,720.00
1C5.5	Leg extension 9.0 m (500-4x1272 DQT40)	8	leg		XXXXX	XXXXX	161,000.00	1,288,000.00	17,160.00	137,280.00
1C5.6	Leg extension 10.5 m (500-4x1272 DQT40)	24	leg		XXXXX	XXXXX	192,000.00	4,608,000.00	20,460.00	491,040.00
1C5.7	Stub type CS (500-4x1272 DQT40)	12	leg		XXXXX	XXXXX	49,700.00	596,400.00	5,300.00	63,600.00

นางสุดารัตน์ ไชยพันธุ์
ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง
26 Jan 2022

อาสยา ช่างวิทยาการ
นางสาวอาสยา ช่างวิทยาการ
หจตส-ห.
21 ก.พ. 2565

MEDIUM COST FOR BID NO. TIPN-L-03

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
1C5.8	Stub type CIII (500-4x1272 DQT40)	24	leg		XXXXX	XXXXX	49,700.00	1,192,800.00	5,300.00	127,200.00
1C5.9	Stub type CIV (500-4x1272 DQT40)	12	leg		XXXXX	XXXXX	45,000.00	540,000.00	4,800.00	57,600.00
1C5.10	Stub type CV (500-4x1272 DQT40)	16	leg		XXXXX	XXXXX	41,900.00	670,400.00	4,460.00	71,360.00
1C5.11	Stub angle (500-4x1272 DQT40) for pile foundation type 12-Pile Cluster	4	leg		XXXXX	XXXXX	28,000.00	112,000.00	2,980.00	11,920.00
1C6	Tower Type DQT60									
1C6.1	Basic body (500-4x1272 DQT60)	15	body		XXXXX	XXXXX	4,483,000.00	67,245,000.00	477,700.00	7,165,500.00
1C6.2	Leg extension 3.0 m (500-4x1272 DQT60)	16	leg		XXXXX	XXXXX	85,500.00	1,368,000.00	9,110.00	145,760.00
1C6.3	Leg extension 4.5 m (500-4x1272 DQT60)	12	leg		XXXXX	XXXXX	115,000.00	1,380,000.00	12,250.00	147,000.00
1C6.4	Leg extension 6.0 m (500-4x1272 DQT60)	8	leg		XXXXX	XXXXX	127,000.00	1,016,000.00	13,530.00	108,240.00
1C6.5	Leg extension 7.5 m (500-4x1272 DQT60)	8	leg		XXXXX	XXXXX	160,000.00	1,280,000.00	17,050.00	136,400.00

นางสุดารัตน์ ไชยพันธุ์
ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง
26 Jan 2022

นางสาวอาสยา ช่างวิทยาการ
หจตส-ห.
21 ก.พ. 2565

MEDIUM COST FOR BID NO. TIPN-L-03

Item No.	Description	Estimated Qty.	Unit	Currency	Supply of Equipment Foreign Supply CIF Thai Port Unit Price	Supply of Equipment Foreign Supply CIF Thai Port Amount	Supply of Equipment Local Supply Ex-works Price (excluding VAT) Baht Unit Price	Supply of Equipment Local Supply Ex-works Price (excluding VAT) Baht Amount	Local Transportation, Construction and Installation (excluding VAT) Baht Unit Price	Local Transportation, Construction and Installation (excluding VAT) Baht Amount
1C6.6	Leg extension 10.5 m (500-4x1272 DQT60)	16	leg		XXXXX	XXXXX	223,000.00	3,568,000.00	23,760.00	380,160.00
1C6.7	Stub type CS (500-4x1272 DQT60)	12	leg		XXXXX	XXXXX	52,400.00	628,800.00	5,580.00	66,960.00
1C6.8	Stub type CIII (500-4x1272 DQT60)	20	leg		XXXXX	XXXXX	52,400.00	1,048,000.00	5,580.00	111,600.00
1C6.9	Stub type CIV (500-4x1272 DQT60)	12	leg		XXXXX	XXXXX	49,300.00	591,600.00	5,250.00	63,000.00
1C6.10	Stub type CV (500-4x1272 DQT60)	8	leg		XXXXX	XXXXX	46,200.00	369,600.00	4,920.00	39,360.00
1C6.11	Stub angle (500-4x1272 DQT60) for pile foundation type 12-Pile Cluster	4	leg		XXXXX	XXXXX	29,000.00	116,000.00	3,090.00	12,360.00
1C6.12	Stub angle (500-4x1272 DQT60) for pile foundation type 16-Pile Cluster	4	leg		XXXXX	XXXXX	29,000.00	116,000.00	3,090.00	12,360.00
1C7	Tower Type DQT90 (Terminal)									
1C7.1	Basic body (500-4x1272 DQT90)	1	body		XXXXX	XXXXX	6,647,000.00	6,647,000.00	708,290.00	708,290.00
1C7.2	Leg extension 3.0 m (500-4x1272 DQT90)	4	leg		XXXXX	XXXXX	93,700.00	374,800.00	9,980.00	39,920.00

นางสุดารัตน์ ไชยพันธุ์
ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง
26 Jan 2022

