



Operations Manual

for the Grant Agreement for the

“Ethiopia Electricity Access Rural Expansion” Project

Between the

Global Partnership on Output-Based Aid (GPOBA)

and the

Ethiopian Electric Power Corporation (EEPCo)

of ETHIOPIA

May 26, 2009



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ACRONYMS AND ABBREVIATIONS

Birr	Ethiopian Birr
CFLs	Compact Fluorescent Lamps
EAREP II	Second Electricity Access Rural Expansion Project
EEPCo	Ethiopian Electric Power Corporation
ESMF	Environment and Social Management Framework Report
GA	Grant Agreement
GoE	Government of Ethiopia
GPOBA	Global Partnership on Output-Based Aid
hhs	Households
IFRs	Interim Financial Reports
IVA	Independent Verification Agent
OM	Operations Manual
OBA	Output-Based Aid
OVR	Output Verification Report
PV	Present Value
RPF	Resettlement Policy Framework Report
UEAP	Universal Electricity Access Program
US\$	United States Dollars
VAT	Value Added Tax

1. INTRODUCTION

1.1 Purpose and Structure of this Project Operations Manual

This Project Operations Manual (OM) sets out the arrangements agreed by the signatories to the Grant Agreement (GA) and all related institutions involved in the implementation of the “Ethiopia Electricity Access Rural Expansion” project, also known as the “OBA in Rural Towns-Electricity Connections for the Poor” project, (the “Project”). The OM outlines the goals, milestones and relevant details for each phase of the project. Additionally, the OM specifies the procurement, financial management, monitoring arrangements, and disbursement, social and environmental management frameworks that will govern the actions of all parties involved.

This OM is intended to be a reference document for project partners and to delineate the key steps and requirements for successful implementation. Any changes to the OM during the course of this project must be requested in writing and must receive written approval from the World Bank.

The GA will defer to the OM for the description of the project's *modus operandi*. EEPCo will bear full responsibility for ensuring operational compliance, including all fiduciary responsibility vis-à-vis the GPOBA GA and this OM. The GA is the formal legal document that regulates the relationship between the World Bank and the Grant Recipient, the Ethiopian Electric Power Corporation (EEPCo). Any project parameters specified in the GA therefore supersede the terms of this OM. Changes to the GA cannot be made without a formal amendment process.

The rest of this OM is structured as follows:

- Section 2 describes the institutional structure and flow of funds;
- Section 3 contains a detailed description of project implementation, including procurement, financial management and disbursement, environmental and social safeguards issues, and monitoring;
- Section 4 contains a description of the project's Reporting Requirements.

1.2 Objectives of the Project

The main objective of the GPOBA project is to increase access to electricity in rural towns and villages with grid-access, by assisting EEPCo in its connection fee¹ financing program, extending loan tenors of five years to poor household customers. In addition, the GPOBA grant will finance two energy efficient Compact Fluorescent Lamps (CFLs) for poor households (hhs). Those CFLs will be delivered as part of the connection package to both ensure an affordable bill for hhs and promote energy efficiency.

¹ Here defined as the drop wire, an additional pole (if necessary), meter, circuit breakers, two efficient bulbs, installation costs and administrative expenses. What is being called connection cost for the purpose of the OBA intervention, excludes any upstream investment in the expansion of sub-transmission or transmission networks.

The increased access to electricity will improve the quality of life, enhance educational services, and provide income-generating opportunities.

1.3 Project Outputs

The key outputs of the project on which GPOBA payments (“subsidies”) will be disbursed to EEPCo are:

- i. the number of new hhs with an operative metered connection made by EEPCo who received a 5-year loan to finance such connection, and
- ii. the number of energy efficient CFLs (two per household) provided to those new hhs.

A total of 228,571 rural hhs will be connected and/or have their connections regularized with proper metering, as a result of this GPOBA intervention. In addition, 457,142 CFLs will be distributed to those customers to promote energy conservation and reduce their electricity bill. The population directly benefited is about 1,142,855 inhabitants, belonging to individual hhs that are used by one family (“domestic”). In some occasions, it is expected that some metered connections will be shared by a more than one household, therefore benefitting a larger population. For the purpose of the GPOBA grant, this is considered one rural household connection, if only one metering point is installed.

2. INSTITUTIONAL STRUCTURE AND FLOW OF FUNDS

2.1 Project Institutional and Contractual Arrangements

EEPCo is “an autonomous public corporation” 100% owned by the Government of Ethiopia (GoE). GPOBA will maintain a GA with EEPCo throughout the duration of this project, having received official permission from the Ministry of Finance to do so. EEPCo will be responsible for ensuring that the project is undertaken in accordance with the GA and this OM, as well as the Environmental and Social Management Framework (ESMF) and Resettlement Policy Framework (RPF) prepared under the umbrella of the World Bank’s Second Electricity Access Rural Expansion Project (EAREP II).

EEPCo has established an internal organization, the Universal Electricity Access Program (UEAP) office responsible for managing the expansion of the electric supply in designated rural areas. UEAP office will play a leading role in many aspects of day-to-day project implementation, monitoring and reporting. However, this office will delegate the executives distribution and sales&marketing processes to perform the mentioned tasks through their district offices.

The Project will be able to use the existing institutional and implementation arrangements under the EAREP II Project. The Project will be implemented by EEPCo, under the Ministry of Mines and Energy. The UEAP Office, within EEPCo, will carry out the grid-extension component.

The key institutional and implementation arrangements are as follows:

- EEPCo will be the GA Recipient, and will be responsible for all fiduciary aspects, including financial and technical reporting.
- EEPCo is 100% government-owned, and has been authorized by the Ministry of Finance to enter into the GPOBA GA.
- An Independent Verification Agent (IVA) will be hired by the World Bank to undertake quarterly technical audits of the outputs delivered, as well as verify information provided by EEPCo related to the monitoring indicators described in Annex F. The World Bank will hire and supervise the IVA.
- An Independent Financial Auditor will undertake the yearly financial audits of the project, to be agreed with the Auditor General of Ethiopia. The Independent Financial Auditor may be the same entity currently auditing EAREP II Project. EEPCo will submit separate audit reports and financial statements for this project entity during the submission of the audit reports of the EAREP II Project. The auditors should review the financial transactions of this Project while their audit of EEPCo's accounts is carried out. The audited Financial Statements covering the period of one fiscal year of the project implementing entity shall be furnished to the association not later than six months after the end of such period. The key legal and contractual arrangements are:
 - 1) the GA signed between EEPCo and the World Bank (on behalf of GPOBA), including its Standard Conditions;
 - 2) the Disbursement Letter signed along with the GA specifying the disbursement arrangements of the project;
 - 3) this OM, including all its annexes; and,
 - 4) the ESMF, which is part of the EAREP II Project.

2.2 Output Verification and Disbursement

The IVA will monitor and verify that all outputs have been met to the standards specified in this OM. The IVA will select a robust representative sample every quarter and produce an output verification report (OVR). In addition, the IVA will have the right to do post-checks on connections (for the first 50% of the subsidy) or bills (for the second 50% of the subsidy) without prior notification to EEPCo.

In terms of the average costs of electrification, it is assumed that GPOBA will contribute with 5% (to fund the cost of connection per se), GoE/EEPCo will contribute with 84%, and 11% will come from the end-users.

GPOBA contribution to the costs of connection, also known as the "subsidy," will be split into two disbursements per output, upon verification from the IVA, triggered by the following events:

- (i) 50% after the customer has received a 5-year loan (similar to the one described in Annex B) and EEPCo has provided a metered connection in conjunction with two CFLs; and,
- (ii) 50% after three successful billing cycles (*i.e.*, bills being sent out to the customer and paid)

The IVA will note in its OVR which percentage of the subsidy payment is triggered by each one of the above events. EEPCo will submit its Application for Withdrawal based on the verified outputs.

2.3 Flow of Funds

The World Bank will disburse payments to EEPCo after it submits an Application for Withdrawal for the required amount for, with the supporting required evidence from the IVA. After examining the Application, the World Bank will provide No Objection in 10 business days or will request additional clarification.

EEPCo will make quarterly Application for Withdrawals to the World Bank based on the number of new 5-year loans and connections made as well as CFLs provided to new customers providing the following documentation:

Requests for Application for Withdrawals referred above;

Statement of Expenditures including:

- i. list of EEPCo's 5-year loans made to new hhs;
 - ii. installation of Connection Certificates (or such alternative documents acceptable to the World Bank to verify the new connections) and record that two CFLs were provided to those new hhs; and
 - iii. billing and payment records for three months for those new hhs.
- (c) Quarterly OVRs in the form specified in the OM, attesting and confirming the basis for, and amount of the subsidy claimed.

