

103/BPC/C&PD/CMS/2023/Vol -1/71

May 30, 2023

Subject: Bid Document: Amendment No, 1 BPC/C&PD/CMS/TENDER-2023/16 (Labour Contract of PLAN WORKS, 2023 under Chukha, Dagana, Gasa, Haa, Lhuentse, Mongar, Paro, Punakha, Samdrup Jongkhar, Samtse, Sarpang, Trashigang, Trashiyangtse, Tsirang, and Wangdue Dzongkhags)

Dear Sir,

This amendment is being issued to incorporate the changes in the price schedule for package PW23-B2L1, PW23-K1, PW23DJ2 and PW23-M1 which is enclosed as Appendix 1 (Revised Price Schedule).

Therefore, the bidders are advised to note the above changes and quote accordingly. All other terms and conditions remain unchanged.

Please confirm the receipt of this Addendum by return mail/fax to the CMS, CD, C&PD, BPC.

Thanking you,

Yours sincerely,

Senior Manager

Address:

Contracts Management Section, Construction Division, Construction & Procurement Department, Bhutan Power Corporation Ltd., Thimphu: Bhutan Telephone /Website/ Email: Phone: +975- 2-322046 (Direct) Phone: +975-2-325096 (Ext: 774) Website: www.bpc.bt Email:<u>dorjikinley@bpc.bt</u> /<u>cmsection@bpc.bt</u> **Registered Office:** Bhutan Power Corporation Ltd., PO Box: 580, Thimphu: Bhutan



Package: PW23 - B2L1

Labour Contract of Plan Work under Chukha & Samtse Dzongkhag

| Sl. No. | Description | Unit | Quantity | Rate (Nu.) | Amount (Nu.) |
|---------|--|-------|----------|------------|--------------|
| | Chukha Dzongkhag | | | | |
| I | Extension of 33kV HT Line , Construction of 33/0.240kV 25 kVA substation and Extension of 2cx50sqmm LT ABC cable to Bichgao Village under Lhamoizingkha Gewog, Lhamoizingkha. | | | | |
| A | Medium / Low Voltage Lines (OH) | | | | |
| 1 | Detailed route survey, clearing of jungle/bushes, felling of trees including cutting of trunks, branches & removing the trees (especially blocking of foot path & roads) wherever necessary, transportation of materials both head loading and vechicular from stores to sites, digging of holes for poles & stays wherever necessary, erection of poles & stays wherever necessary, laying and stringing of conductors, fittings and accessories, painting of existing poles & fittings, supply of miscellaneous items such as nut & bolt, lugs, etc., modification of fittings like drilling, welding, etc., testing, commissioning and any other associated works. | | | | |
| 1.1 | 33 kV lines (ACSR bare conductor) with existing Steel Tubular Poles | | | | |
| a | Rabbit conductor (3 phase, 3 wire) | Km | 0.90 | | |
| 1.2 | Low Voltage Lines (ABC) with Galvanized Steel Tubular Poles 7.5m | | | | |
| a | 2 core 50 sq.mm | Km | 2.60 | | |
| B | Substation Construction Detailed site survey, clearing of jungle/bushes, felling of trees including cutting | | | | |
| 1 | of trunks, branches & removing the trees (especially blocking of foot path & roads), transportation of materials both head loading and vechicular from stores to sites, digging of holes, erection of poles, installation of transformer & distribution pillar, fittings and accessories, installation of GEE slab earthing & connections, cable connections/terminations, supply of miscellaneous items such as nut & bolt, lugs, etc., modification of fittings like drilling, welding, etc., testing, commissioning and any other associated works. | | | | |
| 1.1 | Single phase 33/0.240kV | | | | |
| a | 25 kVA | No | 1.00 | | |
| п | Replacement of faulty 11kV 3cx300sqmm UG cable between Lower | | | | |
| | Market RMU and Helipad RMU. | | | | |
| A | Medium Voltage Lines (UG) | | | | |
| 1 | Detail route survey, clearing of jungle/bushes along the RoW, rivers, footpath and roads etc., transportation (both headloading and vehicular) from stores to sites, digging of trench (0.5 m width & 1000 mm depth) for direct burial, road/drain cutting & reinstatement wherever necessary, laying of cable including protective bricks and with HDPE/Hume pipe of required size at road/drain crossing, sand covering of 75mm bedding below and above the cable, erection of cable route marker for every 20 meters and joint marker wherever needed, supply of miscellaneous items such as nut & bolt, lugs, etc., to complete the work in full as per the approved drawings. | | | | |
| 1.1 | | Mtrs. | 1,100.00 | | |
| 1.2 | Termination of indoor/outdoor termination kit (heat shrink) and other accessories to complete the work in all respect | | | | |
| a | 11kV grade, 3 C x 300 Sq.mm | Set | 3.00 | | |
| 1.3 | Erection of Straight Through Jointing kits | | | | |
| a | 11kV grade, 3 C x 300 Sq.mm | Set | 4.00 | | |

