Report No: 74533

RESTRUCTURING PAPER

ON A

PROPOSED PROJECT RESTRUCTURING OF NEPAL POWER DEVELOPMENT PROJECT LOAN AND GRANT

TO

NEPAL

December 21, 2012

CURRENCY EQUIVALENTS (Exchange Rate Effective: December 2012)

SDR 0.653 = 1 US\$ US\$ 1.530 = 1 SDR

ABBREVIATIONS AND ACRONYMS

Alternative Energy Promotion Centre
Bharatpur-Bardaghat
Department of Electricity Development
Government of Nepal
Hetauda-Bharatpur
Hetauda-Dhalkebar-Duhabi
International Development Association
Integrated Financial Management Information System
Micro Hydro Village Electrification Project
Nepal Electricity Authority
Nepal India Electricity Transmission and Trade Project
Power Development Fund
Power Development Project
Right of Way
Special Drawing Rights

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NEPAL POWER DEVELOPMENT PROJECT

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NEPAL POWER DEVELOPMENT PROJECT

RESTRUCTURING PAPER

A. SUMMARY

1. This Restructuring Paper seeks approval to restructure the Power Development Project (PDP) to ensure effective utilization of project resources consistent with the sector priorities as well as to take into account delays in implementation of some components (stemming largely from the continued uncertain political environment over the last several years). The proposed restructuring is also reflective of the underlying factors that have affected specific activities under the project. These factors include – the need for aligning one activity with related activities under another project, longer than anticipated time in finalization of technical solution for another activity, delays in securing necessary statutory approvals for some activities, and implementation period of some activities extending beyond the project closing date due to delayed start.

- 2. The following changes are proposed:
 - i. Cancellation of SDR 27.76 million (US\$ 42.47 million) of project funds that cannot be utilized by the closing date of December 31, 2012.
 - ii. Extension of the closing date for twelve months to allow for the utilization of SDR 19.37 million (US\$ 29.63 million) of project funds covering mainly ongoing contracts for three critical transmission lines and some electrification/distribution strengthening projects.
 - iii. Revision of the Monitoring and Evaluation framework in context of above changes.

3. The proposed restructuring seeks to drop activities that have not been procured, while extending the closing date to allow for the completion of activities critical to the development of power sector in Nepal, and for which in the most part, the contractors are already mobilized, supplies are on the ground and work is ongoing. In the absence of the proposed extension, these activities are likely to face serious contractual difficulties leading to stranded assets on the one hand and a reputational risk for the World Bank on the other. Also, these activities are part of a larger power transmission system that is being built under the Nepal-India Electricity Transmission and Trade Project (NIETTP) also funded by the Bank. Development of this larger power system is essential for effective utilization of power imported from or exported to India, as well as for the development of vast undeveloped hydropower resources in the country.

4. The Project Development Objective (PDO) is being retained as "*To increase access to electricity in rural areas; and improve the quantum and efficiency of electricity supply.*" The cancellation of funds would not change the PDO, even though the scale of the intervention – and consequently the project targets would undergo a change.

5. The proposed changes have been requested by the Government of Nepal (GoN) in a letter from the Ministry of Finance to IDA, dated December 18, 2012.

B. PROJECT STATUS

Project Background

6. The Power Development Project (PDP) was originally approved by the World Bank Board on May 22, 2003 for SDR 55.2 million (US\$ 84.11 million equivalent). It had three components: (i) Power Development Fund (PDF) implemented by the Department of Electricity Development (DoED), (ii) Micro Hydro Village Electrification Program (MHVEP) implemented by Alternative Energy Promotion Centre (AEPC), and (iii) Nepal Electricity Authority (NEA) component. The project was restructured on February 15, 2008 on account of lack of off-take under the PDF component which was aimed at financing the development of private sector small hydropower projects, and funds were reallocated to the MHVEP and NEA components. The project closing date was shifted from June 30, 2009 to December 31, 2010.