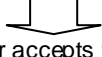
A summary of the main processes related to the GPOBA subsidy and flow of funds is shown in the following chart.

GPOBA PROCESS AND FLOW OF FUNDS

Residential rural customer requests a new connection (or regularization of an indirect, unmetered one)



EEPCo checks if the 5-year loan program is active in the region and prepares a cost estimate, submitting it to the customer for approval. If not active, EEPCo informs when the program will be active, if applicable



Customer accepts the estimate and applies for both the connection and for the five year loan (standard terms and conditions)



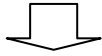
Customer pays 20% of the connection cost upfront and signs a 5-year loan agreement for the balance of 80%



EEPCo records the financial transaction, keeping a separate account for payments made towards the loan (upfront payment, amortization and interest), as well as future contributions from GPOBA



EEPCo schedules and plans the execution of the connection, according to a pre-determined routing



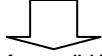
EEPCo executes the connection with its own materials via force-account or sub-contracting, and starts delivering, and billing. EEPCo distributes two CFLs to the customer at no cost, when connection takes place. Once the connection and the distribution of CFLs take place, EEPCo is eligible, subject to IVA attest, to claim 50% of the subsidy, or US\$17.50 per customer connected.



EEPCo goes through three billing cycles - this event enables EEPCo to claim, subject to IVA attest, for the remaining 50% of the subsidy, or US\$17.5 per customer invoiced.



For each billing cycle, EEPCo rolls the payment of the loan into the electricity bill. Amortization of the loan should take place in 60 monthly identical installments. If the billing cycle is longer than one month, EEPCo will amortize the loan on a pro-rate-temporis basis.



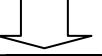
EEPCo informs IVA (on a quarterly basis): (i) how many metered connections were executed during the period which were granted the 5-year loan (ii) how many of those connections went through three complete billing cycles.



IVA attests the executions of the connections, and the proper three billing cycle for the customers connected in previous quarters. IVA also attests the total amount of subsidies claimed for reimbursement. (Application for Withdrawal)



EEPCo sends the IVA Application for Withdrawal to the WB TTL, who provides No-Objection on 10 business days, and sends the Application to the Disbursement Department for reimbursement.



EEPCO gets reimbursed by the GPOBA program on a quarterly basis

Involves financial transactions

3. PROJECT IMPLEMENTATION

3.1 Project Outputs and Targeting the Poor

3.1.1 Connections

The following physical infrastructure will be delivered by EEPCo, reaching out about 1,142,855 people, corresponding to an average of five family members per household.

- 1) 228,571 new and/or regularized rural household connections with direct meters; and,
- 2) 457,142 energy efficient CFLs, representing two units for the each one of the above hhs

3.1.2 Targeting the Poor

The target market for the above household connections encompasses: (i) any existing region or district already grid-electrified by EEPCo for more than a year; or, (i) any region or district to be grid-electrified by EEPCo, one year after the beginning of provision of service. There will be a two-step targeting mechanism. The first step is to identify broad poorer geographical areas. The second step is to offer the 5-year loan only one year after the provision of electric service to a particular town and village, as described below:

b) Geographic targeting

When defining the regions and districts to benefit from GPOBA intervention, EEPCo should prioritize lower income areas, where customers are less likely to afford the upfront payment of the cost of connection, ranging from US\$50 to US\$100 or even higher if the household is distant from the distribution network. Those areas are not being defined ex-ante, since it is not certain, at this stage, how access will evolve. EEPCo will make a judgment call on the areas with larger concentration of poor hhs.

c) Income Targeting

EEPCo will not decide on the provision of connection and associated 5-year loans based on any evidence of household income. Instead, and as a proxy thereof, EEPCo will not make this 5-year loan available during the first 12 months after the town or village has been electrified. The rationale is that hhs with higher income will request immediate connection to enjoy the benefits of electricity. It is known that many customers cannot afford paying US\$75 (average) upfront for a connection and therefore will delay their connection request.

Providing access and/or regularizing those customers, is the main objective of the GPOBA intervention. To better target those customers and minimize subsidy “leakage” it was established that the 5-year loan would only be made available after a certain period of time, herein defined as 12 months. This targeting mechanism was designed to be simple and effective.

In summary, EEPCo has a policy of providing equity and broad geographical coverage for its rural electrification access project. This objective is aligned with GPOBA's. To make faster use of GPOBA resources, therefore benefiting a larger number of poor hhs in a shorter timeframe, it is recommended that:

- a) EEPCo takes advantage of areas already electrified (for more than a year), for which the 5-year connection loan has not been provided (or has not been provided to all potential customer)
- b) Avoid excessive geographical fragmentation, establishing target clusters for the use of GPOBA funds, therefore simplifying logistics, delivery and monitoring & evaluation – as well as a fast use of GPOBA funds, with benefits for the communities
- c) Prioritize poorer areas in the country, where customers are less likely to afford the connection costs unless loans are granted.

Table 1 below, was developed based on EEPCo's database, and presents the target areas to be electrified under UEAP for the next 2-3 years. In principle, any of those districts and regions is eligible for the GA subsidies, taking into account above considerations, with the objective of expediting the use of resources in a targeted way.

Table 1: Number of Customers & Electrified Towns in Ethiopia

NO.	District	Region	2007/08	2008/09	2009/10	2010/11	UEAP
1	A.A East	Eastern A.A	104,127	24,288	27,324	27,324	183,063
2	Sendafa	Eastern A.A	3,054	712	801	801	5,368
3	A.A North	Northern A.A	84,472	22,218	24,995	24,995	156,680
4	Burayu	Northern A.A	7,893	2,076	2,336	2,336	14,641
5	Chancho	Northern A.A	2,684	706	794	794	4,978
6	A.A South	Southern A.A	90,522	19,944	22,437	22,437	155,340
7	Akaki	Southern A.A	22,947	5,056	5,688	5,688	39,379
8	A.A West	Western A.A	118,643	23,353	26,272	26,272	194,540
9	Sebeta	Western A.A	8,369	1,647	1,853	1,853	13,722
10	Addis Alem	Central	2,153	541	609	609	3,912
11	Ginchi	Central	3,912	983	1,106	1,106	7,107
12	Holta	Central	8,059	2,024	2,277	2,277	14,637
13	Debre Zeit	Central	18,610	4,674	5,258	5,258	33,800
14	Nazreth	Central	28,350	7,121	8,011	8,011	51,493
15	Wenji	Central	4,454	1,119	1,259	1,259	8,091
16	Derra	Central	3,419	859	966	966	6,210
17	Modjo	Central	7,715	1,938	2,180	2,180	14,013
18	Metehara	Central	3,506	881	991	991	6,369
19	Abomssa	Central	2,312	581	654	654	4,201
20	Hegere Hiwot	Central	10,262	2,578	2,900	2,900	18,640
21	Debre Birhan	Central	16,931	4,253	4,785	4,785	30,754
22	Ghion	Central	10,461	2,628	2,957	2,957	19,003
23	Wolkitie	Central	4,729	1,188	1,337	1,337	8,591
24	Bekoiji	Central	3,339	839	944	944	6,066
25	Huruta	Central	3,584	900	1,013	1,013	6,510
26	Kersa	Central	2,353	591	665	665	4,274
27	Assela	Central	12,734	3,199	3,599	3,599	23,131
28	Ziway	Central	7,457	1,873	2,107	2,107	13,544
29	Meki	Central	3,665	921	1,036	1,036	6,658
30	Butajira	Central	6,536	1,642	1,847	1,847	11,872
31	Fitche	Central	9,336	2,345	2,638	2,638	16,957