ตสัน ช่างวิทยาการ
นางสาวอาสยา ช่างวิทยาการ
หจตส-ห.
21 ก.พ. 2565

MEDIUM COST FOR BID NO. TIPN-L-03

Item No.	Description	Estimated Qty.	Unit	Currency	Supply of Equipment Foreign Supply CIF Thai Port Unit Price	Supply of Equipment Foreign Supply CIF Thai Port Amount	Supply of Equipment Local Supply Ex-works Price (excluding VAT) Baht Unit Price	Supply of Equipment Local Supply Ex-works Price (excluding VAT) Baht Amount	Local Transportation, Construction and Installation (excluding VAT) Baht Unit Price	Local Transportation, Construction and Installation (excluding VAT) Baht Amount
1C7.3	Stub type CIII (500-4x1272 DQT90)	4	leg		XXXXX	XXXXX	57,900.00	231,600.00	6,170.00	24,680.00
1C8	Tower signs									
1C8.1	Aerial patrol signs	76	piece		XXXXX	XXXXX	included in installation work	included in installation work	2,900.00	220,400.00
1C8.2	Phasing signs (3 pieces per set)	18	set		XXXXX	XXXXX	included in installation work	included in installation work	6,200.00	111,600.00
1C8.3	Circuit name signs	2	piece		XXXXX	XXXXX	included in installation work	included in installation work	5,500.00	11,000.00
1C9	Additional tower work									
1C9.1	Additional galvanized steel work	1	ton		XXXXX	XXXXX	61,000.00	61,000.00	6,500.00	6,500.00
1C9.2	Additional paint with two coats of bituminous paint	10	sq. meter		XXXXX	XXXXX			2,200.00	22,000.00
Total Price for 1C							**Baht**	**603,949,800.00**	**Baht**	**64,722,940.00**

นางสุดารัตน์ ไชยพันธุ์
ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง
26 Jan 2022

อาสยา ช่างวิทยาการ
นางสาวอาสยา ช่างวิทยาการ
หจตส-ห.
21 ก.พ. 2565

MEDIUM COST FOR BID NO. TIPN-L-03

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
1D1	45°/45° V-string suspension Assembly 3 for four-bundled 1272 MCM ACSR/GA conductor (Excluding insulator)	894	set		XXXXX	XXXXX	33,000.00	29,502,000.00	included in stringing work	included in stringing work
1D2	45°/45° V-string suspension Assembly 8A for four-bundled 1272 MCM ACSR/GA conductor (Excluding insulator)	54	set		XXXXX	XXXXX	44,000.00	2,376,000.00	included in stringing work	included in stringing work
1D3	Deadend Assembly 13 for four-bundled 1272 MCM ACSR/GA conductor (Excluding insulator)	186	set		XXXXX	XXXXX	42,000.00	7,812,000.00	included in stringing work	included in stringing work
1D4	Deadend Assembly 14 for four-bundled 1272 MCM ACSR/GA conductor (Excluding insulator)	420	set		XXXXX	XXXXX	42,000.00	17,640,000.00	included in stringing work	included in stringing work
1D5	Deadend Assembly 15A for four-bundled 1272 MCM ACSR/GA conductor (Excluding insulator)	12	set		XXXXX	XXXXX	44,000.00	528,000.00	included in stringing work	included in stringing work
1D6	Jumper support Assembly 17 for four-bundled 1272 MCM ACSR/GA conductor (Excluding insulator)	351	set		XXXXX	XXXXX	24,000.00	8,424,000.00	included in stringing work	included in stringing work

นางสุดารัตน์ ไชยพันธุ์
ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง
26 Jan 2022

อาสยา ช่างวิทยาการ

นางสาวอาสยา ช่างวิทยาการ

หจตส-ห.

21 ก.พ. 2565

MEDIUM COST FOR BID NO. TIPN-L-03

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	Shield wire suspension (Insulated) Assembly 1 for 3/8" extra high strength galvanized steel wire (Excluding vibration damper and insulator)	116	set		XXXXX	XXXXX	2,400.00	278,400.00	included in stringing work	included in stringing work
1D8	Shield wire suspension (Grounded) Assembly 2 for 3/8" extra high strength galvanized steel wire (Excluding vibration damper and insulator)	42	set		XXXXX	XXXXX	1,800.00	75,600.00	included in stringing work	included in stringing work
1D9	Shield wire deadend (Insulated) Assembly 11 for 3/8" extra high strength galvanized steel wire (Excluding vibration damper and insulator)	80	set		XXXXX	XXXXX	4,400.00	352,000.00	included in stringing work	included in stringing work
1D10	Shield wire deadend (Grounded) Assembly 12 for 3/8" extra high strength galvanized steel wire (Excluding vibration damper and insulator)	27	set		XXXXX	XXXXX	1,200.00	32,400.00	included in stringing work	included in stringing work

นางสุดารัตน์ ไชยพันธุ์

ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง

26 Jan 2022

อาสยา ช่างวิทยาการ
นางสาวอาสยา ช่างวิทยาการ
หจตส-ห.
21 ก.พ. 2565

MEDIUM COST FOR BID NO. TIPN-L-03

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
1D11	Porcelain or glass insulator ANSI CLASS 52-8 (36,000 lbs) with corrosion proof type pin. In case of porcelain insulator the quantity of each color shall be : a.Brown glaze 57,495 discs b.Light grey glaze 4,758 discs	62253	disc	THB	900.00	56,027,700.00			included in stringing work	included in stringing work
1D12	Porcelain or glass insulator ANSI CLASS 52-11 (50,000 lbs) with corrosion proof type pin. In case of porcelain insulator the quantity of each color shall be : a.Brown glaze 30,300 discs b.Light grey glaze 2,424 discs	32724	disc	THB	1,100.00	35,996,400.00			included in stringing work	included in stringing work
1D13	Porcelain or glass insulator ANSI CLASS 52-8 (36,000 lbs) with corrosion proof type pin (to be used with item 1D9, in case of porcelain insulator the color shall be Brown glaze)	80	disc	THB	900.00	72,000.00			included in stringing work	included in stringing work

นางสุดารัตน์ ไชยพันธุ์
ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง
26 Jan 2022