7. Additional financing of SDR 60.1 million (US\$ 91.66 million equivalent) was provided on May 26, 2009 to further enhance the MHVEP and NEA components, taking the total project amount to SDR 115.3 million (US\$ 175.77 million equivalent) and the project closing date was revised to December 31, 2012. The additional funds were provided to address the prevailing power crisis in Nepal through rehabilitation of generation capacity, strengthening of the transmission system and expansion of distribution access (including through the off-grid MHVEP component).

Present Context

8. The project remains relevant for the power sector in Nepal. GoN is seeking Bank support for developing the significant and yet undeveloped hydropower resources in the country through public and private sector efforts. However, development of hydropower resources requires establishment of robust transmission network within Nepal as well as cross-border linkages with India for exports. Cross-border transmission linkages with India are also needed to address the severe shortages of power in Nepal through imports in the short term.

9. Transmission lines under the Power Development Project form an important part of the transmission backbone of Nepal that would enable east-west and north-south delivery of power imported from India through the cross-border link supported under the Nepal-India Electricity Transmission and Trade Project (NIETTP). However, the three transmission lines - Khimti-Dhalkebar, Hetauda-Bharatpur and Bharatpur-Bardaghat would require a longer implementation period beyond the closing date of the PDP. In the absence of continued support from the Bank, these lines would face significant contractual difficulties and may result in stranded assets for Nepal.

Project Ratings:

10. The project implementation rating as well as the PDO rating stood at "Unsatisfactory" in the last ISR dated October 24, 2012 because of slow implementation of many activities under the NEA component. The Safeguards rating is also "Unsatisfactory" due to delays in forest clearances, as well as delays in land acquisition and payment of compensation to Project Affected Families. These issues have now been

resolved by the Government of Nepal and the rating is expected to be enhanced in the next ISR. However, the possibility of RoW concerns going forward on other sections of transmission lines cannot be ruled out.

11. The Financial Management rating is "Moderately Unsatisfactory" due to the delays in finalization of annual accounts, though there have been some recent improvements as well as progress in implementation of the Financial Management Action Plan. The rating on procurement is "Moderately Satisfactory", reflecting the significant (albeit late) progress on procurement of contracts over the last several months. The rating on project management is "Moderately Satisfactory", reflecting the recent improvements in project coordination function at NEA.

Component-wise Status

12. <u>MHVEP Component (SDRs 14.15 million)</u>: The AEPC implemented MHVEP component is proceeding well. Most investments under this component are expected to be completed within the project period and the targeted development objectives are likely to be met or exceeded. The total micro-hydro generation capacity created under the PDP is likely to meet the target, despite tight timelines for completion of some investments.

13. <u>PDF Component (SDRs 5.90 million)</u>: Further to the restructuring in 2008, the scope of the PDF component has been limited to technical assistance (TA) activities. However, there has been little progress and none of the TA activities have been procured. Meanwhile, the Kabeli-A hydropower plant, which was originally envisaged as the first private sector small hydropower project financed through the PDF, is now being supported by the Bank as a stand-alone intervention. Therefore, the PDF component of the PDP should be closed. The need for the institution of Power Development Fund itself should be reexamined later based on the experience of the Kabeli-A project and the changed institutional context in the hydropower development sector.

14. NEA Component (SDRs 93.81 million): The NEA component has been affected by procurement and implementation delays from the very beginning. Activities were initiated as a part of the original project (US\$ 25.95 million - 18%), reallocation in 2008 (US\$ 35.91 million - 25%) and additional finance in 2009 (US\$ 79.56 million - 57%). Activities started under the original project have been completed, except the Khimti-Dhalkebar transmission line – where eight towers have been affected by right-of-way difficulties that have been now resolved. Of the activities initiated upon restructuring in 2008, all activities are on course except the Hetauda-Bhartapur transmission line which has been delayed due to rerouting, delayed approval for cost escalation and delays in forest clearance. Of the activities initiated upon additional finance in 2009, the Bharatpur-Bardaghat transmission line has been affected by delays in procurement and contract effectiveness due to difficulty in providing an acceptable Letter of Credit, as also delay in securing Forest Clearance from the Ministry of Forests. The Ramechhap Rural Electrification project has also been delayed due to procurement difficulties and a review of the procurement by the Commission for Investigation of Abuse of Authority (CIAA) of Nepal. This project is crucial for resolution of the RoW issues affecting the Khimti-Dhalkebar line.

