

Assets Forecast to be Acquired During the Period Between the Initial Valuation Date and the Start of the Second Regulatory Period

Schedule A3.3 – Justification for Assets to be Acquired

A. NETWORK ASSETS

1. Load Growth

**1.1. Upgrading of Pueblo Substation from 10 MVA to 20 MVA in 2007 PhP 352,000
US\$ 478,215**

The upgrading is necessary to provide adequate capacity to the 34.5 kV system especially the upper western part where SM and the Pueblo township is located. The old 10 MVA transformer will replace another 10 MVA transformer at Carmen which is due for rehabilitation. The additional 10 MVA resulting from the upgrading of the old transformer will avert a possible supply shortage in 2007. It also shows that the N-1 capability is still not reached even with the additional capacity alone.

**1.2. Upgrading of 10 MVA, 69/13.8kV Power Transformer at Carmen Substation in 2007 PhP 352,000
US\$ 460,914**

The old power transformer will be replaced with a new 15 MVA power transformer. The upgrading is necessary to provide adequate capacity to the 13.8kV system. The additional 5 MVA through upgrading of the old 10 MVA in 2007 will provide adequate supply to the 13.8kV system. Even with this upgrading, the planned N-1 capability is still not reached.

1.3. Installation of Communication Backbone in 2007 US\$ 304,012

One major component of SCADA is the communication system. The communication backbone link is an ongoing project and being implemented by phase. Phase 1 was already completed and the second phase is planned for completion in 2007.

The communication backbone serves to connect the substations together and be able to communicate with the Control Center. By locating the backbone nodes at the substations, traffic can be dropped and inserted at those nodes, thus ensuring communication between those substations and the Control Center, and also to/from pole-top RTUs connected to other nodes on the backbone.

The medium of communication will be mainly fiber optic that will form a ring around substations and major nodes. Microwave radios will also be installed on certain locations. Two types of fiber optic cables are being used, namely; Optic Ground Wire (OPGW), and All Dielectric Self Supporting (ADSS) fiber optic cables. The OPGW will serve a dual role as an overhead ground wire and communication medium along the newly constructed 69kV line, while the ADSS will be strung under existing 13.8kV and 34.5kV lines from various points in the distribution system to the Control Center at the Engineering Office.

**1.4. Automation of Camaman-an Substation in 2007 PhP 1,990,000
US\$ 102,302**

SCADA is an acronym for Supervisory Control and DATA Acquisition. Power transmission and distribution have been using SCADA for decades to monitor and

control the delivery of power from the generation sites to the electricity users.

Presently, CEPALCO substations are monitored and controlled through substation tenders who man the substations in three shifts a day. The installation of SCADA functions to these substations will eliminate the need of these tenders, since most of their functions can now be done by a single load dispatcher who monitors and controls substations at a remote Control Center.

CEPALCO believes that implementing a SCADA system will provide an effective means of improving the reliability and efficiency of the distribution system.

In 1997, CEPALCO contracted with KEMA Consulting Inc., to conduct a feasibility study on the implementation of a SCADA/DA system on CEPALCO's distribution system. Result of the study showed that the investment in implementing SCADA to CEPALCO's T&D system is economically justified and can be considered technically and financially feasible. Specific benefits that have been identified in implementing a SCADA system include, 1) Manpower Savings, 2) Reduction in Electrical Losses, 3) Elimination of a Separate Meter Reading System, 4) Deferred investments, 5) Demand Management, 6) Efficiency improvement through improvements in the quality and quantity of data acquisition, 7) Improved Planning Capability, and 8) Improved Customer Satisfaction.

CEPALCO has already started the implementation of Substation SCADA. The pilot project at Carmen Substation was completed in 2001, and the ongoing substation construction projects at Pueblo and Macasandig is being constructed complete with SCADA functionalities.

The two remaining substations at Camaman-an and Tagoloan are planned for implementation in 2007-2008.

1.5. VHF Radio for Macasandig and Baloy Substations, 2 Units in 2007 PhP 44,000

These are capital items incidental to the new substation.

1.6. Testers and Tools for Substations PhP 66,000

Item	Item Description	Qty.	Amount
1	Multi – Testers	2 Units	50,000
2	Assorted Tools	2 Lots	16,000
	Total		66,000

These are incidental capital items to the new substations.

1.7. Items Needed in the On-going Load Profiling Task PhP 50,000

Essential in the Load Profiling task, using the existing PQ meters, for the segregation of Distribution System Losses and for establishing the Loss Cap.

1.8. New Line: 34.5KV Line for Agusan Hydro (Alae-Damilag Portion) PhP 5,175,500

This line will enable CEPALCO to reach potential customers in the outlying area. In addition, it will establish a link between the CEPALCO lines and the Agusan River Hydro Electric Plant having 1.6 MW capacity – a potential source of supply for the CEPALCO franchise.

1.9. New Line: 34.5KV Line from Alae to Arhep PhP 7,585,547

This line will enable CEPALCO to reach potential customers in the outlying area. In addition, it will establish a link between the CEPALCO lines and the Agusan River Hydro Electric Plant having 1.6 MW capacity – a potential source of supply for the CEPALCO franchise.

1.10. New Line: 69KV Line from Minergy to Natumulan PhP 42,230,344

The line is the last phase of the ongoing construction of an alternative 69kV line from Transco's Natumulan Substation to CEPALCO's main substations. The line is an important part of the 69kV loop for it will provide an alternative line supplying the substations. In addition, it serves as a backup line and enable the substations to be supplied whenever its normal supply line is incapacitated for whatever reason.

1.11. New Line: 34.5KV Line from Taguanao to Tipolohon PhP 8,814,151

The line is intended to serve customers at a fast-growing area in Tipolohon.

1.12. Line Reconductoring for 13.8 KV and 34.5 KV Lines in 2007 PhP 10,389,733

Item	Particulars	Amount
1	34.5 KV Line of Carmen Feeder 3	2,970,101
2	34.5 KV Major Lateral Line of Tagoloan Feeder 1	3,615,579
3	13.8 KV Line of Camaman-an Feeder 1 & 2	1,750,053
4	13.8KV Lateral Lines within the City Proper	2,054,000
	Total	10,389,733

Line reconductoring projects are being planned to those lines both 13.8 and 34.5kV that are expected to experience increased loading in the future. The reconductoring from smaller wire to bigger wires with increased ampacity will enable these lines to handle bigger loads both for normal operation and during switching. Most of these lines form the backbone portion of the distribution system and should therefore have that ready capacity to handle large loads.

1.13. Major Line Extension Projects in 2007 PhP 6,962,300

These projects are for Primary Line Extension with DT installation. Most of these applications are for the preservation of Service area and accommodation of requests by Local Government Unit officials of the city and the neighboring Municipalities. One example is the Neighborhood Association or Group of individuals of a certain barangay, those not yet reached by our distribution lines. This also refers to line extensions to the unwaived areas within our franchise area that are served presently by neighboring utilities especially those near our boundaries. The project cost was based on the historical.

1.14. Minor Line Extension Projects P 2,206,400

These projects are for Secondary Line Extension with a maximum distance of 300m from the existing Distribution Transformer station. Most of the applicants of these projects are those living in the interior part of the barangay of the city, and of the neighboring municipalities which are covered by our franchise area. We have also applicants that are beside or near with our primary poles that does not have secondary lines. The projected

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cost was based on the historical.

1.15. Commercial Projects

PhP 4,158,108

These projects are for feasible projects. It involves the installation of Primary Line with Distribution Transformer and service drops or Distribution Transformer Uprating or Rentals of our Distribution facilities or Electrification of Subdivision. Most of these applicants are those involved in developing a business establishment or contractor and developers of a subdivision. The project cost was based on the historical.

1.16. Installation of Circuit Breaker at Transco-Natumulan and Installation of SCADA ready Disconnect Switches in the T&D System in 2007

US\$ 254,545

The circuit breaker is needed to control and protect the proposed 69kV line loop (34.5kV Line from Alae to Arhep). Disconnect switches will also be installed at various points in the distribution system to facilitate easy sectionalization and isolation of lines.

1.17. Power Metering Accessories

P 1,136,575

Item	Item Description	Amount
1	CT Enclosure	323,400
2	Meter Box	277,300
3	Electronic Meter Battery	15,000
4	Copper Wire, #10 AWG Stranded	34,380
5	Terminal Block, with 10 or 12 Shots, Durham Brand	448,000
6	PVC Pipe, 10 feet, 1" Diameter	8,400
7	Locknut, 1" diameter	2,025
8	Conduit Bushing, 1" diameter	1,800
9	PVC Coupling, 1" diameter	1,410
10	PVC Elbow, 1" diameter	1,410
11	Padlock Master	23,450
	Total – Power Metering Accessories	<u>1,136,575</u>

The above items are power metering accessories necessary for the forecasted load -growth of power customers.

1.18. Watt - hour Meters and Accessories

P 20,822,742

Item	Item Description	Amount
A	Single Phase Watt-hour Meter and Accessories	
1	kWh-Meter, Class 100 / 200	6,026,000
2	Meter Base, 3/4"	1,311,114
3	Meter Base, 1"	101,188

4	Meter Base, 2" 4-Jaws	42,591
5	Meter Base, 2" 5-Jaws	269,000
6	Meter Box, GI, 16' x 10' x 5'	100,000
7	Meter Base Mounting, Small	720,000
8	Meter Base Mounting, Big	70,000
9	Snap – Action Sealing Ring	560,449
10	Glass Cover, GE Type	75,000
11	AAC, #8 AWG, Solid	879,300
	Total - Single Phase WH Meter & Accessories	<u>11,613,542</u>
B	Three Phase WH Meter Accessories	
1	Heavy Duty Ringless Meter Base, 5 Terminals Brand: GE Type 200A	125,500
2	For 3PH 4 Wire Wye/Delta Bottom Type, CL 200 Brand: GE or Equivalent Electronic Meter	1,890,000
	Total - Three Phase WH Meter Accessories	<u>2,015,500</u>
C	Power Metering Equipment	
1	For 3PH 3 Wire Bottom Type Electronic Meter	1,305,000
2	For 3PH 4 Wye/Delta Fitzall Bottom Type, CL20 Brand: GE or Equivalent Electronic Meter	3,510,000
3	For 3PH 4 Wye/Delta Fitzall Bottom Type, CL20 w/ Advanced PQ Brand Nexus or Equivalent Electronic Meter	1,800,000
	Total - Power Metering Equipment	<u>6,615,000</u>
D	Current Transformers	
1	Brand: GE Type: JAK-O Ratio: 200/5A Volt: 600	164,500
2	Brand: GE Type: JAK-O Ratio: 300/5A Volt: 600	175,700
3	Brand: GE Type: JAK-O Ratio: 400/5A Volt: 600	63,000
4	Brand: GE Type: JAK-O Ratio: 600/5A Volt: 600	49,000
5	Brand: GE Type: JAK-O Ratio: 800/5A Volt: 600	44,000
6	Brand: GE Type: JAK-O Ratio: 1000/5A Volt: 600	49,500
7	Brand: GE Type: JAK-O Ratio: 1200/5A Volt: 600	33,000
	Total – Current Transformers	<u>578,700</u>
	Grand Total	<u>20,822,742</u>

These are necessary for the forecasted load-growth of customers.

1.19. Testing Fee for kWh Meters in 2nd Semester 2006

PhP 207,900

These are necessary for the forecasted load - growth of customers.

1.20. Streetlight Control Installation

P 119,928

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Estimated cost for the installation of streetlight control for places that still do not have installations like that of rural areas.

2. Renewal

2.1. Circuit Breakers & Accessories for Camaman-an Substation 13.8 KV Feeder 1, 1 Lot

PhP 2,500,000

The existing circuit breaker for Camaman-an Feeder No. 1 is already 25 years old and had been malfunctioning lately on the mechanical side. A similar breaker, serving Camaman-an Feeder No. 2, is already defective and had been replaced about three years ago.

The budgeted amount will be used to procure the replacement breaker including accessories and spares for parts that will require replacement during the entire service life of the equipment.

If the circuit breaker is not replaced and later fails, the feeder it is serving (Camaman-an Feeder No. 1) will be tied to Camaman-an Feeder No. 2. Subsequent faults on either feeder will affect the other healthy feeder since it is tied to the other feeder. This will correspondingly impact our reliability (SAIDI, SAIFI) since a fault on one feeder will also affect the other feeder.

2.2. Replacement of Disconnect Switches, 2 Units in 2007

PhP 825,000

Item	Particulars	Amount
1	34.5kV Disconnect Switch at Tagoloan Substation	440,000
2	13.8kV Disconnect Switch at Camaman-an Substation	385,000
	Total	825,000

The switches are found to be overheating at the pivot joints and blade contacts during recent infrared inspections. Servicing of the switches (contact cleaning and retightening of connections) did not eliminate the hot spots on the switches. The switches therefore have to be replaced to eliminate the hot spots. The infrared images below show the hotspots on the switches.

The switches at Camaman-an have been in service for 25 years while the switches at Tagoloan have been in service for 29 years.

The existing switches have a current rating of 600 amperes. These switches will be replaced with switches of higher current rating (1200A) to accommodate the higher loadings in the line. The replacement switches will also be provided with auxiliary contacts and/or motor operators in anticipation of SCADA operations.

2.3. Upgrading of Batteries at Carmen Substation and Battery Chargers at Camaman-an, Tagoloan, and Carmen Substations in 2007

P 2,100,000

Item	Item Description	Qty.	Amount
1	Upgrading Battery Chargers at Camaman-an and Tagoloan Substations	2 Lots	1,400,000

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2	Upgrading of Batteries and Battery Charger at Carmen Substation	1 Lot	700,000
	Total		2,100,000

The battery chargers at Camaman-an, Carmen and Tagoloan Substations have been malfunctioning lately and it is expected that these will fail in the near future. The budgeted amount will be used to procure replacement chargers for these substations.

The replacement chargers will be have a higher rating than the existing chargers since the existing chargers were designed for very light duty only. The original duty of these chargers were for float charging of the station batteries and for breaker closing/tripping duty only. The original protective devices in the substations do not require DC supply since these devices were of the electromechanical type.

The present duty of the battery chargers, aside from those mentioned above, already include supplying power to the microprocessor-based metering and protective devices as well as supplying power to the motor operators of motorized disconnect switches, and in the case of Carmen Substation, supplying power to SCADA equipment. These motorized disconnect switches draw a high current load thus imposing a severe duty on the battery chargers.