อาสยา ช่างวิทยาการ
นางสาวอาสยา ช่างวิทยาการ
หจตส-ห.
21 ก.พ. 2565

MEDIUM COST FOR BID NO. TIPN-L-03

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
1D14	Insulator strain type ANSI CLASS 54-2 (to be used with item 1D7)	116	disc	THB	400.00	46,400.00			included in stringing work	included in stringing work
Total Price for 1D				**THB**		**92,142,500.00**	**Baht**	**67,020,400.00**	**Baht**	

นางสุดารัตน์ ไชยพันธุ์
ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง
26 Jan 2022

อสยา ช่างวิทยาการ
นางสาวอาสยา ช่างวิทยาการ
หจตส-ห.
21 ก.พ. 2565

MEDIUM COST FOR BID NO. TIPN-L-03

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
1E1	1272 MCM ACSR/GA conductor									
1E1.1	1272 MCM ACSR/GA Conductor , furnishing conductor for item 1E1.2 and 1E1.3 (to be supplied by EGAT, see Article F-3), approximately 76 kilometers 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, four-bundled conductor per phase, measured based on horizontal distance of line route from the tower type DQT60 at KM.76 to the deadend tower at Lamphun 3 Substation.	76	km		XXXXX	XXXXX	XXXXX	XXXXX	512,000.00	38,912,000.00
1E1.3	Installation of conductor, double circuit, 3 phase, four-bundled conductor per phase, between the deadend tower and take-off structure at Lamphun 3 Substation, approximately 0.2 kilometer in transmission line distance	lump sum	each		XXXXX	XXXXX	XXXXX	XXXXX	335,000.00	335,000.00

นางสุดารัตน์ ไชยพันธุ์
ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง
26 Jan 2022

นางสาวอาสยา ช่างวิทยาการ
หจตส-ห.
21 ก.พ. 2565

MEDIUM COST FOR BID NO. TIPN-L-03

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	Handling and transportation of empty returnable metal reel from the site to Bangkok and/or its vicinity, at the point designated by EGAT (See Article F-3 and F-4)	774	reel		XXXXX	XXXXX	XXXXX	XXXXX	4,000.00	3,096,000.00
1E3	3/8" nominal diameter, extra high strength galvanized steel wire, class A coating									
1E3.1	3/8" Extra high strength galvanized steel wire (Furnishing for item 1E3.2 and 1E3.3) based on linear length (Linear length = No.of shield wire x horizontal distance of line route + 1.5%)	78	km		XXXXX	XXXXX	30,000.00	2,340,000.00	included in stringing work	included in stringing work
1E3.2	Stringing of one shield wire by controlled tension method, measured based on horizontal distance of line route from the tower type DQT60 at KM.76 to the deadend tower at Lamphun 3 Substation.	76	km		XXXXX	XXXXX	XXXXX	XXXXX	24,000.00	1,824,000.00

นางสุดารัตน์ ไชยพันธุ์
ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง
26 Jan 2022

อาสยา ช่างวิทยาการ
นางสาวอาสยา ช่างวิทยาการ
หจตส-ห.
21 ก.พ. 2565

MEDIUM COST FOR BID NO. TIPN-L-03

Item No.	Description	Estimated Qty.	Unit	Currency	Supply of Equipment Foreign Supply CIF Thai Port Unit Price	Supply of Equipment Foreign Supply CIF Thai Port Amount	Supply of Equipment Local Supply Ex-works Price (excluding VAT) Baht Unit Price	Supply of Equipment Local Supply Ex-works Price (excluding VAT) Baht Amount	Local Transportation, Construction and Installation (excluding VAT) Baht Unit Price	Local Transportation, Construction and Installation (excluding VAT) Baht Amount
1E3.3	Installation of three shield wires between the deadend tower and take-off-structure at Lamphun 3 Substation, approximately 0.2 kilometer in transmission line distance	lump sum	each		XXXXX	XXXXX	XXXXX	XXXXX	24,000.00	24,000.00
Total Price for 1E							**Baht**	**2,340,000.00**	**Baht**	**44,191,000.00**

นางสุดารัตน์ ไชยพันธุ์
ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง
26 Jan 2022

อาสยา ช่างวิทยาการ
นางสาวอาสยา ช่างวิทยาการ
หจตส-ห.
21 ก.พ. 2565

MEDIUM COST FOR BID NO. TIPN-L-03

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
1F1	Full tension splices for 1272 MCM ACSR/GA conductor	312	set		XXXXX	XXXXX	1,400.00	436,800.00	included in stringing work	included in stringing work
1F2	Full tension splices for 3/8" extra high strength, galvanized steel shield wire	7	set		XXXXX	XXXXX	300.00	2,100.00	included in stringing work	included in stringing work
1F3	Spacer damper for four-bundled 1272 MCM ACSR/GA conductor (for double circuit, approx. 76 km in transmission line distance)	lump sum	each				18,240,000.00	18,240,000.00	included in stringing work	included in stringing work
1F4	Rigid spacer for four-bundled 1272 MCM ACSR/GA conductor (for jumper loop on double circuit transmission line system)	966	set		XXXXX	XXXXX	1,900.00	1,835,400.00	included in stringing work	included in stringing work
1F5	Rigid spacer for two-bundled 1272 MCM ACSR/GA conductor (for jumper loop on double circuit transmission line system)	612	set		XXXXX	XXXXX	600.00	367,200.00	included in stringing work	included in stringing work
1F6	Vibration damper for 3/8" extra high strength galvanized steel shield wire	209	set		XXXXX	XXXXX	600.00	125,400.00	included in stringing work	included in stringing work

นางสุดารัตน์ ไชยพันธุ์
ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง
26 Jan 2022