Package: PW23 - B2L1

Labour Contract of Plan Work under Chukha & Samtse Dzongkhag

| Sl. No. | Description | Unit | Quantity | Rate (Nu.) | Amount (Nu.) |
|---------|--|-------|----------|------------|--------------|
| III | Extension of 3xc 150sq.mm Arm. Al cable XPLE Ins 11kV, construction of 11/0.415kV 1000kVA USS and extension of UG LT line for power supply to | | | | |
| | upcoming 23 Workshop at Lower Amochu. | | | | |
| Α | Medium Voltage Lines (UG) | | | | |
| | Detail route survey, clearing of jungle/bushes along the RoW, rivers, footpath | | | | |
| | and roads etc., transportation (both headloading and vehicular) from stores to | | | | |
| | sites, digging of trench (0.5 m width & 1000 mm depth) for direct burial, | | | | |
| | road/drain cutting & reinstatement wherever necessary, laying of cable | | | | |
| 1 | including protective bricks and with HDPE/Hume pipe of required size at | | | | |
| | road/drain crossing, sand covering of 75mm bedding below and above the cable, | | | | |
| | erection of cable route marker for every 20 meters and joint marker wherever | | | | |
| | needed, supply of miscellaneous items such as nut & bolt, lugs, etc., to complete | | | | |
| | the work in full as per the approved drawings. | | | | |
| 1.1 | 11kV grade, 3 core x 300 sq.mm | Mtrs. | 622.00 | | |
| 1.2 | Termination of indoor/outdoor termination kit (heat shrink) and other | | | | |
| | accessories to complete the work in all respect | | | | |
| a | 11kV grade, 3 C x 300 Sq.mm | Set | 2.00 | | |
| 1.3 | Erection of Straight Through Jointing kits | | | | |
| a | 11kV grade, 3 C x 300 Sq.mm | Set | 2.00 | | |
| B | Substation Construction | | | | |
| | Detailed site survey, clearing of jungle/bushes, felling of trees including cutting | | | | |
| | of trunks, branches & removing the trees (especially blocking of foot path & | | | | |
| | roads), earth work in excavation over areas & disposal of excavated earth, | | | | |
| 1 | transportation of materials both head loading and vechicular from stores to sites, | | | | |
| | installation of USS, cable termination, installation of GEE slab earthing & | | | | |
| | connections, supply of miscellaneous items such as nut & bolt, lugs, etc., testing | | | | |
| | & commissioning of USS and any other associated works. | | | | |
| 1.1 | 11/0.415kV, 1000 kVA USS | No | 1.00 | | |
| 2 | Construction of foundation for 1000 kVA USS | | | | |
| 0.1 | Excavation in foundation tranches or drains not exceeding 1.5m in width or area | | 00.40 | | |
| 2.1 | 10sq.m on plan, including dressing & ramming, disposal of surplus soil with in | cu.m | 89.49 | | |
| | 50m lead & 1.5m lift-Hard soil | | | | |
| 2.2 | Providing and laying Hand packed stone filling or soiling with stones | cu.m | 7.17 | | |
| | (Thickness-150mm) Providing and laying in position plain cement concret excluding cost of | | | | |
| 2.2 | concreting and laying in position plain cement concret excluding cost of concreting and shuttering- All work upto plinth level -1:3:6 (1 cement, 3 sand, 6 | | 12.17 | | |
| 2.3 | | cu.m | 13.17 | | |
| | graded crushed rock 20mm niminal size) | | | | |
| 2.4 | Proving & Fixing centering and shuttering (Formwork), including | sq.m | 11.36 | | |
| | strutting, propping etc and removal of formwork foundation and plinth etc | | | | |
| 2.5 | Providing & Laying Random Rubble Masonry with hard stone in foundation & | cu.m | 14.04 | | |
| | plinth In cement mortar 1:4 Providing and laying dry earth bedding, including consolidating each deposited | | | | |
| 2.6 | | 011 | 8 60 | | |
| | layer by watering, ramming and dressing. | cu.m | 8.60 | | |

Package: PW23 - B2L1 Labour Contract of Plan Work under Chukha & Samtse Dzongkhag