15. Three activities are yet to be procured and are proposed for cancellation – (i) Conductor for Hetauda-Dhalkebar-Duhabi (HDD) line, (ii) Rehabilitation of Kaligandaki-A plant, and (iii) System Integrator for Implementation of the Integrated Financial Management Information System (IFMIS). The conductor procurement for HDD line was included under the PDP in January 2011 to achieve financial closure of the Nepal-India Electricity Transmission and Trade Project (NIETTP). The procurement has been delayed by NEA to ensure synchronization with other activities on the HDD line which are funded by the World Bank under the NIETTP. On the Kaligandaki-A rehab project, the technical studies have been completed and bid documents prepared. The activity would be pursued further as a stand-alone Bank funded project incorporating elements of dam safety. The IFMIS technical design has been prepared and it is proposed to procure the system integrator under a separate project.

16. <u>Overall disbursement status:</u> Although the project is closing on December 31, 2012, the disbursement ratio remains low (60%) in December 2012. About US\$ 36 million of IDA funds remain uncommitted – largely on account of three activities that are yet to be procured. An additional US\$ 34 million have been committed, but are unlikely to be disbursed by the project closing date – mainly on account of Khimti-Dhalkebar, Hetauda-Bharatpur and Bharatpur-Bardaghat transmission lines.

C. PROPOSED CHANGES

- 17. In light of the project status described above, the following changes are proposed:
 - (i) Reduce the scope of the Nepal Electricity Authority (NEA) component (*by SDRs 21.59 million*) by:
 - a. Excluding from the PDP, conductor supply for Hetauda-Dhalkebar-Duhabi transmission line, rehabilitation of Kaligandaki-A hydropower plant, and procurement of System Integrator (SI) for implementation of the Integrated Financial Management Information System (IFMIS).
 - b. Curtailing funding for Hetauda-Bharatpur and Bharatpur-Bardaghat transmission lines, such that works beyond the revised project closing date of December 31, 2013 would be funded by Government of Nepal from sources other than the PDP.¹
 - (ii) Reduce the scope of the PDF component (*by SDRs 5.18 million*) to activities that are already underway, thereby cancelling unused grant and loan funds.
 - (iii) Cancel unallocated funds under IDA 46370 (SDRs 0.99 million).
 - (iv) Simplify the category structure (without deleting any of the existing categories) for smooth processing of disbursements.
 - (v) Revise the Monitoring and Evaluation framework in the context of a reduced scope of the NEA component.

Changes to Project Development Objective and Results/ Indicators

¹ The Government of Nepal has requested the World Bank for follow-on engagements to fund these activities. Additional finance for the NIETTP is now under preparation and would cover conductor procurement for HDD line, IFMIS and the balance works of the HB and BB lines. In addition, the Kaligandaki-A hydropower plant rehabilitation is being prepared as a separate Bank funded project.

18. The Project Development Objective (PDO) is being retained as "*To increase access to electricity in rural areas; and improve the quantum and efficiency of electricity supply*." The cancellation of funds would not change the PDO, even though the scale of the intervention – and consequently the project targets would undergo a change. While the target for number of households gaining access to electricity through off-grid and grid connected schemes would remain the same, the target for improvement in quantum and efficiency of electricity supply is being lowered.

19. There are three transmission lines under the project, of which only one (Khimti-Dhalkebar) can be completed within the extended project period. Implementation of the other two transmission lines is also currently underway, but the remaining works beyond the extended project closing date would be completed under subsequent funding outside of the PDP. As a result, the transmission capacity augmentation target is being reduced to 500 MW. The original target of adding 1500MW would be achieved – albeit after the extended project closing date.

20. Also, the targeted benefits from increased generation (170 GWh) from rehabilitation of Kaligandaki-A would no longer accrue because this activity is being dropped from the project.