อาสยา ช่างวิทยาการ
นางสาวอาสยา ช่างวิทยาการ
หจตส-ห.
21 ก.พ. 2565

MEDIUM COST FOR BID NO. TIPN-L-03

Item No.	Description	Estimated Qty.	Unit	Currency	Supply of Equipment Foreign Supply CIF Thai Port		Supply of Equipment Local Supply Ex-works Price (excluding VAT) Baht		Local Transportation, Construction and Installation (excluding VAT) Baht	
					Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
1F7	Field test of spacer-damper for four-bundled 1272 MCM ACSR/GA conductor as per Article F-9b of the Specification No. L-500 kV	1	test		XXXXX	XXXXX	XXXXX	XXXXX	190,000.00	190,000.00
Total Price for 1F							**Baht**	**21,006,900.00**	**Baht**	**190,000.00**

นางสุดารัตน์ ไชยพันธุ์
ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง
26 Jan 2022

อาสยา ช่างวิทยาการ
นางสาวอาสยา ช่างวิทยาการ
หจตส-ห.
21 ก.พ. 2565

MEDIUM COST FOR BID NO. TIPN-L-03

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
	Tower grounding									
1G1	No.8 AWG dead soft galvanized steel wire	3200	m				50.00	160,000.00	20.00	64,000.00
1G2	No.2 AWG solid copper-clad steel wire	18600	m				150.00	2,790,000.00	20.00	372,000.00
1G3	Exothermic connector type "CS" for cable to steel surface	800	piece				150.00	120,000.00	70.00	56,000.00
1G4	Exothermic connector type "CR1" for parallel cable to ground rod	880	piece				280.00	246,400.00	80.00	70,400.00
1G5	Exothermic connector type "CR2" for perpendicular cable to ground rod	816	piece				230.00	187,680.00	80.00	65,280.00
1G6	Exothermic connector type "CC" for cable to cable	80	piece				130.00	10,400.00	70.00	5,600.00
1G7	1.6 cm. nominal diameter x 3.0 m. (5/8" diameter x 10') copper-covered steel standard ground rod	880	piece				700.00	616,000.00	140.00	123,200.00
1G8	1.6 cm. nominal diameter x 3.0 m. (5/8" diameter x 10') copper-covered steel sectional ground rod with coupling	20	piece				940.00	18,800.00	170.00	3,400.00

นางสุดารัตน์ ไชยพันธุ์
ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง
26 Jan 2022

อาสยา ช่างวิทยาการ
นางสาวอาสยา ช่างวิทยาการ
หจตส-ห.
21 ก.พ. 2565

MEDIUM COST FOR BID NO. TIPN-L-03

Item No.	Description	Estimated Qty.	Unit	Currency	Supply of Equipment Foreign Supply CIF Thai Port Unit Price	Supply of Equipment Foreign Supply CIF Thai Port Amount	Supply of Equipment Local Supply Ex-works Price (excluding VAT) Baht Unit Price	Supply of Equipment Local Supply Ex-works Price (excluding VAT) Baht Amount	Local Transportation, Construction and Installation (excluding VAT) Baht Unit Price	Local Transportation, Construction and Installation (excluding VAT) Baht Amount
1G9	Fence/metal object grounding (to be performed at location directed by EGAT) 1.6 cm. nominal diameter x 3.0 m. (5/8" diameter x 10') galvanized steel standard ground rod	6	piece				550.00	3,300.00	130.00	780.00
1G10	Galvanized double saddle steel ground rod clamp	6	set				440.00	2,640.00	80.00	480.00
1G11	8 mm.(5/16") 7-strand galvanized steel ground wire	30	m				80.00	2,400.00	50.00	1,500.00
1G12	Galvanized steel crimpet	10	set				70.00	700.00	50.00	500.00
1G13	19 mm. diameter bronze split bolt	6	set				490.00	2,940.00	80.00	480.00
1G14	9.5 mm. (3/8") galvanized steel staples	60	piece				40.00	2,400.00	30.00	1,800.00
Total Price for 1G							**Baht**	**4,163,660.00**	**Baht**	**765,420.00**

นางสุดารัตน์ ไชยพันธุ์
ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง
26 Jan 2022

อสรา ช่างวิทยาการ
นางสาวอาสยา ช่างวิทยาการ
หจตส-ห.
21 ก.พ. 2565

MEDIUM COST FOR BID NO. TIPN-L-03

Item No.	Description	Estimated Qty.	Unit	Currency	Supply of Equipment Foreign Supply CIF Thai Port Unit Price	Supply of Equipment Foreign Supply CIF Thai Port Amount	Supply of Equipment Local Supply Ex-works Price (excluding VAT) Baht Unit Price	Supply of Equipment Local Supply Ex-works Price (excluding VAT) Baht Amount	Local Transportation, Construction and Installation (excluding VAT) Baht Unit Price	Local Transportation, Construction and Installation (excluding VAT) Baht Amount
1H1	Composite overhead ground wire with36 core optical fibers (13.5 MM) (OPGW) (referred section F-4.3)									
1H1.1	13.5mm dia. Composite Overhead Ground Wire with Optical Fiber (OPGW)	lump sum	lump sum	THB	10,032,000.00	10,032,000.00			included in stringing work	included in stringing work
1H1.2	Stringing by controlled tension method, one OPGW measured based on horizontal distance of line route from KM.75 to Lamphun 3 substation (LN3 S/S)	76	km		XXXXX	XXXXX	XXXXX	XXXXX	included in stringing work	included in stringing work
1H2	36-core optical fiber cable, with black and color strip(s) outer sheath, to be used for connecting joint boxes on the tower	lump sum	lump sum				4,180,000.00	4,180,000.00	included in stringing work	included in stringing work
1H3	Warning signs requires as shown on Drawing NoTP-150.1	lump sum	lump sum		XXXXX	XXXXX			included in stringing work	included in stringing work
1H4	Joint boxes for optical fiber cable									
1H4.1	2-way joint box with accessories for two OPGW cables	lump sum	lump sum						5,792,000.00	5,792,000.00
1H4.2	2-way joint box with insulator and accessories for two OPGW cables	lump sum	lump sum							
1H4.3	2-way joint box with insulator and accessories for OPGW cable and non-metallic optical fiber cable	lump sum	lump sum							