| Sl. No. | Description | Unit | Quantity | Rate (Nu.) | Amount (Nu.) |
|---------|--|------------|----------|------------|--------------|
| С | Low Voltage Lines (UG) | | | | |
| | Detail route survey, clearing of jungle/bushes along the RoW, rivers, footpath | | | | |
| | and roads etc., transportation (both headloading and vehicular) from stores to | | | | |
| | sites, digging of trench (0.5m width & 750mm depth) for direct burial, | | | | |
| | road/drain cutting & reinstatement wherever necessary, laying of cable | | | | |
| 2 | including protective bricks and with HDPE/Hume pipe of required size at | | | | |
| | road/drain crossing, sand covering of 75mm bedding below and above the cable, | | | | |
| | erection of cable route marker for every 20 meters and joint marker wherever | | | | |
| | needed, construction of foundations (PCC) for appropriate size of the | | | | |
| | distribution pillar, installation of distribution pillars, cable terminations & earth | | | | |
| | connections, supply of miscellaneous items such as nut & bolt, lugs, etc., to | | | | |
| | complete the work in full as per the approved drawings. | | | | |
| 2.1 | 1.1kV grade, 4 core x 400 sq.mm | Mtrs. | 741.00 | | |
| 2.2 | 1.1kV grade, 4 core x 150 sq.mm | Mtrs. | 329.00 | | |
| 2.3 | Distribution pillar, 4/6ways | No | 9.00 | | |
| 2.4 | Erection of Straight Through Jointing kits | | | | |
| а | 1.1kV grade, 4 C x 300 Sq.mm | Set | 3.00 | | |
| b | 1.1kV grade, 4 C x 150 Sq.mm | Set | 3.00 | | |
| 137 | Construction of permanent power supply structure for POEs under ESD | | | | |
| IV | Phuentsholing | | | | |
| Α | Low Voltage Lines (OH) | | | | |
| | Detailed route survey, clearing of jungle/bushes, felling of trees including | | | | |
| | cutting of trunks, branches & removing the trees (especially blocking of foot | | | | |
| | path & roads) wherever necessary, transportation of materials both head loading | | | | |
| 1 | and vechicular from stores to sites, digging of holes for poles & stays wherever | | | | |
| 1 | necessary, erection of poles & stays wherever necessary, laying and stringing of | | | | |
| | conductors, fittings and accessories, painting of existing poles, testing, | | | | |
| | commissioning and any other associated works including disconnection & | | | | |
| | reconnection of service cable. | | | | |
| 1.1 | Low Voltage Lines (ABC) with existing Steel Tubular Poles | | | | |
| а | 4 core 95 sq.mm | Km | 4.47 | | |
| | Service connection (2x6 sq.mm copper cable) including transportation both | N T | 20.00 | | |
| В | head loading and vehicular from store to site. | No | 20.00 | | |
| | Samtse Dzongkhag | | | | |
| v | Upgradation of 63kVA, 11/0.415kV to 250kVA, 11/0.415kV Substation at | | | | |
| v | Budney | | | | |
| Α | Substation Construction | | | | |
| | Detailed site survey, clearing of jungle/bushes, felling of trees including cutting | | | | |
| | of trunks, branches & removing the trees (especially blocking of foot path & | | | | |
| | roads), transportation of materials both head loading and vechicular from stores | | | | |
| 1 | to sites, digging of holes, erection of poles, installation of transformer & | | | | |
| 1 | distribution pillar, fittings and accessories, installation of GEE slab earthing & | | | | |
| | connections, cable connections/terminations, supply of miscellaneous items | | | | |
| | such as nut & bolt, lugs, etc., modification of fittings like drilling, welding, etc., | | | | |
| | testing, commissioning and any other associated works. | | | | |
| 1.1 | Three phase 11/0.415 kV | | | | |
| а | 250 kVA | No | 1.00 | | |
| | Dismantling of existing transformer (11/0.415kV, 63kVA) & distribution pillar, | | | | |
| 1.2 | dismantled of associated fittings & accessories, and transportation of dismantled | No | 1.00 | | |
| | materials from sites to ESD store. | | | | |

Package: PW23 - B2L1

Labour Contract of Plan Work under Chukha & Samtse Dzongkhag

| SI. No. | Description | Unit | Quantity | Rate (Nu.) | Amount (Nu.) |
|---------|---|------|----------|------------|--------------|
| 2 | Construction of chain link fence & gate and Transformer foundation | | | | |
| 2.1 | Excavation in foundation trenches or drains not exceeding 1.5m in width or area 10sq.m on plan, including dressing & ramming, disposal of surplus soil with in 50m lead & 1.5m lift-Hard soil | cu.m | 23.50 | | |
| 2.2 | Filling of trenches, sides of foundations etc. in layers <200mm using selected excavated earth, ramming etc. within lead 50 m & lift 1.5m | Cu.m | 2.78 | | |
| 2.3 | Providing and laying Hand packed stone filling or soiling with stones (Thickness-150mm) | cu.m | 2.08 | | |
| 2.4 | Providing and laying in position plain cement concrete excluding cost of concreting and shuttering- All work upto plinth level -1:3:6 (1 cement, 3 sand, 6 graded crushed rock 20mm nominal size) | cu.m | 4.10 | | |
| 2.5 | Providing & Fixing centering and shuttering (Formwork), cincluding strutting, cpropping etc., and removal of formwork foundation and plinth etc., | sq.m | 26.56 | | |
| 2.6 | Providing & Laying Random Rubble Masonry with hard stone in foundation & plinth In cement mortar 1:4 | cu.m | 6.90 | | |
| 2.7 | Steel work in single section including cutting, choisting fixing and applying primming coat of red lead paint and finishing with two or more coats of synthetic enamel paint- In Tees, angles, flats and channels | kg | 410.40 | | |
| 2.8 | Supplying and spreading of stone aggregate 20mm on substation yard (Thickness-100mm) | cu.m | 2.94 | | |
| 2.9 | Providing and fixing of GI barbed wire netting including fixing of post or struts, G.I staples coal tarring in case of ballies complete (post, struts, earthwork, concrete paid separate)-2-5mm, (12SWG), 4 bars form by twisting two points wires, each two turns, pitch of barbs 75mm | m | 76.80 | | |
| 2.10 | Providing & fixing G.I chain-link mesh netting including fixing of post struts, G.I staples (excluding the cost of (post, struts, earthwork, concrete etc) -4mm (8SWG)x 50MM Height 2m | sq.m | 48.00 | | |
| 2.11 | Substation gate fabricated out of M.S angle section 4m wide, 2m high with 2 leafs opening with all locking arragement as per BPC standard. | set | 1.00 | | |
| 2.12 | Providing & laying in position reinforced cement concrete 1:1.5:3 (1 cement : 1.5 sand : 3 graded crushed rock 20 mm nominal size) work in beams, lintels, bands, plain window sills, staircases, spiral staircases upto floor five level excluding the cost of centering, shuttering and reinforcement | cu.m | 1.54 | | |
| 2.13 | Providing & fixing Thermo-Mechanically Treated reinforcement bar (Yield Strength 500 MPa) for R.C.C work including cutting, bending, binding and placing in position complete | kg | 161.64 | | |
| | Total Contract Price (Nu.) In words: | | | | |