32	Gebre Guracha	Central	3,379	849	955	955	6,138
33	Bako	Central	4,269	1,072	1,206	1,206	7,753
34	Gedo	Central	4,575	1,149	1,293	1,293	8,310
35	Shambu	Central	2,894	727	818	818	5,257
36	Fincha	Central	4,359	1,094	1,231	1,231	7,915
37	Kachisse	Central	1,059	266	299	299	1,923
38	Mehal Meda	Central	1,619	406	457	457	2,939
39	Molale	Central	874	219	246	246	1,585
40	Alem Ketema	Central	2,000	502	565	565	3,632
41	Lemmi	Central	155	38	43	43	279
42	Dedder	Eastern	3,485	1,005	1,131	1,131	6,752
43	Dire Dawa	Eastern	27,728	7,999	8,999	8,999	53,725
44	Alemaya	Eastern	4,952	1,428	1,607	1,607	9,594
45	Harrar	Eastern	19,941	5,752	6,471	6,471	38,635
46	Asebe Teferi	Eastern	5,835	1,683	1,893	1,893	11,304
47	Gelemso	Eastern	4,020	1,160	1,305	1,305	7,790
48	Bedesa	Eastern	2,507	723	813	813	4,856
49	Gursum	Eastern	1,864	538	605	605	3,612
50	hirna	Eastern	1,989	574	646	646	3,855
51	Karamile	Eastern	2,293	661	744	744	4,442
52	Kersa	Eastern	1,652	477	537	537	3,203
53	Jijiga	Jijiga	8,658	5,454	6,136	6,136	26,384
54	Shilabo	Jijiga	106	67	75	75	323
55	Shekoshe	Jijiga	74	47	53	53	227
56	Degehabour	Jijiga	760	479	539	539	2,317
57	Kelafo	Jijiga	181	114	128	128	551
58	Kebri Dehar	Jijiga	647	407	458	458	1,970
59	Warder	Jijiga	37	23	26	26	112
60	Gode	Jijiga	650	409	460	460	1,979
61	Mekele	Northern	27,055	11,045	12,426	12,426	62,952
62	Samre	Northern	530	216	243	243	1,232
63	Quiha	Northern	6,941	2,834	3,188	3,188	16,151
64	Maychew	Northern	5,896	2,407	2,708	2,708	13,719
65	Wukro	Northern	8,000	3,266	3,674	3,674	18,614
66	Axum	Northern	7,878	3,216	3,618	3,618	18,330
67	Wukro Maraye	Northern	2,735	1,117	1,257	1,257	6,366
68	Adwa	Northern	10,901	4,450	5,006	5,006	25,363
69	Rama	Northern	1,724	704	792	792	4,012
70	Shire	Northern	12,324	5,031	5,660	5,660	28,675
71	Hawzen	Northern	785	320	360	360	1,825

72	Addigrat	Northern	11,369	4,641	5,221	5,221	26,452
73	Alamata	Northern	3,979	1,624	1,827	1,827	9,257
74	Korem	Northern	2,252	920	1,035	1,035	5,242
75	Waja	Northern	428	175	197	197	997
76	Abi Adi	Northern	5,437	2,220	2,498	2,498	12,653
77	Setit Humera	Northern	1,993	814	916	916	4,639
78	Dessie	North Eastern	22,114	7,284	8,195	8,195	45,788
79	Kombolcha	North Eastern	9,054	2,982	3,355	3,355	18,746
80	Kemisse	North Eastern	5,102	1,680	1,890	1,890	10,562
81	Debre Sina S.R	North Eastern	6,138	2,022	2,275	2,275	12,710
82	Ataye	North Eastern	2,945	970	1,091	1,091	6,097
83	Woldya	North Eastern	6,076	2,001	2,251	2,251	12,579
84	Mersa	North Eastern	4,198	1,383	1,556	1,556	8,693
85	Lalibela	North Eastern	3,280	1,080	1,215	1,215	6,790
86	Kobo	North Eastern	3,364	1,108	1,247	1,247	6,966
87	Batti	North Eastern	3,863	1,272	1,431	1,431	7,997
88	Sekota	North Eastern	3,359	1,106	1,244	1,244	6,953
89	Tenta	North Eastern	4,200	1,384	1,557	1,557	8,698
90	Wereilu	North Eastern	2,210	728	819	819	4,576
91	Dabat	North Western	4,074	1,580	1,778	1,778	9,210
92	Gondar	North Western	20,718	8,034	9,038	9,038	46,828
93	Koladeba	North Western	1,941	753	847	847	4,388
94	Bichena	North Western	5,408	2,097	2,359	2,359	12,223
95	Motta	North Western	2,931	1,137	1,279	1,279	6,626
96	Debre Markos	North Western	16,423	6,368	7,164	7,164	37,119
97	Finote Selam	North Western	5,948	2,306	2,594	2,594	13,442
98	Bahir Dar	North Western	20,822	8,074	9,083	9,083	47,062
99	Pawie	North Western	3,884	1,506	1,694	1,694	8,778
100	Adis Zemen	North Western	2,638	1,023	1,151	1,151	5,963
101	Kosober	North Western	4,542	1,761	1,981	1,981	10,265

102	Wereta	North Western	1,924	746	839	839	4,348
103	Dangila	North Western	7,391	2,866	3,224	3,224	16,705
104	Debre Tabor	North Western	555	215	242	242	1,254
105	Metema	North Western	990	384	432	432	2,238
106	Debrezeit	North Western	858	333	375	375	1,941
107	Abdrafi	North Western	315	122	137	137	711
108	Nefas Mewcha	North Western	1,790	695	782	782	4,049
109	Adaba Doddola	Southern	10,038	2,834	3,188	3,188	19,248
110	Yirgalem	Southern	12,524	3,536	3,978	3,978	24,016
111	Bensa_Daye	Southern	1,640	463	521	521	3,145
112	Wolayta Sodo	Southern	15,460	4,365	4,911	4,911	29,647
113	Awassa	Southern	20,220	5,708	6,422	6,422	38,772
114	Dilla	Southern	15,372	4,340	4,883	4,883	29,478
115	Negele Borena	Southern	3,791	1,070	1,204	1,204	7,269
116	Sawla	Southern	2,975	840	945	945	5,705
117	Arba Minch	Southern	11,379	3,212	3,614	3,614	21,819
118	Chencha	Southern	2,189	618	695	695	4,197
119	Bale Goba	Southern	13,765	3,886	4,372	4,372	26,395
120	Kibre Mengist	Southern	4,916	1,388	1,562	1,562	9,428
121	Kofele	Southern	2,329	658	740	740	4,467
122	Yabelo	Southern	1,153	326	367	367	2,213
123	Durame	Southern	3,909	1,104	1,242	1,242	7,497
124	Hagere Mariam	Southern	2,964	837	942	942	5,685
125	Hosaana	Southern	11,048	3,119	3,509	3,509	21,185
126	Shashemene	Southern	20,697	5,843	6,573	6,573	39,686
127	Areka	Southern	467	132	149	149	897
128	Arusi Negele	Southern	5,072	1,432	1,611	1,611	9,726
129	Alaba	Southern	4,999	1,411	1,587	1,587	9,584
130	Ginnir	Southern	2,309	652	734	734	4,429
131	Moyale	Southern	2,689	759	854	854	5,156
132	Jinka	Southern	2,117	597	672	672	4,058
133	Dollo Mena	Southern	1,463	413	465	465	2,806
134	Dollo Oddo	Southern	579	163	183	183	1,108

135	Bore	Southern	957	270	304	304	1,835
136	Tercha	Southern	87	24	27	27	165
137	Asosa	Asosa	4,109	1,608	1,809	1,809	9,335
138	Ghimbi	Asosa	8,427	3,297	3,709	3,709	19,142
139	Guliso	Asosa	1,021	399	449	449	2,318
140	Mendi	Asosa	1,196	468	526	526	2,716
141	Nedjo	Asosa	2,313	905	1,018	1,018	5,254
142	Beggi	Asosa	597	234	263	263	1,357
143	Menge	Asosa	230	89	100	100	519
144	Bonga	Western	4,709	2,512	2,826	2,826	12,873
145	Jimma	Western	19,071	10,173	11,444	11,444	52,132
146	Sokoru	Western	5,516	2,942	3,309	3,309	15,076
147	Nekemt	Western	13,896	7,412	8,338	8,338	37,984
148	Agaro	Western	14,210	7,580	8,527	8,527	38,844
149	Buno Bedele	Western	8,085	4,313	4,852	4,852	22,102
150	Mizan	Western	4,939	2,635	2,964	2,964	13,502
151	Tepi	Western	4,561	2,433	2,737	2,737	12,468
152	Asayta	Semera	2,267	1,813	2,039	2,039	8,158
153	Dubti	Semera	3,130	2,503	2,815	2,815	11,263
154	Galafi	Semera	45	36	40	40	161
155	Awash 7kilo	Semera	3,313	2,648	2,979	2,979	11,919
156	Gambela	Gambela	3,528	1,307	1,470	1,470	7,775
157	Dembi Dollo	Gambela	5,621	2,082	2,342	2,342	12,387
158	Mettu	Gambela	5,701	2,112	2,376	2,376	12,565
159	Mugi	Gambela	657	243	273	273	1,446
160	Gore	Gambela	741	275	309	309	1,634
161	Supe	Gambela	1,302	482	542	542	2,868
162	Yayu	Gambela	1,346	499	561	561	2,967

Note: The total population of all Electrified Towns or Villages is about 17,728,025 as of July 2008

3.1.3 Electricity delivery

EEPCo will ensure that there is sufficient production capacity and energy to serve the connections made under this GPOBA-funded project. EEPCo will also ensure strict electric quality standards will be met, including related to voltage levels and availability of energy. In case of load shedding on a national basis, caused by low hydrology or other contingencies, such customers cannot be discriminated vis-à-vis customers located in urban centers.