2.4. Testers and Tools for Substations

PhP 99,000

Item	Item Description	Qty.	Amount
1	Multi – Testers	3 Units	75,000
2	Assorted Tools	3 Lots	24,000
	Total		99,000

These are incidental capital items to the new substations.

2.5. Line Revisions & Maintenance in 2007

PhP 18,702,400

These are normal recurring capital items based on historical necessary for the maintenance of the T&D System operation to ensure continuous electricity distribution services.

2.6. Distribution Transformers and Accessories in 2007

PhP 10,376,243

Item	Item Description	Amount
A	Distribution Transformers	
1	25 KVA, 13200(14400/24940) PV, 120/240 SV	216,144
2	50 KVA, 13200(14400/24940) PV, 120/240 SV	777,359
3	100 KVA, 13200(14400/24940) PV, 120/240 SV	503,043
4	167 KVA, 13200(14400/24940) PV, 120/240 SV	989,107
5	333 KVA, 13200(14400/24940) PV, 120/240 SV	416,640
6	25 KVA, 34500/19920 PV, 120/240 SV	689,465
7	50 KVA, 34500/19920 PV, 120/240X139/277 SV	2,247,929
8	100 KVA, 34500/19920 PV, 120/240X139/277 SV	998,612

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9	167 KVA, 34500/19920 PV, 120/240X139/277 SV	1,443,927
10	250 KVA, 34500/19920 PV, 120/240X139/277 SV	651,840
	Total – Distribution Transformers	<u>8,934,066</u>
B	Protective Devices & Fuselinks	
1	Lightning Arrester, 15 KV	106,806
2	Lightning Arrester, 27 KV	134,584
3	HT Fuse Cut-Out, 15 KV	125,000
4	HT Fuse Cut-Out, 36 KV	576,791
5	Blade, HT Fuse Cut-Out,15KV	30,000
6	Blade, HT Fuse Cut-Out, 27KV	30,000
7	Loadbreak Fuse Cut-Out, 15KV	67,500
8	Loadbreak Fuse Cut-Out, 20/34.5KV	110,290
9	Fuselinks (Various Sizes)	206,306
10	Photo Switch	34,800
11	Photo Switch Socket	20,100
	Total – Distribution Transformers	<u>1,442,177</u>
	Total – Distribution Transformers & Accessories	<u>10,376,243</u>

These are normal recurring capital items based on historical necessary for the maintenance of the T&D System operation to ensure continuous electricity distribution services.

2.7. Service Materials in 2007

P 2,624,969

Item	Item Description	Amount
1	Porcelain Wire Holder	147,980
2	Fiberglass Mid-span Spacer	117,794
3	ACSR #4, WP	16,620
4	ACSR #2, WP	28,280
5	Copper Wire, #2, AWG, Stranded, TW	87,510
6	Copper Wire, #1/0, AWG, Stranded, TW	135,250
7	Copper Wire, #2/0, AWG, Stranded, TW	170,370
8	Copper Wire, #4/0, AWG, Stranded, TW	269,380
9	Copper Wire, #250 MCM, AWG, Stranded, TW	102,455
10	Copper Wire, #500 MCM, AWG, Stranded, TW	198,080
11	Copper Wire, #750 MCM, AWG, Stranded, TW	321,750
12	Plastic Tape, 3/4"x60"	98,000

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13	Padlock Seal – Logistics	931,500
	Total Service Materials	2,624,969

These are normal recurring capital items based on historical necessary for the maintenance of the T&D System operation to ensure continuous electricity distribution services.

2.8. Single – Phase Watt-hour Meters, Class 100/200 PhP 1,174,000

These are normal recurring capital items based on historical necessary for the maintenance of the T&D System operation to ensure continuous electricity distribution services.

3. Refurbishment

3.1. Repainting of Structure at Carmen Substation in 2007, 1 Lot PhP 50,000

The steel structures at the substations are used for the mounting of major substation equipment and also to serve as support structures for the high-voltage conductors in the substations. These structures are all installed outdoors and are therefore exposed to the harsh environment which tends to cause deterioration of the steel by corrosion.

The best protection a steel structure can have against corrosion is a coat of galvanized zinc. In the case of Carmen and Camaman-an Substations, all the steel structures are not galvanized while at Tagoloan Substation the 34.5-kV steel structure is also not galvanized. These structures are only coated with paint which could not withstand the harsh environment as well as steel structures applied with galvanized coating.

The steel structures are already rusty and needs repainting. In the case of Carmen Substation, the rusty structures are readily visible to the public due to its height and location and made more apparent due to the contrasting galvanized structures of the adjacent TRANSCO substation. These rusting structures will certainly make a negative impression to the public. These structures have not been repainted since it was put up in 1996.

Benefits of Repainting:

- (a) Extends life of the structure by retarding corrosion.
- (b) Eliminates public eyesore.

3.2. Upgrading of Carmen S/S from 10MVA, 69/13.8KV to 15MVA PhP 18,500,000

Upgrading the 10 MVA, 69/13.8kV transformer involves replacing the transformer with a new transformer having 15MVA capacity. The main purpose is to provide additional capacity to the 13.8kV system and provide for n-1 contingency.

In addition, this existing 10 MVA transformer is already 26 years old and needs to undergo thorough check-up, tests, and, rehabilitation. After rehabilitation, this transformer will be stored at the Macasandig Substation as spare transformer for the 13.8kV system.

3.3. Refurbishment of Carmen 10MVA Power Transformers, 2 Lots P 3,215,237

Item	Item Description	Qty.	Amount
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1	69/13.8kV Power Transformer	1 Lot	1,600,000
2	69/34.5kV Power Transformer	1 Lot	1,615,237
	Total		3,215,237

The two transformers mentioned above are currently leaking oil in the tank lids and in the bushings. The tank also needs repainting and some accessories also need replacement.

This project will involve regasketing, replacement/repair of leaking bushings, replacement of malfunctioning accessories, repainting, oil treatment and other related works.

3.4. Installation of Tie Switch for the 13.8kV Feeders Including Accessories at Camaman-an Substation in 2007, 1 Lot PhP 485,000

Presently, there are no existing tie switches for the outgoing 13.8-kV feeder at Camaman-an Substation mentioned above.

During emergencies, it usually takes about three hours (including mobilization) and three linemen to tie the two feeders using jumper cables.

The installation of tie switches at these substations will result to the following advantages:

1. Reduction of the time and manpower it takes to tie the two feeders together during emergencies → only 1 or 2 minutes and one operator (assuming the substation is manned or the tie switch can be operated by SCADA)
2. The tie switches will allow maintenance on the feeder circuit breakers to be performed on a separate schedule from the rest of the substation equipment, requiring only a brief interruption for shifting of feeder loads. This will subsequently enable the maintenance crew to perform more comprehensive testing and inspection of the rest of the substation equipment during scheduled maintenance interruptions.
3. The associated feeder protective device can be simultaneously taken out for comprehensive simulation/testing during such feeder breaker maintenance. A temporary unit will be installed as replacement until the original unit is reinstalled. Note: This is in conjunction with another CAPEX project → Acquisition of simulation/testing units for protection devices.

3.5. Protective Relay Simulation/Testing Unit in 2007, 2 Lots PhP 880,000

Item	Item Description	Qty.	Amount
1	Feeder Protective Relay Simulation / Testing Unit	1 Lot	PhP 440,000
2	Transformer Protective Relay Simulation / Testing Unit	1 Lot	440,000
	Total		PhP 880,000

The primary protection devices being used at CEPALCO substations are of the microprocessor-based type of devices. These devices normally include many other important functions aside from the basic protection function that they are intended for.

Unlike the electromechanical type of devices where there is usually one protection device for each phase, these digital protection devices integrate all the single-phase

devices into one single unit. The result is a compact, space-saving unit which is simpler to mount and wire. The downside however is that a failure of one unit results in the complete loss of protection to an equipment or line. The loss of one unit in electromechanical relays will leave the two other phases still protected.

It is therefore important that simulation and testing be performed regularly on these digital protection devices to ensure protection is available when required.

Single-phase electromechanical relays usually can be taken off line for testing since protection is still provided by the other two relays still on line. With digital relays, taking the unit off line for testing will leave the equipment or line unprotected. It is therefore imperative that an extra unit be available to temporarily replace the unit taken off line for testing and simulation. This will also allow comprehensive testing of the unit under test since the unit can then be taken to the laboratory for testing, unlike in field tests where, due to time constraints, usually only the basic functions are tested simultaneous with a scheduled line or equipment shutdown.

3.6. K-Switch for GE Electronic Meter Upgrading for LP, PQ, TOU, KVAR and Other Monitoring Options, 45 Softwares in 2007 PhP 900,000

This software is an activation key for the software already installed in the electronic meters but was inactivated by the supplier. This is necessary for monitoring of data.

B. NON - NETWORK ASSETS

4. Load Growth

4.1. Fire Sprinkler System for New Admin Building at Kauswagan PhP 2,750,000

This is necessary for prevention of the New Admin Building.

4.2. Service & Payment Center for Carmen Area in 2007 PhP 2,604,900

Cost Driver: Load Growth & Customer Service

A CEPALCO Service and Payment Center will be established inside the Carmen Market. The Service Center will be used to receive bill payments and also handle customer concerns. There is a need to set-up a Service Center in the Carmen Area because of the travel time needed to service customers as well as the delays due to traffic congestion in the bridges. Quick response to customer concerns and ease in payments for residents in the Carmen and neighboring areas is expected to create goodwill for the company. On the tellering aspects, it will have a great impact to the de-congestion in the main office due to the bulk of potential customers to be served in the Center. It will cater customers from the following barangays:

Areas	Areas
1. Carmen	6. Bayabas
2. Patag	7. Iponan
3. Bulua	8. Lumbia
4. Kauswagan	9. Balulang
5. Bonbon	10. Canitoan

The Center will benefit 10 barangays with a total of 36,800 registered customers, and has a total population of 183,500.

Building General Description:

The total area of the Service Center is 8.5 meters x 4.85 meters or a total of 41.25 square meters, to be built on the second floor of the Carmen Market adjacent to the Administration building of the BOT operator. Building will be made of concrete hollow blocks and roofing made of either steel deck or concreted corrugated roofing material as protection from theft. There will be three glass window panels with individual slots for payment receiving. There will be one glass door. This shall be protected by metal shutters or roll-up. Floor shall be vinyl-tiled because this will not be a high traffic area since payment transactions will be conducted outside of the Building.

The building will have a small area where floor to ceiling racks will be installed to store supplies and service materials The building will be occupied in any one time by at least 6 personnel consisting of the following:

- a. Service Staff (2-3)
- b. Service Crew (1 two-man crew)
- c. Security Guard

Personnel Complement:

A. Service Staff - shall handle both tellering and the receiving of customer concerns. The task is almost similar to our Sub-Coordinators in the District Services Department (DSD). Personnel reporting time will be 8:00 AM to 5:00 PM. Two personnel shall be regularly assigned and one Reliever from the Main Office will be added if there is surge of customers.

B. Service Crews will be assigned to do handle customer concerns dispatched by the Service Staff and/or the CAS Supervisor. Reporting time shall be 9:00 AM to 5:00 PM straight duty. The company shall hire two new Service staff while one CAS crew will be permanently assigned to the Carmen Service Center.

C. Security Guard - From 8-5pm only.

CAPEX Requirement:

I. Building /Office Improvements: 390,000

At P13,000 per square meter, Roll-up shutters at P1800 per square meter, Steel Deck at P420 per square meter

II. Office Equipment:

<u>Description</u>	<u>Qty</u>	<u>Price</u>	<u>Amount</u>
Computer, Printer, Modem, Software, License	3	107,000	321,000
UPS	1	25,000	25,000
Table or Counters	3	3,500	10,500
Swivel Chairs	3	2,000	6,000
Working Table	1	6,000	6,000
Working Table Chairs	4	500	2,000
VHF Radio	1	30,000	30,000
Telephones (Misortel-Philcom)	2	5,000	10,000
Filing Cabinet, 1 with Safe	2	10,000	20,000
2 HP wall mounted Airconditioner	1	30,000	30,000
Overhead Cabinets	3	3,000	9,000
Office emergency light	2	2,000	4,000
Plastic Chairs	50	300	15,000
Fake Currency Detector	3	1,200	3,600
Calculators	3	1,000	3,000
Sub-total			495,100

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III. Communication Network		
(c/o ICTSD) Parabolic Antenna, 1 lot		400,000
cables, router, ports		
IV. TOOLS - for the 1-2 Man Crew (Annex A-List of Standard Tools)		
1. Standard Personal Tools		149,978
(1 set each for 2 linemen at P74,989@)		
2. Standard Group Tools (1 set each)		269,822
	Sub-total	419,800
V. CREW VEHICLE		900,000
TOTAL		2,604,900

The opening of this Customer & Payment Center will bring customers service closer to the customers considering its strategic location, alleviating the impact of traffic, reduced trips, and convenient payment center.

4.3. 3 – Ton Airconditioning Unit for Main Office New Space P 130,000

For cooling requirement, the new Aircon unit will be installed at the new office space located at 3rd floor of the Main Office – adjacent to the old Lecture Hall.

4.4. Notebook Computer for RDB Belga, 1 Unit P 105,000

RDB Belga needs the use of a Notebook PC in field meeting with customers and local officials. Work Plan, Design and other related information about the line projects requested of applied by the customers, especially industrial, large commercial and local government units and barangays could readily be explained and issues be settled at hand with the visual presentation of actual details. With this approach, lots of grounds could be covered by explaining several options or making design modifications and can lead to on-site resolution of issues and agreement with customers. While at the customers' premises, copies could be provided in diskettes of agreed designs should the customer desire. Agreed designs could be uploaded and mailed to other Design Staff.

4.5. Various Equipment for Telling Station at ESD Complex P 119,800

Item	Item Description	Qty.	Amount
1	Computer (with Windows License only)	1	46,000
2	Printer: Epson FX – 1170	1	30,000
3	UPS	1	27,000
4	Safety Vault, 2 drawers	1	8,900
5	Teller's Counter	1	3,000
6	Plastic Chairs		2,400
7	Fake Currency Detector	1	1,000
8	Ergonomic Chair, for Teller's Use	1	1,500
	Total		119,800

The benefit on this project will be the **improvement of our customer service for Telling** which is a **decongested and a comfortable lobby in the main office for the paying customers** which have not been solved with the additional space due to increase of customers. It will also lessen physical stress to our tellers attending volume of customers during peak days.