Note:

The quantities mentioned here are indicative and are estimated values. These are subject to change at the time of execution. Payments shall be made based on the actual volume of works at the rate or price schedule of the contract.

Package: PW23-DJ2

Labour Contract of Plan Work under Gasa & Punakha Dzongkhags

| <u>Sl. No.</u> | Description | Unit | Quantity | Rate (Nu.) | Amount (Nu. |
|----------------|--|------|----------|------------|--|
| Ι | Power supply extension to BBSC FM Station at Laya | | | | |
| Α | Medium / Low Voltage Lines (OH) | | | | |
| | Detailed route survey, clearing of jungle/bushes, felling of trees including cutting of | | | | |
| | trunks, branches & removing the trees (especially blocking of foot path & roads) | | | | |
| | wherever necessary, transportation of materials both head loading and vechicular | | | | |
| 1 | from stores to sites, digging of holes for poles & stays wherever necessary, erection | | | | |
| 1 | of poles & stays wherever necessary, laying and stringing of conductors, fittings and | | | | |
| | accessories, painting of existing poles & fittings, supply of miscellaneous items such | | | | |
| | as nut & bolt, lugs, etc., modification of fittings like drilling, welding, etc., testing, | | | | |
| | commissioning and any other associated works. | | | | |
| 1.1 | 33 kV lines (ACSR bare conductor) with existing Steel Tubular Poles | | | | |
| a | Conductor - AAAC Covered 111sq.mm | Km | 2.50 | | |
| 1.2 | Low Voltage Lines (ABC) with existing Steel Tubular Poles | | | | |
| a | 2 core 50 sq.mm | Km | 1.00 | | |
| В | Substation Construction | | | | |
| | Detailed site survey, clearing of jungle/bushes, felling of trees including cutting of | | | | |
| | trunks, branches & removing the trees (especially blocking of foot path & roads), | | | | |
| | transportation of materials both head loading and vechicular from stores to sites, | | | | |
| 1 | digging of holes, erection of poles, installation of transformer & distribution pillar, | | | | |
| 1 | fittings and accessories, installation of GEE slab earthing & connections, cable | | | | |
| | connections/terminations, supply of miscellaneous items such as nut & bolt, lugs, | | | | |
| | etc., modification of fittings like drilling, welding, etc., testing, commissioning and | | | | |
| | any other associated works. | | | | |
| 1.1 | Single phase 33/0.240 kV | | | | |
| a | 16 kVA | No | 1.00 | | |
| | Power supply for BT Tower(Repeater station) at Lungu, Laya gewog, Gasa | | | | |
| П | Dzongkhag | | | | |
| Α | Medium / Low Voltage Lines (OH) | | | | |
| | Detailed route survey, clearing of jungle/bushes, felling of trees including cutting of | | | | |
| | trunks, branches & removing the trees (especially blocking of foot path & roads) | | | | |
| | wherever necessary, transportation of materials both head loading and vechicular | | | | |
| | from stores to sites, digging of holes for poles & stays wherever necessary, erection | | | | |
| 1 | of poles & stays wherever necessary, laying and stringing of conductors, fittings and | | | | |
| | accessories, painting of existing poles & fittings, supply of miscellaneous items such | | | | |
| | as nut & bolt, lugs, etc., modification of fittings like drilling, welding, etc., testing, | | | | |
| | commissioning and any other associated works. | | | | |
| 1.1 | 33 kV lines (ACSR bare conductor) with existing Steel Tubular Poles | | | | |
| 1.1 a | Conductor - AAAC Covered 111sq.mm | Km | 1.00 | | |
| 1.2 | Low Voltage Lines (ABC) with existing Steel Tubular Poles | | 1.00 | | |
| a | 2 core 50 sq.mm | Km | 0.10 | | |
| B | Substation Construction | | 0.10 | | |
| | Detailed site survey, clearing of jungle/bushes, felling of trees including cutting of | | | | |
| | trunks, branches & removing the trees (especially blocking of foot path & roads), | | | | |
| | transportation of materials both head loading and vechicular from stores to sites, | | | | |
| | digging of holes, erection of poles, installation of transformer & distribution pillar, | | | | |
| 1 | fittings and accessories, installation of GEE slab earthing & connections, cable | | | | |
| | connections/terminations, supply of miscellaneous items such as nut & bolt, lugs, | | | | |
| | etc., modification of fittings like drilling, welding, etc., testing, commissioning and | | | | |
| | any other associated works. | | | | |
| | Single phase 33/0.240 kV | | | | |
| 11 | ISINGIC PHASE JJ/0.240 KV | | | | |
| 1.1 | | No | 1 00 | | and the second |
| 1.1 a | 16 kVA Total Contract Price (Nu.) | No | 1.00 | | |