3.2 Unit Costs

It was estimated that the cost of connection paid by the customer will vary from US\$50 to US\$100, or even within a wider range, depending on several factors such as distance from the nearest pole, need to install additional poles, cost of wiring to meet the reported load, and other factors.

Table 2 below, provides a hypothetical example of a connection cost breakdown. This cost estimate, shown for illustrative purposes only, is prepared by EEPCo upon receiving a request for connection. The cost estimate for this particular connection is US\$59.85. These costs are then presented to the household customer for approval.

Table 2: Breakdown of Units Costs

Description of materials	unit	Qty	unit price (USD)	Total Price (USD)
Cable 2x6 mm ²	mt	6	2.15	12.89
Insulated wire 6mm ²	mt	24	0.56	13.45
Minature circuit breaker 25A	ea	1	3.85	3.85
Automatic cover	ea	1	1.07	1.07
Single phase meter board	ea	1	2.5	2.5
Spool insulator 30/20	ea	2	0.12	0.25
Plaster of Paris	kg	1	0.19	0.19
Clamp Al to Cu	ea	2	1.32	2.64
Total material cost				36.84
Labour Cost				8.58
Transport Cost				5.05
Sub Total				50.47
Over head cost				5.05
Additional estimation fee				4.34
Grand Total				59.85

For the purpose of the GPOBA subsidy calculation, it was assumed a fixed US\$75 cost per connection. This figure may vary significantly. For example, for customers who use less than 2kW and with a 5/15 kWh meter, the average service drop connection is about US\$50. For most of the customers who need 10/30 kWh meter, the average service drop connection is about USD\$75, while for customers who need one pole additional to their service drop connection, the cost is about US\$110.

For the overall Project, GPOBA will reimburse EEPCO based on the above-mentioned assumption, of US\$75 per customer, regardless of the real cost of providing those

connections to the customers. EEPCo will make operative connections to the targeted hhs. On average those operative connections will cost US\$75 per household. GPOBA will reimburse EEPCo US\$35 per each household. This US\$35 GPOBA subsidy notionally offsets EEPCo's working capital cost of providing a 5-year loan and two CFLs to each household, for an average connection cost of US\$75.

The following summary table presents the financial engineering used to calculate the customer contribution as well as the terms and conditions of the loan. It illustrates three hypothetical cases, for connection costs ranging from US\$50 to US\$100 per customer.

Connection Cost (US\$)	50	75	100
Customer Upfront Payment (US\$)	10.00	15.00	20.00
Balance to be Paid by Customer (US\$)	40.00	60.00	80.00
Monthly Payment (US\$) (1/60th of Balance)	0.67	1.00	1.33
Total Payments Made by the Customer	50.00	75.00	100.00
PV of Payments Made by Customer (US\$)	25.70	38.55	51.40
Interest Rate (p.a.)	19%	19%	19%
PV Implicit Cost of Capital (at 19% p.a)	14.30	21.45	28.60
Cost of 2 CFLs Acquired/Distributed by EEPCo (US\$)	6.00	6.00	6.00
Customer Upfront Payment	10.00	15.00	20.00
GPOBA Contribution (US\$)	35.00	35.00	35.00
PV of GPOBA Contribution (US\$)	29.41	29.41	29.41
PV of GPOBA Contribution Excluding CFLs (US\$)	23.41	23.41	23.41

For the calculation of the GPOBA contribution, it is assumed connection cost of US\$75 as being a "typical" case. Under this scenario, the customer pays US\$15 upfront, leaving a balance to be paid of US\$60. This balance shall be divided into 60 monthly, identical installments (which may also be charged bi-monthly or on a quarterly basis, depending on the billing cycle).

Assuming a discount rate of 19% (proxy for EEPCo's cost of working capital), the present value (PV) of the US\$60 payment stream is equivalent to US\$38.55. Therefore, the implicit cost of capital of a hypothetical risk-free loan to the customer would be US\$21.45. The primary objective of the US\$35 GPOBA contribution per customer is to compensate EEPCo for the cost of working capital and also to provide two CFLs to the customers.

EEPCo incurs costs of connection (US\$75 for a typical case) and procures & distributes two CFLs. Total expenditures to EEPCo, on the average, represent US\$81 per customer. The customer pays 20% upfront or US\$15.00. The balance of US\$60 is paid in equal monthly statements over a period of 5 years. The PV of GPOBA contribution, in two installments, is US\$29.41, including the compensation of US\$6 for the two for the CFLs acquired by EEPCo.

Annex B presents a sample of EEPCo's 5-year loan agreement. The amount to be financed is connection specific. In all cases, the monthly payment is the cost of connection (net of the initial deposit) divided by 60 months. Roughly speaking, for an implicit annual interest rate of 19%, 64.25% of the customer payments will be made towards principal and 35.75% towards interest. This percentage is fixed, and does not vary as a function of the amount being financed. The template presented in Annex B should be filled out and a copy delivered to the client. The client should be able to clearly see the monthly payment, and informed that such payment will be rolled into the electricity bill.

3.3 Project Funding

3.3.1 Pre-financing by EEPCo

The total expected (notional) cost of a rural electrification project, serving about 229,000 customers is about US\$162.3 million. A rough estimate on how such a program will be notionally financed is shown in Table 3, which follows.

Table 3: Project Investment Costs

GPOBA connection subsidy	US\$	35	8,000,000
User contribution	US\$	75	17,142,600
Funding from the GoE/EEPCo.	US\$	600	137,142,600
Total	US\$	710	162,285,425

To ensure that the project can move forward at the speed planned, EEPCo will open an operating account, or “Project Account” as defined in the GA², for this project. This account is dedicated for the use of EEPCo’s co-financing obligations under this project. Payments made by the customer, such as the 20% payment, as well as amortization of the principal and interests associated with the 5-year loan will be credited to this “Project Account.”

3.3.2. GPOBA Funding

GPOBA will make two payments of US\$17.5 to EEPCo for each connection made. The total contribution to be made by GPOBA is US\$8 million. This payment is fixed, and does not depend on the actual connection cost. This payment will not be subject to any escalation costs linked to the prices of materials and services. It is important to note that EEPCo, as the implementing agency, bears the cost construction risk. GPOBA will provide US\$35 per connection and EEPCo has an obligation to connect 228,571 customers.

3.3.3 User Contribution

Customers will pay the full connection cost, based on an estimate prepared by EEPCo and submitted to the customer when a connection is formally requested. If the estimate is accepted by the customer, and if the region is eligible to GPOBA support, he/she has the option to enter into the 5-year loan agreement with EEPCo, and receive two CFLs when the connection is completed.

The customer has to pay 20% of the cost of connection upfront and, at his/her discretion, apply for a loan consisting of 80% of the actual connection cost. The loan will be repaid in 60 identical monthly installments, to be rolled into the electricity bill. Assuming a cost of

² The “Project Account” is for the Recipient’s counter-part funding, whereas the Special Designated Account is the account to which GPOBA/the Bank will disburse the grant funds.

connection of US\$75, the upfront payment should be US\$15 and the customer would pay a US\$1 monthly installment for five years. EEPCo bears the credit risk of providing the loan and supplying electricity. Pursuant to the prevailing customer service regulations, service may be discontinued if the customer defaults on the payment of electricity or amortization of the loan.

3.3.4 Value Added Tax (VAT)

The unit costs used to calculate the project component costs do not include VAT since VAT is no longer being applied to contracts and consulting in the electric sector. The GPOBA contribution is a fixed payment per connection, and does not exclude any applicable taxes.

3.4 Tariffs

The current tariff levels, for different customer groups, are presented on Table 4.