21. Apart from the changes highlighted in para-19 and 20 above, the other activities are on course towards completion. Most of these activities have been procured and are currently either in an advanced state of implementation or have already been completed. These include: Chandranigahpur Substation, Distribution and Rural Electrification Project (DREP), Khimti-Dhalkebar Transmission Line, Distribution System Rehabilitation Project (DSRP), Multi-fuel Power Plant Rehabilitation Project, Hetauda Diesel Rehabilitation Project, Pathlaiya Substation, Materials Supply for Ramechhap Electrificaton and conductor supply for Second Circuit of Khimti Dhalkebar transmission line. Therefore, other targets under the project remain unchanged, as reflected in Annex-1.

Review of Appraisal Summary:

22. *Financial and Economic Aspects:* There is no change in the Economic Rate of Return (ERR) or the Financial Internal Rate of Return (FIRR) of project activities consequent to the changes introduced through this restructuring.

23. Indeed, the three transmission lines being financed under the project are expected to eventually have an even higher economic benefit because these lines would help transmit power imported from India through the Nepal-India cross-border line (North-South interconnection) via the Hetauda-Dhalkebar-Duhabi 400kV line to different parts of the country. The Khimti-Dhalkebar line would interconnect with the Hetauda-Dhalkebar-Duhabi line at Dhalkebar, while the Hetauda-Bharatpur and Bharatpur-Bardaghat transmission lines – which would be completed after the project closing date – would actually extend the 400kV Hetauda-Dhalkebar-Duhabi line and enable power to be transmitted further west up to Bardaghat.

24. *Safeguards:* RoW issues would be important for other ongoing and future transmission line projects in Nepal, including the Hb and BB lines, as well as the HDD line under the NIETTP. Although NEA has a more liberal policy than most other developing countries on transmission line RoW (the country provides RoW compensation

at 10% of the land value, while neighboring countries only compensate for crop loss), the disagreements on RoW are more acute because of scarce land and potential for urban expansion especially for any flat land in the valleys. GoN is attempting some tactical approaches for resolving immediate issues – such as by acquiring land for construction of road in the problematic areas, thereby providing compensation at 100% of the land value and also providing the road to the local community. In addition, the Bank safeguards team is working with NEA to develop a more systemic solution to the problem at the policy level.

25. *Procurement:* Almost all the necessary procurement for activities covered by the project post-restructuring has been completed and implementation is underway.

26. *Risks:* The project is being implemented in a difficult political environment and with limited institutional capacity of the implementation agencies – factors which have been responsible for delays in implementation. Overall country risk in Nepal remains substantial due to continued fluid political situation and ongoing efforts at developing a new constitution. This has tended to affect the decision making process – especially when faced with difficult project implementation issues. However, with most activities having been procured and now in an advanced stage of implementation (except those that are being dropped or partially canceled), it is now expected that the project activities would be completed within the remaining project period or the extended period of twelve months in some cases. *The key residual risk is on account of safeguard issues – specifically land acquisition and right-of-way for transmission lines.*

SDR Millions			Original			Revised					
	IDA	IDA	IDA	IDA	Total	IDA	IDA	IDA	IDA	Total	
	37660	H0390	46370	H5060		37660	H0390	46370	H5060		
	(Credit)	(Grant)	(Credit)	(Grant)		(Credit)	(Grant)	(Credit)	(Grant)		
(a) PDF	4.30	1.60	0	0	5.90	0	0.72	0	0	0.72	
(b) MHVEP	0	6.00	0	8.15	14.15	0	6.00	0	8.15	14.15	
(c) NEA	32.50	10.28	48.61	2.35	93.74	32.50	10.28	28.51	0.86	72.15	
(d) Unallocated	0	0	0.99	0	0.99	0	0	0	0	0	
(e) Cancelled Earlier	0	0.52	0	0	0.52	0	0.52	0	0	0.52	
Total	36.80	18.40	49.60	10.50	115.30	32.50	17.52	28.51	9.01	87.54	
Cancelled Now	0	0	0	0	0	4.30	0.88	21.09	1.49	27.76	
Grand Total	36.80	18.40	49.60	10.50	115.30	36.80	18.40	49.60	10.50	115.30	

27.	Financing Plan:	The revised financing plan is indicated below.	
<i>_</i> ,.	I mancing I failt	The revised infancing plan is maleated below.	

