

ELECTRICITY GENERATING AUTHORITY OF THAILAND

SUPPLEMENTAL NOTICE NO. 1

INVITATION TO BID NO. TS12-S-18

SUPPLY AND CONSTRUCTION FOR EXPANSION
OF 230/115 kV NAKHON PHANOM SUBSTATION

TRANSMISSION SYSTEM EXPANSION PROJECT NO. 12

The attached Supplemental Notice shall be considered as part of the bidding documents No. TS12-S-18.

As acknowledgement of receipt that all additions, deletions and revisions contained in this Supplemental Notice are incorporated into the above bidding documents, Bidder is requested to sign and return this acknowledgement via email address : thana.kir@egat.co.th within three (3) days from the date of the announcement of this Supplemental Notice on <http://www4.egat.co.th/fprocurement/biddingeng/>.

The original acknowledgement which is manually signed in ink by a person or persons duly authorized shall be included in the proposal to be submitted on the bid opening date.

ELECTRICITY GENERATING AUTHORITY OF THAILAND

January 15, 2020

ACKNOWLEDGEMENT

This undersigned Bidder hereby certifies that the additions, deletions and revisions set forth in this Supplemental Notice to Invitation to Bid No. TS12-S-18 are incorporated as part of the above bidding documents and will be fully included in any bid he may submit.

Signed _____

Title _____

Company _____

Date _____

ELECTRICITY GENERATING AUTHORITY OF THAILAND

SUPPLEMENTAL NOTICE NO. 1

INVITATION TO BID NO. TS12-S-18

SUPPLY AND CONSTRUCTION FOR EXPANSION
OF 230/115 kV NAKHON PHANOM SUBSTATION

TRANSMISSION SYSTEM EXPANSION PROJECT NO.12

The following supplemental information is hereby given for the above described Invitation:

Volume II of IV

Section C : Price Schedule and Proposal Data

Replace pages Part 2-C61 thru Part2-C66 of Proposal Data with the revised pages with (Rev. 1) attached.

Bid submitted must be in accordance with this Notice. Receipt of this Notice shall be acknowledged by the Bidder on the proposal included in the Bidding Documents in the space provided on page Part3-C20, Article C-5 Supplemental Notices.

ELECTRICITY GENERATING
AUTHORITY OF THAILAND

.....January 152020.....

COMPACT SWITCHGEAR

PROPOSAL DATA

PROCUREMENT REFERENCE -----

BIDDER -----

SCHEDULE NO -----

ITEM NO -----

a. Manufacturer / country of origin

----- / -----

b. Type

c. Applied standards

d. General rating

- Rated voltage ----- kV
- Maximum service voltage ----- kV
- Rated frequency ----- Hz
- Power frequency withstand level ----- kV
- Lightning impulse withstand level ----- kV
- Rated continuous current ----- A
- Rated short-time (1s) withstand current for main and earthing circuits ----- kA
- Rated peak withstand current for main and earthing circuits ----- kA

e. Type of enclosure

- Single phase enclosure
- Three phase enclosure

f. Material

- Enclosure -----
- Conductor -----

g. Conductor connecting piece

- Type -----
- Material -----

h. SF₆ Gas

- Rated filling pressure at 20 °C
 - For circuit breaker compartment ----- kg/cm²
 - For all other compartment ----- kg/cm²
- Alarm pressure at 20 °C
 - For circuit breaker compartment ----- kg/cm²
 - For all other compartment ----- kg/cm²
- Minimum functional pressure at 20 °C
 - For circuit breaker compartment ----- kg/cm²
 - For all other compartment ----- kg/cm²
- Design pressure of enclosures
 - For circuit breaker compartment ----- kg/cm²
 - For all other compartment ----- kg/cm²
- Operating pressure of pressure relief device
 - For circuit breaker compartment ----- kg/cm²
 - For all other compartment ----- kg/cm²
- Internal fault Short-circuit current ----- kA
- Weight of SF₆ gas filling (Complete) ----- kg
- SF₆ gas leakage rate ----- %/year
(Certified test record shall be submitted together with tender document during the bidding as an evidence for consideration of evaluation)