Table 4:EEPCo Tariff Structure (as of July 1st 2006) 1US\$ = 8.8 Birr

**1. ELECTRICITY ENERGY AND SERVICE
CHARGE TARIFF
1.1 ELECTRICITY SALES PRICE (TARIFF)**

No.	Tariff Category and blocked ID	Monthly Consumption kWh	Rate Birr/month
1.1.1	Domestic		
	Equivalent Flat Rate		0.4735
	First Block	01-50 kWh	0.2730
	Second Block	51-100 kWh	0.3564
	Third Block	101-200 kWh	0.4993
	Fourth Block	201-300 kWh	0.5500
	Fifth Block	301-400 kWh	0.5666
	Sixth Block	401-500 kWh	0.5880
	Seventh Block	above 500 kWh	0.6943
1.1.2	General (Commercial)		
	Equivalent Flat Rate		0.6723
	First Block	First 50 kWh	0.6088
	Second Block	Above 50 kWh	0.6943
1.1.3	Low Voltage (380 V) Industrial Tariff		
	Equivalent Flat Rate		0.5578
	Peak		0.7426
	Off-Peak		0.5435
1.1.4	Medium Voltage (15 or 33 kV)Industrial Tariff		
	Equivalent Flat Rate		0.4086
	Peak		0.5085
	Off-Peak		0.3933
1.1.5	Medium Voltage (15 or 33 kV)Industrial Tariff		
	Equivalent Flat Rate		0.3805
	Peak		0.4736
	Off-Peak		0.3664
1.1.6	Street Light Tariff		
	Equivalent Flat Rate		0.4843

1.2 SERVICE CHARGE

No.	Tariff Category and blocked ID	Monthly Consumption kWh	Rate Birr/month
1.2.1	Domestic Sector		
	a) Single Phase (220V)		
		0-25	1400
		26-50	3404
		51-105	6820
		106-300	10236
		above 300	13652
	b) Three Phase (380V)	Monthly	17056
	c)Active/Reactive (380V)	Monthly	37564
1.2.2	General Sector (Commercial)		
	a) Single Phase (220 V)	Monthly	14494
	b) Three Phase (380V)	Monthly	22558
	c)Active/Reactive (380V)	Monthly	35258
1.2.3	Low Voltage (380) Industry Tariff		
	Three Phase	Monthly	53570
1.2.4	Medium Voltage (15 or 33 kV) Industry Tariff		
	Three Phase	Monthly	54009
1.2.5	High Voltage (132 kV) Industry Tariff		
	Three Phase	Monthly	54009
1.2.6	Street Lighting		
	a) Single Phase (220 V)	Monthly	14494
	b) Three Phase (380V)	Monthly	22558
	c)Active/Reactive (380V)	Monthly	35258

2. MINIMUM CHARGE AND POWER FACTOR

2.1 MINIMUM CHARGE

(FOR INDUSTRIAL & HIGH POWER CONSUMERS)

2.1.1	Inter Connected System(ICS)		
	a) High or Medium Voltage Consumer		
		First 20 kW	31.086
		Next 400 kW	15.543
		For the balance	7.771
	b) Low Voltage consumer		
		First 20 kW	34.197
		Next 200 kW	17.104
		For the balance	8.552
2.1.2	Self-contained System (SCS)		
	Low Voltage Consumer		
		First 20 kW	41.968
		Next 200 kW	20.2032
		For the balance	10.1016

2.2 POWER FACTOR (FOR INDUSTRIAL & HIGH POWER CONSUMERS)

2.2.1	Inter Connected System(ICS)		
	a) High or Medium Voltage Consumer		61.634

	b) Low Voltage consumer		68.369
2.2.2	Self-contained System (SCS)		
	Low Voltage Consumer		83.363

In the case of EEPCo, hhs in the lowest consumption bracket³ have to pay a two-part tariff consisting of:

- a) a fixed monthly payment (service charge) of US\$16 cents; and,
- b) a variable payment on a per kWh basis (lifeline tariff) of US\$3 cents/kWh up to a consumption of 50 kWh.

A typical poor household in rural areas falls under this lowest bracket consuming approximately 15 kWh/month. This results in a monthly payment of about US\$61 cents or US4 cents/kWh, which is slightly lower than EEPCo's cost to serve that poor household (US\$4.6 cents/kWh). Therefore, this structure is currently not cost-covering for the lowest strata of the population, and the deficit is financed by EEPCo or by cross subsidies from higher consumption customers.

Sustainability pledge: EEPCo has vouched that the tariffs applied to the connections which are being funded by GPOBA are sustainable, as they cover operating and maintenance costs. Shall this change, EEPCo will notify GPOBA immediately to consider best options for moving forward. In 2006, a tariff increase of 20% was deferred for poor customers, but is expected to be implemented in the next 2-3 years, therefore reducing the gap between the tariff and the cost to serve the low income customers.

Once the customer is connected, EEPCo will continue to supply electricity and provide services, assuming that the tariff payment is made on time. CFLs should help make the bill more affordable to the customer, increasing chances of prompt payment with the provision of CFLs. Given the expected share of lighting in the overall consumption of electricity among the poor, is expected that the household consumption will be reduced by 55%. Use of energy efficient devices creates some room for future tariff increases in the lowest brackets.

3.5 Project Roll out and Impact Evaluation

GPOBA donors have expressed interest in the development of rigorous impact evaluations. Therefore, the economic and social impacts of this project will be evaluated by an independent institution. The impact analysis will most likely require a randomized phase-in of project operations.

The Bank will recruit and IVA to provide to the World Bank and the Recipient quarterly OVRs during the implementation of the Project. EEPCo should, throughout the implementation of the Project, take all the necessary measures required to enable the IVA to visit any facilities and sites for the purpose of carrying out activities pursuant to the preparation of the OVR and other purposes related to the GA.

³ The current tariff system in Ethiopia includes several consumption brackets with higher tariffs for hhs with a higher consumption.

3.6 Roles of the IVA

EEPCo will indicate to the IVA the number of customers who have been connected during the previous period and their respective locations. The IVA will attest the reported number of household connections carried out in tandem with the provision of new, 5-year loans, by selecting randomized samples to be visited on a spot check basis. This action will trigger the payment of 50% of the GPOBA subsidy.

The IVA will also be informed by EEPCo on the number of customers which have gone through three successful billing cycles, and will carry on spot checks to verify the billing process. The IVA will then attest the issuance of three invoices (the "bills") for the designated customers, which triggers the payment of the remaining 50% subsidy to EEPCo.

The IVA will monitor and verify that all outputs have been met to the standards specified in this OM, as well as against the ESMF. The process is as follows:

1. The IVA will verify a robust sample of the connections made each quarter, the percentage to be agreed between the IVA and the World Bank, and will submit an OVR each quarter to both the World Bank and EEPCo as per Annex H.
2. EEPCo must provide a signed confirmation of the outputs verified through the appropriate Use of Funds Schedule from Section 3 of the IFR, depicted in Annex E. This chart must be attached to EEPCo's Application for Withdrawal requesting disbursement of funds by GPOBA into EEPCo's Special Account.
3. The World Bank must provide a written No Objection, within 10 business days, to the Application for Withdrawal and attachment, as stated in the GA's Disbursement Letter.
4. EEPCo can then submit the Application for Withdrawal with attachment to the World Bank's Disbursement Department, which will transfer the funds into the Special Account, having verified that the World Bank Task Team Leader approval has been received.
5. The IVA must carry out periodic reviews of the increase of pace of connections in GPOBA-contemplated areas, as well as an assessment of the nature and benefits electricity use among poor communities and among women.
6. A TOR describing the services of the IVA will be prepared shortly and submitted to the Bank for No-Objection

GPOBA contribution to the costs of connection will be split into two payments:

- (i) 50% after the customer has received a 5-year loan and EEPCo has provided an operative metered connection and distributed two CFLs to each household customer; and,
- (ii) 50% after three successful billing cycles (*i.e.*, electricity bills being sent out to the customer and paid).

The IVA will note in its OVR which percentage of the subsidy payment applies, and EEPCo will verify this when submitting its Application for Withdrawal as stated above. In the event that in a particular quarter, an OVR shows that certain % of the sample taken, does not meet the requirements as stated in this OM, then, subsidy payments will be pro-rated accordingly for the quarter covered under that OVR.

3.7 Disbursement Arrangement

In order for EEPCo to receive reimbursements for connections made under the GA, EEPCo must submit an Application for Withdrawal to the World Bank's Disbursement Department.

An Application for Withdrawal (Direct Payment) should only be submitted after the outputs have been delivered to agreed standards, and the IVA has submitted its quarterly OVR to the World Bank and EEPCo. Prior to EEPCo's submission of the Application for the Withdrawal with attachment to the World Bank's Disbursement Department, EEPCo shall send the Application for Withdrawal and attachment to the World Bank Project Task Team Leader for No Objection. The Task Team Leader will send the No-Objection, within ten business days, to the World Bank's Disbursement Department, LOADM, stating that all requirements were met in advance to submitting each Application for Withdrawal of funds.

Applications for Withdrawal should be completed and signed, together with the supporting documents required, such as the Statement of Expenditures. The Statement of Expenditures should include: (i) list of EEPCo's 5-year loans made to new hhs; (ii) installation of Connection Certificates (or such alternative documents acceptable to the World Bank to verify the new connections) and record that two CFLs were provided to those new hhs; and (iii) billing and payment records for three months for those new hhs. In addition, this statement should be supported by quarterly OVRs in the form specified in the OM, attesting and confirming the basis for, and amount of the subsidy claimed.

Along with the Application for Withdrawal, EEPCo should attach the appropriate schedule from the Interim Financial Report (IFR), attesting and conforming the basis for, and the amount of the subsidy claimed.

