

# 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) Fill-out the Registration Form and upload the proof of payment via the link provided in <https://www4.egat.co.th/fprocurement/biddingeng>

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) The registration will be deemed complete only upon successful processing of the payment and confirmation of funds received.
- 3) 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.

\*\*\*\*\*



## Invitation to Bid No. BBS1-L-01

### Supply and Construction of Transmission Line 230 kV Bhumibol 2 – Bhumibol Transmission System for Hydro-Floating Solar Hybrid Project Bhumibol Dam Unit 1

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. The project is on the process of the Government's Approval. The Bid may be cancelled in case the project is not approved.

**Place of Construction** : 230 kV Bhumibol 2 – Bhumibol Transmission Line (approx. 5.6 kilometers)

**Medium Cost (including Value Added Tax and other expenses)** : THB 119,300,000.-

#### 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 February 16, 2026 to March 20, 2026 at USD 100.- or THB 3,000.- per copy, non-refundable.

Please find more details for online purchasing process at <https://www4.egat.co.th/fprocurement/biddingeng> or contact for further information at telephone no. 66 2436 0345 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 137 Building at EGAT's Head Office, Nonthaburi during 9:00 hrs. to 10:00 hrs., Bangkok Standard Time, April 22, 2026 and will be opened publicly at 10:00 hrs.

ELECTRICITY GENERATING AUTHORITY OF THAILAND

February 16, 2026

(Miss Wallapa Chewadhnakorlku)

Chief, Procurement Department – Transmission System Segment



## ประกาศการไฟฟ้าฝ่ายผลิตแห่งประเทศไทย

### เรื่อง ประกวดราคาจ้าง เลขที่ BBS1-L-01

การไฟฟ้าฝ่ายผลิตแห่งประเทศไทย (กฟผ.) มีความประสงค์จะจัดซื้อและจ้างก่อสร้างสายส่งไฟฟ้าแรงสูง 230 KV เชื่อมภูมิภาค 2 – เชื่อมภูมิภาค สำหรับระบบส่งไฟฟ้าสำหรับโครงการโรงไฟฟ้าพลังงานแสงอาทิตย์ทุ่นลอยน้ำร่วมกับโรงไฟฟ้าพลังน้ำเชื่อมภูมิภาค ชุดที่ 1 โดยทำสัญญาแบบปรับราคาได้ (ค่า k) โดยใช้ประมาณ กฟผ. ทั้งนี้ โครงการอยู่ระหว่างการขออนุมัติจากคณะรัฐมนตรี การจัดหาครั้งนี้จะไม่ผูกพัน กฟผ. หากโครงการไม่ได้รับอนุมัติ

**สถานที่ก่อสร้าง :** สายส่งไฟฟ้าแรงสูง 230 KV เชื่อมภูมิภาค 2 - เชื่อมภูมิภาค (ระยะทางประมาณ 5.6 กิโลเมตร)

**ราคากลาง (รวมภาษีมูลค่าเพิ่มและค่าใช้จ่ายอื่นๆ) :** 119,300,000.- บาท

#### คุณสมบัติของผู้เสนอราคา

1. ต้องเป็นนิติบุคคลผู้มีอาชีพรับจ้างตามประกวดราคาจ้างดังกล่าว และต้องไม่เป็นผู้ทำงานซึ่งปลัดกระทรวงการคลังได้แจ้งเวียนชื่อไว้ หรือต้องไม่เป็นผู้ที่ กฟผ. ห้ามติดต่อหรือห้ามเข้าเสนอราคา หรือต้องไม่เป็นผู้ที่ได้รับผลของการสั่งให้นิติบุคคลหรือบุคคลอื่นเป็นผู้ทำงานตามคำสั่ง กฟผ.
2. ต้องเป็นผู้มีผลประโยชน์ร่วมกันกับผู้เสนอราคารายอื่น 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. ต้องไม่เป็นผู้ได้รับเอกสิทธิ์หรือความคุ้มกัน ซึ่งอาจปฏิเสธไม่ยอมขึ้นศาลไทย เว้นแต่รัฐบาลของผู้เสนอราคาได้มีคำสั่งให้ละสิทธิ์และความคุ้มกันเช่นนั้น
5. ผู้ประสงค์เข้าประกวดราคาในนามของกิจการร่วมค้าหรือกิจการร่วม (Joint Venture or Consortium) จะต้องดำเนินการทุกขั้นตอนของการประกวดราคา ในนามของกิจการร่วมค้าหรือกิจการร่วม ตั้งแต่การเสนอราคาจนถึงสิ้นสุดข้อผูกพันกับ กฟผ.

#### การขายเอกสารประกวดราคา

ผู้สนใจติดต่อซื้อเอกสารประกวดราคา ในราคาชุดละ 3,000.- บาท ในวันทำการระหว่างเวลา 08:00 น. ถึง 15:00 น. ตั้งแต่วันที่ 16 กุมภาพันธ์ 2569 ถึงวันที่ 20 มีนาคม 2569 ทั้งนี้ สามารถดูรายละเอียดการซื้อเอกสารประกวดราคาได้ที่เว็บไซต์ <http://www4.egat.co.th/fprocurement/biddingeng> หรือสอบถามข้อมูลเพิ่มเติมได้ทางโทรศัพท์ หมายเลข 0 2436 60345 หรืออีเมล [procurement.tse@egat.co.th](mailto:procurement.tse@egat.co.th)

## การยื่นซองประกวดราคา

กำหนดยื่นซองประกวดราคา ในวันที่ 22 เมษายน 2569 เวลา 09:00 น. ถึง 10:00 น. และเปิดซองประกวดราคา เวลา 10:00 น. ณ ห้องประกวดราคา ชั้น 1 อาคาร ท.137 การไฟฟ้าฝ่ายผลิตแห่งประเทศไทย เชียงสะพานพระราม 7 จังหวัดนนทบุรี

ประกาศ ณ วันที่ 16 กุมภาพันธ์ 2569



(นางสาววัลลภา ชีวธนากรณกุล)