The idea is just to transfer 1 Teller from the main office including its equipment to the ESD. Considering transition period to campaign to customers of the new tellering office, complete tellering equipment have to be purchased. Upon normalization, the above equipment will become back-up/spare units for CCD or other users.

It is estimated that around 5,365 out of 7,664 customers in the area (Consolacion, Puntod, Macabalan, Julio Pacana Streets & Corrales Extension) will be advised to pay at the ESD complex which is believed will decongest the main office.

4.6. ERGONOMIC CHAIR for Additional IAG Staff PhP 1,500

One unit Ergonomic chair is for the additional IAG Staff.

4.7. Equipment for 1 Additional Staff P 63,000

Item	Item Description	Qty.	Amount
1	Computer (Inclusive of License)	1	57,000
2	Office Table	1	6,000
	Total	2	63,000

These are incidental requirements for the additional staff who will be working on additional work loads as follows: (a) new financial reporting standards due to the implementation of the new EVAT regulations and (b) the upcoming ERC related regulatory book of accounts for BSUP and PBR.

4.8. Television with DVD Player, 1 Set P 17,500

This is to be placed at CSD waiting area which main purpose is for flashing of information such as: service application procedures, energy saving tips, important announcements relative to rates, rules, regulations, power interruption, safety precautions, etc. in which the customer can make use of his waiting time in reading those information.

4.12. Asset Register Database Build-up, in 2007 P 8,510,700

Project Details:			
Name	Asset Register Database Build-Up		
Description	Build-up of Geographical Information System (GIS) Based Asset Register Database and Implementation of Automated Mapping and Facilities Management Application.		
Project Duration	2007		
Project Classification:			
Rank		(Ongoing; 1 st Priority; 2 nd Priority)	
Project Classification	Driver	(Load Growth, Network non-growth, network control/safety/metering, non-network)	
Project Classification	Type	(Replacement, Refurbishment, New Assets)	
Cost Disbursement 2007	Forex: US \$	Local: PhP 8,510,700.00	Total: PhP 8,510,700.00
Project Recommendation:			

Capex Classification:	Project	Approved Fully	Approved at X%	Not Approved
Recommendation:		Yes		
Primary Reason(s) for Decision	<p><i>The build-up of a GIS-based Asset Register is basically the development of a Continuing Property Record that contains all Unitized Property Units with the following attributes: quantity, purchase price, installed (or as-built) cost, year installed or placed in service, and significant changes in value due to maintenance or refurbishment. By adding another data to each property unit – the location or geo-location – the Asset Register becomes GIS-capable. As GIS-capable, Asset Register will have a self-checking feature as the data will have a geo-location on which to physically verify where it is installed thus ensuring the accuracy of the Asset Register. These cannot be satisfactorily attained if the Asset Register is not GIS-capable. Accurate, complete, and up-to-date geo-referenced Asset Register is already a valuable asset, but this value can be further dramatically increased if GIS-based applications are implemented to avail of the data, thus enabling the company to effectively manage the assets. This application, which is an integral part of the project, is the Automated Mapping and Facilities Management (AM/FM)</i></p> <p><i>Work associated with assets is 80% geo-spatial in nature (related to a point in the map). The company needs a GIS-based automated mapping software to sustain and maintain the updating of the base map, thus providing accurate, complete and up-to-date data to the users, providing the users capability to view and analyze the spatial data in ways to create thematic maps, like franchise area classification, soil types, shorelines, vegetation growth, etc.</i></p> <p><i>Facilities Management (FM) would enable the company to use circuit topology and perform spatial analysis and optimal path determination. FM can readily determine and show Planned Network, Network Under Construction and Network in Operation once AM/FM is interfaced with Work Management System. Queries and verification can easily be made to provide type and quantity of facilities (assets) per voltage level, per feeder, per section, per area. AM/FM will also provide the company the opportunities to manage effectively right-of-way assets, pole usage, and vegetation clearing.</i></p> <p><i>With the AM/FM, customers' locations and network connectivity can be reflected on the base maps and distribution network. These will provide the Customer Assistance and Services groups and System Operators the capability to promptly determine the locations of affected customers for transmission to the field crews, thus aiding in hastening the resolution of customers' complaints.</i></p>			

Other Comments	Mapping is a major issue for the company as it is dedicated in improving system reliability. The company's existing base map is in AutoCAD and this map is overlaid with the distribution facilities. These base map and the overlaid facilities need to be converted to GIS-based environment. In essence, GIS-capable Asset Register and GIS-based applications will provide company with tools to improve productivity and implement efficiency initiatives to reduce the cost of constructing, operating and maintaining distribution facilities. Incoming competitive market and stricter regulatory requirements will demand for more efficient operations, while an increasingly complex infrastructure requires more monitoring and maintenance. The GIS-based systems can effectively meet these challenges and contribute to the improvement of system reliability.
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Analysis of Project

The existing AutoCAD-based base map, overlaid facilities and over customer locations will have to be converted to GIS-based environment. The conversion will involve acquisition of GIS-based software, hardware (computers and Geographical Position System, or GPS device), training, geo-database design and actual field survey and verification of asset locations. The survey output will then update the existing asset register by providing the asset entities with geo-locations and then reconciled, and all attributes added, as required by ERC in the PBR.

The system will require a relational database system software to store and handle all the attributes and a spatial database engine software to interface with the AM/FM software.

Details of Project Cost

ASSET REGISTER DATABASE BUILD-UP	Amount
<u>Information Systems Equipment</u>	
A. Asset Register Database Build-up	
1. Software (ArcGIS)	
a. ArcGIS ArcEditor 9 (2 Licenses @ 886,000e)	1,772,000
b. ArcGIS Data Interoperability Extension (1License)	320,000
c. ArcGIS ArcPad Application Builder (1 License)	187,000
d. ArcGIS ArcPad (2 Licenses @ 66000e)	132,000
e. Arc Spatial Database Engine (SDE)	1,250,000
2. Trainings	
a. Introduction to ArcGIS 1 (2 days, 6 participants)	60,000
b. Introduction to ArcGIS II (3 days, 6 participants)	90,000
c. Geodatabase I (2 days, 6 participants)	60,000
d. Geodatabase II (3 days, 6 participants)	90,000
e. Working with ArcPad Application Builder (6p)	30,000
3. Technical Services	
a. Data Conversion + Workshop (5 days)	87,500
b. Data Design Review (3 days)	52,500
4. Technical Support (via e-mail, telephone, & fax -1 year)	120,000
B. Oracle 10g	
1. Software – One (1) Processor License for 5 Users	1,000,000
2. Training	

a. Oracle Database 10g: Introduction to SQL & Oracle Database 10g: Programming with PL/SQL	380,000
b. Database Administration I & II	80,000
Total – Information Systems Equipment	5,711,000
Office Furniture and Equipment	
1. Computer Hardware and Peripherals for Asset Register Database Build-up	
a. Workstation IBM M51, 3GB RAM, 80GB HDD+(2)	200,000
b. Viewsonic Monitor 21" (2)	90,000
c. GPS Thales Navigation Promark3 (2 units @ 385000e)	770,000
2. Oracle 10g - Server	450,000
Total – Office Furniture and Equipment	1,510,000
Miscellaneous Equipment – Other Expenses related to Asset Register Build-up	1,289,700
Grand Total	8,510,700

4.10. Desktop PC	1 unit	2007	PhP 60,000
Computer Table	1 unit	2007	2,500
Handheld Radio	1 unit	2007	22,000

These are incidental capital requirement for the hiring of additional System Design Staff.

4.11. Calculator for New Substations PhP 1,200

Calculators are incidental and necessary equipment for substations.

4.12. Portable Gensets, 2 Sets PhP 110,000

These gensets will be used by Technical Services Department to power the existing small G.E. oil filtering machine and for the 240V input test sets during preventive maintenance works on power transformer and circuit breakers which had no other alternative source of power during total substation maintenance works.

4.13. Deskjet Printer for CCRD, 1 Unit PhP 10,000

This is necessary for the increasing number of customers.

4.14. COMPUTER – PBAS PhP 54,200

This is necessary for the increasing number of customers

4.15. TV 25", Sony, 1 Unit in 2007 P 26,990

This will be used for viewing training materials in VCDs, DVDs, or VHS. This is also needed for viewing recorded training footages for critiquing. This is especially important during hotline training since we need to review the trainees' performance during the training so that unsafe positioning or movements could be corrected before they will perform actual live line work.

4.16. Incidental Capital Expenditures System Analyst/Programmer

4.17. Incidental Capital Expenditures SDMS/Programmer

4.18. Electric Fan, Small, 1 Unit in 2007

PhP 500

This is to be installed in the Boomtruck # 054. Ventilation is not sufficient due to the design of the window glass panel.

4.19. Office Desk/Table, 7 Units in 2007

PhP 42,000

Office/Computer Chairs, 9 Units 2007

PhP 13,500

These are incidental requirements of the additional manpower in 2007.

4.20. Corporate Servers (Network, Applications, Database)

PhP 666,000

DETAIL					
Name	High Availability Project				
Description	1. Server Clustering 2. Total Storage 3. Additional Servers for Data Security 4. Management Tools and Devices				
Date Needed	1) Jan- Jun2007				
CLASSIFICATION					
Rank	1st Priority				
CAPEX Driver Classification	Non-Network				
CAPEX Type Classification	100% New Asset				
Cost	Schedule	Server Clustering	Total Storage	Add. Servers	Mngt. Tools
	Jan-Jun2007		66,000	520,000	80,000
	TOTAL	0.00	66,000	520,000	80,000
JUSTIFICATION					
CAPEX Requirement and Magnitude					
<p>High-availability clusters (also known as <i>HA Clusters</i>) are computer clusters that are implemented primarily for the purpose of improving the availability of services which the cluster provides. They operate by having redundant computers or <i>nodes</i> which are then used to provide service when system components fail.</p> <p>High Availability refers to the ability of the user community to access the system, whether to submit new work, updated or alter existing work, or collect the results of previous work. If a user cannot access the system, it is said to be <i>unavailable</i>. Generally, the term <i>downtime</i> is used to refer to periods when a system is unavailable.</p> <p>HA cluster implementations attempt to build redundancy into a cluster to eliminate single points of failure, including multiple network connections and data storage which is multiply connected via <i>Storage Area Networks</i></p>					
Reason to Support Justification					
<p>The project High Availability is intended to achieve the least unplanned downtime in our corporate application system, it will include setting up of a clustered server environment, disaster recovery solution, storage and data protection. Thus assuring as a continuous operation on our mission critical applications currently running on our servers.</p>					

4.21. Barcode Scanner, printers & stickers for Solomon Inventory Module Implementation

PhP 365,000

This equipment is incidental to the implementation of Solomon Inventory Module.

4.22. Help Desk PhP

DETAIL	
Name	Help Desk
Description	HelpDesk System, Workstation and Portable hard drives
Date Needed	1) Jan- Jun2007
CLASSIFICATION	
Rank	1st Priority

CAPEX Driver Classification	Non-network	
CAPEX Type Classification	100% New Asset	
Cost (Php Peso)	Schedule	Help Desk System
	Jan - Jun2007	385,000
JUSTIFICATION		
CAPEX Requirement and Magnitude		
<p>A <i>help desk</i> is an information and assistance resource that troubleshoots problems with computers and similar products. It provides the users a central point to receive help on various computer issues. The help desk typically manages its requests via help desk software that allows them to track user requests with a unique ticket number. This way we could monitor common issues, response time of the support group, and provide solutions much easier.</p> <p>The system will be composed of three teams:</p> <p>DeskSide Team: Responsible for the desktops, laptops and peripherals such as printers. The help desk will assign the desktop team the second level deskside issues that the first level was not able to solve. They set up and configure computers for new users and are typically responsible for any physical work relating to the computers such as repairing software or hardware issues and moving workstations to another location.</p> <p>Network Team: Responsible for the network software, hardware and infrastructure such as Servers, switches, backup systems and firewalls. They are responsible for the network services such as email, file, and security. The help desk will assign the network team issues that are in their field of responsibility.</p> <p>Other Team: Responsible for the phone infrastructure such as PBX, voicemail, VOIP, telephone sets, modems and fax machines. They are responsible for configuring and moving telephone numbers, voicemail setup and configuration and are assigned these types of issues from the help desk.</p>		
Reason to Support Justification		
This will serve as a vital tool for ICTSD organization to monitor common computer related issues, response time of the support group, and provide solutions much easier.		

4.23. Vehicle for Purchasing's Use, 1 Unit P 750,000

The vehicle is used primarily to deliver voluminous various supplies from the ESD Complex to the Main Office. The vehicle is preferably Mitsubishi L300FB since it has spacious cargo area and can also be used for passenger service in case other units may need it.

4.24. Office Desk/Table and Computer Chairs in 2007 P 55,500

Item	Item Description	Qty.	Amount
1	Office Desk / Table	7	42,000
2	Office / Computer Chairs	9	13,500
	Total		55,500

These are incidental requirements of the additional manpower.

4.25. PC, Desktop Pentium 4, 1 Unit in 2007 P 54,200

This unit will be used by the additional Service Processor for District Services

CAPEX Justification

Department during day time, which will assist the existing Service Processor in processing and attending service requests and complaints. This will be used in feedbacking inspection orders and job orders in the Customer Information Management System and mapping facilities.

4.26. Lineman Personal Tools, 3 Lots in 2007

P 174,430

These are incidental capital requirements for the additional three Linemen in 2007 and one in 2010 for District Services Department.

4.27. Handheld Radio, 1 Unit in 2007

P 22,000

This is incidental capital requirement for the new Service Application/Customer Assistance Supervisor for District Services Department.

4.28. Various CAPEX Requirements in 2007 for New DSD Service Field Inspector

P 100,100

Item	Item Description	Qty.	Amount
1	Motorcycle, Yamaha, Crypton	1	49,100
2	Handheld Radio	1	22,000
3	Digital Camera	1	10,000
4	Range Finder	1	19,000
	Total		100,100

These are incidental capital requirements for the new Service Field Inspector for District Services Department.

The **Digital Camera** shall be used by the Service Field Inspector to capture images of applicant's service entrance installation, the pole or line where the power source is to be tapped, and the area where the proposed service line is routed. The images will be downloaded to the Service Processor's PC and will be used as reference for further discussion with the applicant or his representatives, especially if there is a need to correct any portion of the service entrance installation, clearing of vegetations affected by the service line, and correctly point the affected lots where to traverse the service line and require ROW grants from the owners.