นางสุดารัตน์ ไชยพันธุ์
ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง
26 Jan 2022

ดสร ช่างวิทยาการ
นางสาวอาสยา ช่างวิทยาการ
หจตส-ห.
21 ก.พ. 2565

MEDIUM COST FOR BID NO. TIPN-L-03

Item No.	Description	Estimated Qty.	Unit	Currency	Supply of Equipment Foreign Supply CIF Thai Port		Supply of Equipment Local Supply Ex-works Price (excluding VAT) Baht		Local Transportation, Construction and Installation (excluding VAT) Baht	
					Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
1H4.4	2-way joint box with insulator and accessories for OPGW and 36 core non-metallic optical fiber cable at take-off structure (LN3 S/S)	1	set							
1H4.5	2-way joint box with accessories for OPGW cable and36 core non-metallic optical fiber cable on the tower located about 2 kilometers apart from LN3 S/S	1	set							
1H4.6	2-way joint box with insulator and accessories for OPGW cable and non-metallic optical fiber cable at KM75	1	set							
1H5	Hardware assembly for OPGW									
1H5.1	OPGW suspension (Insulated) assembly 21 with armor rods (excluding insulator and vibration damper)	lump sum	lump sum		XXXXX	XXXXX				
1H5.2	OPGW suspension (Grounded) assembly 22 with armor rods (excluding vibration damper)	lump sum	lump sum		XXXXX	XXXXX				
1H5.3	OPGW tension (Insulated) assembly 23 with armor rods and arcing horns (excluding insulator and vibration damper)	lump sum	lump sum		XXXXX	XXXXX				
1H5.4	OPGW tension (Grounded) assembly 24 with armor rods (excluding vibration damper)	lump sum	lump sum		XXXXX	XXXXX				

นางสุดารัตน์ ไชยพันธุ์
ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง
26 Jan 2022

อาสยา ช่างวิทยาการ
นางสาวอาสยา ช่างวิทยาการ
หจตส-ห.
21 ก.พ. 2565

MEDIUM COST FOR BID NO. TIPN-L-03

Item No.	Description	Estimated Qty.	Unit	Currency	Supply of Equipment Foreign Supply CIF Thai Port Unit Price	Supply of Equipment Foreign Supply CIF Thai Port Amount	Supply of Equipment Local Supply Ex-works Price (excluding VAT) Baht Unit Price	Supply of Equipment Local Supply Ex-works Price (excluding VAT) Baht Amount	Local Transportation, Construction and Installation (excluding VAT) Baht Unit Price	Local Transportation, Construction and Installation (excluding VAT) Baht Amount
1H5.5	OPGW tension assembly with accessories and insulator to be used at take-off structure (excluding vibration damper) (LN3 S/S)	1	set		XXXXX	XXXXX				
1H6	Line accessories									
1H6.1	Vibration damper assembly with accessories	lump sum	lump sum		XXXXX	XXXXX				
1H6.2	Parallel groove clamps	lump sum	lump sum		XXXXX	XXXXX				
1H6.3	Grounding clamps	lump sum	lump sum							
1H6.4	1-wire cleat without insulator for OPGW down-lead to joint box	lump sum	lump sum							
1H6.5	2-wire cleats without insulator for OPGW down-lead to joint box	lump sum	lump sum							
1H6.6	6-wire cleats without insulator for OPGW down-lead to joint box	lump sum	lump sum							
1H6.7	1-wire cleat with insulator for OPGW down-lead to joint box	lump sum	lump sum							
1H6.8	2-wire cleats with insulator for OPGW down-lead to joint box	lump sum	lump sum							
1H6.9	6-wire cleats with insulator for OPGW down-lead to joint box	lump sum	lump sum							
1H6.10	Porcelain or glass insulator ANSI CLASS52-8 (36,000 lbs) with corrosion proof type pin	lump sum	lump sum							

นางสุดารัตน์ ไชยพันธุ์
ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง
26 Jan 2022

อสยา ช่างวิทยาการ
นางสาวอาสยา ช่างวิทยาการ
หจตส-ห.
21 ก.พ. 2565

MEDIUM COST FOR BID NO. TIPN-L-03

Item No.	Description	Estimated Qty.	Unit	Currency	Supply of Equipment Foreign Supply CIF Thai Port		Supply of Equipment Local Supply Ex-works Price (excluding VAT) Baht		Local Transportation, Construction and Installation (excluding VAT) Baht	
					Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
1H6.11	Insulator strain type ANSI CLASS54-2	lump sum	lump sum							
1H6.12	3/8" Extra high strength galvanized steel wire for grounding OPGW to towers	lump sum	lump sum		XXXXX	XXXXX				
1H7	Field testing for optical fiber	lump sum	lump sum		XXXXX	XXXXX	XXXXX	XXXXX	60,000.00	60,000.00
Total Price for 1H				**THB**		**10,032,000.00**	**Baht**	**4,180,000.00**	**Baht**	**5,852,000.00**

นางสุดารัตน์ ไชยพันธุ์
ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง
26 Jan 2022