หัวหน้ากองจัดซื้อจัดจ้างสายงานระบบส่ง

**ตารางแสดงวงเงินงบประมาณที่ได้รับจัดสรรและราคากลาง(ราคาอ้างอิง)  
ในการจัดซื้อจัดจ้างที่มีใช้งานก่อสร้าง**

**1. ชื่อโครงการ** Bid No. BBS1-L-01

การจัดซื้อและจ้างก่อสร้างสายส่ง 230 kV เชื้อนภูมิพล 2 – เชื้อนภูมิพล  
ระบบส่งไฟฟ้าสำหรับโครงการโรงไฟฟ้าพลังงานแสงอาทิตย์ทุ่นลอยน้ำร่วมกับโรงไฟฟ้าพลังน้ำเชื้อนภูมิพล ชุดที่ 1  
/หน่วยงานเจ้าของโครงการ ฝ่ายแผนงานและโครงการระบบส่ง การไฟฟ้าฝ่ายผลิตแห่งประเทศไทย

**2. วงเงินงบประมาณที่ได้รับจัดสรร**

ระบบส่งไฟฟ้าสำหรับโครงการโรงไฟฟ้าพลังงานแสงอาทิตย์ทุ่นลอยน้ำร่วมกับโรงไฟฟ้าพลังน้ำเชื้อนภูมิพล ชุดที่ 1  
งบประมาณ 1,195.4 ล้านบาท

**3. วันที่กำหนดราคากลาง** 12 ธันวาคม 2568 (วันที่ อวส. อนุมัติ)

ราคารวมภาษีมูลค่าเพิ่มและค่าใช้จ่ายอื่นๆ เป็นเงิน 119,300,000.00 บาท **ราคา/หน่วย** ตามเอกสารแนบ

**4. แหล่งที่มาของราคากลาง**

หลักเกณฑ์การกำหนดราคากลางการจัดซื้อและจัดจ้างงานก่อสร้างระบบส่งไฟฟ้าของสายงานพัฒนาระบบส่ง

**5. รายชื่อเจ้าหน้าที่ผู้กำหนดราคากลาง**

- |                              |                       |
|------------------------------|-----------------------|
| 5.1 นายสมปอง บวรธีระกิจชัย   | นวส-วช., กวสส-ร.      |
| 5.2 นางสาวสิรินยา ต้นสัจจา   | ทปส-ร., กวสส-ร.       |
| 5.3 นายธรรกานต์ นิโครวนจำรัส | วศ.5, ทปส-ร., กวสส-ร. |

หมายเหตุ ค่าใช้จ่ายอื่นๆ ได้แก่ ค่าใช้จ่ายที่ กฟผ. ต้องจ่ายตามวิธีการพิจารณาเปรียบเทียบราคาที่กำหนดไว้ในเอกสารประกวดราคา เช่น อกรักษาเข้า เป็นต้น

**DETAILS OF MEDIUM COST FOR BID NO. BBS1-L-01****230 KV BHUMIBOL 2 - BHUMIBOL (5.6 KM)**

Description	Total (THB)
1A : PRELIMINARY WORK	462,600.00
1B : TOWER FOUNDATIONS	11,488,898.00
1C : TOWERS	21,335,643.37
1D : INSULATOR STRING AND OVERHEAD GROUND WIRE ASSEMBLIES	8,632,120.00
1E : CONDUCTOR AND OVERHEAD GROUND WIRE	62,424,200.00
1F : LINE ACCESSORIES	1,616,400.00
1G : GROUNDING MATERIALS	226,400.00
1H : OPTICAL FIBER AND LINE ACCESSORIES	2,395,993.60
1N : TEST OF EQUIPMENT	418,500.00
1O : SUPPLY OF SERVICE OF VEHICLES	1,600,000.00
1P : SUPPLY OF SPARE EQUIPMENT	893,010.00
<b>Total price for Schedule 1 (After 1st adjusted)</b>	<b>111,493,764.97</b>

<b>Total price for All Schedule (After 1st adjusted)</b>	<b>111,493,764.97</b>
<b>Adjusted Price (Import Duty &amp; Tax + VAT)</b>	<b>7,804,563.54</b>
<b>Total Price for All Schedule (All factor included + Import duty &amp; Tax + VAT)</b>	<b>119,298,328.51</b>

<b>MEDIUM COST OF BID NO. BBS1-L-01</b>	<b>119,300,000.00</b>
---	-----------------------

  
 นายสมชัย เจริญศรีเกษม  
 ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง  
 12 Dec 2025

INVITATION TO BID NO. BBS1-L-01  
 TOTAL PRICE FOR SCHEDULE NO. 1  
 230 kV BHUMIBOL 2 - BHUMIBOL  
 Line Length 5.6 KM.

SUPPLY AND CONSTRUCTION OF TRANSMISSION LINE 230 KV BHUMIBOL 2 - BHUMIBOL  
 TRANSMISSION SYSTEM FOR HYDRO-FLOATING SOLAR HYBRID PROJECT BHUMIBOL DAM UNIT 1

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					
1A : PRELIMINARY WORK							462,600.00	
1B : TOWER FOUNDATIONS			1,465,860.00				10,023,038.00	
1C : TOWERS			17,916,200.00				3,419,443.37	
1D : INSULATOR STRING AND OVERHEAD GROUND WIRE ASSEMBLIES	THB	4,715,120.00	3,917,000.00					
1E : CONDUCTOR AND OVERHEAD GROUND WIRE	THB	59,150,000.00	11,200.00				3,263,000.00	
1F : LINE ACCESSORIES			1,446,400.00				170,000.00	
1G : GROUNDING MATERIALS			170,800.00				55,600.00	

  
 นายสมชัย เจริญศรีเกษม  
 ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง

12 Dec 2025

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					
IH : OPTICAL FIBER AND LINE ACCESSORIES	THB	982,699.20	689,472.00				723,822.40	
IN : TEST OF EQUIPMENT	THB			418,500.00				
IO : SUPPLY OF SERVICE OF VEHICLES							1,600,000.00	
IP : SUPPLY OF SPARE EQUIPMENT			867,000.00			26,010.00		
<b>TOTAL PRICE</b>	<b>THB</b>	<b>64,847,819.20</b>	<b>Baht 26,483,932.00</b>	<b>418,500.00</b>	<b>Baht</b>	<b>Baht 26,010.00</b>	<b>Baht 19,717,503.77</b>	<b>Baht</b>
							<b>Baht</b>	