Note:

The quantities mentioned here are indicative and are estimated values. These are subject to change at the time of execution. Payments shall be made

Package: PW23-K1

Labour Contract of Plan Work under Samdrup Jongkhar Dzongkhag

| Sl. No. | Description | Unit | Quantity | Rate (Nu.) | Amount (Nu.) |
|----------|--|-------|----------|------------|--------------|
| I | Construction of Distribution substations at Dewathang (a) 250 kVA ,11/0.415 kV at Dewathang LSS | | | | |
| A | Medium Voltage Lines (UG) | | | | |
| 1 | Detail route survey, clearing of jungle/bushes along the RoW, rivers, footpath and roads etc., transportation (both headloading and vehicular) from stores to sites, digging of trench (0.5 m width & 1000 mm depth) for direct burial, road/drain cutting & reinstatement wherever necessary, laying of cable including protective bricks and with HDPE/Hume pipe of required size at road/drain crossing, sand covering of 75mm bedding below and above the | | | | |
| | cable, erection of cable route marker for every 20 meters and joint marker wherever needed, supply of miscellaneous items such as nut & bolt, lugs, etc., to complete the work in full as per the approved drawings. | | | | |
| 1.1 | 11kV grade, 3 core x 150 sq.mm | Mtrs. | 30.00 | | |
| 1.2 | Termination of indoor/outdoor termination kit (heat shrink) and other accessories to complete the work in all respect 11kV grade, 3 C x 150 Sq.mm | Set | 2.00 | | |
| Α | Low Voltage Lines | 1 | | | |
| 1 | Detailed route survey, clearing of jungle/bushes, felling of trees including cutting of trunks, branches & removing the trees (especially blocking of foot path & roads), transportation of materials both head loading and vechicular from stores to sites, digging of holes, erection of poles, laying and stringing of conductors, fittings and accessories, HV ABC cable termination kit jointings, supply of miscellaneous items such as nut & bolt, lugs, etc., modification of fittings like drilling, welding, etc., testing, commissioning and any other associated works. | | | | |
| 1.1 | Low Voltage Lines (ABC) with Galvanized Steel Tubular Poles 7.5m | | | | |
| a D | 4 core 95 sq.mm | Km | 0.07 | | |
| B | Substation Construction Detailed site survey, clearing of jungle/bushes, felling of trees including cutting of trunks, branches & removing the trees (especially blocking of foot path & roads), earth work in excavation over areas & disposal of excavated earth, transportation of materials both head loading and vechicular from stores to sites, digging of holes, erection of poles, installation of transformer & distribution pillar, fittings and accessories, installation of GEE slab earthing & connections, construction of foundations (PCC) for appropriate size of the distribution pillar, cable connections/terminations, supply of miscellaneous items such as nut & bolt, lugs, etc., modification of fittings like drilling, welding, etc., testing, commissioning and any other associated works. | | | | |
| 1.2 | Three phase 11/0.415 kV | | | | |
| a | 250 kVA | No | 1.00 | | |
| 2 | Construction of chain link fence with gate and Transformer Plinth | | | | |
| 2.1 | Excavation in foundation trenches or drains not exceeding 1.5m in width or area 10sq.m on plan, including dressing & ramming, disposal of surplus soil with in 50m lead & 1.5m lift-Hard soil | cu.m | 23.50 | | |
| 2.2 | Filling of trenches, sides of foundations etc. in layers <200mm using selected excavated earth, ramming etc. within lead 50 m & lift 1.5m | Cu.m | 2.78 | | |
| 2.3 | Providing and laying Hand packed stone filling or soiling with stones (Thickness-150mm) | cu.m | 2.08 | | |
| 2.4 | Providing and laying in position plain cement concret excluding cost of concreting and shuttering- All work upto plinth level -1:3:6 (1 cement, 3 sand, 6 graded crushed rock 20mm nominal size) | cu.m | 4.10 | | |