i. Rated supply voltage of closing and opening devices and auxiliary circuits

----- Vdc

COMPACT SWITCHGEAR

PROPOSAL DATA	PROCUREMENT REFERENCE _____	
BIDDER _____	SCHEDULE NO _____	
	ITEM NO _____	
j. Temperature limitations for		
- Gas dew point	_____	°C
- Buses and connections	_____	°C
- External parts subjected to contact by personnel	_____	°C
k. Constructional features		
- Mass of the heaviest transport unit	_____	kg
- Length of longest section for transportation	_____	m
l. Space Heating		
- Install heating	_____	W
- Number of heater	_____	
- Rated voltage	_____	V
m. Net weight of each compact switchgear	_____	kg
Circuit Breaker		
a. Type	_____	
b. Single pole and/or three pole operated	_____	
c. Number of breaks per pole	_____	
d. Applied standard	_____	
e. Rated voltage	_____	kV
f. Maximum service voltage	_____	kV
g. First pole to clear factor	_____	
h. Power frequency withstand voltage		
- Across contacts	_____	kV
- Phase to earth	_____	kV
i. Lightning impulse withstand voltage		
- Across contacts	_____	kV
- Phase to earth	_____	kV
j. Frequency	_____	Hz
k. Current rating		
- Rated continuous	_____	A
- Rated short circuit current at max kV	_____	kA
- Limited overload capacity	_____	A
l. Interrupting rating		
- Max asymmetrical interrupting current	_____	kA
- 1 s short time current	_____	kA
- Max opening and interrupting time at rated voltage		
- Opening time	_____	ms
- Interrupting time	_____	ms
- Current at max interrupting time	_____	A
- Interrupting time of resistive current	_____	ms

COMPACT SWITCHGEAR

PROPOSAL DATA

PROCUREMENT REFERENCE _____
SCHEDULE NO _____
ITEM NO _____

BIDDER _____

- | | | | | | | | | | | | | | | | | | | | | | |
|---|---|----------|---------|----------|--|-------|-------|-------|--|-------|---|---|-----|-------|-------|-------|---|-------|-------|-------|----|
| <p>m. Asymmetrical interrupting rating</p> <ul style="list-style-type: none"> - Max asymmetrical interrupting current - Max interrupting time at 25-100% of asymmetrical interrupting capability - Max interrupting time below 25% of asymmetrical interrupting capability <p>n. Closing rating</p> <ul style="list-style-type: none"> - Closing and latching current at max kV - Making capacity-peak at max kV - Closing time at rated operations <p>o. Capacitive current</p> <ul style="list-style-type: none"> - Rated capacitance current switching - Corresponding to max line length of - Rated transient overvoltage factor <p>p. Temperature rise of contacts at nominal current</p> <p>q. Operating mechanism</p> <ul style="list-style-type: none"> - Manufacturer type - Mechanism type (spring, hydraulic, etc) - Operating voltage range (min/max) - Current rating of coil - Command duration <p>r. Reclosing duty cycle</p> <p>s. Rated reclosing time</p> <p>t. Spring charged mechanism</p> <ul style="list-style-type: none"> - Model no - Motor rating - Max charging time at rated voltage <p>u. Stored energy requirements</p> <p>v. Max recharging time after CO operation</p> | <p>----- kA</p> <p>----- ms</p> <p>----- ms</p> <p>----- kA</p> <p>----- kA</p> <p>----- ms</p> <p>----- kA</p> <p>----- km</p> <p>----- °C</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;"></td> <td style="text-align: center;">Closing</td> <td style="text-align: center;">Tripping</td> <td></td> </tr> <tr> <td>-----</td> <td>-----</td> <td>-----</td> <td></td> </tr> <tr> <td>-----</td> <td style="text-align: center;">/</td> <td style="text-align: center;">/</td> <td>Vdc</td> </tr> <tr> <td>-----</td> <td>-----</td> <td>-----</td> <td>A</td> </tr> <tr> <td>-----</td> <td>-----</td> <td>-----</td> <td>ms</td> </tr> </table> <p>-----</p> <p>----- ms</p> <p>-----</p> <p>----- Vdc</p> <p>----- s</p> <p>----- Operations</p> <p>----- s</p> | | Closing | Tripping | | ----- | ----- | ----- | | ----- | / | / | Vdc | ----- | ----- | ----- | A | ----- | ----- | ----- | ms |
| | Closing | Tripping | | | | | | | | | | | | | | | | | | | |
| ----- | ----- | ----- | | | | | | | | | | | | | | | | | | | |
| ----- | / | / | Vdc | | | | | | | | | | | | | | | | | | |
| ----- | ----- | ----- | A | | | | | | | | | | | | | | | | | | |
| ----- | ----- | ----- | ms | | | | | | | | | | | | | | | | | | |