28. **Cancellations:** It is proposed to cancel SDR 27.76 million in funding across credits and grants under the project, as indicated in the financing plan above.

29. **Project Costs:** With exclusion of some activities and partial funding of some others, the overall project costs would change as follows:

Project Costs (US\$m.) ²		
Components/Activities	Current ³	Proposed
Part A: Power Development Fund (DoED)	9.17	1.08
Part B: Micro Hydro Village Electrification (AEPC)	22.10	22.10
Part C: NEA		
Chandranigahpur Substation	4.72	4.72
Distribution and Rural Electrification Project	9.53	9.53
Khimti Dhalkerbar Transmission Line		
i) Main Line	11.70	11.70
ii) Second Circuit ⁴	-	2.58
Institutional Strengthening Project-1	0.91	0.91
Distribution System Rehabilitation Project		
i) Distribution System Rehab Investments	11.76	11.76
ii) Energy & Consumer Accountability	0.62	0.62
Hetauda Bharatpur Transmission Line		
i) Transmission Line	16.37	11.13^{5}
ii) Substations	6.23	3.66^{6}
Multi Fuel Power Plant Rehabilitation Project		
i) Supply, Installation and Overhaul	7.30	7.30
ii) Additional Spares	1.53	1.53
Pathlaiya 132kV Substation Project	3.36	3.36
Hetauda Diesel Rehabilitation Project	1.00	1.00
Kathmandu Valley Distribution System Rehab		
i) All Contracts Except (ii)	17.66	17.66
ii) Distribution Network Reinforcement Contracts	4.55	4.55
Bharatpur-Bardaghat Transmission Line	15.53 ⁷	12.87^{8}
Kaligandaki A Rehabilitation Project		
i) Consulting Services	0.53	0.53
ii) Rehabilitation Supplies and Works	16.00	-
iii) Additional Studies or TA	0.50	0.25
Institutional Strengthening Project-2		
i) TA for Finance & Accounts Strengthening	0.52	0.52
ii) Supply and Installation of FMIS System	2.00^{9}	-
Support to NIETTP		
i) Supply of Conductor, OPGW and EW	20.00	-
ii) Technical Assistance & Capacity Building	4.11	0.73
Ramechhap Rural Electrification	-	6.00
GRAND TOTAL	187.70	136.09

² Figures are indicative due to changes in SDR-US\$-NPR exchange rates throughout the life of the project.

 ² Figures are indicative due to changes in SDK-US\$-NPK exchange rates infoughout the file of the project
³ The project has had a previous restructuring and the current reflects the latest approved costs.
⁴ Supply of conductor for second circuit of the Khimti-Dhalkebar transmission line has been included.
⁵ Balance US\$ 5.24 million would be funded by Government of Nepal from sources outside of the PDP.
⁶ Balance US\$ 0.99 million of price and quantity variation.
⁸ D d = US\$ 2.66 million would be funded by the Government of Nepal from sources outside of the PDP.

⁸ Balance US\$ 2.66 million would be funded by the Government of Nepal from sources outside of the PDP.

⁹ The IFMIS would be developed by NEA using funds from sources outside of the PDP.

