

Republic of the Philippines  
National Electrification Administration

*"The 1st Performance Governance System-Institutionalized National Government Agency"*

02 May 2012

MEMORANDUM No. 2012-011

TO : **ALL ELECTRIC COOPERATIVES**

SUBJECT : **2012 UNBUNDLED PRICE INDEX OF 5 AND 10MVA  
POWER SUBSTATIONS**

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The National Electrification Administration (NEA) developed the Unbundled Price Index for 5 MVA and 10 MVA Power Substations being procured by the Electric Cooperatives (ECs) in lieu of the previously issued complete package basis. The Unbundled Price Index will provide NEA with a more detailed price reference in the evaluation of requested projects involving complete power substation package as well as similar projects consisting of selected accessories only. It will also guide the ECs in the procurement of the power substation.

To determine the most reasonable prices, we have consulted ECs in Luzon, Visayas and Mindanao on their latest awarded costs of 5 MVA and 10 MVA Power Substations based on competitive bidding and also requested price quotations from various suppliers. The reflected unit prices are averages of the current market price provided by seven ECs from Luzon, five from Visayas and two from Mindanao. In the evaluation, sources of origin were given consideration during the process instead of the brand names of equipment and accessories. To cover any price variation due to fluctuating peso conversion rate and in-country freight and handling, a 10% contingency was provided in the unbundled cost. Likewise, 12 % VAT was included.

Attached is the Unbundled Price Index of 5 MVA and 10 MVA Power Substations. Please feel free to communicate with the Accelerated Total Electrification Office (ATEO) for any clarification through telephone number (02) 9292040 or through email address: nea\_comcenrdo@yahoo.com.ph

For your information and guidance.

  
**EDITA S. BUENO**  
Administrator

NATIONAL ELECTRIFICATION  
ADMINISTRATION

IN REPLYING- PLS. CITE: #OR020306



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Republic of the Philippines  
**NATIONAL ELECTRIFICATION ADMINISTRATION**  
 Quezon City

**2012 UNBUNDLED PRICE INDEX - 5 MVA POWER SUBSTATION**

Unbundled Components	Source of Origin	Unit Cost
<b>POWER TRANSFORMER</b>	Asia	7,099,400.00
<b>69KV STRUCTURES</b>		
Receiving Structures Power Circuit Breaker Structures Potential Transformer Structures Current Transformer Structures Surge Arresters Structures Disconnect Switch Structures	Asia	607,291.66
<b>69KV PROTECTION AND METERING EQUIPMENT</b>		
Power Circuit Breaker w/ relay	USA/Europe	3,169,956.28
Potential Transformer	USA/Europe	293,780.15
Current Transformer	USA/Europe	275,377.12
Surge Arresters	USA/Europe	58,414.95
Disconnect Switch - 3 pole	Europe	440,904.39
<b>15KV PROTECTION EQUIPMENT</b>		
Circuit Breaker	USA/Europe	1,252,986.90
Circuit Breaker (individual)	Asia	375,375.00
Potential Transformer	USA/Europe	71,194.30
Current Transformer	USA/Europe	58,891.15
Surge Arrester	USA/Europe	26,745.40
Disconnect Switch	USA/Europe	16,284.16
<b>69KV AND 15KV METERING, CONTROL AND PROTECTION PANEL AND RELAY</b>		
69KV Protection, Control and Metering Panel	Asia	456,016.00
15KV Protection, Control and Metering Panel		
15KV Metering Current Transformer	USA/Europe	12,453.34
15KV Multifunction Power Meter	USA/Europe	41,704.67
15KV Medium Voltage Switchgear	Asia	1,747,625.00
15KV Protection Relay	USA/Europe	98,845.63
<b>BATTERY AND BATTERY CHARGER</b>		
Battery Bank		350,997.90
Battery Charger	USA/Europe	317,991.67
Battery Rack		
<b>15KV POWER CABLE AND TERMINATION KIT</b>		
Power Cable		1,347.50
Termination and Other Accessories		15,675.00
<b>CIVIL AND OTHER ELECTRICAL WORKS</b>		
Civil Works		
Fencing		319,000.00
Equipment Foundation		440,000.00
Site Development/clearing/grading		33,000.00
Power House		352,000.00
Gravelling		110,000.00
Electrical Work	Asia	
Incoming 69 KV line and 69 KV metering equipment		572,000.00
Overhead line hardwares and materials for 69 KV line		110,000.00
Control cables and conduit, XLPE power cables with indoor and outdoor terminating kits		693,000.00
Complete grounding mat system		522,500.00
Project Mngt.		110,000.00
Testing and Commissioning		110,000.00

**Note: All equipment and accessories shall meet the IEC, IEEE, and NEA Standards**



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**2012 UNBUNDLED PRICE INDEX - 10 MVA POWER SUBSTATION**

Unbundled Components	Source of Origin	Unit Cost
<b>POWER TRANSFORMER</b>	Asia	11,676,151.48
<b>69KV STRUCTURES</b>		
Receiving Structures Power Circuit Breaker Structures Potential Transformer Structures Current Transformer Structures Surge Arresters Structures Disconnect Switch Structures	Asia	607,291.66
<b>69KV PROTECTION AND METERING EQUIPMENT</b>		
Power Circuit Breaker w/ relay	USA/Europe	3,169,956.28
Potential Transformer	USA/Europe	293,780.15
Current Transformer	USA/Europe	275,377.12
Surge Arresters	USA/Europe	58,414.95
Disconnect Switch - 3 pole	Europe	440,904.39
<b>15KV PROTECTION EQUIPMENT</b>		
Circuit Breaker	USA/Europe	1,252,986.90
Circuit Breaker (individual)	Asia	375,375.00
Potential Transformer	USA/Europe	71,194.30
Current Transformer	USA/Europe	58,891.15
Surge Arrester	USA/Europe	26,745.40
Disconnect Switch	USA/Europe	16,284.16
<b>69KV AND 15KV METERING, CONTROL AND PROTECTION PANEL AND RELAY</b>		
69KV Protection, Control and Metering Panel	Asia	456,016.00
15KV Protection, Control and Metering Panel		
15KV Metering Current Transformer	USA/Europe	12,453.34
15KV Multifunction Power Meter	USA/Europe	41,704.67
15KV Medium Voltage Switchgear	Asia	1,747,625.00
15KV Protection Relay	USA/Europe	98,845.63
<b>BATTERY AND BATTERY CHARGER</b>		
Battery Bank		350,997.90
Battery Charger	USA/Europe	317,991.67
Battery Rack		
<b>15KV POWER CABLE AND TERMINATION KIT</b>		
Power Cable		1,347.50
Termination and Other Accessories		15,675.00
<b>CIVIL AND OTHER ELECTRICAL WORKS</b>		
Civil Works		
Fencing		319,000.00
Equipment Foundation		440,000.00
Site Development/clearing/grading		33,000.00
Power House		352,000.00
Gravelling		110,000.00
Electrical Work	Asia	
Incoming 69 KV line and 69 KV metering equipment		572,000.00
Overhead line hardwares and materials for 69 KV line		110,000.00
Control cables and conduit, XLPE power cables with indoor and outdoor terminating kits		693,000.00
Complete grounding mat system		522,500.00
Project Mngt. Testing and Commissioning		110,000.00

**Note: All equipment and accessories shall meet the IEC, IEEE, and NEA Standards**