At present, 1 out of 3 applications were inspected more than twice. One of the causes is the communication gap between our personnel and the customers. With the images, it will aid the right understanding to applicants or their representatives and even the Service Processor who could not fully comprehend the advice written in the inspection report by the Service Inspector. Hence, applicants or through his representative could easily comply on the needed corrections and other requirements. Possibility is the second inspector's visit would be the final inspection. Annual savings due to reduction of inspections and other important usage are as follows:

- a) Avoided re-inspections,
- b) Opportunity cost due to earlier connections, and
- c) Avoided Professional fee during evidence gathering and documentation of found direct connection and meter tampering.

The **Range Finder** is a recommended basic tool for a Service Field Inspector to measure distances from the tapping pole or secondary line to the point of service entrance,

instead of Measuring Tape. The use of Rangefinder is advantageous compared to a typical measuring tape because of the following:

1. The Rangefinder measures distance very fast and about less than a minute, compared to a tape of about 5-10 minutes.
2. Measuring tape is not safe and very difficult for a single person in measuring distance across the road or highways. In many instances, the applicant's house is at the opposite side of the road where the power source is located.
3. The Rangefinder is handy to carry when riding a motorcycle.
4. The life expectancy of a Rangefinder if handled properly is much longer than a tape due to exposure of the latter to wet and sharp objects on the ground when dragged during measurement.

4.29. Various CAPEX Requirements in 2007 for the New DSD Meter Reading/ Billing Supervisor

P 91,950

Item	Item Description	Qty.	Amount
1	Desktop PC, Pentium 4	1	54,200
2	Printer, Epson, LQ 2180	1	35,000
3	Working Table	1	2,000
4	Computer Chair, Ergonomic	1	750
	Total		100,100

These are incidental capital expenditure requirements for the new Meter Reading/ Billing Supervisor for District Services Department.

4.30. Motorcycle, Yamaha, Crypton, 1 Unit in 2007

P 51,000

This is an incidental capital expenditure requirement for the new Streetlights Inspector for District Services Department.

4.31. Computer Set with Computer Table, 1 Set in 2007

P 56,700

Incidental requirements on computers and its peripherals for one (1) additional Audit Staff are provided in 2007 to complement for the manpower requirements of Internal Audit Group.

**4.32. Additional Computer Units and Peripherals in 2007
P12,000**

Item	Item Description	Qty.	Amount
1	Desktop Computer	3	9,000
2	Printer, Epson	1	3,000
	Total		12,000

These are additional computers for Accounting Department. At present there are thirteen units for the sixteen Accounting Staffs. All Accounting Staff should be equipped with computer to be able to work efficiently and meet set dates of reports submission.

4.33. Scanner, 1 Unit in 2007 P 3,000

This will be used by Accounting Department for perpetual document retention.

4.34. Heavy Duty Stapler, 1 Unit in 2007 P 3,000

This will be used by Accounting Department needed for thick reports.

4.35. Eye Protector Screen, 8 Pieces in 2007 P 24,000

These are intended for Accounting Staff for radiation protection.

4.36. Flash Disk, 2 Units in 2007 P 6,000

This is necessary for data storage.

4.37. HP Deskjet Printer, 1 Unit in 2007 P 10,000

This is for Cash & Collection Department use for external correspondence to ERC, BIR, banks, power customers, government agencies for statement of accounts and follow-up letters.

4.38. Photocopier/Scanner/Fax, 1 Unit in 2007 P 17,000

This is needed in Tagoloan - District Central Office for reproduction of various documents. At present, has no photocopier for reproduction of any documents either for customers or for CEPACO. We reproduce copies at Poblacion, Tagoloan, about kilometer away from the office. This has caused inconvenience on our part or to the customers waiting for their copies, especially if there is no available staff and vehicle.

4.39. TV Set, 21", with DVD Player, 1 Set P 15,000

This will be installed at Tagoloan - District Central Office, where paying customers and the applicants for new connections from the entire district coverage area are making their transactions. With the Cable TV connection, it will give customers' comfort and pleasure while staying inside the office waiting for their service turns. Most importantly, it could be used as communication medium in disseminating useful customer information/announcements and advertisements like: Energy savings tips, how to read the kWhr meter, interruption schedules, etc. through a recorded CDs and tapes.

4.40. Priority Numbering Machine, 2 Units P 30,500

These units will be installed at Bugo (District Sub-office) and Tagoloan – District Central Office. The system of calling customers' name to come to the teller's booth despite done in seconds contributes delay in serving them. Aside from mispronouncing their names that would surely irritate the customers, it would also irritate the throat of our tellers at the end of the day. The installation would somehow give comfort and convenience to customers because they would know exactly the time they will be entertained.

4.41. Exhaust Fan 10", 1 Unit P 750

To be installed at the comfort room of Bugo (District Sub-office) to eradicate the foul odors coming out from the CR after customers' use.

4.42. Wooden Filing Cabinet, 1 Unit P 10,000

This is intended for District Services Department for the filing of accomplished

CAPEX Justification

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inspection orders, job orders, service contracts, electrical permits and other supporting documents.

4.43. Heavy duty Inverter and Power Supply (AC/DC) Adaptor in 2007 P 22,800

Needed by the Power Quality Crew/Technicians of Distribution Compliance Section in areas where there are no available AC source to power their mobile (laptop) PC and the communication device interface (UNICOM 2500) between the installed PQ meters/analyzers and their mobile PC. In those areas, the inverter and power supply adaptor will work in tandem to supply power for the mobile PC and the communication interface device from the battery of their vehicle.

4.44. Electric Drill Set and Soldering Iron P 6,040

Needed by the Power Quality Crew/Technicians of Distribution Compliance Section in fabricating the metal boxes to enclose the PQ meters/analyzers and the AC current probes.

4.45. Toolbox P 1,250

For safe keeping and protection of the tools issued to the Power Quality Crew/Technicians of Distribution Compliance Section.

4.46. Grip Guy and Thimble Wire for OPGW and ADSS Project P 25,000

Lacking Materials for the completion of Main Office to Camaman-an to Macasandig Substation links.

4.47. Fiberglass Extension Ladder, 1 Unit P 40,000

The fiberglass extension ladder is an equipment inherent for crew working on fiber-optic installations. This will be mounted to an enclosed and air-conditioned customized van designed to simulate a dust-free work environment which is a requirement for working with fiber-optics and which will serve as a mobile fiber-optic work area.

4.48. Fabrication of Case Holders for Hotstick and Ladder of Bucket Truck P 12,000

Unanticipated needs since the Bucket Truck budgeted last 2005 was turned-over to CSD-CAS just last March 2006.

4.49. Swivel Chair for the New Internal Audit Staff, 1Unit P 1,500

This is an incidental requirement for the new Internal Audit Staff. Based on manpower loading, the department expects a 328-manday deficit for the planned audit works in 2006. The additional staff will be working on some routine/regular accountability and compliance audits plus performance and effectiveness reviews required by TM.

4.50. Lineman's Tools, 1 Lot P 500,000

These are additional Lineman's Personal and Group Tools to be used in Dualized Training Program (DTP) and Apprenticeship Training Program (ATP).

4.51. Spineboard and Accessories, 3 Units P 10,000

Spineboard is used to prevent further injury to a victim due to fall or other accidents causing bone injury, fracture and other related illnesses. The accessories (spiderweb,

splints and other paraphernalia) are needed to immobilize the injured part of the victim and in place the victim to the spine board during time of transport.

This is very necessary to aid our firstaiders perform their function during the time of accident in preventing further damage to the injured and ease in transporting the injured from the site of accident to the hospital.

These will be placed in the Main Office, Engineering Office and Tagoloan Central Office.

4.52. Computer Set, 1 unit in 2007

P 54,200

Additional computer will be requested for Personnel & Benefit Administration Section once the other Human Resource Information System modules will be fully implemented. HR Assistants will need the computers in processing HR-related transactions like Recruitment, Benefits, etc.

4.53. Safety Measuring Equipments in 2007

P 80,000

Item	Item Description	Qty.	Amount
1	Noise Meter, 1 Unit in 2007	1	50,000
2	Lux & Temperature Meter, 1 Unit in 2007	1	30,000
	Total	2	80,000

These are necessary for the monitoring of ambient factors in the workplace, such as noise, illumination and temperature.

Local and international standards on Occupational Health and Safety requires that no employee may be exposed to a noise level greater than 85dB(A) for a duration of more than 8 hours per day.

The Noise Meter would be necessary in the determination of noise level in the workplace, to ensure that no employee may be exposed to hazardous noise level and serve as basis for the enforcement of using hearing protection when it becomes necessary.

The Lux and Temperature Meter is also necessary in determining the minimum limits for illumination intensity in the workplace. Precautionary measures to minimize and control optical problems due to poor workplace illumination could be put in place with the aid of the equipment. The temperature meter will aid to adequately address the risks of extreme temperatures and maintenance of reasonable and appropriate temperatures in the workplace.

The above equipments are necessary to provide safe and healthful workplace for employees and to meet the local and international standards on Occupational Health and Safety.

4.54. Handheld Radios, Motorola, GP-328, 1 Unit in 2007

P 22,000

This is incidental to the proposed 20MVA 69KV/34.5KV Baloy Substation, necessary for communication and security.

4.55. Fire Extinguishers (HCFC-123), for 3 Satellite Offices, 3 Units in 2007 P 30,000

These are incidental to the above projects. Availability of fire suppression equipments is for ready use during immediate response to fire emergencies in the facilities, and to meet the requirements of the Fire Code of the Philippines (PD1185).

4.56. Assorted Hand Tools, 1 Lot

P 22,095

These are basic hand tools for maintenance to be kept at each of the five substations namely: Carmen, Camaman-an, Tagoloan, Pueblo, and Macasandig Substations.

4.57. Incidental Requirements for the Hiring of Additional Meter Readers in 2007

P 1,800,600

Item	Item Description	Qty.	Amount
1	Motorcycle	2	98,200
2	Handheld Computer & Portable Printer	2	500,000
3	Leather Case for the Handheld	2	2,000
	Total		600,200

The additional Meter Readers have to be hired due to the increase in the number of customers. They need the above meter reading equipment so that they will be able to perform their tasks effectively.

4.58. Time of Use (TOU) Billing Software Development 2007

P 500,000

CEPALCO's existing billing software cannot handle TOU billing which requires billing on an hourly basis. There is a need for new software for use in billing customers under the TOU scheme.

4.59. Additional Tools and Safety Equipment for Differential Billing (DB) Crews 2007

P 500,000

Currently, CEPALCO's DB Crews are only issued basic tools. Additional tools and safety equipment are needed to enhance their capability, effectiveness and safe performance in the conduct of pilferage detection, testing, apprehension, and correction of electrical lines.

4.60. Range Finder 1 unit 2007 Php 25,000

The Range Finder will be for use by the section.

4.61. Electric Stove 2 units 2007 Php 4,000

These are Electric Stove for the new substations.

4.62. Lineman/Technician Ladder 1 pc. 2007 Php 32,000

Material & Equipment Testing and Repair Section has no ladder and keeps on borrowing from other groups whenever it conducts testing and maintenance works on CEPALCO's T&D equipment.

4.63. Meter Change-out of All Installed KWH Meters Every Two Years

2007 Php 10,594,125

Meter change-out or replacement of all installed kWh meters is in compliance with the mandate of Republic Act 7832 (Anti-Electricity Pilferage Act) that requires all electric utilities to calibrate all installed kWh meters every two years.

This activity requires the purchase of additional vehicles, testing equipment, materials and tools. There will also be a need to hire additional personnel resulting to an increase in the monthly usage of fuel, oil and other operational expenses due to the additional vehicles and personnel.

The number of vehicles is based on the number of customers per year, the average daily output per crew, and the average man-days per month. Please refer to the formula below.

$$\text{No. of Crews} = \frac{\text{Annual no. of customers for meter change-out}}{10 \text{ customers/day}} \times 22 \text{ mandays/month}$$

One crew is composed of two personnel.

Ladders, tools, digital camera, and handheld radio should be provided for every vehicle to ensure efficiency and safety.

Data of customers scheduled for meter change-out will be downloaded to these handheld computers for faster field data updating without resorting to the traditional manually issued job orders.

4.64. Incidental Capital Requirements for the Hiring of Additional Meter Readers 2007

Motorcycle	2 units	Php 98,200
Handheld Computer & Portable Printer	2units	Php 500,000
Leather Case for the Handheld	2 pcs.	Php 2,000

The hiring of additional Meter Readers is due to the increase in the number of customers. They need the above meter reading equipment so that they will be able to perform their tasks effectively.

4.65. Additional Tools and Safety Equipment for Differential Billing (DB) Crews 2007 Php 500,000

Currently, CEPALCO's DB Crews are only issued basic tools. Additional tools and safety equipment are needed to enhance their capability, effectiveness and safe performance in the conduct of pilferage detection, testing, apprehension, and correction of electrical lines.

4.66. Deskjet Printer, HP 1 unit 2007 Php 10,000
This is use for external correspondence to ERC, BIR, banks, power customers, government agencies for statement of accounts and follow-up letters.

4.67. Computer 1 unit 2007 Php 54,200
Printer 1 unit 2007 Php 35,000

These are incidental capital requirements for the additional CCD Staff.

4.68. Priority Numbering Device 2 units 2007 Php 30,500

This is intended for Service Application Section (SAS) and Customer Assistance Section (CAS) customers. This is to guide and ensure that our customers are attended to on a first come basis.

4.69. Computer	3 units	2007	Php 162,600
Printer, Dot Matrix	1 unit	2007	Php 35,000
Deskjet Printer	3 units	2007	Php 30,000
Computer Table	3 units	2007	Php 7,500

These are capital requirements for the two additional SAS Supervisors and one additional SAS Service Staff/Processor.

4.70. Lockers	26 units	2007	Php 26,000
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There is a need to provide frontline Customer Services Department (CSD) Supervisors with overhang lockers where they can place their personal belongings and additional lockers for additional linemen and inspectors at CSD lineman's quarter.

4.71. Computer	2 units	2007	Php 108,400
Printer, Dot Matrix	2 units	2007	Php 70,000

These are capital requirements for the two additional CAS Supervisors.

4.72. Photocopier/Scanner/Fax,	1 unit	2007	Php 17,000
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This is needed in Tagoloan - District Central Office for reproduction of various documents. At present, has no photocopier for reproduction of any documents either for customers or for CEPACO. We reproduce copies at Poblacion, Tagoloan, about kilometer away from the office. This has caused inconvenience on our part or to the customers waiting for their copies, especially if there is no available staff and vehicle.

