

THE INSPECTION PANEL

**The Inspection Panel Report
on
Request for Inspection
Nepal: Proposed Arun III Hydroelectric Project
and
Restructuring of the Arun III Access Road Project
(Credit 2029-NEP)**

Request No. RQ94/1

December 16, 1994
Washington, D.C.

ABBREVIATIONS AND ACRONYMS

ACRP	-	Acquisition, Compensation and Rehabilitation Plan
BP	-	Bank Procedures
EA	-	Environmental Assessment
EAP	-	Environmental Action Plan
HMG/N	-	Kingdom of Nepal
IDA	-	International Development Association
IEPS	-	Initial Executive Project Summary
LCGEP	-	Least Cost Generation Expansion Program
MOP	-	Memorandum and Recommendation of the President
MW	-	Megawatts
NEA	-	Nepal Electricity Authority
NGO	-	Non-governmental Organization
OD	-	Operational Directive
OMS	-	Operational Manual Statement
OP	-	Operational Policies
OPN	-	Operational Policy Note
PAF	-	Project Affected Family
PIC	-	Public Information Center
PID	-	Project Information Document
POE	-	Panel of Experts
RAP	-	Regional Action Plan for Arun III Project
SAR	-	Staff Appraisal Report
SPAF	-	Seriously Project Affected Family

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PREFACE

This is the Inspection Panel's Report on the Request for Inspection (the "Request") relating to the proposed Nepal, Arun III Hydroelectric Project and restructuring of the Arun III Access Road Project; Credit 2029-NEP, granted under Development Credit Agreement, dated August 8, 1989 between the Kingdom of Nepal and the International Development Association ("IDA") (collectively referred to as "Arun III"). The Request was filed with the Panel on November 2, 1994 and registered by the Chairman on November 3, 1994. On the same date the Notice of Registration and text of the Request was transmitted to the President of IDA. The Chairman and Panel members note that prompt registration is required by IDA Resolution 93-6 (the "Resolution").

The Panel received the Management Response (the "Response") on November 22, 1994: it addressed the substance of the Request rather than impeding and delaying an independent review of the issues by questioning formalities. The attached report likewise deals with the substance of the Request.

The Panel's initial findings are based on the information contained in the text together with a limited review of supporting or referenced documents in the Request and the Response; and in addition, supplementary clarifications from the Requesters, Management, the proposed borrower and the executing entity. On the basis of this preliminary review and in accordance with the Panel's Operating Procedures of August, 1994 (the "Procedures"), the Panel is satisfied that conditions required by paras 12-14 of the Resolution have, in substance, been met.

In accordance with the Resolution the Panel consulted the proposed borrower and the Executive Director representing the Kingdom of Nepal on the subject matter of the Request.

The Panel wishes to thank all those who assisted them both in Kathmandu and in Washington, D.C.

A. BACKGROUND

PROPOSED PROJECT

1. Management of IDA is planning to seek approval for an SDR 99.5 million development credit to the Kingdom of Nepal ("HMG/N" - the borrower) and the restructuring of an existing credit for SDR 24.4 million (Arun III Access Road Project - Cr. 2029-NEP) to help finance the proposed Arun III Hydroelectric Project.¹ The revised project components include a 122 kilometer access road through the Arun Valley, construction of a 201 MW run-of-river (including a 68 meter dam) hydroelectric power scheme (the first phase of the Arun III 402 MW scheme) in the Sankhuwa-Sava District and 122 kilometers of transmission lines from there to Duhabi. The Arun basin is about 170 kilometers east of Kathmandu.
2. The proposed credit would be on standard IDA terms with a 40 year maturity. HMG/N would onlend to the implementing agency, the Nepal Electricity Authority ("NEA"), the Nepalese rupee equivalent of US\$136.1 million plus US\$34.3 million (available under the existing Arun III Access Road Project) at a rate of 10.25 percent for a period of 30 years including a 9 year grace period. HMG/N would bear the foreign exchange risk. The remaining US\$4.6 million would be utilized by the Ministry of Water Resources to finance a Regional Action Plan ("RAP").
3. Total project costs are estimated at about US\$800 million. The project would be cofinanced by the Asian Development Bank, Kreditanstalt für Wiederaufbau, the Government of France, the Swedish Agency for International Technical and Economic Cooperation, the Finnish International Development Agency and other donors.