  
 นายสมชัย เจริญศรีเกษม  
 ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง

12 Dec 2025

**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 locations (Approximately 5.6 km in transmission line distance)	lump sum	each	168,000.00	168,000.00
1A2	Clearing right-of-way of 20 meters in width on each side of the center line of the transmission line (approx. 5.6 km in transmission line distance)	lump sum	each	140,000.00	140,000.00
1A3	Sub-soil tests and preliminary measurement of ground resistance and earth resistivity (to be performed at tower locations directed by EGAT)				
1A3.1	Light ram sound method with hand auger and preliminary measurement of ground electrical resistance and earth resistivity from surface to 7 meters in depth	18	bore	6,900.00	124,200.00
1A4	Boundary post along line of right-of-way	32	post	950.00	30,400.00
<b>Total Price for 1A</b>				<b>Baht</b>	<b>462,600.00</b>

  
 นายสมชัย เจริญศรีเกษม  
 ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง

12 Dec 2025

**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 ( excluding VAT ) Baht			
					Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
1B1	Foundation for Tower Type WB2									
1B1.1	Stub type CIII (230-2x1272 WB2) and Pad Foundation type CIII	1	tower		XXXXX	XXXXX	53,200.00	53,200.00	526,060.00	526,060.00
1B1.2	Stub type CIV (230-2x1272 WB2) and Pad Foundation type CIV	1	tower		XXXXX	XXXXX	53,200.00	53,200.00	314,302.00	314,302.00
1B1.3	Stub type CV (230-2x1272 WB2) and Pad Foundation type CV	2	tower		XXXXX	XXXXX	51,500.00	103,000.00	221,270.00	442,540.00
1B2	Foundation for Tower Type WD2									
1B2.1	Stub type CIV (230-2x1272 WD2) and Pad Foundation type CIV	1	tower		XXXXX	XXXXX	106,800.00	106,800.00	720,418.00	720,418.00
1B2.2	Stub type CV (230-2x1272 WD2) and Pad Foundation type CV	1	tower		XXXXX	XXXXX	106,800.00	106,800.00	501,004.00	501,004.00
1B3	Foundation for Tower Type WDE									
1B3.1	Stub type CIII (230-2x1272 WDE) and Pad Foundation type CIII	1	tower		XXXXX	XXXXX	114,500.00	114,500.00	1,045,914.00	1,045,914.00
1B3.2	Stub type CIV (230-2x1272 WDE) and Pad Foundation type CIV	1	tower		XXXXX	XXXXX	106,800.00	106,800.00	720,418.00	720,418.00
1B3.3	Stub type CV (230-2x1272 WDE) and Pad Foundation type CV	2	tower		XXXXX	XXXXX	106,800.00	213,600.00	501,004.00	1,002,008.00
1B4	Foundation for Tower Type LWD2									
1B4.1	Stub type CIII (230-2x1272 LWD2) and Pad Foundation type CIII	1	tower		XXXXX	XXXXX	136,900.00	136,900.00	1,143,876.00	1,143,876.00
1B4.2	Stub type CIV (230-2x1272 LWD2) and Pad Foundation type CIV	1	tower		XXXXX	XXXXX	128,700.00	128,700.00	802,082.00	802,082.00
1B4.3	Stub type CV (230-2x1272 LWD2) and Pad Foundation type CV	2	tower		XXXXX	XXXXX	128,700.00	257,400.00	544,620.00	1,089,240.00
1B5	Foundation for Tower Type HWT									
1B5.1	Stub type CIII (230-2x1272 HWT(15°)) and Pad Foundation type CIII	1	tower		XXXXX	XXXXX	21,240.00	21,240.00	471,076.00	471,076.00

  
 นายสมชัย เจริญศรีเกษม  
 ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง  
 12 Dec 2025

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
IB5.2	Stub type CIV (230-2x1272 HWT(15°)) and Pad Foundation type CIV	1	tower		XXXXX	XXXXX	21,240.00	21,240.00	447,760.00	447,760.00
IB5.3	Stub type CV (230-2x1272 HWT(15°)) and Pad Foundation type CV	2	tower		XXXXX	XXXXX	21,240.00	42,480.00	398,170.00	796,340.00
<b>Total Price for 1B</b>							<b>Baht 1,465,860.00</b>		<b>Baht 10,023,038.00</b>	

  
 นายสมชัย เจริญศรีเกษม  
 ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง

12 Dec 2025

MEDIUM COST FOR BID NO. BBS1-L-01

1C : 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			
					CIF Thai Port		Ex-works Price (excluding VAT) Baht			
					Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
1C1	Tower type WB2									
1C1.1	Basic body (230-2x1272 WB2)	4	body		XXXXX XXXXX	708,000.00	2,832,000.00	123,600.00	494,400.00	
1C1.2	Body extension 7.0 m (230-2x1272 WB2)	1	leg		XXXXX XXXXX	200,600.00	200,600.00	35,020.00	35,020.00	
1C1.3	Leg extension 1.0 m (230-2x1272 WB2)	4	leg		XXXXX XXXXX	8,800.00	35,200.00	1,536.27	6,145.08	
1C1.4	Leg extension 2.0 m (230-2x1272 WB2)	4	leg		XXXXX XXXXX	13,300.00	53,200.00	2,321.86	9,287.44	
1C1.5	Leg extension 8.0 m (230-2x1272 WB2)	4	leg		XXXXX XXXXX	40,400.00	161,600.00	7,052.88	28,211.52	
1C1.6	Leg extension 9.0 m (230-2x1272 WB2)	4	leg		XXXXX XXXXX	47,600.00	190,400.00	8,309.83	33,239.32	
1C2	Tower type WD2									
1C2.1	Basic body (230-2x1272 WD2)	2	body		XXXXX XXXXX	1,044,300.00	2,088,600.00	182,310.00	364,620.00	
1C2.2	Body extension 7.0 m (230-2x1272 WD2)	1	leg		XXXXX XXXXX	347,000.00	347,000.00	60,577.97	60,577.97	
1C2.3	Leg extension 2.0 m (230-2x1272 WD2)	4	leg		XXXXX XXXXX	25,300.00	101,200.00	4,416.78	17,667.12	
1C2.4	Leg extension 6.0 m (230-2x1272 WD2)	4	leg		XXXXX XXXXX	50,600.00	202,400.00	8,833.56	35,334.24	
1C3	Tower type WDE									
1C3.1	Basic body (230-2x1272 WDE)	4	body		XXXXX XXXXX	1,032,500.00	4,130,000.00	180,250.00	721,000.00	
1C3.2	Leg extension 3.0 m (230-2x1272 WDE)	4	leg		XXXXX XXXXX	32,400.00	129,600.00	5,656.27	22,625.08	
1C3.3	Leg extension 4.0 m (230-2x1272 WDE)	4	leg		XXXXX XXXXX	36,300.00	145,200.00	6,337.12	25,348.48	
1C3.4	Leg extension 5.0 m (230-2x1272 WDE)	4	leg		XXXXX XXXXX	45,000.00	180,000.00	7,855.93	31,423.72	
1C3.5	Leg extension 8.0 m (230-2x1272 WDE)	4	leg		XXXXX XXXXX	67,300.00	269,200.00	11,748.98	46,995.92	
1C4	Tower type LWD2									
1C4.1	Basic body (230-2x1272 LWD2)	4	body		XXXXX XXXXX	1,239,000.00	4,956,000.00	216,300.00	865,200.00	
1C4.2	Body extension 7.0 m (230-2x1272 LWD2)	1	leg		XXXXX XXXXX	389,400.00	389,400.00	67,980.00	67,980.00	