4.73. TV Set, 21", with DVD Player	1 unit	2007	Php 15,000
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This will be installed at Tagoloan - District Central Office, where paying customers and the applicants for new connections from the entire district coverage area are making their transactions. With the Cable TV connection, it will give customers' comfort and pleasure while staying inside the office waiting for their service turns. Most importantly, it could be used as communication medium in disseminating useful customer information/announcements and advertisements like: Energy savings tips, how to read the kWhr meter, interruption schedules, etc. through a recorded CDs and tapes.

4.74. Priority Numbering Machine	2 units	2007	Php 30,500
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These units will be installed at Bugo (District Sub-office) and Tagoloan – District Central Office. The system of calling customers' name to come to the teller's booth despite done in seconds contributes delay in serving them. Aside from mispronouncing their names that would surely irritate the customers, it would also irritate the throat of our tellers at the end of the day. The installation would somehow give comfort and convenience to customers because they would know exactly the time they will be entertained.

4.75. Exhaust Fan, 10",	1 unit	2007	Php 750
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To be installed at the comfort room of Bugo (District Sub-office) to eradicate the foul odors coming out from the CR after customers' use.

the workplace.

The above equipments are necessary to provide safe and healthful workplace for employees and to meet the local and international standards on Occupational Health and Safety.

4.82. Handheld Radios, Motorola, GP-328 1 unit 2007 Php 22,000

This is incidental to the proposed 20MVA 69KV/34.5KV Baloy Substation, necessary for communication and security.

**4.83. Fire Extinguishers, HCFC-123)
20MVA 69KV/34.5KV Baloy Substation 2 pcs. 2008 Php 20,000
3 Satellite Offices 3 pcs. 2007 Php 30,000**

These are incidental to the above projects. Availability of fire suppression equipments is for ready use during immediate response to fire emergencies in the facilities, and to meet the requirements of the Fire Code of the Philippines (PD1185).

4.84. Electric Fan, Small 1 unit 2007 Php 500

This is to be installed in the Boomtruck # 054. Ventilation is not sufficient due to the design of the window glass panel.

**4.85. Lineman Personal Tools 3 Lots 2007 Php 185,900
1 Lot 2010 Php 82,478**

These are incidental capital requirements for the additional three Linemen in 2007 and one in 2010 for District Services Department.

4.86. Handheld Radio 1 units 2007 Php 22,000

This is incidental capital requirement for the new Service Application/Customer Assistance Supervisor for District Services Department.

**4.87. Motorcycle, Yamaha, Crypton 1 unit 2007 Php 51,000
Handheld Radio 1 unit 2007 Php 22,000
Digital Camera 1 unit 2007 Php 10,000
Range Finder 1 unit 2007 Php 19,000**

These are incidental capital requirements for the new Service Field Inspector for District Services Department.

The **Digital Camera** shall be used by the Service Field Inspector to capture images of applicant's service entrance installation, the pole or line where the power source is to be tapped, and the area where the proposed service line is routed. The images will be downloaded to the Service Processor's PC and will be used as reference for further discussion with the applicant or his representatives, especially if there is a need to correct any portion of the service entrance installation, clearing of vegetations affected by the service line, and correctly point the affected lots where to traverse the service line and require ROW grants from the owners.

At present, 1 out of 3 applications were inspected more than twice. One of the causes is the communication gap between our personnel and the customers. With the images, it will aid the right understanding to applicants or their representatives and even the Service Processor who could not fully comprehend the advice written in the inspection

2. Enclosure of the teller's booth. Collection supervisor and staff who are handling customers' complaints and requests shall be transferred outside. (P5,000)

3. The space vacated by the Dept. head will be utilized by the Collection Supervisor (presently at the back of the tellers), additional CAS staff who will man the radio and telephone calls, and the Collection Staff – attending promissory requests.

4.90. Computer	3 units	2007	Php 162,600
Printer, Epson	1 unit	2007	Php 35,000

These are additional computers for Accounting Department. At present there are thirteen units for the sixteen Accounting Staffs. All Accounting Staff should be equipped with computer to be able to work efficiently and meet set dates of reports submission.

4.91. Scanner	1 unit	2007	Php 16,000
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This will be used by Accounting Department for perpetual document retention.

4.92. Heavy Duty Stapler	1 unit	2007	Php 3,500
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This will be used by Accounting Department needed for thick reports.

4.93. Eye Protector Screen	8 pcs.	2007	Php 2,400
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These are intended for Accounting Staff for radiation protection.

4.94. Flash Disk	2 pcs.	2007	Php 6,000
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4.95. Meter Installer and Puller	2 units	2007	Php 56,000
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This is a new device recommended to be one of the standard crew-tools of District Services Department that will be used to safely and quickly remove and install kWhr meters. The use of the tool will avoid possible cover glass breakage and meter inaccuracy brought by banging the meter to insert into a meterbase. At present the meters are installed or inserted in a meter socket through exerting manual force by a hand. In some instances the meter glasses were broken because of excessive or unbalanced force exerted. The accuracy level is affected when the meter is subjected to a jolt. Using this tool, the meter installation and removal are safe and quick. Rather using the hands, a line worker can quickly snap the tool into the base of the meter and remove it from its socket and likewise, a meter need only to place in the tool and push the meter into its socket. The company will not only save time but more importantly it guarantees the installed meter's accuracy and safety to its line workers.

4.96. Handheld Radio	1 unit	2007	Php 22,000
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District Services Department-Service Section has four existing Handheld Radios used by two Service Crews, one Inspector and one Supervisor. With the addition of two units for the additional Inspector and Supervisor, we need to have a reserve unit in case of breakdown.

5. Renewal

5.1. Replacement of Defective Power Supply for Network Attached Storage (NAS) 200 Server	P 90,000
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The Network Attached Storage Server has currently been experiencing intermittent power problem. It is also noticed that only one (1) out of three (3) power supplies is operational. It is suggested that the replacement power supplies be purchased before the CIMS full implementation in order to maximize the use of available back-up facility.

5.2. Replacement of Defective Server Including Licenses, 1 Lot P 270,000

One of the servers - the "CEPALCO Main" has intermittently malfunctioned for quite a number of times. The said equipment is serving as the Primary Domain Collector for over six (6) years. Due to obsolescence, dysfunctional parts could no longer be replaced.

5.3. Replacement of Inefficient Aircon Unit at Conference Room 1 P 65,000

The condenser showed that the fan motor is inefficient considerably due to "wear and tear". The 15-year old unit is obsolete hence, parts are not available anymore. An alternative solution to repair such aircon unit is to improvise a condensing motor. However, pursuing such could again be subject to the possibility of mismatched operation between the old compressor and the "retrofitted" condenser. Thus, a brand new Airconditioning Unit is recommended to replace the old unit.

5.4. Replacement of Computer Server for NT_MAIN, 1 Unit P 250,000

The PC-based NT_MAIN served as the core file storage server for years. It was used as the centralized store of corporate network and application systems' installers, including drivers of numerous IT peripherals.

After HRIS, a number of application systems were dished concurrently. To avoid additional cost outlay, NT_MAIN was drawn beyond its limit. Since last year, multiple server downtimes were experienced. In effect, all application systems it serves intermittently were unavailable.

In June 2006, the server was technically out, and was beyond repair. ICTSD staff tried to replace another PC but observed to be inefficient due to service congestion.

In summary, the PC – based Server totally crashed and is beyond repair, all served systems were out, and the services tendered by NT_MAIN server can no longer be catered by any PC – based server. Hence, it is recommended a server – based unit to replace the PC – based NT_MAIN.

5.5. Replacement of Infocus Projector, 1 Unit P 65,000

The Infocus projector displays pink / violet color only.

5.6. Calculator, 1 Unit in 2007 PhP 600

The Calculator is a replacement unit used in one of the substations.

5.7. Computer and Peripherals for use in Manila Office: PhP 132,000

5.8. Air conditioning Unit, 1 Unit for Engineering Complex and 1 Unit for Main Office in 2007 PhP 144,000

These are replacements of more than 10 to 15 year old units. The replacements shall be done on staggered basis, starting from the oldest, frequently downed and has low efficiency.

5.9. Copying Machine, 1 Unit

P 85,000

The old unit assigned to Engineering Complex has long been broken. Required parts needed in the repair were found to be expensive thus buying a new unit is more advisable.

5.10. Computer and Peripherals (Maintenance and replacements with license requirements)

PhP 8,276,000

DETAIL				
Name	Computer and Peripherals			
Description	1) Computers/Servers with Softwares 2) Peripherals			
Date Needed	1) Jan- Jun2007			
CLASSIFICATION				
Rank	1st Priority			
CAPEX Driver Classification	Non-Network			
CAPEX Type Classification	Renewal			
Cost	Schedule	Computers/Servers with Softwares		Peripherals
	Jan-Jun 2007	6,401,000.00		1,875,000.00
	Totals	6,401,000.00		1,875,000.00
JUSTIFICATION				
CAPEX Requirement and Magnitude				
This is intended for the replacement of all computers/servers/peripherals including softwares that will reach to its 4 year life or 5 year life as provided standard for the computers/servers and other peripherals.				
Reason to Support Justification				
Ensures continuous operations of the running mission critical applications and to go with the fast trend of technology, replacement of all computers/servers is necessary.				

5.11. IT Projects for 2007 P

I. Network Infrastructures:

DETAIL				
Name	Network Infrastructures Equipments			
Description	1) Communication Link (Wireless) 2) Network Switches 3) Network Cabling			
Date Needed	1) Jul - Dec2006 2) Jan- Jun2007			
CLASSIFICATION				
Rank	1st Priority			
CAPEX Driver Classification	Non-Network			
CAPEX Type Classification	Renewal			
Cost	Schedule	Communication Link (Wireless)	Network Switches	Network Cabling
	Jul -Dec2006	400,000.00	50,000.00	15,000.00
	Jan-Jun2007	800,000.00	345,000.00	255,000.00
	TOTALS	1,200,000.00	395,000.00	270,000.00
JUSTIFICATION				
CAPEX Requirement and Magnitude				
This is intended for the replacement of all network infrastructures which will reach to its 5 year life as provided standard for the network/computer peripherals which is set to 5 years. Also included is the provision for the additional link to ESD-Tagoloan as a back up link and the incidental requirement of equipments/cabling intended for the service centers (ESD, Carmen and the Eastbound)				
Reason to Support Justification				

Ensures continuous operations of the running applications that are all connected with the networking of the company and to go with the fast trend of technology, replacement of all ICT infrastructures is necessary.

IV. Maintenance of Corporate Applications and Support Systems:

a. Customer Information Management System (CIMS)

DETAIL				
Name	Customer Information Management System (CIMS)			
Description	1) Licenses needed for additional users 2) Customizations for the enhancement needed			
Date Needed	1) Jan- Jun2007			
CLASSIFICATION				
Rank	1st Priority			
CAPEX Driver Classification	Non-Network			
CAPEX Type Classification	100% New Asset			
Cost	Schedule	Licenses	Programs Customization	
	Jan-Jun2007	572,000	600,000	
	TOTALS	572,000	600,000	
JUSTIFICATION				
CAPEX Requirement and Magnitude				
Licenses:				
<p>These additional concurrent user licenses are provisioned for the projected increase in the number of users by year 2007 up to 2011 due to the full implementation of CIMS with MMS features, accessing thru web and the setting up of the remote customer service centers and the necessary enhancements needed to cater Government mandatory requirements such as the DSOAR, Magna Carta and others.</p>				
Reason to Support Justification				
<p>To effectively serve the valued customers, expected additional users/staff to cater those running application system and to complied with the Government mandatory requirements, enhancements cost is provided for.</p>				

b. RE6/Financials

1. Computer Notebook

DETAIL	
Name	Computer Notebook for Solomon
Description	IBM X-Series with Wifi feature
Date Needed	January-June 2007
CLASSIFICATION	
Rank	1st Priority
CAPEX Driver Classification	Non-network
CAPEX Type Classification	100% New Asset
Cost (Php Peso)	150,000.00
JUSTIFICATION	
CAPEX Requirement and Magnitude	
<p>This computer notebook will be used in supporting corporate-wide system implementation and maintenance of Solomon modules. This mobile computer will also serve as development and test environment for all system enhancements done for Solomon as well as portable storage of Solomon database backups.</p> <p>Solomon modules are deployed in disparate parts of the franchise area including Manila Office. To minimize downtime by improving the response time of ICTSD staff in attending trouble calls related to Solomon system implementation. The responding staff is necessary to have portable pc during the maintenance and repair, on-site troubleshooting of the Solomon and other support applications. Frequent on-site maintenance is expected especially in the first 2 years of operation of Inventory and Fixed Assets considering most of the users are from remote sites (i.e. DSD, ESD, Manila and possibly affiliates like Minergy and CESTCO).</p>	

Reason to Support Justification
Solomon implementation setup has multi-application server deployment on each major site (Main Office, ESD, DSD). This is to provide redundancy incase the Citrix server is unavailable. Each of these servers should contain a replica of the main application server in main office. Until such time when Solomon will be fully integrated with other support applications, it will be dynamically updated to cater new requirements. Prior to updating of live application server, all customizations shall be tested in a test environment to ensure integrity of data. Thus making this computer the main equipment for Solomon system support and maintenance.

2. Solomon License

DETAIL	
Name	Solomon License
Description	Additional Solomon 3-User License for 2007 -2009
Date Needed	February 2007
CLASSIFICATION	
Rank	1st Priority
CAPEX Driver Classification	Non-network
CAPEX Type Classification	100% New Asset
Cost	Schedule 2007 343,200.00
JUSTIFICATION	
CAPEX Requirement and Magnitude	
These additional concurrent user licenses are provisioned for the projected increase in the number of users by year 2007 due to the full implementation of IPAMS and interface systems (WMS, CIMS, AM/FM, EMS) in 2008, and Solomon web portal in 2009.	
Reason to Support Justification	
Existing license count does not include projected users for new applications for that are still for deployment (integrated IPAMS-WMS-CIMS and Solomon Web Portal, which will be eventually used by higher management users)	

3. Solomon Customization Package

DETAIL	
Name	Solomon Customization Package
Description	Acquisition of VB Tools .NET for Solomon and Training
Date Needed	April 2007
CLASSIFICATION	
Rank	2nd Priority
CAPEX Driver Classification	Non-network
CAPEX Type Classification	100% New Asset
Cost (Php Peso)	315,000.00
JUSTIFICATION	
CAPEX Requirement and Magnitude	

Since we are expecting additional customizations in the implementation of Inventory and Fixed Assets due to PBR requirements and Solomon version upgrading by year 2008, we have planned to get the auxiliary software (i.e. VB tools for Solomon) to enable us to build unlimited customizations in-house. By investing in this software package and have ICTSD programmer trained with this development tool, we can save cost on high customization and implementation services from service provider. This one-time investment will directly translate into cost saving benefits since it costs cheaper than projected customization expenditure for the succeeding years (approximately P550,000.00). Such tool does not only provide transfer of technology but also long term cost saving measure for systems development/enhancement costs since it sets us free from being too tied up from external developers whose rates rapidly increase each year.