THE REQUEST

4. **Summary:** The Panel received a Request, dated October 24, 1994, from citizens of Nepal (the "Requesters") who claim that their rights and interests have been or are likely to be materially and adversely affected by the acts or omissions of IDA during the design and appraisal of Arun III. Two of the Requesters claim that they have been directly and adversely affected by the design and implementation of the resettlement program related to Arun III. The Requesters claim to be, or likely to be affected by alleged violations of provisions of, inter-alia, the following policies and procedures:

- Operational Policy/Bank Procedure 10.04: *Economic Evaluation of Investment Operations*
- *The World Bank Policy on Disclosure of Information*, September 1994; Bank Procedures 17.50 and 10.00, Annex A
- Operational Directive 4.01: *Environmental Assessment*
- Operational Directive 4.30: *Involuntary Resettlement*
- Operational Directive 4.20: *Indigenous Peoples*

5. The two Requesters from the now abandoned Hill Route asked for anonymity and, in accordance with Nepalese law, appointed Messrs. Siwakoti and Ghimire of Kathmandu, Nepal (the other two Requesters), to represent them. (For further details see Annex C)

REGISTRATION

6. **Eligibility Issues:** Para 17 of the Procedures requires the Chairman to register the Request "[I]f the Request appears to contain sufficient required information...". While recognizing that there were deficiencies in the formalities, in accordance with this para, the Chairman, on November 3, 1994, registered the Request in the Panel Register; notified the Requester, the Executive Directors and the President of IDA of the registration; and transmitted to the President a copy of the original Request together with faxed copies of the attachments and evidence of representation. Upon receipt, on November 8, of the originals of the accompanying documentation, copies were forwarded to the President of IDA.

7. The Panel judged that the serious nature of the substance of the Request as a whole and its timing in relation to the project process outweighed outright rejection of the Request on the grounds of doubts on the standing of the Requesters and incomplete compliance with formal procedures. Management apparently came to the same conclusion since, as noted before, it addressed the substance of the Request without questioning its eligibility under the applicable terms of the Resolution.

OPERATIONAL POLICIES AND PROCEDURES

8. Given that a period of about seven years has elapsed since the inception of Arun III, the evolving nature of IDA policies and procedures and the timing of their application in relation to various stages of this proposed project is a source of disagreement between the Request and Response. These questions are addressed in Annex C and referred to, as necessary in the text of this Report.

B. THE REQUEST and THE RESPONSE

9. The Request lists a number of statements of policies and procedures which the Requesters believe IDA has failed to follow in the course of the design, appraisal and initial implementation of Arun III. The Response provides information indicating that Management believes it has not failed to follow the relevant policies and procedures. The Request and the Response are reviewed briefly below and are followed by the Panel's initial comments.

I. Economic Analysis of Investment Operations

ALTERNATIVES

10. **THE REQUEST** states that IDA "has violated its operational policies regarding the Economic Evaluation of Investment Operations, as a basic criterion for acceptability. For the project to be acceptable on economic grounds, 'the expected present value of the project's net benefits must be higher than or equal to the expected net present value of mutually exclusive project alternatives.' By not undertaking the relevant studies of the alternatives..., the World Bank has not fulfilled this very basic criteria for acceptability of the project".

11. The Request also complains that IDA violated this Directive throughout the project cycle by not considering alternative sequencing until 1993/94 and that the study is incomplete as the comparison was made with only very preliminary costs for the alternative schemes; that the earlier Least Cost Generation Expansion Plans ("LCGEP") of 1987 and 1990 failed to take into account that the same amount of power generated from Arun III could also be generated from a series of smaller alternatives in the 1MW to 100 MW range; and that by not completing feasibility studies of the 30 or more smaller alternatives identified by HMG/N, IDA has not fulfilled the policy requirement to compute the LCGEP for additional power generation for Nepal. The Request also states that "there is every reason to believe that once the detailed studies are completed, the smaller alternatives can be built at prices lower than or competitive with Arun III".²