  
 นายสมชัย เจริญศรีโกมล  
 ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง  
 12 Dec 2025

MEDIUM COST FOR BID NO. BBS1-L-01

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
1C4.3	Leg extension 2.0 m (230-2x1272 LWD2)	4	leg		XXXXX	XXXXX	30,400.00	121,600.00	5,307.12	21,228.48
1C4.4	Leg extension 3.0 m (230-2x1272 LWD2)	4	leg		XXXXX	XXXXX	38,800.00	155,200.00	6,773.56	27,094.24
1C4.5	Leg extension 4.0 m (230-2x1272 LWD2)	4	leg		XXXXX	XXXXX	43,500.00	174,000.00	7,594.07	30,376.28
1C4.6	Leg extension 5.0 m (230-2x1272 LWD2)	4	leg		XXXXX	XXXXX	54,000.00	216,000.00	9,427.12	37,708.48
1C5	Tower type HWT									
1C5.1	Basic body (230-2x1272 HWT(15°))	4	body		XXXXX	XXXXX	209,450.00	837,800.00	36,565.00	146,260.00
1C6	Tower Signs									
1C6.1	Preserved forest signs	11	piece		XXXXX	XXXXX	included in installation work	included in installation work	24,500.00	269,500.00
1C6.2	Circuit name signs	4	piece		XXXXX	XXXXX	included in installation work	included in installation work	550.00	2,200.00
1C6.3	Aerial patrol signs	7	piece		XXXXX	XXXXX	included in installation work	included in installation work	500.00	3,500.00
1C6.4	Phasing signs (3 pieces per set)	8	set		XXXXX	XXXXX	included in installation work	included in installation work	1,500.00	12,000.00
1C6.5	Warning signs	4	piece		XXXXX	XXXXX	included in installation work	included in installation work	500.00	2,000.00
1C6.6	Danger signs	5	piece		XXXXX	XXXXX	included in installation work	included in installation work	500.00	2,500.00
<b>Total Price for 1C</b>							<b>Baht 17,916,200.00</b>		<b>Baht 3,419,443.37</b>	

  
 นายสมชัย เจริญศรีเกษม  
 ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง

12 Dec 2025

**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 (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	Bypass V-string suspension insulator assemblies for two-bundled Invar conductor, 12000 kg ultimate strength, coupling type J (without insulator and arcing horn) as per drawing No. E05-147	4	set		XXXXX	XXXXX	15,000.00	60,000.00	included in stringing work	included in stringing work
1D2	Bypass I-string suspension insulator assemblies for two-bundled Invar conductor, 12000 kg ultimate strength, coupling type J (without insulator and arcing horn)	33	set		XXXXX	XXXXX	9,000.00	297,000.00	included in stringing work	included in stringing work
1D3	Single string tension insulator assemblies for two-bundled Invar conductor, 13000 kg ultimate strength, coupling type J (without insulator and arcing horn)	30	set		XXXXX	XXXXX	14,000.00	420,000.00	included in stringing work	included in stringing work
1D4	Double string tension insulator assemblies for two-bundled Invar conductor, 26000 kg ultimate strength, coupling type K (without insulator and arcing horn)	114	set		XXXXX	XXXXX	17,000.00	1,938,000.00	included in stringing work	included in stringing work
1D5	Single string tension inverted insulator assemblies for two-bundled Invar conductor, 13000 kg ultimate strength, coupling type J (without insulator and arcing horn)	18	set		XXXXX	XXXXX	14,000.00	252,000.00	included in stringing work	included in stringing work
1D6	Single string tension inverted insulator assemblies and compression deadend for connecting 2xINVAR to 4x1272 MCM as per drawing No. E11-206	6	set		XXXXX	XXXXX	17,000.00	102,000.00	included in stringing work	included in stringing work
1D7	Double string tension inverted insulator assemblies for two-bundled Invar conductor, 26000 kg ultimate strength, coupling type K (without insulator and arcing horn)	42	set		XXXXX	XXXXX	17,000.00	714,000.00	included in stringing work	included in stringing work
1D8	Double string tension inverted insulator assemblies and compression deadend for connecting 2xINVAR to 4x1272 MCM as per drawing No. E11-206	6	set		XXXXX	XXXXX	20,000.00	120,000.00	included in stringing work	included in stringing work

  
 นายสมชัย เจริญศิริโกศล  
 ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง  
 12 Dec 2025

MEDIUM COST FOR BID NO. BBS1-L-01

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
1D9	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
1D10	Porcelain or glass insulator ANSI CLASS 52-5 (25,000 lbs) with corrosion proof type pin	1298	disc	THB	640.00	830,720.00			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	4680	disc	THB	830.00	3,884,400.00			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 1D10 on take-off structures	4	set		XXXXX	XXXXX	700.00	2,800.00	included in stringing work	included in stringing work
<b>Total Price for 1D</b>						<b>4,715,120.00</b>	<b>Baht</b>	<b>3,917,000.00</b>	<b>Baht</b>	