Customization package includes the following:

Software investment - VB Tools .NET for Solomon	P250,000.00
Training Investment (1 staff).....	50,000.00
Out-of-town expenses (1 staff)	15,000.00

Reason to Support Justification

Due to our lack of technical expertise and development tools to be able to do in-house customizations, we have just availed of the customization services from InfoSoft International Solutions, Inc. (IISI) for quite some time now. Because of this we have spent over P600,000.00 on various customizations from the time we implemented Solomon in year 2001. Without such tool, we will continue to be dependent from external providers for customization of new requirements.

c. Intranet/Internet Applications

DETAIL			
Name		Intranet / Internet Applications	
Description		Project-based Programmer, Workstation, DigiCam, Web Tools	
Date Needed		1) Jan- Jun2007	
CLASSIFICATION			
Rank		1st Priority	
CAPEX Driver Classification		Non-Network	
CAPEX Type Classification			
Cost	Schedule	Project-based Staff	PC / Web Development Tools
	Jan-Jun 2007	50,000	75,000
JUSTIFICATION			
CAPEX Requirement and Magnitude			
To be able to develop a short messaging system portal and web portal interfaced with our current CIMS system. In this way, customers could make an inquiry on their respective account via their mobile phones as well as via the internet. The project will cover from linkage to CIMS and SMS service providers, authentication modules and transactions/payment modules.			
Reason to Support Justification			
Considering the number of staffs, capabilities and projects handled respectively by ICTSD personnel, there might be a need to hire project based programmers to handle web development. Hired staffs will facilitate in the enhancement of our web based applications. Maintenance of the said projects will be turned over to regular cepalco staff after acceptance will be made.			

h. Office Productivity/Management Systems

DETAIL	
Name	Office Productivity / Management Systems

Description	Software Licensing / Office Automation		
Date Needed	1) Jan- Jun2007		
CLASSIFICATION			
Rank	1st Priority		
CAPEX Driver Classification	Non-Network		
CAPEX Type Classification	100% New Asset		
Cost	Schedule	Software Licensing	Office Automation
	Jan-Jun 2007	897,000	
JUSTIFICATION			
CAPEX Requirement and Magnitude			
Acquisition of productivity softwares to be used by SA/Programmers and Office personnels in there development and reports requirement. Office automation project would provide a soft copy of all documents.			
Reason to Support Justification			
Most of this software copies will serve as development tools for ICTSD programmers and the other softwares will be used by supervisors for their reports. Office automation will be for provision of softcopy in optical forms of all documents.			

New Requirements:

VI. VoIP Communication Infrastructure: (Telephone System – CALL CENTER)

DETAIL			
Name	Telephone System –Call Center		
Description	Call Center		
Date Needed	1) Jan- Jun2007		
CLASSIFICATION			
Rank	1st Priority		
CAPEX Driver Classification	Non-Network		
CAPEX Type Classification	100% New Asset		
Cost	Schedule	Software Licensing & Media Gateway	
	Jan-Jun2007	200,000	
JUSTIFICATION			
CAPEX Requirement and Magnitude			
<u>Our call center as mandated by ERC will be under the supervision of the CSD - Customer Assistance Section (CAS). The call center will handle service related calls, general or personal calls covering Main Office, Engineering and District offices. This will relieve front liners from handling telephone calls.</u>			
<i>Work Shifting Schedules:</i>			
2006 Monday to Saturday:			
1)	<u>6 AM - 2 PM (2 personnel)</u>		
2)	<u>9 AM - 5 PM (2 personnel)</u>		
3)	<u>2 PM -10 PM (2 personnel)</u>		
4)	<u>10 PM - 6 AM (1 personnel)</u>		
2007			
2008 <u>Sunday:</u>			
1)	<u>8 AM - 4 PM (1 personnel)</u>		
<u>The Call Center will be based our Toribio Chavez St. office preferably in one contiguous area. Staffing is based on the number of main office front liners who are currently receiving calls (CAS-3; SAS-2; BSD-1; CCD-2; Secretaries -2). This is also the minimum requirement in the acquisition of software for call management.</u>			
All job orders and inspection orders processed at the Call Center will be auto forwarded and printed and sent to the concerned unit.			
Reason to Support Justification			
The new envisioned telephone system shall at least feature an integrated and centralized receiving of calls from all existing telephone lines and can be transferred to specific person through automatic or manual settings.			

5.12. Isuzu D-MAX 4X4 Pick-Up, 1 Unit P 1,400,000

This will replace the more than 15-year old Nissan Pathfinder assigned to ESD engineers and presently used by SYSPAD in their survey/inspection. This will be made available to all users that require 4x4 power during actual field works.

5.13. Toyota Grandia – Staff Car, 1 Unit P 1,430,000

Replacement of the 10-Year old Toyota Hi-Ace Van is necessary and these are based on the following:

- Policy on Replacement of Staff Cars is set at seven years of use (*formerly 5 years*)
- Prolonging the replacement will cost the company more since 4 or 5-year old cars already require the necessary repairs, e.g., engine overhauling, body repairs, replacement of under-chassis parts. Furthermore, there would be more downtime and inconvenience when travelling.

The Toyota Hi-Ace staff car currently emits black smoke needing engine repair or overhaul. Some of its parts are already replaced due to its age and usage.

5.14. Replacement of Air Conditioning Units for ESD Complex and Main Office in 2007, 2 Units P 144,000

These are replacements of more than 10 to 15 year old units. The replacements shall be done on staggered basis, starting from the oldest, frequently downed and has low efficiency.

5.15. Office/Computer Chair, 1 Unit P 1,500

These are projected replacements of office/computers chairs for the Controller’s Office.

5.16. Plastic Pallet, 10 Units P 39,500

These will replace the wooden pallets which are oversized and not suitable for our use. These wooden pallets were not procured or designed for our use.

5.17. Motorcycles, Yamaha Crypton, 13 Units in 2007 P 638,300

These are replacements of 13 units of at least 8-year old units. Prolonging the replacement would cost the company more since maintenance costs are already high. Furthermore, there would be more downtime resulting to lower utilization of these units and affect the users’ productivity. These will also replace the 2 strokes motorcycles in compliance of the Clean Air Act.

5.18. Replacement Various Transportation Equipment P 3,106,300

Proposed Replacement	Existing Unit	Age	Estimated Cost
Multi-Cab	Multi-Cab MV#005 KBT854	12	495,000
KIA K2700 4x4	Kia Ceres 4x4 MV# 044 KBR 419	12	842,000
	Kia Ceres 4x4 MV# 091 KBR 536	12	842,000
Isuzu NKR	Isuzu NKR MV# 047 KBV 654	11	927,300

Replacements of the above vehicles are necessary and these are based on the following:

- Policy on replacements of vehicles was set on 10 years of use.
- Prolonging the replacement would cost the company more since 10 year old

vehicles already required the necessary repairs, e.g. engine overhauling, body repairs, replacement of underchassis parts. Furthermore, there would be more downtime and inconvenience that affect the user's productivity.

5.19. Replacement of Worn-Out Rubber Gloves, 4 Units P 56,000

The 4 pairs of worn-out rubber gloves are used by Linemen for Hotline Works. ETR test results showed alarming indication upon visual test.

5.20. CSD: Replacement of 1 Lost and 1 Defective Miner's Lamps P 8,000

The defective Miner's Lamp has broken glasses and busted lamps. The findings of ECN test and repair indicated the Miner's Lamp is beyond repair, hence, replacement is endorsed.

Replacement of lost Miner's Lamp is endorsed for safe performance of the job that requires its use.

5.21. Various Standard Group Tools, 1 Lot P 2,354

These are replacements of the existing personal and group tools issued to Apprentice and Dualized Training Program Trainees.

5.22. Personal/Lineman's Tools 2007 Php 50,000

These are provisions for the replacement of the above tools.

5.23. Calculator 1 unit 2007 Php 600

These are replacements of calculators used at the substations.

5.24. Various Personal Tools Replacement 1 lot 2007 Php 59,272

These are budget provisions for the issued tools of all Linemen of District Services Department Service Section. The replacement schedules are based on the standard estimated lives of tools.

5.25. Various Crew Tools Replacement 1 lot 2007 Php 2,750

These are budget provisions for the issued crew tools of all Linemen of District Services Department Service Section. The replacement schedules are based on the standard estimated lives of tools.

5.26. Various Standard Group Tools 1 lot 2007 Php 2,354

These are replacements of the existing personal and group tools issued to Apprentice and Dualized Training Program Trainees.

5.27. Air conditioning Unit, various HP for Engineering complex 1 unit 2007 Php 72,000

Main Office (Accounting Office, C1, Mezzanine, and customer lobby) 1 unit 2007 Php 72,000

These are replacements of more than 10 to 15 year old units. The replacements shall be done on staggered basis, starting from the oldest, frequently downed and has low

efficiency.

5.28. Copying Machine 1 unit 2007 Php 85,000

The old unit assigned to Engineering Complex has long been broken. Required parts needed in the repair were found to be expensive thus buying a net unit is more advisable.

5.29. Office/Computer Chairs 1 unit 2007 Php 1,500

These are projected replacements of office/computers chairs for the Controller's Office.

6. Refurbishment

6.1. Gate, Motor Operated for Engineering Complex, 2 Units Php 240,000

The refurbishment of existing steel gates at the Engineering Complex and District Central Office, and installation of motor for operations are primarily for the improvement of gate operations and enhancement of security performance. This will allow motorized operations of steel gates and improve security performance.

6.2. Main Office Front Canopy Shed, Gutter, Downspout, and Rain Water Collection Pipelines in 2007 Php 61,000

The Main Office Front Canopy Shed is designed to provide a covered comfortable place for customers, who could not be accommodated inside the CCD lobby, to stay while waiting for their turn to pay their electric bills. It is of "built-up steel frames" and "plain GI sheets with epoxy paint finish" structure, provided with insulation layer matting to deflect the heat of the sun. It will cover practically the whole main office front ground and would also provide as protective roof cover for company vehicles parked, thereat, overnight.

6.3. Rehabilitation of Sewer Facility and Drainage System of the Main Office and Other Buildings in 2007 P 65,000

Most of the sewage and water waste containment facilities of the Main Office, Engineering Complex, including those of the Substations are either clogged or broken that needs revamp or reconstructions.

6.4. CSD Office Renovation Php 270,000

The renovation is necessary to accommodate more customers.

6.5. Repair of Signage - 24 - Hour Service Php 35,000

No maintenance done with signage since acquisition.

6.6. Office Reconfiguration, 1Lot in 2007 Php 27,000

The following are the reasons for the needed reconfiguration at District Services Department (DSD):

- To accommodate the two (2) additional office-based personnel to be hired in 2007. (Service Staff and CAS/SAS Processor)
- To address the need of enclosing the tellers booth area for safety purposes.
- To avoid congestion as a result of enclosing the teller's booth and increase of customers transacting in the office.

Proposal for Office re-arrangement: (refer to separate floor plan)

2. Transfer the office of DSD–head to the existing stock room. The stock room is due for transfer to the planned building extension (2006 approved budget). The actual construction is scheduled in the second half of 2006. Needed are:
 - c) Existing Stock room - Removal of divider, boxes, & shelves, retouching or repainting, network re-wiring, and installation of 1 unit 1.0HP, Window type ACU. (P20,000)
 - d) Removal of existing divider and the corresponding re-touches and rewiring of network at the Dept. head office. (P2,000)
4. Enclosure of the teller's booth. Collection supervisor and staff who are handling customers' complaints and requests shall be transferred outside. (P5,000)
5. The space vacated by the Dept. head will be utilized by the Collection Supervisor (presently at the back of the tellers), additional CAS staff who will man the radio and telephone calls, and the Collection Staff – attending promissory requests.

6.7. Upgrading of DB Clerk's Desktop Computer P 72,000

The existing desktop computer is not capable of running AutoCad applications necessary to locate customers especially those with bill deficiencies. Also, DB Section is using digitized pictures as evidences thus a CD Writer is necessary for archiving CD-stored pictures for future use.

6.8. Upgrade of JL Eblacas' Desktop Computer P 18,000

The said desktop computer frequently hangs especially when the user accesses base map, necessitating needless restart and thereby incurring unnecessary processing delays, which ripple down to the other Design Staff. Due to frequent hanging up of the unit, the user has to render late night overtime just to complete the required maps. The is evaluated to be upgraded to 2.0 GB memory and 2x80GB, 72000 rpm hard disk.

6.9. Upgrade of EMB's Desktop Computer P 8,000

EGL to use EMB's desktop computer but to be upgraded to accommodate EGL's SysPad functions that he still carry while at LCMD. The said desktop will be upgraded to 1GB memory and 80 GB Hard Disk from a 512MB memory and 40GB Hard Disk.

6.10. PC Upgrading to Pentium 4 P 20,000

One of the existing computers at District Services Department is still Pentium III which is more than 5 years in service and is not capable to process huge data such as AutoCAD files. This will be used for AutoCAD for viewing facilities map.

6.11. Provision of Air Condition for Staff Vehicle (094), 1 Unit P 50,000

The service vehicle Isuzu-IPV is presently used to ferry District Services Department Staff residing at the city proper. This same vehicle is used by the Collection Supervisor and Dept. Head to visit key account customers, including the LGU officials for collection follow-up and other operational concerns. The provision of air condition would give comfort and convenience to the users, especially in extreme hot season. The bad effect to the personnel's health due to sudden change of temperature from getting in and out from the air conditioned offices could be minimized if not eliminated.

6.12. Calibration/Rehabilitation of Lineman/Technician Tools, 1 Lot P 50,000

The proposed calibration and/or equipment rehabilitation are intended to maintain reliability and integrity of these testing instruments as these instruments are used to test high valued T&D equipment. Further, these instruments are used for various external services works where clients normally ask for calibration certificates to ensure that test results are reliable and dependable.