12. **THE RESPONSE**, while answering the Request in line with OP/BP 10.04 suggests, in its Annex A, that this policy was not in effect at the time of identification and appraisal: that only those instructions in this OP/BP which are identical to those in force at the time are applicable. It indicates that the basis for the LCGEP was the initial consideration of "some 3000" alternative generation and expansion plans of which 11 individual hydro investment project candidates of varying sizes were examined to the pre-feasibility level or "beyond." However, "in response to questions, additional alternative strategies were investigated in order to check the robustness of the standard least-cost analysis. This involved the consideration of project candidates that preliminary analysis had previously screened out." The Response concludes that the cost of an alternative was higher than the cost of HMG/N's proposed program.³

13. The Response also states that there are no hard and fast rules on how many alternative proposals should be investigated to the "pre-feasibility" stage, it is a question of professional judgment. The number of hydro candidates explored to the pre-feasibility level is considered to represent "a very respectable effort for a country such as Nepal"--given that the determining factors are the extra cost and associated delays. Noting that the project contains funding for further pre-feasibility and feasibility work for smaller hydro projects⁴ - which, if attractive, will

be accommodated periodically into the LCGEP - it is pointed out that there is no evidence that such further study would displace Arun III from the LCGEP.⁵

RISK ANALYSIS

14. **THE REQUEST** complains that the risk analysis is faulty, in particular that:

- one large natural catastrophe would virtually ruin the Nepalese economy;
- no account has been taken of the risk of undertaking such a large project in relation to the size of the Nepalese economy;
- while over 80% of the catchment area of the Arun River lies under the control of China and a proposed Changsun Basin Irrigation Project is pending, no account of upstream developments (riparian rights) has been included; and
- there is no bilateral agreement with India even though Phase II of Arun III and future development in the valley depend on surplus power sales to India.⁶

15. **THE RESPONSE** explains that:

- under OP 10.04 treatment of risks associated with large projects is not mentioned and there is no explicit policy with respect to the valuation of risks - as distinguished from the analysis and/or management of risks - associated with large projects. But "recognition of Arun's magnitude and importance to the Nepalese economy was what led the Bank to undertake such comprehensive analysis of the project."⁷
- the analysis does not consider the risks to project viability of the possible construction of the Changsuo Basin Irrigation Project because the appraisal team judged these risks to be minimal; recently the Chinese authorities have reconfirmed their non-objection to the project and that the small size of the project is likely to have no effect on downstream water users;⁸ and
- with respect to sales to India: in the past bilateral agreements have not been necessary and suggests that even if no surplus sales occur, there would be only a 1% drop in the project's economic rate of return which remains above the project's opportunity cost of capital.⁹

POVERTY REDUCTION

16. **THE REQUEST** suggests there will be immediate and threatened long-term irreversible adverse impacts on the already absolute poor inhabitants of the Arun Valley, as a result, in particular, of NEA's lack of capacity to implement environmental and social safeguards.

17. At the national level, the Request suggests that the large size of the project in relation to Nepal's annual national budget will not directly benefit the poor as its high cost will crowd out investments in social services and targeted poverty interventions.¹⁰

18. **THE RESPONSE** acknowledges that 450,000 inhabitants of the Arun Valley lead a "harsh subsistence life;" it states that the primary objective of the project is to meet Nepal's growing power requirements in the medium term at least cost so that this constraint on growth and poverty reduction can be overcome. Referring to the Environmental Action Plan the Response suggests that it aims to limit negative direct impacts and to maximize the Valley's prospects for sustainable growth and poverty reduction.¹¹

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ALTERNATIVES

19. *With respect to examination of alternatives, the Panel notes that previous policies and procedures would appear to be applicable. A preliminary review (see Annex C) of those policies and procedures suggests that the fundamental requirements are substantially the same as those in OP/BP 10.04. In particular it is noted that OMS 2.21, para 8, states that:*

“Consideration of alternatives is the single most important feature of proper project analysis throughout the project cycle, from the development plan for the particular sector through identification to appraisal.”

It is also noted that the Response deals with the issues of alternatives and analysis of project risks in the context of the requirements of OP 10.04.