  
 นายสมชัย เจริญศรีเกษม  
 ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง

12 Dec 2025

MEDIUM COST FOR BID NO. BBS1-L-01

1E : 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			
					CIF Thai Port		Ex-works Price (excluding VAT) Baht			
					Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
1E1	INVAR Conductor									
1E1.1	Furnishing Invar conductor for the entire length of 230 kV Bhumibol 2 - Bhumibol Transmission Line, double circuit, 3 phase, twin-bundled INVAR conductor per phase, plus extra length to cover sag, terrain, irregularities and wastage for Item 1E1.2, 1E1.3 and 1E1.4 (approx. 5.6 kilometer in transmission line distance)	70	km	THB	845,000.00	59,150,000.00				
1E1.2	Stringing of conductor by controlled tension method, double circuit, twin-bundled INVAR conductor per phase, measured based on horizontal distance of line route from the new deadend tower No.0/1 type WDE at Bhumibol 2 Substation to the new deadend tower No.5/5 type WDE at Bhumibol Substation	5.4	km		XXXXX	XXXXX	XXXXX	XXXXX	500,000.00	2,700,000.00
1E1.3	Installation of conductor , double circuit , 3 phase, twin-bundled INVAR conductor per phase, between the new deadend tower No.0/1 type WDE and take-off structure at Bhumibol 2 Substation, approx. 0.1 km in transmission line distance	lump sum	each		XXXXX	XXXXX	XXXXX	XXXXX	256,000.00	256,000.00
1E1.4	Installation of conductor , double circuit , 3 phase, twin-bundled INVAR conductor per phase, between the new deadend tower No.5/5 type WDE and take-off structure at Bhumibol Substation, approx. 0.1 km in transmission line distance	lump sum	each		XXXXX	XXXXX	XXXXX	XXXXX	256,000.00	256,000.00
1E2	3/8" nominal diameter, high strength galvanized steel overhead ground wire, Class A coating									
1E2.1	3/8" High strength galvanized steel wire, furnishing for Item 1E2.2 and 1E2.3 based on linear length (Linear length = No. of overhead ground wire x horizontal distance of line route + 1.5%)	0.4	km		XXXXX	XXXXX	28,000.00	11,200.00		

นายสมชัย เจริญศรีเกษม  
ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง

12 Dec 2025

MEDIUM COST FOR BID NO. BBS1-L-01

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	
1E2.2	Installation of two overhead ground wires between the new deadend tower No.0/1 type WDE and take-off structure at Bhumibol 2 Substation	lump sum	each		XXXXX	XXXXX	XXXXX	XXXXX	25,500.00	25,500.00	
1E2.3	Installation of two overhead ground wires between the new deadend tower No.5/5 type WDE and take-off structure at Bhumibol Substation	lump sum	each		XXXXX	XXXXX	XXXXX	XXXXX	25,500.00	25,500.00	
<b>Total Price for 1E</b>				<b>THB</b>	<b>59,150,000.00</b>		<b>Baht</b>	<b>11,200.00</b>		<b>Baht</b>	<b>3,263,000.00</b>

  
 นายสมชัย เจริญศรีเกษม  
 ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง

12 Dec 2025

MEDIUM COST FOR BID NO. BBS1-L-01

1F : 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			
					CIF Thai Port		Ex-works Price (excluding VAT) Baht			
					Unit Price	Amount	Unit Price	Amount	Unit Price	Amount
1F1	Tension sleeve for Invar conductor	60	set		XXXXX	XXXXX	1,400.00	84,000.00	included in stringing work	included in stringing work
1F2	Repair sleeve for Invar conductor	10	set		XXXXX	XXXXX	1,000.00	10,000.00	included in stringing work	included in stringing work
1F3	Spacer damper for two-bundled INVAR Conductor (for double circuit, approx. 5.6 km in transmission line distance)	lump sum	each		XXXXX	XXXXX	1,232,000.00	1,232,000.00	included in stringing work	included in stringing work
1F4	Rigid type spacer for two-bundled INVAR Conductor	192	set		XXXXX	XXXXX	600.00	115,200.00	included in stringing work	included in stringing work
1F5	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
1F6	Field test of spacer damper for two-bundled Invar conductors as per Specifications No.TL-03	1	test		XXXXX	XXXXX	XXXXX	XXXXX	170,000.00	170,000.00
<b>Total Price for 1F</b>							<b>Baht</b>		<b>Baht</b>	
							<b>1,446,400.00</b>		<b>170,000.00</b>	

  
 นายสมชัย เจริญศรีเกษม  
 ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง

12 Dec 2025

MEDIUM COST FOR BID NO. BBS1-L-01

**1G : 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			
					CIF Thai Port		Ex-works Price (excluding VAT) Baht			
					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	72	set		XXXXX	XXXXX	1,200.00	86,400.00	200.00	14,400.00
1G2	1.6 cm. nominal diameter x 1.8 m. (5/8" diameter x 6') copper-covered steel sectional ground rod with coupling	8	set		XXXXX	XXXXX	800.00	6,400.00	200.00	1,600.00
1G3	Connector set (No.4 AWG annealed copper ground connecting wire 0.6 m. long with stub angle connector)	24	set		XXXXX	XXXXX	300.00	7,200.00	100.00	2,400.00
1G4	Counterpoise No.2 AWG solid copper-clad steel wire 30% conductivity	360	m		XXXXX	XXXXX	180.00	64,800.00	90.00	32,400.00
1G5	Heavy duty exothermic or compression type connector	24	set		XXXXX	XXXXX	250.00	6,000.00	200.00	4,800.00
<b>Total Price for 1G</b>							<b>Baht 170,800.00</b>		<b>Baht 55,600.00</b>	