MAJOR CAPITAL EXPENDITURE FOR RY 2007

20 MVA, 69-34.5kV BALOY SUBSTATION

CAGAYAN ELECTRIC POWER & LIGHT CO.,INC 2007 Capital Expenditure Forecast Major Project Information Summary	
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Name	20 MVA, 69-34.5kV BALOY SUBSTATION
Project code	
Description	Baloy substation will have a power transformer with 20 MVA capacity, self-cooled. Its primary voltage is 69kV, with 34.5kV secondary. The power transformer and other major equipment are all outdoor type and mounted on steel structures. The substation will be equipped with facilities for remote monitoring and control. RTUs, IEDs, and communication facilities will be installed in steel Cabinets located inside the Control Building.
Commissionin	1st Q 2007

Rank	1st priority	(Ongoing; 1 st Priority; 2 nd Priority)	
Project Driver	Load Growth	(Load Growth; Network non-	
Project Type Classification	a. Rank - 1st priority		
	b. Project Driver - Load Growth		
	c. Project Type - Growth		
	d. Expenditure		
Expenditure for the Period 2007 (Real Value)	Forex: \$1,051,466	Local: 24,478,158	TOTAL:

Project Purpose	The demand for electricity in the eastern part of the franchise area has grown considerably. Its existing substation supplying the area is already experiencing more than 100% of its rated capacity. The addition of one substation in the eastern part will relieve the existing substation of excesss load and prevent overloading of this substation. A worse-case scenario would happen if this transformer would be out of service for whatever reason, since this would disrupt service to a large number of customers.
Impact if Project Not Implemented	If the project is not implemented there will be shortage of supply for the 34.5kV system in the eastern part. There's only one transformer serving this area and located at Tagoloan substation.
Reason for ranking project commissioning date relative to other projects	This project is given 1st priority ranking since this will provide the minimum delivery capacity and reliability levels to meet required service delivery standards.

20MVA 69/34.5KV BALOY SUBSTATION

ASSET CATEGORY		Capital Expenditure (total, expressed in nominal PhP)									
		Actual (Pesos, nominal in Pesos of calendar year)				Budget (Calendar year)	Budget (Regulatory year)	Forecast (Pesos, nominal in Pesos of regulatory year)			
		2003	2004	2005	2006	2007	2007	2008	2009	2010	2011
A. Distribution Plant											
1	Land and Land Rights (Distribution Purposes)	-	-	-	-	-	2,403,675	-	-	-	-
2	Structures and Improvements	-	-	-	-	-	3,896,090	-	-	-	-
3	Station Equipment	-	-	-	-	-	-	-	-	-	-
3a	Power transformers	-	-	-	-	-	23,948,631	-	-	-	-
3b	Switchgear	-	-	-	-	-	19,313,538	-	-	-	-
3c	Protective equipment	-	-	-	-	-	7,155,380	-	-	-	-
3d	Metering & control equipment	-	-	-	-	-	921,143	-	-	-	-
3e	Communications equipment	-	-	-	-	-	4,850,280	-	-	-	-
3f	Other station equipment	-	-	-	-	-	4,455,723	-	-	-	-
4	Poles, Towers and Fixtures - Distribution	-	-	-	-	-	7,587,609	-	-	-	-
5	Poles, Towers and Fixtures - Customer	-	-	-	-	-	-	-	-	-	-
6	Overhead Conductors and Devices - Distribution	-	-	-	-	-	6,325,393	-	-	-	-
7	Overhead Conductors and Devices - Customer	-	-	-	-	-	-	-	-	-	-
8	Underground Circuits - Distribution	-	-	-	-	-	-	-	-	-	-
9	Underground Circuits - Customer	-	-	-	-	-	-	-	-	-	-
10	Underground Conduits - Distribution	-	-	-	-	-	-	-	-	-	-
11	Underground Conduits - Customer	-	-	-	-	-	-	-	-	-	-
12	Line Transformers - Distribution	-	-	-	-	-	-	-	-	-	-
13	Line Transformers -Customer	-	-	-	-	-	-	-	-	-	-
14	Power Conditioning Equipment	-	-	-	-	-	2,705,200	-	-	-	-
15	Services	-	-	-	-	-	-	-	-	-	-
16	Meters, Instruments & Metering Transformers - Distribution	-	-	-	-	-	-	-	-	-	-
17	Meters, Instruments & Metering Transformers - Customer	-	-	-	-	-	-	-	-	-	-
18	Information Technology Equipment (distribution)	-	-	-	-	-	-	-	-	-	-
19	Regulated Entity Property on Consumer's Premises	-	-	-	-	-	-	-	-	-	-
20	Street Lights and Signal Systems	-	-	-	-	-	-	-	-	-	-
21	Submarine Cables	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL Distribution Plant		-	-	-	-	-	83,562,662	-	-	-	-
B. General Plant											
1	Land and Land Rights (non-network)	-	-	-	-	-	-	-	-	-	-
2	Structures and Improvements (non-network)	-	-	-	-	-	-	-	-	-	-
3	Office Furniture and Equipment	-	-	-	-	-	-	-	-	-	-
4	Transportation Equipment	-	-	-	-	-	-	-	-	-	-
5	Stores Equipment	-	-	-	-	-	-	-	-	-	-
6	Tools, Shop and Garage Equipment	-	-	-	-	-	-	-	-	-	-
7	Laboratory Equipment	-	-	-	-	-	-	-	-	-	-
8	Information Systems Equipment (non-network)	-	-	-	-	-	-	-	-	-	-
9	Power-operated Equipment	-	-	-	-	-	-	-	-	-	-
10	Communication Plant and Equipment	-	-	-	-	-	-	-	-	-	-
11	Miscellaneous Equipment	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL General Plant		-	-	-	-	-	-	-	-	-	-
C. Materials and Supplies (including spares)											
D. Transferred Subtransmission Assets		-	-	-	-	-	-	-	-	-	-
E. Allocated Overheads Capitalized											
TOTAL CAPITAL EXPENDITURE		-	-	-	-	-	88,828,128	-	-	-	-
Exchange Rate Assumption for Forecast Period (Peso/US\$) (for quarters in regulatory year)	Sep quarter	1.00	1.00	1.00	1.00	52.72	52.72	52.42	52.42	52.91	52.91
	Dec quarter	1.00	1.00	1.00	1.00	52.72	52.72	52.42	52.42	52.91	52.91
	Mar quarter	1.00	1.00	1.00	1.00	52.72	52.72	52.42	52.42	52.91	52.91
	Jun quarter	1.00	1.00	1.00	1.00	52.72	52.72	52.42	52.42	52.91	52.91
Philippines Consumer Price Index Assumption (for quarters in regulatory year)	Sep quarter	1.00	1.00	1.00	1.00	1.07	1.07	1.12	1.17	1.22	1.27
	Dec quarter	1.00	1.00	1.00	1.00	1.07	1.07	1.12	1.17	1.22	1.27
	Mar quarter	1.00	1.00	1.00	1.00	1.07	1.07	1.12	1.17	1.22	1.27
	Jun quarter	1.00	1.00	1.00	1.00	1.07	1.07	1.12	1.17	1.22	1.27
USA Consumer Price Index Assumption (for quarters in regulatory year)	Sep quarter	1.00	1.00	1.00	1.00	1.04	1.04	1.06	1.09	1.12	1.15
	Dec quarter	1.00	1.00	1.00	1.00	1.04	1.04	1.06	1.09	1.12	1.15
	Mar quarter	1.00	1.00	1.00	1.00	1.04	1.04	1.06	1.09	1.12	1.15
	Jun quarter	1.00	1.00	1.00	1.00	1.04	1.04	1.06	1.09	1.12	1.15
Base Value assumed for Philippine CPI figures		Year:	-	Value:	-						
Base Value assumed for USA CPI figures		Year:	-	Value:	-						

20MVA 69/34.5KV BALOY SUBSTATION

ASSET CATEGORY	Capital Expenditure: Peso Component (expressed in real PhP)									
	Actual (Pesos, real in Pesos of calendar year)				Budget (Calendar year)	Budget (Regulatory year)	Forecast (Pesos, real in Pesos of regulatory year)			
	2003	2004	2005	2006	2007	2007	2008	2009	2010	2011
A. Distribution Plant										
1 Land and Land Rights (Distribution Purposes)						2,250,000.00				
2 Structures and Improvements						3,647,000.00				
3 Station Equipment										
3a Power transformers						202,000.00				
3b Switchgear						1,172,963.00				
3c Protective equipment						130,697.00				
3d Metering & control equipment										
3e Communications equipment						400,000.00				
3f Other station equipment						3,520,000.00				
4 Poles, Towers and Fixtures - Distribution						7,102,508.00				
5 Poles, Towers and Fixtures - Customer										
6 Overhead Conductors and Devices - Distribution						5,920,989.00				
7 Overhead Conductors and Devices - Customer										
8 Underground Circuits - Distribution										
9 Underground Circuits - Customer										
10 Underground Conduits - Distribution										
11 Underground Conduits - Customer										
12 Line Transformers - Distribution										
13 Line Transformers -Customer										
14 Power Conditioning Equipment						132,000.00				
15 Services										
16 Meters, Instruments & Metering Transformers - Distribution										
17 Meters, Instruments & Metering Transformers - Customer										
18 Information Technology Equipment (distribution)										
19 Regulated Entity Property on Consumer's Premises										
20 Street Lights and Signal Systems										
21 Submarine Cables										
SUB-TOTAL Distribution Plant					0	24,478,157.00	0	-	0	0
B. General Plant										
1 Land and Land Rights (non-network)										
2 Structures and Improvements (non-network)										
3 Office Furniture and Equipment										
4 Transportation Equipment										
5 Stores Equipment										
6 Tools, Shop and Garage Equipment										
7 Laboratory Equipment										
8 Information Systems Equipment (non-network)										
9 Power-operated Equipment										
10 Communication Plant and Equipment										
11 Miscellaneous Equipment										
SUB-TOTAL General Plant					0	0	0	-	-	-
C. Materials and Supplies (including spares)										
D. Transferred Subtransmission Assets										
E. Allocated Overheads Capitalized						1,266,305.85		-		
TOTAL CAPITAL EXPENDITURE					0	25,744,462.85	0	-	-	-
Exchange Rate Assumption for Forecast Period (Peso/US\$)	Sep quarter									
	Dec quarter									
	Mar quarter									
	Jun quarter									
Philippines Consumer Price Index Assumption	Sep quarter									
	Dec quarter									
	Mar quarter									
	Jun quarter									
USA Consumer Price Index Assumption	Sep quarter									
	Dec quarter									
	Mar quarter									
	Jun quarter									
Base Value assumed for Philippine CPI figures	Year:		Value:							
Base Value assumed for USA CPI figures	Year:		Value:							

20MVA 69/34.5KV BALOY SUBSTATION

ASSET CATEGORY	Capital Expenditure: US\$ Component (expressed in real US\$)									
	Actual (US\$, real in US\$ of calendar year)				Budget (Calendar year)	Budget (Regulatory year)	Forecast (US\$, real in US\$ for regulatory year)			
	2003	2004	2005	2006	2007	2007	2008	2009	2010	2011
A. Distribution Plant										
1 Land and Land Rights (Distribution Purposes)										
2 Structures and Improvements										
3 Station Equipment										
3a Power transformers						434,648.00				
3b Switchgear						330,763.00				
3c Protective equipment						128,488.00				
3d Metering & control equipment						16,870.00				
3e Communications equipment						81,003.00				
3f Other station equipment						12,734.00				
4 Poles, Towers and Fixtures - Distribution										
5 Poles, Towers and Fixtures - Customer										
6 Overhead Conductors and Devices - Distribution										
7 Overhead Conductors and Devices - Customer										
8 Underground Circuits - Distribution										
9 Underground Circuits - Customer										
10 Underground Conduits - Distribution										
11 Underground Conduits - Customer										
12 Line Transformers - Distribution										
13 Line Transformers -Customer										
14 Power Conditioning Equipment							46,961.00			
15 Services										
16 Meters, Instruments & Metering Transformers - Distribution										
17 Meters, Instruments & Metering Transformers - Customer										
18 Information Technology Equipment (distribution)										
19 Regulated Entity Property on Consumer's Premises										
20 Street Lights and Signal Systems										
21 Submarine Cables										
SUB-TOTAL Distribution Plant					0	1,051,467.00	0	-	0	0
B. General Plant										
1 Land and Land Rights (non-network)										
2 Structures and Improvements (non-network)										
3 Office Furniture and Equipment										
4 Transportation Equipment										
5 Stores Equipment										
6 Tools, Shop and Garage Equipment										
7 Laboratory Equipment										
8 Information Systems Equipment (non-network)										
9 Power-operated Equipment										
10 Communication Plant and Equipment										
11 Miscellaneous Equipment										
SUB-TOTAL General Plant					0	0	0	0	0	0
C. Materials and Supplies (including spares)										
D. Transferred Subtransmission Assets										
E. Allocated Overheads Capitalized										
TOTAL CAPITAL EXPENDITURE					0	1,123,124.48	0	-	0	0
Exchange Rate Assumption for Forecast Period (Peso/US\$)	Sep quarter									
	Dec quarter									
	Mar quarter									
	Jun quarter									
Philippines Consumer Price Index Assumption	Sep quarter									
	Dec quarter									
	Mar quarter									
	Jun quarter									
USA Consumer Price Index Assumption	Sep quarter									
	Dec quarter									
	Mar quarter									
	Jun quarter									
Base Value assumed for Philippine CPI figures	Year:			Value:						
Base Value assumed for USA CPI figures	Year:			Value:						