Credit/		Category of Expenditure	Current	Revised
Grant No.	Category	Description	Allocation	Allocation
	0 2	1	(in SDRs)	(in SDRs)
IDA	1A	IDA37660 INVESTMENT SUB-LOANS	0	0
37660	AAA	Goods\Works\Services subgrant Prt A	4,300,000	0
	DA-A	Designated Account	0	0
		Sub Total (PDF)	4,300,000	0
	3A(I)	IDA37660 GOODS(EXCL.PT.C1A(11	4,910,000	4,811,134
	3A(II)	IDA37660 GOODS(PART.C.1A.(II)	1,290,000	959,141
	3B(I)	IDA37660 WORKS(EXCL.PT.C1A(11	285,000	279,111
	3B(II)	IDA37660 WORKS(PART.C.1A.(II)	70,000	69,172
	CCC	Goods \ Works \ Services for Part-2 of the Project	25,945,000	26,381,442
		as defined in Schedule-1 of the Amendment to the		
		Financing Agreement dated August 21, 2009,		
		including, Part-C of Schedule-2 of the Amendment		
		to the Development Financing Agreement signed		
		on February 22, 2008 as well as Part-C of		
		Schedule-2 of the Original Development Finance Agreement signed on July 9, 2003.		
	DA-C		0	0
	<u>DA-C</u> 4	Designated Account IDA37660 UNALLOCATED	0	0
·	4	Sub Total (NEA)	32,500,000	32,500,000
		Cancelled Amount	0	4,300,000
		TOTAL	36,800,000	36,800,000
IDA	1B	IDAH0390 PDF ADMN FEE	845.000	385,883
H0390	AAA	DISB – OTHER	755,000	333,685
110020	DA-A	Designated Account	0	0
	DITI	Sub Total (PDF)	1,600,000	719,568
	2A	IDAH0390 COMMUNITY SUBPROJ GR	2,745,895	2,745,895
	2B	IDAH0390 GOODS	64,518	64,518
	2C	IDAH0390 CONSULTANT SERVICES	10,553	10,553
	2D	IDAH0390 TRG AND PROMO ACTIVI	114,510	114,510
	2E	IDAH0390 INC. OPERATING COSTS	21,217	21,217
	BBB(I)	DISB – OTHER	2,764,413	3,010,451
	BBB(II)	DISB - OPERATING COSTS	280,000	33,962
	DA-B	Designated Account	0	0
		Sub Total (AEPC)	6,001,106	6,001,106
	3A(I)	IDAH0390 GOOD PT C EXC 3A(II)	4,910,000	4,812,880
	3A(II)	IDAH0390 GOOD PART C.1(A)(II)	1,290,000	959,982
	3B(I)	IDAH0390 CW - PT C EXC 3B(II)	285,000	279,254
	3B(II)	IDAH0390 CW PART C.1(B)(II)	70,000	68,958
	3C	IDAH0390 CONSULTANT SERVICES	521,793	521,793
	CCC	Goods \ Works \ Services for Part-2 of the Project	3,203,231	3,637,157
		as defined in Schedule-1 of the Amendment to the		
		Financing Agreement dated August 21, 2009,		
		including, Part-C of Schedule-2 of the Amendment		
		to the Development Financing Agreement signed		
		on February 22, 2008 as well as Part-C of		
		Schedule-2 of the Original Development Finance		
		Agreement signed on July 9, 2003.		
	DA-D	Designated Account	0	0
	4	UNALLOCATED	0	0
		Sub Total (NEA)	10,280,024	10,280,024
		Cancelled Amount	0	880,432
		TOTAL	17,881,130	17,881,130
		Cancelled amount earlier	518,870	518,870
		TOTAL	18,400,000	18,400,000

30. Category Reallocations:

IDA	2A	GOODS AND WORKS - NEA PART	48,270,000	28,170,000
46370	2C	SERV COST-SOIL,ROCK,CONCRTE LAB	340,000	340,000
	UNALLOC	UNALLOCATED	990,000	0
	DA-F	Designated Account	0	0
		Cancelled Amount	0	21,090,000
		TOTAL	49,600,000	49,600,000
IDA	1A	COMM SUB GRANTS - AEPC	7,350,000	7,669,009
H5060	1B	GD\CS\TR\PROM ACTV - AEPC	580,000	459,966
	1C	OPERATING COSTS - AEPC	220,000	21,025
	DA-E	Designated Account	0	0
		Sub Total (AEPC)	8,150,000	8,150,000
	2B	CONS SERVICES - NEA	2,350,000	860,175
	DA-F	Designated Account	0	0
		Sub Total (NEA)	2,350,000	860,175
		Cancelled Amount	0	1,489,825
		TOTAL	10,500,000	10,500,000
	Total Cance	elled Amount through this cancellation	0	27,760,257
		Cancelled amount earlier	518,870	518,870
		GRAND TOTAL	115,300,000	115,300,000