  
 นายสมชัย เจริญศรีเกษม  
 ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง

12 Dec 2025

**IH : 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 cores Optical fibers (OPGW) (referred section F-4.3)									
1H1.1	11.4mm dia. Composite Overhead Ground Wire with Optical Fiber (OPGW)	lump sum	each	THB	491,349.60	491,349.60			Included in Item 1H1.2	Included in Item 1H1.2
1H1.2	Stringing by controlled tension method, one OPGW measured based on horizontal distance of line route from 230 kV Bhumibol 2 substation to 230 kV Bhumibol substation (Route 1)	5.6	km		XXXXXX	XXXXXX	XXXXXX	XXXXXX	64,627.00	361,911.20
1H1.3	Supply and intallation of hardware assemblies and line accessories include splicing work for overhead ground wire with optical fiber (OPGW) including: (a) 2-way joint box with accessories (lump sum) (b) OPGW suspension (Grounded) assembly 22 with armor rods (excluding vibration damper) (lump sum) (c) OPGW tension (Insulated) assembly 23 with armor rods and arcing horns (excluding insulator and vibration damper) (lump sum) (d) OPGW tension (Grounded) assembly 24 with armor rods (excluding vibration damper) (lump sum) (e) Vibration damper assembly with accessories (lump sum) (f) Parallel groove clamps (lump sum) (g) Grounding clamps (lump sum) (h) 1-wire cleat without insulator (lump sum) (i) 2-wire cleat without insulator (lump sum) (j) 6-wire cleat without insulator (lump sum) (k) 1-wire cleat with insulator (lump sum) (l) 6-wire cleat with insulator (lump sum) (m) Porcelain or glass insulator ANSI CLASS 52-5 (25,000 lbs) to be used at take-off structure (lump sum) (n) 3/8" Extra high strength galvanized steel wire for grounding OPGW to tower (lump sum)	lump sum	each					344,736.00	344,736.00	
1H2	Field testing for optical fiber for item 1H1	lump sum	each		XXXXXX	XXXXXX	XXXXXX	XXXXXX		
1H3	Composite overhead ground wire with 36 cores Optical fibers (OPGW) (referred section F-4.3)									
1H3.1	11.4mm dia. Composite Overhead Ground Wire with Optical Fiber (OPGW)	lump sum	each	THB	491,349.60	491,349.60			Included in Item 1H3.2	Included in Item 1H3.2

นายสมชัย เจริญศรีเกษม  
ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง

12 Dec 2025

MEDIUM COST FOR BID NO. BBS1-L-01

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	
1H3.2	Stringing by controlled tension method, one OPGW measured based on horizontal distance of line route from 230 kV Bhumibol 2 substation to 230 kV Bhumibol substation (Route 2)	5.6	km		XXXXXX	XXXXXX	XXXXXX	XXXXXX	64,627.00	361,911.20	
1H3.3	Supply and intallation of hardware assemblies and line accessories include splicing work for overhead ground wire with optical fiber (OPGW) including: (a) 2-way joint box with accessories (lump sum) (b) OPGW suspension (Grounded) assembly 22 with armor rods (excluding vibration damper) (lump sum) (c) OPGW tension (Insulated) assembly 23 with armor rods and arcing horns (excluding insulator and vibration damper) (lump sum) (d) OPGW tension (Grounded) assembly 24 with armor rods (excluding vibration damper) (lump sum) (e) Vibration damper assembly with accessories (lump sum) (f) Parallel groove clamps (lump sum) (g) Grounding clamps (lump sum) (h) 1-wire cleat without insulator (lump sum) (i) 2-wire cleat without insulator (lump sum) (j) 6-wire cleat without insulator (lump sum) (k) 1-wire cleat with insulator (lump sum) (l) 6-wire cleat with insulator (lump sum) (m) Porcelain or glass insulator ANSI CLASS 52-5 (25,000 lbs) with corrosion proof type pin to be used at take-off structure (lump sum) (n) 3/8" Extra high strength galvanized steel wire for grounding OPGW to tower (lump sum)	lump sum	each					344,736.00	344,736.00		
1H4	Field testing for optical fiber for item 1H3	lump sum	each		XXXXXX	XXXXXX	XXXXXX	XXXXXX			
<b>Total Price for 1H</b>											
				<b>THB</b>	<b>982,699.20</b>		<b>Baht</b>	<b>689,472.00</b>		<b>Baht</b>	<b>723,822.40</b>

  
 นายสมชัย เจริญศรีเกษม  
 ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง

12 Dec 2025

**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 52-5 (25,000 lbs), as per Specification No.TL-01 (Rev.2)	1	test	THB	139,500.00	139,500.00		
1N2	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	139,500.00	139,500.00		
1N3	Laboratory test of spacer damper for two-bundled Invar conductors as per Specifications for INVAR Conductor and Hardware Assemblies and Line Accessories (Revision 1)	1	test	THB	139,500.00	139,500.00		
<b>Total Price for 1N</b>				<b>THB</b>	<b>418,500.00</b>		<b>Baht</b>	

  
 นายสมชัย เจริญศรีเกษม  
 ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง

12 Dec 2025

**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.)	32	car-month	50,000.00	1,600,000.00
<b>Total Price for 10</b>				<b>Baht 1,600,000.00</b>	

  
 นายสมชัย เจริญศรีเกษม  
 ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง

12 Dec 2025

**1P : SUPPLY OF SPARE EQUIPMENT**

Item No.	Description	Estimated Qty.	Unit	Currency	Supply of Equipment		Supply of Equipment		Local Transportation ( 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
1P1	Spacer damper for two-bundled INVAR Conductor	50	set		XXXXX	XXXXX	14,700.00	735,000.00	441.00	22,050.00
1P2	Rigid spacer for two-bundled INVAR Conductor	20	set		XXXXX	XXXXX	600.00	12,000.00	18.00	360.00
1P3	Compression dead end for INVAR Conductor	24	set		XXXXX	XXXXX	5,000.00	120,000.00	150.00	3,600.00
<b>Total Price for 1P</b>							<b>Baht 867,000.00</b>		<b>Baht 26,010.00</b>	

  
 นายสมชัย เจริญศรีเกษม  
 ผู้อำนวยการฝ่ายวิศวกรรมระบบส่ง

12 Dec 2025

**Important Information**  
**for**  
**Invitation to Bid No. BBS1-L-01**

---

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-6. Preparation and Delivery of Bids and Article B-1. Preparation of Bids**

Details on how to prepare the proposal have been revised. Bids shall be prepared in accordance with the Instructions to Bidders contained in the Bidding Documents in one (1) original hard copy and one (1) electronic copy contained in USB flash drive.