20MVA 69/34.5KV BALOY SUBSTATION

ASSET CATEGORY		Capital Expenditure : Peso component (total, expressed in nominal PHP)									
		Actual (Pesos, nominal in Pesos of calendar year)				Budget (Calendar year)	Budget (Regulatory year)	Forecast (Pesos, nominal in Pesos of regulatory year)			
		2003	2004	2005	2006	2007	2007	2008	2009	2010	2011
A. Distribution Plant											
1	Land and Land Rights (Distribution Purposes)	-	-	-	-	-	2,403,675	-	-	-	-
2	Structures and Improvements	-	-	-	-	-	3,896,090	-	-	-	-
3	Station Equipment	-	-	-	-	-	-	-	-	-	-
	3a Power transformers	-	-	-	-	-	215,797	-	-	-	-
	3b Switchgear	-	-	-	-	-	1,253,076	-	-	-	-
	3c Protective equipment	-	-	-	-	-	139,624	-	-	-	-
	3d Metering & control equipment	-	-	-	-	-	-	-	-	-	-
	3e Communications equipment	-	-	-	-	-	427,320	-	-	-	-
	3f Other station equipment	-	-	-	-	-	3,760,416	-	-	-	-
4	Poles, Towers and Fixtures - Distribution	-	-	-	-	-	7,587,609	-	-	-	-
5	Poles, Towers and Fixtures - Customer	-	-	-	-	-	-	-	-	-	-
6	Overhead Conductors and Devices - Distribution	-	-	-	-	-	6,325,393	-	-	-	-
7	Overhead Conductors and Devices - Customer	-	-	-	-	-	-	-	-	-	-
8	Underground Circuits - Distribution	-	-	-	-	-	-	-	-	-	-
9	Underground Circuits - Customer	-	-	-	-	-	-	-	-	-	-
10	Underground Conduits - Distribution	-	-	-	-	-	-	-	-	-	-
11	Underground Conduits - Customer	-	-	-	-	-	-	-	-	-	-
12	Line Transformers - Distribution	-	-	-	-	-	-	-	-	-	-
13	Line Transformers - Customer	-	-	-	-	-	-	-	-	-	-
14	Power Conditioning Equipment	-	-	-	-	-	141,016	-	-	-	-
15	Services	-	-	-	-	-	-	-	-	-	-
16	Meters, Instruments & Metering Transformers - Distribution	-	-	-	-	-	-	-	-	-	-
17	Meters, Instruments & Metering Transformers - Customer	-	-	-	-	-	-	-	-	-	-
18	Information Technology Equipment (distribution)	-	-	-	-	-	-	-	-	-	-
19	Regulated Entity Property on Consumer's Premises	-	-	-	-	-	-	-	-	-	-
20	Street Lights and Signal Systems	-	-	-	-	-	-	-	-	-	-
21	Submarine Cables	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL Distribution Plant		-	-	-	-	-	26,150,015	-	-	-	-
B. General Plant											
1	Land and Land Rights (non-network)	-	-	-	-	-	-	-	-	-	-
2	Structures and Improvements (non-network)	-	-	-	-	-	-	-	-	-	-
3	Office Furniture and Equipment	-	-	-	-	-	-	-	-	-	-
4	Transportation Equipment	-	-	-	-	-	-	-	-	-	-
5	Stores Equipment	-	-	-	-	-	-	-	-	-	-
6	Tools, Shop and Garage Equipment	-	-	-	-	-	-	-	-	-	-
7	Laboratory Equipment	-	-	-	-	-	-	-	-	-	-
8	Information Systems Equipment (non-network)	-	-	-	-	-	-	-	-	-	-
9	Power-operated Equipment	-	-	-	-	-	-	-	-	-	-
10	Communication Plant and Equipment	-	-	-	-	-	-	-	-	-	-
11	Miscellaneous Equipment	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL General Plant		-	-	-	-	-	-	-	-	-	-
C. Materials and Supplies (including spares)											
D. Transferred Subtransmission Assets		-	-	-	-	-	-	-	-	-	-
E. Allocated Overheads Capitalized											
TOTAL CAPITAL EXPENDITURE		-	-	-	-	-	27,502,810	-	-	-	-
Exchange Rate Assumption for Forecast Period (Peso/US\$)											
	Sep quarter										
	Dec quarter										
	Mar quarter										
	Jun quarter										
Philippines Consumer Price Index Assumption		1.00	1.00	1.00	1.00	1.07	1.07	1.12	1.17	1.22	1.27
(for quarters in regulatory year)		1.00	1.00	1.00	1.00	1.07	1.07	1.12	1.17	1.22	1.27
	Sep quarter	1.00	1.00	1.00	1.00	1.07	1.07	1.12	1.17	1.22	1.27
	Dec quarter	1.00	1.00	1.00	1.00	1.07	1.07	1.12	1.17	1.22	1.27
	Mar quarter	1.00	1.00	1.00	1.00	1.07	1.07	1.12	1.17	1.22	1.27
	Jun quarter	1.00	1.00	1.00	1.00	1.07	1.07	1.12	1.17	1.22	1.27
USA Consumer Price Index Assumption											
	Sep quarter										
	Dec quarter										
	Mar quarter										
	Jun quarter										
Base Value assumed for Philippine CPI figures		Year:		Value:							
Base Value assumed for USA CPI figures		Year:		Value:							

20MVA 69/34.5KV BALOY SUBSTATION

ASSET CATEGORY		Capital Expenditure: US\$ Component (expressed in nominal US\$)										
		Actual (US\$, nominal in US\$ of calendar year)				Budget (Calendar year)	Budget (Regulatory year)	Forecast (US\$, nominal in US\$ of regulatory year)				
		2003	2004	2005	2006	2007	2007	2008	2009	2010	2011	
A. Distribution Plant												
1	Land and Land Rights (Distribution Purposes)	-	-	-	-	-	-	-	-	-	-	
2	Structures and Improvements	-	-	-	-	-	-	-	-	-	-	
3	Station Equipment	-	-	-	-	-	-	-	-	-	-	
3a	Power transformers	-	-	-	-	-	450,208	-	-	-	-	
3b	Switchgear	-	-	-	-	-	342,604	-	-	-	-	
3c	Protective equipment	-	-	-	-	-	133,088	-	-	-	-	
3d	Metering & control equipment	-	-	-	-	-	17,474	-	-	-	-	
3e	Communications equipment	-	-	-	-	-	83,903	-	-	-	-	
3f	Other station equipment	-	-	-	-	-	13,190	-	-	-	-	
4	Poles, Towers and Fixtures - Distribution	-	-	-	-	-	-	-	-	-	-	
5	Poles, Towers and Fixtures - Customer	-	-	-	-	-	-	-	-	-	-	
6	Overhead Conductors and Devices - Distribution	-	-	-	-	-	-	-	-	-	-	
7	Overhead Conductors and Devices - Customer	-	-	-	-	-	-	-	-	-	-	
8	Underground Circuits - Distribution	-	-	-	-	-	-	-	-	-	-	
9	Underground Circuits - Customer	-	-	-	-	-	-	-	-	-	-	
10	Underground Conduits - Distribution	-	-	-	-	-	-	-	-	-	-	
11	Underground Conduits - Customer	-	-	-	-	-	-	-	-	-	-	
12	Line Transformers - Distribution	-	-	-	-	-	-	-	-	-	-	
13	Line Transformers - Customer	-	-	-	-	-	-	-	-	-	-	
14	Power Conditioning Equipment	-	-	-	-	-	48,642	-	-	-	-	
15	Services	-	-	-	-	-	-	-	-	-	-	
16	Meters, Instruments & Metering Transformers - Distribution	-	-	-	-	-	-	-	-	-	-	
17	Meters, Instruments & Metering Transformers - Customer	-	-	-	-	-	-	-	-	-	-	
18	Information Technology Equipment (distribution)	-	-	-	-	-	-	-	-	-	-	
19	Regulated Entity Property on Consumer's Premises	-	-	-	-	-	-	-	-	-	-	
20	Street Lights and Signal Systems	-	-	-	-	-	-	-	-	-	-	
21	Submarine Cables	-	-	-	-	-	-	-	-	-	-	
SUB-TOTAL Distribution Plant		-	-	-	-	-	1,089,110	-	-	-	-	
B. General Plant												
1	Land and Land Rights (non-network)	-	-	-	-	-	-	-	-	-	-	
2	Structures and Improvements (non-network)	-	-	-	-	-	-	-	-	-	-	
3	Office Furniture and Equipment	-	-	-	-	-	-	-	-	-	-	
4	Transportation Equipment	-	-	-	-	-	-	-	-	-	-	
5	Stores Equipment	-	-	-	-	-	-	-	-	-	-	
6	Tools, Shop and Garage Equipment	-	-	-	-	-	-	-	-	-	-	
7	Laboratory Equipment	-	-	-	-	-	-	-	-	-	-	
8	Information Systems Equipment (non-network)	-	-	-	-	-	-	-	-	-	-	
9	Power-operated Equipment	-	-	-	-	-	-	-	-	-	-	
10	Communication Plant and Equipment	-	-	-	-	-	-	-	-	-	-	
11	Miscellaneous Equipment	-	-	-	-	-	-	-	-	-	-	
SUB-TOTAL General Plant		-	-	-	-	-	-	-	-	-	-	
C. Materials and Supplies (including spares)												
D. Transferred Subtransmission Assets												
E. Allocated Overheads Capitalized												
		-	-	-	-	-	74,223	-	-	-	-	
TOTAL CAPITAL EXPENDITURE		-	-	-	-	-	1,163,332	-	-	-	-	
Exchange Rate Assumption for Forecast Period (Peso/US\$)		Sep quarter										
		Dec quarter										
		Mar quarter										
		Jun quarter										
Philippines Consumer Price Index Assumption		Sep quarter										
		Dec quarter										
		Mar quarter										
		Jun quarter										
USA Consumer Price Index Assumption		Sep quarter	1.00	1.00	1.00	1.00	1.04	1.04	1.06	1.09	1.12	1.15
(for quarters in regulatory year)		Dec quarter	1.00	1.00	1.00	1.00	1.04	1.04	1.06	1.09	1.12	1.15
		Mar quarter	1.00	1.00	1.00	1.00	1.04	1.04	1.06	1.09	1.12	1.15
		Jun quarter	1.00	1.00	1.00	1.00	1.04	1.04	1.06	1.09	1.12	1.15
Base Value assumed for Philippine CPI figures		Year:					Value:					
Base Value assumed for USA CPI figures		Year:					Value:					

20MVA 69/34.5KV BALOY SUBSTATION

ASSET CATEGORY		Capital Expenditure: US\$ Component (expressed in nominal PhP)									
		Actual (Pesos, nominal in Pesos of calendar				Budget (Calendar year)	Budget (Regulatory year)	Forecast (Pesos, nominal in Pesos of regulatory year)			
		2003	2004	2005	2006	2007	2007	2008	2009	2010	2011
A. Distribution Plant											
1	Land and Land Rights (Distribution Purposes)	-	-	-	-	-	-	-	-	-	-
2	Structures and Improvements	-	-	-	-	-	-	-	-	-	-
3	Station Equipment	-	-	-	-	-	-	-	-	-	-
3a	Power transformers	-	-	-	-	-	23,732,834	-	-	-	-
3b	Switchgear	-	-	-	-	-	18,060,461	-	-	-	-
3c	Protective equipment	-	-	-	-	-	7,015,756	-	-	-	-
3d	Metering & control equipment	-	-	-	-	-	921,143	-	-	-	-
3e	Communications equipment	-	-	-	-	-	4,422,960	-	-	-	-
3f	Other station equipment	-	-	-	-	-	695,307	-	-	-	-
4	Poles, Towers and Fixtures - Distribution	-	-	-	-	-	-	-	-	-	-
5	Poles, Towers and Fixtures - Customer	-	-	-	-	-	-	-	-	-	-
6	Overhead Conductors and Devices - Distribution	-	-	-	-	-	-	-	-	-	-
7	Overhead Conductors and Devices - Customer	-	-	-	-	-	-	-	-	-	-
8	Underground Circuits - Distribution	-	-	-	-	-	-	-	-	-	-
9	Underground Circuits - Customer	-	-	-	-	-	-	-	-	-	-
10	Underground Conduits - Distribution	-	-	-	-	-	-	-	-	-	-
11	Underground Conduits - Customer	-	-	-	-	-	-	-	-	-	-
12	Line Transformers - Distribution	-	-	-	-	-	-	-	-	-	-
13	Line Transformers -Customer	-	-	-	-	-	-	-	-	-	-
14	Power Conditioning Equipment	-	-	-	-	-	2,564,184	-	-	-	-
15	Services	-	-	-	-	-	-	-	-	-	-
16	Meters, Instruments & Metering Transformers - Distribution	-	-	-	-	-	-	-	-	-	-
17	Meters, Instruments & Metering Transformers - Customer	-	-	-	-	-	-	-	-	-	-
18	Information Technology Equipment (distribution)	-	-	-	-	-	-	-	-	-	-
19	Regulated Entity Property on Consumer's Premises	-	-	-	-	-	-	-	-	-	-
20	Street Lights and Signal Systems	-	-	-	-	-	-	-	-	-	-
21	Submarine Cables	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL Distribution Plant		-	-	-	-	-	57,412,647	-	-	-	-
B. General Plant											
1	Land and Land Rights (non-network)	-	-	-	-	-	-	-	-	-	-
2	Structures and Improvements (non-network)	-	-	-	-	-	-	-	-	-	-
3	Office Furniture and Equipment	-	-	-	-	-	-	-	-	-	-
4	Transportation Equipment	-	-	-	-	-	-	-	-	-	-
5	Stores Equipment	-	-	-	-	-	-	-	-	-	-
6	Tools, Shop and Garage Equipment	-	-	-	-	-	-	-	-	-	-
7	Laboratory Equipment	-	-	-	-	-	-	-	-	-	-
8	Information Systems Equipment (non-network)	-	-	-	-	-	-	-	-	-	-
9	Power-operated Equipment	-	-	-	-	-	-	-	-	-	-
10	Communication Plant and Equipment	-	-	-	-	-	-	-	-	-	-
11	Miscellaneous Equipment	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL General Plant		-	-	-	-	-	-	-	-	-	-
C. Materials and Supplies (including spares)											
D. Transferred Subtransmission Assets											
E. Allocated Overheads Capitalized											
TOTAL CAPITAL EXPENDITURE		-	-	-	-	-	61,325,319	-	-	-	-
Exchange Rate Assumption for Forecast Period (Peso/US\$) (for quarters in regulatory year)	Sep quarter	1.00	1.00	1.00	1.00	52.72	52.72	52.42	52.42	52.91	52.91
	Dec quarter	1.00	1.00	1.00	1.00	52.72	52.72	52.42	52.42	52.91	52.91
	Mar quarter	1.00	1.00	1.00	1.00	52.72	52.72	52.42	52.42	52.91	52.91
	Jun quarter	1.00	1.00	1.00	1.00	52.72	52.72	52.42	52.42	52.91	52.91
Philippines Consumer Price Index Assumption	Sep quarter										
	Dec quarter										
	Mar quarter										
	Jun quarter										
USA Consumer Price Index Assumption	Sep quarter										
	Dec quarter										
	Mar quarter										
	Jun quarter										
Base Value assumed for Philippine CPI figures		Year:		Value:							
Base Value assumed for USA CPI figures		Year:		Value:							