ANNEX 1: Results Framework and Monitoring NEPAL: POWER DEVELOPMENT PROJECT

		D=Dropped C=Continue				Cumu	lative Target `	Values			Data Source/ Methodology	
PDO Level Results Indicators	Core	N= New R=Revised	Unit of Measure	Baseline	YR 1 2004/2009	YR 2 2010	YR 3 2011	YR4 2012	YR5 2013	Frequency		Responsibility for Data Collection
Number of additional rural households with access to electricity generated by micro- hydro schemes	\checkmark	С	Households	0 HHs (2003)	33,000	17,000 (50,000 in cumulative)	12,000 (62,000 in cumulative)	12,000 (74,000 in cumulative)	-	Annually reported by AEPC	Supervision Report	AEPC
Number of additional rural households with access to grid- connected electricity	\checkmark	С	Households	0 HHs (2003)	-	35,000	10,000 (45,000 in cumulative)	10,000 (55,000 in cumulative)	10,000 (65,000 in cumulative)	Annually reported by NEA	Supervision Report	NEA
Increased transmission capacity (MW)		R (Reduced from 1500 MW to 500 MW as some lines cannot be completed)	MW	0 (2003)	-	-	-	-	500 MW	Annually reported by NEA	Supervision Report	NEA
Transmission lines constructed under the project	\checkmark	N (Added to reflect a Core Indicator)	Kms	0 (2003)	-	-	-	70	130 (200 cumulative)	Annually reported by NEA	Supervision Report	NEA
Increased generation capacity (MW)		С	MW	24 MW (2008)	-	-	-	Additional 22.4 MW (46.4 MW in cumulative)	-	Annually reported by NEA	Supervision Report	NEA
Increased energy generation (GWh)		D (Kaligandaki Rehabilitation cancelled)	GWh	620 GWh (2008)	-	-	-	-	-	Annually reported by NEA	Supervision Report	NEA
Reduced transmission and distribution losses in project- supported distribution centers outside Kathmandu Valley (Itahari, Rajbiraj, Janakpur, Bharatpur, Malangawa, Bhairahawa, Guleria, Tikapur, and Ghorahi)	\checkmark	С	%	28% aggregated distribution losses (2007)	-	-	-	Loss reduction in 9 distribution centers by 1.6%	-	Annually reported by NEA	Supervision Report	NEA
Reduced distribution losses in distribution centers in Kathmandu Valley	V	С	%	18.8% aggregated distribution losses (2008)	-	-	-	Aggregated loss reduction in 9 distribution centers in Kathmandu Valley by 6%	-	Annually reported by NEA	Supervision Report	NEA

	INTERMEDIATE RESULTS											
Intermediate Result (Compone	nt O	ne): Increase	in service covera	ge								
Total kW capacity of new micro- hydro village schemes (off-grid)		С	kW	0 kW (2003)	3,409 kW	1,900 kW (5,309 kW cumulative)	1,400 kW (6,709 kW cumulative)	1,400 kW (8,109 kW cumulative)	-	Annually reported by AEPC	Progress Reports issued by AEPC	AEPC
Km of distribution lines built (grid extension)	\checkmark	С	Km	0 km (2003)	-	700 km	400 km (1,100 km cumulative)	7,00 km (1,800 km in cumulative)	400 km (2,200 km cumulative)	Annually reported by NEA	Supervision Report	NEA
Intermediate Result (Compone	nt T	wo): Progress	towards loss red	uction								
Number of distribution centers under rehabilitation		С	DCs	0 DCs (2007)	-	-	9 DCs	9 DCs (18 DCs in cumulative)	-	Annually reported by NEA	Supervision Report	NEA