Package: PW23-K1

Labour Contract of Plan Work under Samdrup Jongkhar Dzongkhag

| Sl. No. | Description | Unit | Quantity | Rate (Nu.) | Amount (Nu.) |
|----------|---|--------|----------|------------|--------------|
| 2.5 | Providing & Fixing centering and shuttering (Formwork), including | sa m | 26.56 | | |
| 2.5 | strutting, propping etc and removal of formwork foundation and plinth etc | sq.m | 20.30 | | |
| 2.6 | Providing & Laying Random Rubble Masonry with hard stone in foundation & | cu.m | 6.90 | | |
| 2.0 | plinth In cement mortar 1:4 | Cu.III | 0.70 | | |
| | Steel work in single section including cutting, hoisting fixing and applying | | | | |
| 2.7 | primming coat of red lead paint and finishing with two or more coats of | kg | 410.40 | | |
| | synthetic enamel paint- In Tees, angles, flats and channels | | | | |
| 2.8 | Supplying and spreading of stone aggregate 20mm on substation yard | cu.m | 2.94 | | |
| | (Thickness-100mm) Providing and fixing of GI barbed wire netting including fixing of post or struts, | | | | |
| | G.I staples coal tarring in case of ballies complete (post,struts,earthwork, | | | | |
| 2.9 | concrete paid separate)-2-5mm, (12SWG),4 bars form by twisting two points | m | 76.80 | | |
| | wires, each two turns,pitchof barbs 75mm | | | | |
| | Providing & fixing G.I chain-link mesh netting including fixing of post struts, | | | | |
| 2 10 | G.I staples (excluding the cost of (post, struts, earthwork, concrete etc) -4mm | sq.m | 48.00 | | |
| 2.10 | (8SWG)x 50MM Height 2m | 59.111 | 10.00 | | |
| | Substation gate fabricated out of M.S angle section 4m wide, 2m high with 2 | | | | |
| 2.11 | leafs opening with all locking arragement as per BPC standard. | set | 1.00 | | |
| | Providing & laying in position reinforced cement concrete 1:1.5:3 (1 cement : | | | | |
| 0.10 | 1.5 sand : 3 graded crushed rock 20 mm nominal size) work in beams, lintels, | | 1.54 | | |
| 2.12 | bands, plain window sills, staircases, spiral staircases upto floor five level | cu.m | | | |
| | excluding the cost of centering, shuttering and reinforcement | | | | |
| | Providing & fixing Thermo-Mechanically Treated reinforcement bar (Yield | | | | |
| 2.13 | Strength 500 MPa) for R.C.C work including cutting, bending, binding and | kg | 161.64 | | |
| | placing in position complete | | | | |
| II | Construction of 11 kV ACSR Rabbit line to bifurcate 11 kV Feeder from | | | | |
| A | 33/11 kV Langchenphu Substation Medium Voltage Lines (OH & UG) | | | | |
| A | Detailed route survey, clearing of jungle/bushes, felling of trees including | | | | |
| | cutting of trunks, branches & removing the trees (especially blocking of foot | | | | |
| | path & roads), transportation of materials both head loading and vechicular | | | | |
| 1 | from stores to sites, digging of holes, erection of poles, laying and stringing of | | | | |
| | conductors, fittings and accessories, supply of miscellaneous items such as nut | | | | |
| | & bolt, lugs, etc., modification of fittings like drilling, welding, etc., testing, | | | | |
| | commissioning and any other associated works. | | | | |
| 1.1 | 11 kV lines (ACSR bare conductor) with GI Steel Tubular Poles 10m | | | | |
| а | Rabbit conductor (3 phase, 3 wire) | Km | 1.20 | | |
| | Detail route survey, clearing of jungle/bushes along the RoW, rivers, footpath | | | | |
| | and roads etc., transportation (both headloading and vehicular) from stores to | | | | |
| | sites, digging of trench (0.5 m width & 1000 mm depth) for direct burial, | | | | |
| | road/drain cutting & reinstatement wherever necessary, laying of cable | | | | |
| 1.2 | including protective bricks and with HDPE/Hume pipe of required size at | | | | |
| | road/drain crossing, sand covering of 75mm bedding below and above the | | | | |
| | cable, erection of cable route marker for every 20 meters and joint marker | | | | |
| | wherever needed, supply of miscellaneous items such as nut & bolt, lugs, etc., | | | | |
| | | | | | 1 |
| | to complete the work in full as per the approved drawings. | M | 20.00 | | |
| a | to complete the work in full as per the approved drawings. 11 kV grade, 3 core x 150 sq.mm | Mtrs. | 30.00 | | |
| a 1.3 | to complete the work in full as per the approved drawings. | Mtrs. | 30.00 | | |