นางสาวอาสยา ช่างวิทยาการ
หจตส-ห.
21 ก.พ. 2565

MEDIUM COST FOR BID NO. TIPN-L-03

Item No.	Description	Estimated Qty.	Unit	Currency	Foreign Currency		Local Currency (excluding VAT) Baht	
					Unit Price	Amount	Unit Price	Amount
1N1	Corona and RIV tests of complete conductor, insulator and hardware assemblies in accordance with Article D-7a(1) of Specification No.L-500 kV							
1N1.1	For 45º/45º V-string suspension Assembly 3	1	test	THB	240,000.00	240,000.00		
1N1.2	For 45º/45º V-string suspension Assembly 8A	1	test	THB	240,000.00	240,000.00		
1N1.3	For Conductor deadend Assembly 13	1	test	THB	240,000.00	240,000.00		
1N1.4	For Conductor deadend Assembly 14	1	test	THB	240,000.00	240,000.00		
1N1.5	For Conductor deadend Assembly 15A	1	test	THB	240,000.00	240,000.00		
1N1.6	For Jumper support Assembly 17	1	test	THB	240,000.00	240,000.00		
1N2	Power arc test of insulator strings in accordance with Article D-7c(4) of Specification No.L-500 kV							
1N2.1	For insulator ANSI Class 52-8 (36,000 lbs)	1	test	THB	450,000.00	450,000.00		
1N2.2	For insulator ANSI Class 52-11 (50,000 lbs)	1	test	THB	450,000.00	450,000.00		
1N3	Thermal-mechanical performance test in accordance with Article D - 7c(5) of Specification No.L-500 kV							
1N3.1	For insulator ANSI Class 52-8 (36,000 lbs)	1	test	THB	100,000.00	100,000.00		
1N3.2	For insulator ANSI Class 52-11 (50,000 lbs)	1	test	THB	100,000.00	100,000.00		

นางสุดารัตน์ ไชยพันธุ์
ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง
26 Jan 2022

อสยา ช่างวิทยาการ
นางสาวอาสยา ช่างวิทยาการ
หจตส-ห.
21 ก.พ. 2565

MEDIUM COST FOR BID NO. TIPN-L-03

Item No.	Description	Estimated Qty.	Unit	Currency	Foreign Currency		Local Currency (excluding VAT) Baht	
					Unit Price	Amount	Unit Price	Amount
1N4	Steep wave front impulse test in accordance with Article D-7c(6) of Specification No. L-500 kV							
1N4.1	For insulator ANSI Class 52-8 (36,000 lbs)	1	test	THB	150,000.00	150,000.00		
1N4.2	For insulator ANSI Class 52-11 (50,000 lbs)	1	test	THB	150,000.00	150,000.00		
Total Price for 1N				**THB**		**2,840,000.00**	**Baht**	

นางสุดารัตน์ ไชยพันธุ์
ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง
26 Jan 2022

อาสยา ช่างวิทยาการ
นางสาวอาสยา ช่างวิทยาการ
หจตส-ห.
21 ก.พ. 2565

MEDIUM COST FOR BID NO. TIPN-L-03

Item No.	Description	Estimated Qty.	Unit	Local Transportation, Construction and Installation (excluding VAT) Baht	
				Unit Price	Amount
1O1	Facilities and service of four-wheel-driven, four doors vehicles, at least one ton capacity, 2000 cc. nominal, gasoline engine or 2500 cc. Nominal diesel engine, equipped with air-condition. The vehicles shall be in good condition, which shall be approved by EGAT. In case used Vehicles are proposed, the used period shall not exceed two years. (Refer to Article G-6. Housing and Other Facilities.)	96	car-month	50,000.00	4,800,000.00
Total Price for 1O				**Baht**	**4,800,000.00**

นางสุดารัตน์ ไชยพันธุ์
ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง
26 Jan 2022

Important Information

for

Invitation to Bid No. TIPN-L-03

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:

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

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

Article A-4. Eligibility of Bidders : Technical Requirements

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

Article E-16. Inspection and Tests

Terms and conditions regarding inspection and tests 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 G-3. <u>Safety Program</u>

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

DATA SHEET

for

Invitation to Bid No. TIPN-L-03

(Two-envelope)

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

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

   The following requirement shall be added to item I.:

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

2. Article B-2. Bid Prices

   The price for the dismantled Equipment is not applicable in this invitation to bid.

3. Article B-3. Bid Security

   The amount of bid security shall be USD 2,006,540.- or THB 68,000,000.-.

4. Article B-4. Validity of Bids

   The validity of the bid shall be for three hundred (300) Days from the date specified for opening of technical proposals.

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

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

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

6. Article B-12. Evaluation and Comparison of Bids

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

Anti-Corruption Compliance Checklist
(Consortium)

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

Project : .....

State Agency: Electricity Generating Authority of Thailand

Member No. ... of the consortium:

.....

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

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

Signed

_____

(Name of Bidder)

(Authorized person)

Stamp company seal (if any)

Anti-Corruption Compliance Checklist

(Individual Company / Joint Venture)

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

Project : .....

State Agency: Electricity Generating Authority of Thailand

Bidder Name : .....

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

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

Signed

_____

(Name of Bidder)

(Authorized person)

Stamp company seal (if any)

ELECTRICITY GENERATING AUTHORITY OF THAILAND

Nonthaburi
Thailand

INVITATION TO BID NO. TIPN-L-03

SUPPLY AND CONSTRUCTION OF TRANSMISSION LINE 500 kV MAE MOH 3 – LAMPHUN 3 (FROM KM.76 TO LAMPHUN 3)

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

(TWO-ENVELOPE)

Invitation

The Electricity Generating Authority of Thailand (EGAT) hereby invites sealed bids for Supply and Construction of Transmission Line 500 kV Mae Moh 3 – Lamphun 3 (from KM.76 to Lamphun 3) under Transmission System Improvement Project in Upper Northern Region to Enhance System Security in accordance with the Terms and Conditions, Technical Specifications and Drawings described in these Bidding Documents.