A detailed estimate of the disbursement profile for the project is provided in Annex A.

3.8 Procurement Arrangements

All goods required for the Project and to be financed out of the proceeds of the Grant shall be procured in accordance with the requirements set forth in Section I (excluding paragraph 1.16) of the "Guidelines: Procurement under IBRD Loans and IDA Credits" published by the World Bank in May 2004.

The World Bank is not directly financing the procurement of materials and services to carry on the connections. Only CFLs will be directly financed by the Bank and should be procured strictly according to WB Guidelines on Procurement. Procuring other items is EEPCo's responsibility. However, the Bank expects that EEPCo will carry on those procurement activities according to the Bank's principles of transparency and efficiency. EEPCo agrees to meet the requirements set forth in the Procurement Guidelines. EEPCo's established commercial practices have been found acceptable to the World

Bank. The procurement will follow the procurement arrangements of EAREP 2 (i.e., in accordance with the requirements set forth or referred to in Section I of the Procurement Guidelines, and with the provision of the Schedule III Item A.1)

3.9 Financial Management, Financial Reports and Audits

- a) EEPCo shall maintain or cause to be maintained a financial management system in accordance with the provision of 2.07 of the Standard Conditions.
- b) EEPCo shall prepare and furnish to the World Bank, not later than forty-five (45) days after the end of each calendar quarter, un-audited IFRs for the Project covering the quarter, in form and substance satisfactory to the World Bank.
- c) EEPCo shall have its financial Statements for EAREP 2 Project audited in accordance with the provisions of Section 2.7(b) of the Standard Conditions. The GPOBA project will also be audited with EAREP 2. Each such audit shall cover the period of one fiscal year of the Recipient. The Audited Financial Statements for each such period shall be furnished to the World Bank not later than six months after the end of such period.

EEPCo uses The Financial Management Guidelines for GPOBA with its Financial Management and Accounting Policies and Procedures.

3.10 Environmental and Social Management Framework

EEPCo shall carry out the Project in accordance with the guidelines, rules and procedures defined in the ESMF and the RFP prepared under the scope of EAREP II. These are integral to the project, and should be read in conjunction with the GA and this OM. EEPCo has to disclose those locally, and will ensure that potential beneficiaries are well-apprieved of the issues and their rights.

Implementation of those guidelines, rules and procedures should take place in a manner satisfactory to the World Bank. EEPCo should maintain an environment manage capacity with the responsibility for implementing the ESMF and RPF.

The WB is currently working with EEPCo and the Ministry of Environment in the design of a recycling program for solid waste, here including the disposal of old CFLs and tubular fluorescent lamps. The working is now at early stages. It is expected that as this program evolves, EEPCo will get fully engaged and will communicate to their customers about the options and incentives to recycle old CFLs and tubular fluorescent lamps and other related solid waste.

3.11 Energy Conservation

EEPCo will ensure that appropriate capacity building has been provided to potential beneficiaries regarding efficient and safe use of energy.

EEPCo should distribute a simple folder to hhs highlighting the importance of energy efficiency, informing the customer about the specific consumption of devices and appliances, and emphasizing the importance of poor customers using the distributed CFLs as a means to save electricity (considering that lighting is the primary use of energy

among poor hhs). Information about proper care, health issues related to mercury, and disposal of CFLs should also be provided in the folder. This kind of information is not GPOBA intervention specific. Existing folders or customer orientation about conservation and efficiency may be used to meet World Bank objectives.

4. REPORTING REQUIREMENTS

The reports to be provided to the World Bank after the GA becomes effective are:

4.1 Project Progress Report

EEPCo should monitor and evaluate the progress of the Project and prepare Project Reports in accordance with the provisions of Section 2.06 of the Standard Conditions of the Grant Agreement, and on the basis of the monitoring indicators agreed with the World Bank as per Annex F.

The report contains the progress made during the reporting quarter, physical progress on output, monitoring indicator report, procurement status, environment and social safeguards update, feedback and lessons learned.

Each Progress Report shall cover the period of three (3) months, and shall be furnished to the World Bank no later than 45 days after the end of the period covered by such Report.

4.2 Financial Reports

4.2.1 IFRs: As per Section 3.9 above, EEPCO should submit un-audited IFRs to the World Bank on a quarterly basis.

4.2.2 Financial Audits

As per Section 3.9 above, EEPCO should submit audited financial statements on an **annual basis**. EEPCo should hire an Independent Financial Auditor to undertake the yearly financial audits of the project, to be agreed with the Auditor General of Ethiopia. The Independent Financial Auditor may be the same entity currently auditing EAREP II Project. EEPCo will submit separate audit reports and financial statements for this project entity during the submission of the audit reports of the EAREP II Project. The auditors should review the financial transactions of this Project while their audit of EEPCo's accounts is carried out. The audited Financial Statements covering the period of one fiscal year of the project implementing entity shall be furnished to the association not later than six months after the end of such period.

4.3 Implementation Completion Reports

In accordance with provisions of Section 2.06 of the Standard Conditions in the GA, EEPCo is required to produce an Implementation Completion Report ("ICR") **no later than 6 months after the closing date of the GA**. See Annex G for a proposed outline of this ICR.

4.4 Post-Project Completion Reports

As described in the GA, EEPCo has to prepare two additional reports (“Post Project Reports”), each of such scope and in such detail as the World Bank shall reasonably request, setting out measures designed to ensure the continued effective and sustainable achievement of Project’s objectives. EEPCo and the World Bank will agree on the appropriate template for this Post Project Report.

Post-Project reports should be provided to the World Bank **no later than one month after of the first and second anniversaries of the Closing Date, respectively.**

4.5 Output Verification Report (by Internal Verification Agent)

The IVA hired by the World Bank shall produce an OVR on a **quarterly basis**. The IVA shall submit this simultaneously to EEPCo and the World Bank. This will enable EEPCo to submit its Application for Withdrawal and relevant attachment to GPOBA for No Objection prior to disbursement of funds.

See Annex H for a draft of the OVR, to be finalized prior to hiring of the IVA.

5. WORLD BANK SUPERVISION

The project will be subject to World Bank supervision. The Project Progress Reports will be monitored in detail during regular supervision missions. IFRs and audited financial reports will be reviewed as necessary. Frequency of on-site supervision missions will be determined based on agreement with EEPCo. Project supervision will take place in conjunction with the other three rural energy access projects currently financed by the World Bank in Ethiopia.

ANNEXES

Annex A. Project Implementation and Disbursement Schedule

The estimated milestones for project implementation are show as follows:

Activity	Time frame
GPOBA provides subsidy commitment	April 2008
GA signed	October 2008
Service provision begins	June 2009
GPOBA disbursement begins	October 2009
GPOBA disbursement ends	December 2011

The estimated disbursements are as follows:

PLANNED													
Deliverables/Milestones	2009				2010				2011				Total
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
ConnectionsExecuted in tandem with 5- year loans granted (000)			20.00	25.00	30.00	30.00	30.00	30.00	30.00	33.57	0.00	0.00	228.571
CFLs Distributed (000)			40.00	50.00	60.00	60.00	60.00	60.00	60.00	67.14	0.00	0.00	457.142
Payments for first tranche (US\$000)			350.0	437.5	525.0	525.0	525.0	525.0	525.0	525.0	587.5	0.0	4,000.0
Payments for second tranche (US\$000)				350.0	437.5	525.0	525.0	525.0	525.0	525.0	525.0	587.5	4,000.0
Disbursement (US\$ 000)				350.0	787.5	962.5	1,050.0	1,050.0	1,050.0	1,050.0	1,112.5	587.5	8,000.0

ACTUAL													
Deliverables/Milestones	2009				2010				2011				Total
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
ConnectionsExecuted in tandem with 5- year loans granted (000)													
CFLs Distributed (000)													
Payments for first tranche (US\$000)													
Payments for second tranche (US\$000)													
Disbursement (US\$ 000)													

Annex B. SAMPLE OF EEPCo'S 5-YEAR LOAN AGREEMENT

ETHIOPIAN ELECTRIC POWER CORPORATION

Credit facility

Contract No:

CUSTOMER DETAILS			
First Name:/Company name:		Father/Surname	
Identity No:	Ethiopian ID <input type="checkbox"/>	Other <input type="checkbox"/>	If other, Specify
Premise Address	Region	City	Kifle Ketema
	Kebele	House No/Duplic:	Floor No/Apartment No
AGREEMENT DETAILS			
Work Request <input type="checkbox"/> Work request No		Bills <input type="checkbox"/> Bill Numbers	
Total Connection Cost: US\$75	Amount in advance: US\$15		Balance: US\$60
Number of installments: 60 (if monthly)	Installment :US\$/1 (monthly)		Total to be repaid = US\$60
Interest Rate (per year) = 19%	Interest Rate (per month) = 1.5833%		
Loan Principal (PV of Payments) = US\$35.55 (Corresponding to 64.25% of US\$60)		PV of Interests = US\$21.45 (Corresponding to 35.75% of US\$60)	
First Installment Due Date:		Last Installment Due Date:	

I/We, owner or in representation of the owner of the above premise here-by request credit Facility to pay the charges as indicated.