20. *It is clear that Nepal's hydropower potential is considerable (estimated at 25,000 MW). However less than 1% of the resource has been developed and there is no complete inventory that could be used reliably for long term planning.*

21. *Out of about 107 potential hydroelectric sites that have been identified, technical and economic screening criteria yielded only 18 projects for which pre-feasibility or further engineering studies have been carried out. The latest LCGEP considered only 11 projects. It is a matter of judgment whether this is an adequate number of options that should have been considered in the 30-80 MW range.*

22. *The Panel notes that the MOP recognizes that:*

“The only realistic alternative to the hydropower investment program proposed by the Government is a series of hydro investments in the range of 10 MW to 100 MW. While these are certainly small projects by international standards, most are similar in magnitude to the two previous major hydro investments made in Nepal; namely, Kulekhani (60 and 32 MW) and Marsyangdi (69 MW). Past pre-investment studies in Nepal's major river systems have identified a large number of such potential investments. Pre-feasibility and feasibility work has been done on some 18 of the 93 sites identified. About half of the 18 are under 100 MW; these have already been taken into account in the least cost generation analysis. Hence, the effort to develop an alternative hydropower investment program has had to draw from among those projects, mostly in the 30 to 80 MW range, which had previously been screened out (on the basis of rather crude technical and economic criteria) as less attractive than those for which pre-feasibility work has been commissioned.

The alternative investment program thus identified has been labelled Plan B (SAR Annex 5.4, [paras 41, 42]) The costs of Plan B are estimated to be about 5% higher than the Government's proposed investment program under assumptions about the future considered most likely, and 5% less in the scenario where demand growth follows the low load forecast.¹²

23. *There is reason to believe that if a less restrictive assessment, including a wider range of hydro resources, could be undertaken it would result in expanding the number of economically and environmentally acceptable options.*

RISK ANALYSIS

24. IDA policies provide for evaluation of investment projects to ensure that they promote the borrower's development goals and that the economic analysis be conducted to determine whether the project creates more net benefits to the economy than other mutually exclusive options for the use of the resources in question; and state that assessing sustainability includes evaluating the project's financial impact on the implementing/sponsoring institution and estimating the direct effect on public finances of the project's capital outlays and recurrent costs. This process also includes an analysis of the sources, magnitude and effects of the risks associated with the proposed project.¹³

25. The Panel notes that, with the information available, the comparison of the risks associated with the project and its alternatives is very difficult due to the large number of factors involved including:

- natural catastrophic events such as Glacial Lake Outburst Floods (GLOF) and high monsoon rains leading to high river floods which constitute a permanent risks in the project area. These risks were considered a major factor in the original decision to choose a Hill Route for the access road;
- the steep tariff rate increases that NEA must implement, likely cost overruns, lower economic growth;
- major risks associated with the economic performance of the project are associated with the rate of growth of demand, which in turn is related to the unforeseeable response to price increases and export sales. The lack of a long term power sales agreement with India poses a potential long term risk to the project.. This risk has been highlighted by IDA, particularly in the case of Nepal, in the 1986 Project Performance Audit Report for the Kulekhani Hydroelectric Project (Cr. 600-NEP and 600-1-NEP) which concludes that:

“Agreements on export would be required prior to the start of any large scale development, and because most countries are reluctant to be dependent on others for electrical energy, negotiations on such matters may last over extended periods of time”.¹⁴

The MOP contains a rather detailed discussion of risks and concludes that:

“Comparison of the overall risks of the alternative strategies shows that both have problems requiring careful management. There is simply no low risk way to meet Nepal's power requirements over the next decade or so.”¹⁵

26. All power development options require careful risk management unprecedented in Nepal and therefore institutional capacity building is critical to the success of any strategy. Major risks associated with institutional capacity in the NEA and HMG/N emerge as significant in a variety of ways: to oversee construction, long-term O&M, reorganization of the power sector management, and ability to sustain appropriate tariff increases. Each could endanger the viability of Arun III at any time. While funding agencies can supplement institutional capacity in the short-term, the strengthening of institutions will still have to develop rapidly and extensively;

27. The Request cites, as a potential risk, the fact that 80 percent of the river lies in China. The Response refers to the small size of the proposed Changsuo Basin Irrigation Project. At the

request of the Panel, Management has provided satisfactory evidence showing that the Government of China does not oppose Arun III.