**Article A-6. Preparation and Delivery of Bids**

Details of bid opening time and place shall be specified in the Tentative Schedule.

**Article A-7. Availability of Bidding Documents**

Availability of Bidding Documents has been changed from CD-ROM to electronic files for download via link provided by EGAT.

**Channel of Documents Submission**

For channel of document submission in the hereunder Articles, facsimile and telex has been replaced with letters submitted electronically or electronic mails (E-mails).

- Article B-1. Preparation of Bids
- Article B-4. Validity of Bids
- Article D-9. Notices
- Article E-20. Documents Required for Each Shipment
- Article F-10. Payment

**Article B-2. Bid Prices**

1. Prices for Equipment, Prices for Equipment manufactured outside Thailand (imported Equipment) shall be firm CIF Thai Port basis and quoted in Thai baht, US dollar, euro, Japanese yen, renminbi (Chinese yuan), or in the Bidder's or Manufacturer's home currency only if his currency trading is prevailed at the time of bidding in any international market other than in Bidder's or Manufacturer's home country.

The following paragraph has also been added :-

“Prices for the following Equipment manufactured outside Thailand which was imported before the technical proposal opening date shall be firm ex-works and quoted in Thai baht, provided that the Bidder shall submit any document(s) evidencing the importation date of such Equipment:

- Joint box for optical fiber cable”

**Article E-19. Shipment**

The Maritime Promotion Bureau has been updated to the Maritime Promotion Division and its contact information has also been updated.

**Article F-10. Payment**

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

# DATA SHEET

for

## Invitation to Bid No. BBS1-L-01

---

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

1. Article A-1. Invitation

Insert the following as the second and third paragraphs of this article respectively:

The Letter of Award of Contract to be issued to the successful Bidder will be made after EGAT obtains the Project approval from the Government of Thailand, and the approval for Project implementation from the Government's authority and/or other related entities as required (if any) by Thai laws.

Unless EGAT gets approval as such, the Project and the work under this invitation has to be cancelled. In the event such cancellation is required, all costs incurred by the Bidder in purchasing documents and preparing his bid shall be at his own account and will not be reimbursed by EGAT

2. Article B-3. Bid Security

The amount of bid security shall be USD 193,190.- or THB 6,263,500.-.

3. 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.

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

Insert the following information after item (viii) under the subtopic For 115 kV and 230 kV Transmission Line:

**(ix) Detailed information on the proposed INVAR Conductor, including**

**(a) Detailed calculations on the following items of the proposed INVAR Conductor**

**(1) Ampacity (Current Carrying Capacity)**

**(2) Sag & Tension Calculation**

*Sag-Tension calculations for INVAR Conductor at various output conditions given below shall be submitted along with the Bid. These calculations shall also include calculations for determination of transition temperature. The parameters and conditions taken for sag tension calculations shall be as follows :*

**Parameters**

*Ruling spans shall be in accordance with those of the existing transmission lines given in Technical Information of Transmission Lines attached to Specifications for INVAR Conductor and Hardware Assemblies and Line Accessories (Revision 1).*

**Design condition**

*Base condition : 27°C, No wind, Tension 22% UTS of conductor*

**Sag & Tension Requirement Condition**

*6°C, 12°C, 18°C, 27°C,...,210°C No wind  
27°C with wind*

*Output might be given in the format as shown in Technical Information of Transmission Lines attached to Specifications for INVAR Conductor and Hardware Assemblies and Line Accessories (Revision 1).*

**(3) Power loss (comparing to that of 2x1272 MCM ACSR/GA conductor)**

**(b) Previous test report of INVAR conductor of the same or similar size as specified in the Specifications to demonstrate that the Equipment offered meets all the requirements of the Contract. Such previous test reports shall consist of Type Test, Acceptance or Sample Test, Routine Test, and etc.**

(c) *Test method or Test procedure, including referenced standardization and acceptance criteria, for the following tests of INVAR conductor*

(1) *Test before producing (Type Test or Design Test).*

(2) *Test during producing (Sample Test or Acceptance Test and Routine Test).*

(3) *Specific tests consisting of*

- *Temperature of surrounded area*
- *Temperature of rainfall at any distance far from conductor*
- *Ampacity test*
- *Etc.*

*Detailed items of the tests and duration that each test item will take shall also be provided.*

(d) *Previous test reports of the same or equivalent type of compression deadend, armor rod, tension sleeve and repair sleeve for INVAR conductor to demonstrate that the Equipment offered meets all the requirements specified in Specifications for INVAR Conductor and Hardware Assemblies and Line Accessories (Revision 1). The previous test reports shall include*

(1) *Type Test*

(2) *Sample Test*

(3) *Routine Test*

(e) *Detailed design of fittings at T.O.S. for connection of INVAR Conductor (twin-bundled conductor) with the other conductors in substations (to be performed at Bhumibol 2 and Bhumibol Substations)*

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

The evaluation of bid prices shall be on *a bid package of schedule basis*. Evaluation and comparison of Bids shall be as specified in Article B-12. Evaluation and Comparison of Bids.

# ELECTRICITY GENERATING AUTHORITY OF THAILAND

Nonthaburi  
Thailand

**INVITATION TO BID NO. BBS1-L-01**  
**SUPPLY AND CONSTRUCTION OF TRANSMISSION LINE**  
**230 kV BHUMIBOL 2 – BHUMIBOL**  
**TRANSMISSION SYSTEM FOR HYDRO-FLOATING SOLAR HYBRID**  
**PROJECT BHUMIBOL DAM UNIT 1**

---

**A-1. Invitation**

The Electricity Generating Authority of Thailand (EGAT) hereby invites sealed bids for Supply and Construction of Transmission Line 230 kV Bhumibol 2 – Bhumibol under Transmission System for Hydro-Floating Solar Hybrid Project Bhumibol Dam Unit 1 in accordance with the Terms and Conditions, Technical Specifications and Drawings described in these Bidding Documents.