Work Description

The transmission line to be supplied and constructed under this Invitation is 500 kV, 50 Hz, 3 phase, quad-bundled conductor per phase on double circuit self-supporting lattice steel towers extending from KM.76 to Lamphun 3 Substation, having a distance of approximately 76 kilometers in length as the second section of the 500 kV Mae Moh 3 – Lamphun 3 Transmission Line in the northern region of Thailand with a total distance of approximately 152 kilometers. This transmission line will be located on the new right-of-way with 30 meters in width on each side of the center line of the transmission line.

Please note that the first section of the whole 500 kV Mae Moh 3 – Lamphun 3 Transmission Line to be constructed from Mae Moh 3 Substation to KM. 76 and the work at the connection point as shown in the Drawing No. T05-001: Interfacing Work will be undertaken under Invitation to Bid No. TIPN-L-04.

The conductor to be employed under this Invitation 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, extra 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.

All types of steel towers and foundations have already been designed by EGAT. Furthermore, the fabrication / erection drawings as well as stub & setting dimensions and details & bar bending schedule of foundations for all tower types will be prepared and provided to the Contractor by EGAT.

However, the Contractor shall also note that the detailed fabrication / erection drawings for some tower leg extensions as well as stub & setting dimensions for some tower types may not be available or some modifications to EGAT's furnished details & bar bending schedule of foundations may be required. In such case, the Contractor shall perform and provide these drawings for EGAT's approval.

Detailed fabrication / erection drawings of steel towers provided by EGAT will be furnished to the Contractor after confirmation of Letter of Award of Contract. The Contractor shall carefully scrutinize EGAT's furnished detailed fabrication / erection drawings, make minor modifications as necessary and submit all revised drawings to EGAT for review and approval. 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.

Reproducible drawings and CD-ROM of EGAT's furnished detailed fabrication / erection drawings of steel towers will not be required. The approved drawings, reproducible drawings and CD-ROM of these steel towers required to be submitted for this Contract shall therefore be bill of material. However, in case the Contractor makes modifications to EGAT's furnished detailed fabrication / erection drawings of steel towers or details & bar bending schedule of foundations or prepares drawings of which leg extensions and/or stub & setting dimensions are not available, such drawings shall be submitted for EGAT's approval and therefore reproducible drawings and CD-ROM of these drawings shall be required.

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

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

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 shall be a purchaser of the bidding documents from EGAT. For a joint venture or consortium, only one (1) member of the joint venture or consortium is required to purchase the bidding documents.

In the case where the Bidder is not the purchaser of the bidding documents, the purchaser shall notify EGAT of the name of the Bidder in writing prior to the bid opening.

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.

Eligibility of Bidders: Technical Requirements

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

a. The Bidder shall be named in EGAT Accepted Bidders List for Supply and Construction of Transmission Line : 500 kV Transmission Line with Four-bundled Conductor. The said Accepted List is attached at the end of Section A. Invitation to Bid.

b. For Insulator for conductor, the manufacturer shall be named in EGAT Accepted Manufacturers List for Insulator Fog Type and/or Standard Type attached at the end of Section A. Invitation to Bid.

OR

In case EGAT Accepted Manufacturers List is not attached herewith, the manufacturer shall have the qualifications as follows :

1) Insulator for conductor manufacturer shall be a regular manufacturer of excellent reputation having significant technical knowledge and at least three (3) years experience in the design, manufacture and testing of the Equipment, having manufacturing capacity available to perform the Work properly and expeditiously within the time specified, and having satisfactory past experience.

2) Insulator for conductor manufacturer shall have a record of three (3) consecutive years of successful operation/use of at least 100,000 units of insulator ANSI Class 52-8 or similar and at least 20,000 units of insulator ANSI Class 52-11 or similar in transmission line(s) operated in the transmission network electric utility in overseas country (not his own country) at a voltage level of 400 kV or higher during the last ten years.

c. Proposing towers, conductor, hardware assemblies and line accessories for conductor, rigid spacers 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) Rigid spacer for conductor manufacturer being an eligible local firm having set up a plant in Thailand

4) Spacer dampers for conductor manufacturer having a record of five (5) consecutive years of successful operation/use of the same or similar type as those required under this Invitation and used in multi but not less than four-bundled conductor transmission lines operated at a voltage level of 400 kV or higher having accumulated circuit distance of not less than 200 kilometers

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

6) For proposed conductor, according to the Industrial Product Standards Act B.E. 2511 which stipulates that the conductor is an industrial product that is required to conform with the Thai Industrial Standards – TIS 85-2548;

   In case of locally supplied conductor, the manufacturer of the conductor shall receive a license from the Industrial Product Standards Council, Ministry of Industry, for manufacture of the industrial product and use of a standard mark, and

   In case of foreign supplied conductor, the conductor shall be imported by a person having received a license from the Industrial Product Standards Council, Ministry of Industry, for importation of the industrial product.

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 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 with 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.

<u>This eligibility will not be applicable for any Equipment which is not required under this Invitation</u>.

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 shield wire, insulators for shield wire and for OPGW, hardware assemblies and line accessories for shield 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 shield wire (zinc-coated extra high strength steel wire), hardware assemblies and line accessories for shield wire and for OPGW, and non-metallic optical fiber cable (OFC) being an eligible local firm having set up a plant in Thailand

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 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 with 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 this Bid.

<u>This eligibility will not be applicable for any Equipment which is not required under this Invitation</u>.

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.