Applicant's signature_____

Date_____

Request Accepted by_____

Date_____

.Service Center head signature_____

Date_____

Annex C. Financial management

Financial Management and Disbursement Arrangements

Ethiopia Electricity Access Rural Expansion Project II (EAREP II) – GPOBA

Budgeting

Each unit in EEPCo prepares its own budget and EEPCo prepares a consolidated budget. EEPCo will include GPOBA financing in its consolidated budget.

Accounting

The GPOBA financial transactions will be included as part of UEAP office accounting records. The UEAP Office accounting records (delegated Offices i.e. Distribution and Sales and Marketing Processes) are integrated with the entity accounting system with general and subsidiary ledgers. The entity has introduced accounting software Agresso accounting software. GPOBA transaction can be extracted from overall system.

EEPCo uses The Financial Management Guidelines For GPOBA with its Financial Management and Accounting Policies and Procedures.

Internal control and internal auditing

EEPCo's main focus of the internal control is placed on the following i) segregation of duties ii) physical control of assets iii) authorization and approval iv) clear channels of command v) arithmetic and accounting accuracy vi) integrity and performance of staff at all levels and vii) Supervision.

Under the on going Business Process Reengineering (BPR) initiative, the FM procedures are structured to provide a strong basis to the existing internal control system as well as the GPOBA project. During the audit program, the inclusion of the GPOBA financial transactions shall be considered.

In addition to the existing internal control system under this project an IVA will be employed to verify the number of connections made to confirm the output made by EEPCo for disbursement by GPOBA.

Flow of funds and disbursement arrangement

Flow of funds

A third designated DA-C for EEPCo -GPOBA accounts will be opened at the National Bank of Ethiopia. The designated account will be held in United States Dollar. A communication in regard to opening these bank accounts and the account signatories should be sent to IDA before disbursements are made. This designated bank account will receive reimbursements to EEPCo after satisfactory delivery of outputs under the project. EEPCo after making the connections and obtaining evidence from the IVA submits withdrawal applications to GPOBA. GPOBA will disburse payments to EEPCo.

Disbursement Methods

Disbursements will be done after satisfactory verification of the outputs delivered by an independent firm (IVA). Reimbursements by GPOBA/IDA will be made to the designated bank account for the project.

The project will use reimbursement method of disbursement. GPOBA will disburse payments to EEPSCO after EEPSCO submits a withdrawal application for the required amount, with the required evidence from the IVA, for World Bank No Objection.

EEPCO will present withdrawal applications on a regular basis depending up on the no of connections made. GPOBA will reimburse US\$35 to EEPSCO upon independent verification as follows: 50% after the customer has received a 5-year loan and EEPSCO has provided an operative connection and 2 CFLs; and 50% after three successful billing cycles.

Designated Account

The Designated account will be managed by EEPSCO after it is delegated by the Minister of Finance and Economic Development.

Financial Reporting

The GPOBA financial translations will be included as part of UEAP office (delegated Offices i.e. Distribution and Sales and Marketing Processes) accounting records. The mentioned offices will include the financial transactions of GPOBA while preparing the Interim Un audited Financial Reports (IFRs) of EAREP II.

UEAP office (delegated Offices i.e. Distribution and Sales and Marketing Processes) will submit the IFRs to IDA forty-five days after the end of each quarter. At a minimum, the financial reports must include the sources and uses of funds, expenditure by main expenditure classification, beginning and ending cash balances and other supporting schedules.

Auditing

The annual Project financial statements of UEAP Office or delegated Offices i.e. Distribution System and Marketing and Sales including GPOBA will be included in the entity accounts of EEPSCO. The notes to EEPSCO will show the movement of designated accounts of the project and the auditors will review the financial transaction of the project during their audit of EEPSCO's accounts.

EEPCO shall have its financial Statements for EAREP II in accordance with the provisions of Section 2.7(b) of the Standard Conditions. The GPOBA project will also be audited with EAREP 2. Each such audit shall cover the period of one fiscal year of the Recipient. The audit report of the project will cover the sources and uses of funds for GPOBA. The sources of funds shall be from own and grant fund. The amount shown as a balance (Excess of source over uses) is the grant amount to be reconciled with the year ending balance as shown in the project Bank Account. Hence statement showing the movements of the special dollar account is an important part of the audit.

The amount paid as an advance and for the repayment of debt has to be accounted separately and deposited in a separate Birr Bank Account. This amount will serve for EEPCo for the next GPOBA connections. The Special Account Reconciliation Statement is prepared same as the Dollar Special Account and the auditing will be undertaken with the same process.

The notes to the project audit report will show the movement of the designated account of GPOBA. The Audited Financial Statements for each such period shall be furnished to the World Bank not later than six months after the end of such period.

The entity and project accounts will be audited by an external auditor acceptable to IDA and the audit will be conducted in line with International Standards on Auditing. Both the entity and project annual audited financial statements along with the management letters will be submitted to IDA not later than six months after the end of the year.

EEPCo has submitted the audited entity financial statement for the year ended July 7, 2007 four months after the due date. The delay in submitting audit reports should improve as there is now a computerized accounting system implemented.

Supervision plan

A financial management supervision mission will be conducted over the Project's lifetime. The project will be supervised twice a year.

The focus of the supervision will be to determine: (i) if funds are used for the intended purposes; (ii) any lapses in operation of the FM arrangements; (iii) further capacity strengthening measures; and (iv) implementation of financial covenants and other issues that will be clarified at subsequent assessments.

ANNEX D: PROCUREMENT

A. General

Procurement for the proposed project would be carried out in accordance with

1. Procurement Guidelines. All goods required for the Project and to be financed out of the proceeds of the Grant shall be procured in accordance with the requirements set forth in Section I (excluding paragraph 1.16) of the “Guidelines: Procurement under IBRD Loans and IDA Credits” published by the World Bank in May 2004 (“Procurement Guidelines”).

2. Particular Methods of Procurement of Goods. The following methods may be used for procurement of goods for those contracts which the Bank agrees meet the requirements set forth in the Procurement Guidelines for their use: (a) established commercial practices of the Recipient which have been found acceptable to the World Bank, for goods procured by the Recipient.

B. Assessment of the agencies’ capacity to implement procurement

An assessment of the capacity of the implementing agency –Ethiopian Electric Power Corporation (EEPCo) to implement procurement actions for the project was carried out a Procurement Specialist based Ethiopia Country Office. In October 2008. The assessment reviewed the organizational structure for implementing the project and the interaction between the staff responsible for project implementation and procurement.

EEPCo staff who will implement the procurement functions are procurement proficient and familiar with the World Bank procurement guidelines, which they applied in the execution of the other financed Urban Electric Project.

The overall risk for the EAREP II is rated LOW because there are no procurement activities under this project, except for the acquisition of CFLs.

Confirmation by the Operator:

I hereby certify that, in accordance with the provisions of the Grant Agreement dated [insert date], this quarterly request for disbursement has to be sent for review and clearance to the Task Team Leader at The World Bank, which is acting as Administrator of the Global Partnership on Output-based Aid. I also certify that the information provided on this invoice is accurately presenting the number of eligible water connections made during the aforementioned period and the number of eligible connections. I also understand that the Word Bank Task Team Leader might request that the conclusion of an independant verification agent be received prior to disbursing the funds, in accordance with the provisions of the Operations Manual. This request will be officially submitted to the Loan Department of the World

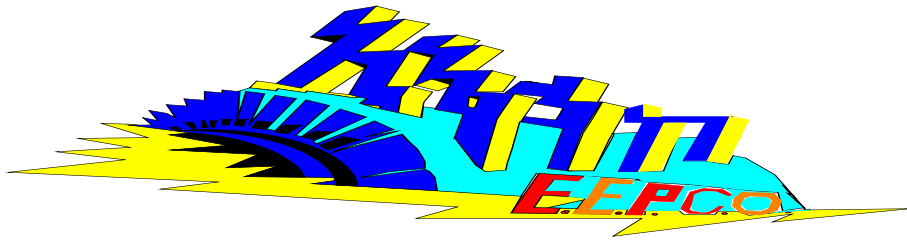
NAME (authorized representative):

TITLE:

Annex F. Project Progress Report template (To Be Agreed With IVA)

Project Progress Report No. XX of .././..