**A-2. Work Description**

The transmission line to be supplied and constructed under this Invitation is 230 kV, 50 Hz, 3 phase, twin-bundled conductor per phase on double circuit self-supporting lattice steel towers extending from Bhumibol 2 Substation to Bhumibol Substation in the western region of Thailand, having a distance of approximately 5.60 kilometers on the new right-of-way with 20 meters in width on each side of the center line of the transmission line.

The conductor to be employed will be high temperature low sag conductor (INVAR). Two types of overhead ground wires will be employed; one of which is 3/8 inch nominal diameter, high strength galvanized steel overhead ground wire and the other is composite overhead ground wire with 36-core optical fiber. The INVAR Conductor and both types of overhead ground wires 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 tower types, as well as details & bar bending schedule for all foundation types 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 turnkey contract as contractor (not as subcontractor) in overseas country (not his own country) or with EGAT at the following voltage levels :
  - 110 kV or higher for the Work of supply and construction of 115 kV transmission line

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

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

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

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

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

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

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

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

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

- c. Himself, or either firm of the joint venture/consortium or his subcontractor or the combination thereof, having adequate technical knowledge and

practical experience in stringing of line conductors or overhead ground wire or OPGW parallel to a live line. This eligibility will be applicable in case that scope of work under this Invitation requires stringing of circuit conductor, overhead ground wire and/or OPGW on towers on which the other circuit conductor is under energizing condition while performing such work.

- d. Himself, or either firm of the joint venture/consortium or his subcontractor or the combination thereof, having excellent reputation and adequate technical knowledge and having at least three (3) years experience in the completed construction of transmission line with end user's acceptance having accumulative distance of overhead ground wire with optical fiber not less than 20 kilometers in length. This eligibility will not be applicable if such Equipment is not required under this Invitation.

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

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

- e. Proposing towers, conductor, insulators, hardware assemblies and line accessories for conductor, dampers and spacer dampers for conductor, and composite overhead ground wire with optical fiber (OPGW) manufactured by regular manufacturers of excellent reputation having significant technical knowledge and at least three (3) years experience in the design, manufacture and testing of such Equipment, having manufacturing capacity available to perform the Work properly and expeditiously within the time specified, and having satisfactory past experience, with additional requirements as follows:

- 1) Tower manufacturer being an eligible local firm having set up a plant for fabrication of steel towers in Thailand
- 2) Insulator manufacturer having a record of a minimum three (3) consecutive years of successful operation/use of at least 10,000 units of insulators of the same or similar ANSI class as those required under this Invitation in any one transmission line operating in the transmission network electric utility in overseas country (not his own country) during the last ten years at the following voltage levels :
  - 110 kV or higher for the Work of supply and construction of 115 transmission line

- 220 kV or higher for the Work of supply and construction of 230 transmission line
- 3) Invar conductor manufacturer having an experience in design, manufacture, test and supply of at least two hundred (200) kilometers of Invar conductor with successful operation thereof for a period of at least one (1) year as of the date of the bid opening.
- 4) Manufacturer(s) of hardware assemblies, line accessories and spacer dampers for Invar conductor shall have an experience in design, manufacture, test and supply of hardware assemblies, line accessories and spacer dampers for any type of high-temperature low-sag conductor for at least three (3) years.
- 5) Composite overhead ground wire with optical fiber (OPGW) manufacturer having a record of at least three (3) consecutive years of successful operation/use of the same or similar type as those required under this Invitation in the transmission line having accumulated distance of not less than 20 kilometers.

If the manufacturer is a new company formed by acquisition of or merger with other companies or business units, and any of such previous companies or business units has the experience records that meet the requirements set forth herein, such experience records are acceptable as the experience records of the new company, provided that each item of the Equipment to be supplied under this Bid shall be manufactured from the same source of supply as indicated in each of such relevant supply records as described in Item I.e.1) thru I.e.5) above. Otherwise, it shall not be acceptable and shall be sufficient grounds for rejection.

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

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

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

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

All experiences, successful operation, successful operation/use and requirements to be submitted under this Bid shall not be later than Bid opening date.

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

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

If the manufacturer is a new company formed by acquisition of or merger with other companies or business units, and any of such previous companies or business units has the experience records that meet the requirements set forth herein, such experience records are acceptable as the experience records of the new company, provided that each item of the Equipment to be supplied under this Bid shall be manufactured from the same source of supply as indicated in each of such relevant supply records.

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

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

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

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

All experiences, successful operation, successful operation/use and requirements to be submitted under this Bid shall not be later than Bid opening date.

- 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 ***hard copy and one (1) electronic copy contained in USB flash drive***, in English, on the bid forms included for this purpose and shall be accompanied with a bid security as required under Article B-3. Bid Security in a separate sealed envelope.

***For preparation of original hard copy, each page of the original hard copy shall be marked with the volume number and the page number in the lower right-hand corner, for example, Volume 1 of 10 and Page 1 of 100.***

***For preparation of electronic copy, each volume of the signed original hard copy shall be scanned into one (1) PDF file and each PDF file shall be named according to the volume number.***

*The USB flash drive shall contain electronic files of the proposal in the following formats :*

- *PDF files of all pages of each volume of the proposal, and*
- *Excel files of filled-in Proposal Data, and*
- *Excel files of filled-in Price Schedule*

*In the event of any discrepancy between the original hard copy and the electronic file(s), the original hard copy shall govern.*

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

**INVITATION TO BID NO. BBS1-L-01**  
**SUPPLY AND CONSTRUCTION OF TRANSMISSION LINE**  
**230 kV BHUMIBOL 2 – BHUMIBOL**  
**TRANSMISSION SYSTEM FOR HYDRO-FLOATING SOLAR HYBRID**  
**PROJECT BHUMIBOL DAM UNIT 1**

and shall be addressed and delivered to **EGAT** 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 the *place and* time specified *in Tentative Schedule*.

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

**A-7. Availability of Bidding Documents**

The Bidding Documents are available for examination *and online purchase at <http://www4.egat.co.th/fprocurement/biddingeng/>* and can be obtained *by downloading via link provided by EGAT* upon payment to EGAT, non-refundable, in the amount of USD 100.- or Baht 3,000.-. These prices include the value added tax.

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.