****

EGAT Accepted Bidders List

for Supply and Construction of Transmission Line

500 kV Transmission Line with Four-bundled Conductor

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

Bid No.TIPN-L-03

เอกสารควบคุม
รับรองสำเนาโดย ทพอ-ส. กสส-ส. อวส.
ก่อนนำไปใช้งาน
ต้องตรวจสอบ Revision ล่าสุด
ฝ่ายวิศวกรรมระบบส่ง กฟผ.
17 Nov 2021

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

Bid No.TIPNI-L-03

เอกสารควบคุม
รับรองสำเนาโดย ทพอ-ส. กสส-ส. อวส.
ก่อนนำไปใช้งาน
ต้องตรวจสอบ Revision ล่าสุด
ฝ่ายวิศวกรรมระบบส่ง กฟผ.
17 Nov 2021

No.	Bidder/Country
27	HS Consortium (Hydro Engineering Co., Ltd. / Thailand and Sinotec Co., Ltd. / China)
28	SRI U-THONG & LPS CONSORTIUM (Sri U-Thong Limited / Thailand and Loxley Power Systems Co., Ltd. / Thailand)
29	Benyapha Power Line Co., Ltd. / Thailand
30	Joint Venture of STC and BENYAPHA (Sinohydro (Thailand) Co., Ltd. / Thailand and Benyapha Powerline Co., Ltd. / Thailand)
31	Demco Public Company Limited / Thailand
32	Joint Venture of STC-BENYAPHA-NEPC (Sinohydro (Thailand) Co., Ltd. / Thailand, Benyapha Powerline Co., Ltd. / Thailand and NEPC Power Construction Co., Ltd. / Thailand)
33	Consortium of Jiangsu Zhongtian Technology Co., Ltd. (ZTT), PNK Transmission Line Co., Ltd. (PNK) and China National Electric Engineering Co., Ltd. (CNEEC) (Jiangsu Zhongtian Technology Co., Ltd. (ZTT) / China and PNK Transmission Line Co., Ltd. (PNK) / Thailand and China National Electric Engineering Co., Ltd. (CNEEC) / China)
34	CONSORTIUM OF TSEC (THAILAND) CO., LTD. AND SRICHONLATHORN CO., LTD. (TSEC (THAILAND) CO., LTD. / Thailand and SRICHONLATHORN CO., LTD. / Thailand)
35	Sinohydro (Thailand) Co., Ltd. / Thailand
36	Teda Company Limited / Thailand
37	CHC ENGINEERING CO., LTD. / Thailand
38	Joint Venture of TBNP (TBEA CO.,LTD. / China and NAPAT POWER CO., LTD. / Thailand)
39	Tata Projects Limited / India
40	XIAN ELECTRIC ENGINEERING CO., LTD. / China

Bid No.TIPN-L-03

Note:

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

เอกสารควบคุม
รับรองสำเนาโดย ทพอ-ส. กสส-ส. อวส.
ก่อนนำไปใช้งาน
ต้องตรวจสอบ Revision ล่าสุด
ฝ่ายวิศวกรรมระบบส่ง กฟผ.
17 Nov 2021

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

Bid No.TIPN-L-03

เอกสารควบคุม
รับรองสำเนาโดย หพอ-ส. กสส-ส. อวส.
ก่อนนำไปใช้งาน
ต้องตรวจสอบ Revision ล่าสุด
ฝ่ายวิศวกรรมระบบส่ง กฟผ.
12 Jan 2022

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)

Bid No. TIPN-L-03

Mosdorfer (Thailand) Co., Ltd.

เอกสารควบคุม
รับรองสำเนาโดย หพอ-ส. กสส-ส. ฝวส.
ก่อนนำไปใช้งาน
ต้องตรวจสอบ Revision ล่าสุด
ฝ่ายวิศวกรรมระบบส่ง กฟผ.
12 Jan 2022

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

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

2. Hardware assemblies and line accessories (except damper) for overhead ground wire and OPGW

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

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

3) OVERHEAD GROUND WIRE

Thai Wire Products Public Company Limited

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

USHA Siam Steel Industries Public Company Limited

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

Charoong Thai Wire & Cable Public Company Limited

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

Bid No.TIPN-L-03

4) GROUNDING MATERIALS

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

100/3 Thasabansongkrow Road
Ladyao, Jatujak
Bangkok 10900
Tel : 0 2954 3455
Fax : 0 2591 7891

เอกสารควบคุม
รับรองสำเนาโดย หพอ-ส. กสส-ส. อวส.
ก่อนนำไปใช้งาน
ต้องตรวจสอบ Revision ล่าสุด
ฝ่ายวิศวกรรมระบบส่ง กฟผ.
12 Jan 2022

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

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

Thai-Yazaki Electric Wire Co., Ltd.

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

Venine Cable Electric Wire Company Limited

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

เอกสารควบคุม
รับรองสำเนาโดย ทพอ-ส. กสส-ส. อวส.
ก่อนนำไปใช้งาน
ต้องตรวจสอบ Revision ล่าสุด
ฝ่ายวิศวกรรมระบบส่ง กฟผ.
12 Jan 2022

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)

Bid No TIPN-L-03

6) NON-METALLIC OPTICAL FIBER CABLE (OFC)

Thai China Fiber Optics Co., Ltd.

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

Thai Fiber Optics Co., Ltd.

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

HBC Telecom Co., Ltd.

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

Siam Fiber Optics Co., Ltd.

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

Bid No TIPN-L-03

เอกสารควบคุม
รับรองสำเนาโดย หพอ-ส. กสส-ส. อวส.
ก่อนนำไปใช้งาน
ต้องตรวจสอบ Revision ล่าสุด
ฝ่ายวิศวกรรมระบบส่ง กฟผ.
12 Jan 2022

SECTION H
ATTACHMENTS

Attachment No. 1 : List of Equipment to be Furnished by EGAT

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.

Item	Description	Estimated Quantity
1.	1272 MCM ACSR/GA conductor as per Schedule 1E, Item 1E1.1	1,857.60 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 Specification No. L-500 kV, Section B : Conductor