Disconnecting Switch

- | | |
|---|--|
| <p>a. Type</p> <p>b. Number of breaks per pole</p> <p>c. Applied standard</p> <p>d. Rated voltage</p> <p>e. Maximum service voltage</p> <p>f. Power frequency withstand voltage</p> <ul style="list-style-type: none"> - Phase to earth - Across the isolating distance | <p>-----</p> <p>-----</p> <p>-----</p> <p>----- kV</p> <p>----- kV</p> <p>----- kV</p> <p>----- kV</p> <p>----- kV</p> |
|---|--|

COMPACT SWITCHGEAR

PROPOSAL DATA	PROCUREMENT REFERENCE _____
BIDDER _____	SCHEDULE NO _____
	ITEM NO _____
g. Lightning impulse withstand voltage	
- Phase to earth	kV
- Across the isolating distance	kV
h. Frequency	Hz
i. Rated continuous current	A
j. Rated peak withstand current	kA
k. Rated short time (1 s) withstanding current	kA
l. Type of contact	
m. Material of contact	
n. Thickness of silver on contact surfaces	mm
o. Operating mechanism	
p. Operating time	
- Closing	s
- Opening	s
q. Operating and control voltage	Vdc
High Speed Grounding Switch	
a. Type	
b. Rated voltage	kV
c. Power frequency withstand voltage	
- Phase to earth	kV
d. Lightning impulse withstand voltage	
- Phase to earth	kV
e. Rated short circuit making current	kA
f. Rated short time (1 s) withstand current	kA
g. Type of contact	
h. Material of contacts	
i. Thickness of silver on contacts surfaces	mm
j. Operating mechanism	
k. Operating and control voltage	Vdc

COMPACT SWITCHGEAR

PROPOSAL DATA

PROCUREMENT REFERENCE _____
SCHEDULE NO _____
ITEM NO _____

BIDDER _____

Maintenance Grounding Switch

- a. Type _____
- b. Rated voltage _____ kV
- c. Power frequency withstand voltage
- Phase to earth _____ kV
- d. Lightning impulse withstand voltage
- Phase to earth _____ kV
- e. Rated short time (1 s) withstand current _____ kA
- f. Type and material of contacts _____
- g. Operating mechanism _____
- h. Operating and control voltage _____ Vdc

Voltage Transformer

- a. Manufacturer/ Country _____
- b. Type / Model / Catalog No. _____
- c. Applied standard _____
- d. Maximum service voltage _____ kV
- e. Voltage ratio _____
- f. Secondary voltage rating
- No 1 secondary winding _____
- No 2 secondary winding _____
- No 3 secondary winding _____
- g. Burden
- No 1 secondary winding _____
- No 2 secondary winding _____
- No 3 secondary winding _____
- Simultaneous _____
- h. Accuracy class _____

Current Transformer

- a. Manufacturer/ Country _____
- b. Type / Model / Catalog No. _____
- c. Applied standard _____
- d. Maximum service voltage _____ kV
- e. Rated Primary Current _____ A

COMPACT SWITCHGEAR

PROPOSAL DATA

PROCUREMENT REFERENCE _____
SCHEDULE NO _____
ITEM NO _____

BIDDER _____

- f. Rated Secondary Current _____ A
- g. No of core _____
- h. Current ratio _____
- i. Accuracy class _____
- j. Continuous thermal current rating factor _____

Bushing

- a. Manufacturer/ Country _____
- b. Type / Model / Catalog No. _____
- c. Applied standard _____
- d. Maximum service voltage _____ kV
- e. Type of internal insulation _____
- f. Type of external insulation _____
- g. Nominal specific creepage distance _____ mm/kV
- h. Cantilever load _____ N
- i. Type of line termination _____