Package: PW23-K1

Labour Contract of Plan Work under Samdrup Jongkhar Dzongkhag

| Sl. No. | Description | Unit | Quantity | Rate (Nu.) | Amount (Nu.) |
|----------|--|------|----------|------------|--------------|
| ш | Replacement of LV ACSR Rabbit conductor with LV ABC conductor at | | | | |
| | Langchenphu | | | | |
| A | Low Voltage Lines (OH) | | | | |
| | Detailed route survey, clearing of jungle/bushes, felling of trees including | | | | |
| | cutting of trunks, branches & removing the trees (especially blocking of foot | | | | |
| | path & roads) wherever necessary, transportation of materials both head loading | | | | |
| 1 | and vechicular from stores to sites, digging of holes for poles & stays wherever | | | | |
| 1 | necessary, erection of poles & stays wherever necessary, laying and stringing of | | | | |
| | conductors, fittings and accessories, painting of existing poles, testing, | | | | |
| | commissioning and any other associated works including disconnection & | | | | |
| | reconnection of service cable. | | | | |
| 1.1 | Low Voltage Lines (ABC) with existing Steel Tubular Poles | | 1.0.0 | | |
| a | 4 core 50 sq.mm | | 1.80 | | |
| a | 2 core 50 sq.mm | Km | 0.30 | | |
| | Dismantling of existing LV ACSR conductor (3phase, 4wire/2phase, | | | | |
| 1.2 | 3wire/1phase, 2wire) & rolling, dismantling of associated fittings & | Km | 2.10 | | |
| | accessories, and transportation of dismantled materials from sites to ESD store. | | | | |
| | Service connection $(2x10 \text{ sq.mm copper cable})$ including transportation both | | | | |
| В | head loading and vehicular from store to site. | No | 41.00 | | |
| IV | Electrification of Bakalamshing village under Phuntshothang Gewog | | | | |
| A | Medium / Low Voltage Lines (OH) | | | | |
| | Detailed route survey, clearing of jungle/bushes, felling of trees including | | | | |
| | cutting of trunks, branches & removing the trees (especially blocking of foot | | | | |
| | path & roads) wherever necessary, transportation of materials both head loading | | | | |
| | and vechicular from stores to sites, digging of holes for poles & stays wherever | | | | |
| 1 | necessary, erection of poles & stays wherever necessary, laying and stringing of | | | | |
| | conductors, fittings and accessories, painting of existing poles & fittings, supply | | | | |
| | of miscellaneous items such as nut & bolt, lugs, etc., modification of fittings | | | | |
| | like drilling, welding, etc., testing, commissioning and any other associated | | | | |
| | works. | | | | |
| 1.1 | 33 kV lines (ACSR bare conductor) with existing Steel Tubular Poles | | | | |
| a | Rabbit conductor (3 phase, 3 wire) | Km | 1.71 | | |
| 1.2 | Low Voltage Lines (ABC) with Galvanized Steel Tubular Poles 7.5m | | | | |
| a | 2 core 50 sq.mm | Km | 1.16 | | |
| B | Substation Construction | | | | |
| | Detailed site survey, clearing of jungle/bushes, felling of trees including cutting | | | | |
| | of trunks, branches & removing the trees (especially blocking of foot path & | | | | |
| | roads), transportation of materials both head loading and vechicular from stores | | | | |
| 1 | to sites, digging of holes, erection of poles, installation of transformer & | | | | |
| | distribution pillar, fittings and accessories, installation of GEE slab earthing & | | | | |
| | connections, cable connections/terminations, supply of miscellaneous items | | | | |
| | such as nut & bolt, lugs, etc., modification of fittings like drilling, welding, etc., | | | | |
| 1.1 | testing, commissioning and any other associated works. Single phase 33/0.240 kV | | | | |
| 1.1 a | 25 kVA | No | 1.00 | | |
| | Service connection (2x10 sq.mm copper cable) including transportation both | | 1.00 | | |
| C | head loading and vehicular from store to site. | No | 9.00 | | |
| | Total Contract Price (Nu.) | | | | |
| | In words | | | | I |
| Notes | | | | | |

Note:

The quantities mentioned here are indicative and are estimated values. These are subject to change at the time of execution. Payments shall