Ethiopian Electric Power Corporation



Quarterly Project Progress Report
for the OBA in Ethiopia – Electric Connections for the Poor Project

For the period:

Starting: XX-XX-XX and Ending: XX-XX-XX

Report Outline:

1. Introduction – Summary Presentation of Progress Made During the Semester
2. Physical Progress on Outputs
3. Monitoring Indicator Report
4. Procurement Status report
5. Environment and Social Safeguards Update
6. Feedback and Lessons Learned

1. Introduction: Summary Presentation of Progress Made During the Period

This section should present, in a few words, the quarterly summary results for the physical progress of the project, and any important information to be made clear upfront to the Bank/GPOBA team, including on environmental or social issues, procurement, and lessons learned this quarter.

2. Review of physical Progress for the Quarter Ended _____

Table A: Output Table

PLANNED		2009				2010				2011				Total
Deliverables/Milestones		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
ConnectionsExecuted in tandem with 5- year loans granted (000)				20.00	25.00	30.00	30.00	30.00	30.00	30.00	33.57	0.00	0.00	228.571
CFLs Distributed (000)				40.00	50.00	60.00	60.00	60.00	60.00	60.00	67.14	0.00	0.00	457.142
Payments for first tranche (US\$000)				350.0	437.5	525.0	525.0	525.0	525.0	525.0	525.0	587.5	0.0	4,000.0
Payments for second tranche (US\$000)					350.0	437.5	525.0	525.0	525.0	525.0	525.0	587.5	587.5	4,000.0
Disbursement (US\$ 000)					350.0	787.5	962.5	1,050.0	1,050.0	1,050.0	1,050.0	1,112.5	587.5	8,000.0

ACTUAL		2009				2010				2011				Total
Deliverables/Milestones		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
ConnectionsExecuted in tandem with 5- year loans granted (000)														
CFLs Distributed (000)														
Payments for first tranche (US\$000)														
Payments for second tranche (US\$000)														
Disbursement (US\$ 000)														

3. Information on Monitoring Indicators

Table B: Static data (to be provided at the beginning of the project and updated when necessary)

Outputs	Definition of outputs	Electricity connection to poor households (lhs) that receive a 5- year loan plus two CFLs
	Disbursement milestones	50% at connection 50% after 3 billing cycles
Access	Number of people per household in project area	Typically From 4.7 to 5.0
Targeting	Targeting	Loan scheme being introduced after 1 year of electrification in the target areas.

	Average household expenditure on alternative service provision	For lighting, about 90% use kerosene and 10% other forms, including candles, torches, and wood
Aid efficiency		
	Actual unit subsidy	US\$35.0 per household
	Comparator information from output or input-based projects	Availability of 5-year loans in tandem with connection will enable a faster connection rate in the target areas
	Time (months) to design OBA scheme	3 months
	Cost of project development (TA)	US\$40,000
Provider selection	Description of service provider	National Public electricity utility (EEPCo)
	Type of contract/certification	Typical Connection and Loan Agreement
	Competitive bidding used?	No, since there is one single service provider of grid-connected services
Development Impacts	Development impacts recorded by the project	Reduction in time and resources spent or distance traveled for procuring service; health benefits; children can study at night, potential for household productive activities, as recorded by the project. Energy savings by virtue of use of CFLs for lighting (primary use in the first years). Metered consumption allows better targeting of existing lifeline rates subsidies (granted to first bracket of household customers)
	Gender impact	Connection to the grid creates potential for productive activities to be carried out by women in the household. Availability of energy on a 24x7 basis enables women to develop productive activities at home. Girls can improve the quality of learning at night.

Table C: Indicator Tracking Table

Year	Unit	Baseline	2009				2010				2011			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Service quality Indicators - (continuity of supply-except during extreme dry periods)	% of Time	N/A	97	97	97	97	97	97	97	97	97	97	97	97
Average consumption of service (without CFLs)	kWh per quarter	0	4.1	4.1	4.1	4.1	4.2	4.2	4.2	4.2	4.3	4.3	4.3	4.3
Average household expenditure on service (without CFL)	US\$ per quarter	1.4	1.2	1.2	1.2	1.2	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5
Residential tariffs for project beneficiaries	US\$ per kWh	3	3	3	3	3	3.3	3.3	3.3	3.3	3.6	3.6	3.6	3.6
Average household income of beneficiary hhs	US\$ per quarter	130	130	130	130	130	135	135	135	135	145	145	145	145
Collection efficiency (Amount billed/amount collected on time)	%	85	85	85	85	85	90	90	90	90	90	90	90	90
Default rate on loans (repayment rolled into electricity bill)	%	N/A	N/A	N/A	N/A	N/A	90	90	90	90	90	90	90	90
Percentage of population in target area with access to service in question	%	0	40	43	45	48	50	53	55	58	60	63	67	70
Yearly Energy Savings due to GPOBA Intervention	GWh per Year	0			2	7	11	15	19	23	26	32	35	39
Percentage of women developing Economic activities using electricity	%	0	5	5	10	15	20	30	40	50	50	50	50	50
Number of people per household	#	5	5	5	5	5	5	5	5	5	5	5	5	5
Number of women per household	#	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5

4. Procurement Status Report as of _____

[Describe here any concerns regarding Procurement that have arisen in relation to the project, based on the Procurement Guidelines described in the GA or OM.]

5. Environment and Social Status Report as of _____

[Describe here any concerns related to meeting the environmental and social guidelines per the ESMF or RPF and other Ethiopian standards that have arisen this quarter, as well as mitigation measures.]

6. Feedback and Lessons Learned this Semester

[Please provide any feedback on the GPOBA/World Bank support provided, as well as any lessons learned on OBA or the project in general.]

Annex G. Implementation Completion Report outline

This is a draft and subject to amend if agreed by the World Bank and EEP Co.

Main Text (not to exceed 15 pages):

1. Project Vital Statistics and Introduction to Project
2. Development Objectives by Project sub-Component
 - a. Original Objectives – including outputs and expected outcomes Revised Objectives (if any) – outputs and outcomes
3. Achievement of Objectives
 - a. Analysis of baseline versus time series data
 - b. Results from impact evaluations (if conducted)
 - c. Related outcomes (e.g. vis-à-vis outputs and documented related outcomes)
4. Major Factors Affecting Implementation and Outcome
 - a. Factors outside the control of the government or implementing agency
 - b. Factors generally within the control of government/implementing agency
 - c. Factors relating to cost and financing (including disbursement)
5. Sustainability
6. Compliance with Bank Safeguards and Fiduciary Requirements
7. GPOBA Performance (disbursement, supervision)
8. Lessons Learned (including mitigating project risks, challenges encountered, institutional issues, etc)
 - a. Design stage (areas to cover include: targeting, access to finance, tariffs, regulation, market structure, definition of outputs, capacity building)
 - b. Implementation (areas to cover include: tendering and other procurement, disbursement, output verification, dissemination/communication)

Annexes (not to exceed 10 pages in total):

- 1. Project Costs by Component**
- 2. Completed Procurement Plan**
- 3. Monitoring and Evaluation indicators table – baseline against time series**

Annex H. Output Verification Report

Output Verification Report – Sample to be developed with IVA

Date of verification:

Date of issue of report:

No. of OVR issued: Quarter from [date] to [date]

<i>Output(s) delivered:</i>	<u>Budgeted</u>	<u>Actual</u>
(list per target area)	(no./pct.)	(no./pct.)

- Metered house holds (hhs)
- Other hhs hooked up to the same meter (indirect connection)
- Pre-paid meters, if any
- Street light points

Method(s) of verification:

Participants:

Comments to verification:

Recommendations (as to release of GPOBA subsidy payment)

Required attachments:

1. List of participants in output verification.
2. Map of project area showing location of connections made under the GPOBA sponsorship
3. List of new connections.
 - a) Installed electric meter.
 - b) Name of hhs.
 - c) Quality and characteristics of connection to EEPCo standard.
 - d) Proper grounding around connection.
 - e) Electric bill evidencing consumption and service delivery (if available).

- f) Number of people in the household.
- g) Number of customers indirectly connected and hooked up to the same meter.
- h) Percentage of women developing economic activities using electricity.
- i) Number of women per household.

4. Billing records for connections one year after works completion

- a) Quality and characteristics of connection to EEPCo standard
- b) Electric bill evidencing consumption, service delivery and payment
- c) Number of people in the household
- d) Verification if 24-hour electric supply (interview household)
- e) Number of CFLs installed and operating
- f) Quality of service, measured by special meters randomly located in rural areas
- g) Number of customers indirectly connected and hooked up to the same meter
- h) Indication of meter tampering or other kinds of energy theft or fraud.