Package: PW23-M1

Labour Contract of Plan Work under Sarpang Dzongkhag

| Sl. No. | Description | Unit | Quantity | Rate (Nu.) | Amount (Nu.) |
|---------|--|-------|----------|------------|--------------|
| Ι | Augmentation/Extension of LV ABC lines in and around Gelephu/Sarpang of FY 2023 | | | | |
| A | Low Voltage Lines (OH) | | | | |
| 1 | Detailed route survey, clearing of jungle/bushes, felling of trees including cutting of trunks, branches & removing the trees (especially blocking of foot path & roads) wherever necessary, transportation of materials both head loading and vechicular from stores to sites, digging of holes for poles & stays wherever | | | | |
| 1 | necessary, erection of poles & stays wherever necessary, laying and stringing of conductors, fittings and accessories, painting of existing poles, testing, commissioning and any other associated works including disconnection & reconnection of service cable. | | | | |
| 1.1 | Low Voltage Lines (ABC) with existing Steel Tubular Poles | | | | |
| a | 4 core 50 sq.mm | Km | 2.50 | | |
| п | Upgradation of existing overhead distribution network to underground network at Gelephu Core Area | | | | |
| Α | Medium Voltage Lines (UG) | | | | |
| 1 | Detail route survey, clearing of jungle/bushes along the RoW, rivers, footpath and roads etc., transportation (both headloading and vehicular) from stores to sites, digging of trench (0.5 m width & 1000 mm depth) for direct burial, road/drain cutting & reinstatement wherever necessary, laying of cable including protective bricks and with HDPE/Hume pipe of required size at road/drain crossing, sand covering of 75mm bedding below and above the cable, erection of cable route marker for every 20 meters and joint marker wherever needed, supply of miscellaneous items such as nut & bolt, lugs, etc., to complete the work in full as per the approved drawings. <u>11kV grade, 3 core x 150 sq.mm (Tapping point to RMU)</u> | | 50.00 | | |
| 1.1 | 11kV grade, 3 core x 150 sq.mm (Charali Feeder) | Mtrs. | 70.00 | | |
| 1.1 | 11kV grade, 3 core x 150 sq.mm (Vegetable Market) | Mtrs. | 250.00 | | |
| 1.2 | Termination of indoor/outdoor termination kit (heat shrink) and other accessories to complete the work in all respect | | | | |
| a | 11kV grade, 3 core x 150 sq.mm | Set | 6.00 | | |
| B | Installation of RMU | | | | |
| 1 | Detailed site survey, clearing of jungle/bushes, felling of trees including cutting of trunks, branches & removing the trees (especially blocking of foot path & roads), earth work in excavation over areas & disposal of excavated earth, transportation of materials both head loading and vechicular from stores to sites, installation of RMU, laying of cable between RMU & transformer, earthing connections, supply of miscellaneous items such as nut & bolt, lugs, etc., testing & commissioning of RMU and any other associated works. | | | | |
| 1.1 | 11kV RMU | No | 1.00 | | |
| 2 | Construction of platform for RMU - 1nos. | | | | |
| 2.1 | Excavation in foundation trenches or drains not exceeding 1.5m in width or area 10sq.m on plan, including dressing & ramming, disposal of surplus soil with in 50m lead & 1.5m lift-Hard soil | cu.m | 1.94 | | |
| 2.2 | Providing and laying Hand packed stone filling or soling with stones | cu.m | 0.50 | | |
| 2.3 | Providing and laying in position plain cement concret excluding cost of concreting and shuttering- All work upto plinth level -1:3:6 (1 cement, 3 sand, 6 graded crushed rock 20mm nominal size) | cu.m | 0.34 | | |
| 2.4 | Providing & laying Random Rubble Masonry with hard stone in foundation & plinth in CM 1:5 | cu.m | 10.07 | | |
| 2.5 | Steel work in single section including cutting, hoisting fixing and applying primming coat of red lead paint- In Tees, angles, falts and channels | kg | 91.11 | | |

Package: PW23-M1 Labour Contract of Plan Work under Sarpang Dzongkhag

| Sl. No. | Description | Unit | Quantity | Rate (Nu.) | Amount (Nu.) |
|----------|--|-------|----------|------------|--------------|
| В | Substation Construction | | | | |
| 1 | Detailed site survey, clearing of jungle/bushes, felling of trees including cutting of trunks, branches & removing the trees (especially blocking of foot path & roads), earth work in excavation over areas & disposal of excavated earth, transportation of materials both head loading and vechicular from stores to sites, installation of USS, cable termination, installation of GEE slab earthing & | | | | |
| | connections, supply of miscellaneous items such as nut & bolt, lugs, etc., testing & commissioning of USS and any other associated works. | | | | |
| 1.1 | 11/0.415kV, 750 kVA USS | No | 1.00 | | |
| 2 | Construction of foundation for 750 kVA USS | | | | |
| 2.1 | Excavation in foundation tranches or drains not exceeding 1.5m in width or area 10sq.m on plan, including dressing & ramming, disposal of surplus soil with in 50m lead & 1.5m lift-Hard soil | cu.m | 89.49 | | |
| 2.2 | Providing and laying Hand packed stone filling or soiling with stones (Thickness- 150mm) | cu.m | 7.17 | | |
| 2.3 | Providing and laying in position plain cement concret excluding cost of concreting and shuttering- All work upto plinth level -1:3:6 (1 cement, 3 sand, 6 graded crushed rock 20mm niminal size) | cu.m | 13.17 | | |
| 2.4 | Proving & Fixing centering and shuttering (Formwork), including strutting, propping etc and removal of formwork foundation and plinth etc | sq.m | 11.36 | | |
| 2.5 | Providing & Laying Random Rubble Masonry with hard stone in foundation & plinth In cement mortar 1:4 | cu.m | 14.04 | | |
| 2.6 | Providing and laying dry earth bedding, including consolidating each deposited layer by watering, ramming and dressing. | cu.m | 8.60 | | |
| С | Low Voltage Lines (UG) | | | | |
| 1 | Detail route survey, clearing of jungle/bushes along the RoW, rivers, footpath and roads etc., transportation (both headloading and vehicular) from stores to sites, road/drain/trench cutting & reinstatement wherever necessary, laying of cable in the trench/duct/on the wall (existing hook/rack) and with HDPE/Hume pipe of required size at road/drain crossing, supply of miscellaneous items such as nut & bolt, lugs, etc., to complete the work in full as per the approved drawings. | | | | |
| 1.1 | 1.1kV grade, 4 core x 300 sq.mm | | | | |
| 1.1 a | Charali to core town | Mtrs. | 850.00 | | |
| b | Vegetable market to core town | Mtrs. | 1,170.00 | | |
| 1.2 | Mini-Feeder pillar, 600 Amps, 6ways with HRC fuses | No | 95.00 | | |
| | Total Contract Price (Nu.) | | | | |
| | In words | | | | |

Note:

The quantities mentioned here are indicative and are estimated values. These are subject to change at the time of execution. Payments shall be made based on the actual volume of works at the rate or price schedule of the contract.