28. *Risk assessment must include all factors that might have a bearing on the project, and compare them with those of the alternatives. IDA has attempted to deal with those issues, but, the environmental and social impacts of the alternative have not been systematically analyzed; therefore a realistic comparison of risks associated with the proposed project and its alternatives could not have been carried out.*

POVERTY ALLEVIATION

29. OP 10.04 states that the economic analysis examines the project's consistency with IDA's poverty reduction strategy.

30. *The Panel recognizes two levels of potential impacts on poverty.*

The first relates to the localized effect of Arun III on the Arun basin's poor, particularly the people whose land, like that of the Requesters on the abandoned Hill Route, was expropriated; and those on the proposed Valley Route whose land might be expropriated.

The second relates to the likely macro economic impacts on the country as a whole due to the large size of the investment to be undertaken in relation to the size of the economy. These impacts on a national level might result in:

(a) an initial increase in poverty because the opportunity cost of capital to address poverty directly and the resources needed for other targeted interventions may be consumed by Arun III;

(b) a reduced consumption due to the effect of rising electricity tariffs on consumers as they devote a larger share of their disposable income to electricity; and

(c) a constraint on public expenditure and investment - as noted in a recent Bank document:

"The power sector as a whole is expected to absorb 15 percent of local resources and 40 percent of foreign resources, and AHP [Arun III] alone will absorb close to 20 percent of total development resources during the peak implementation phase in FY97-FY99."¹⁶

31. *The high priority of poverty alleviation in Nepal has been reiterated by the Bank. However, steps already taken by IDA and HMG/N suggest it will be more difficult to implement the policies on poverty. Future steps, such as further cancellation of "low priority projects" in social sectors and the large fiscal demands of Arun III may contribute to the risk that policies on poverty cannot be implemented.*

II. Environmental Assessment

ALTERNATIVES

32. **THE REQUEST** states that the environmental and social issues and available alternatives to Arun III were not integrated into decisions on whether to proceed with the project. Citing the 1991 Basinwide Environmental Impacts Study ("RAP"), it states that: "the road alignment [hill route] and dam site were already decided and the study team did not have the mandate to change these decisions;" and the 1992 study¹⁷ of the valley route was conducted to

determine whether it “might provide time and cost savings in providing access to the Arun III hydropower site. Serving the needs of the population...is a secondary consideration ... and that the need for and the siting of the power project and therefore the justification for the road, is taken as a given.” It is noted that, in response to pressure to investigate alternatives adequately, and after the EIA process was completed, the Bank commissioned a study known as Plan B which was conducted from the standpoint of whether Arun III is the “least cost” option for Nepal - without consideration of the environmental and social costs of either Arun III or its alternatives.

33. The Request also points out that:

“[t]he so called EIA of the Valley route of the access road fails to take into consideration and compare from environmental standpoint any alternative approach to build this road. For example, applying environmentally friendly approach in building the roads in the Himalayan foothills by employing simple and conservation-oriented techniques and labor intensive methods have been proved successful. The pace of the proposed construction of the road and the approach adopted, thus, is a serious environmental concern that the EIA ignores.”¹⁸

34. **THE RESPONSE** questions the applicability of the policy on Environmental Assessment for timing reasons but then states that Management nevertheless proceeded as if it were applicable. As evidence of compliance, the Response cites the consideration of three dam sites in the Arun valley and two different access roads. The Response notes that the 1993 Environmental Assessment Executive Summary¹⁹ (“EA Summary”) clearly states that identification of Arun III was based on least cost studies undertaken up to 1990 and that “these studies addressed environmental/social issues at the reconnaissance level for all feasible sites.”²⁰

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35. *Notes that while the current policy was not in effect when the Credit 2029 for the Hill Access Road Project was approved, it was in effect at the time when it was decided to change the access road to the Valley Route.*²¹

The 1993 *EA Summary* states that:

“The Arun III...was identified as the best major hydropower scheme for early addition to the Nepal Interconnected System under the LCGEP completed by the NEA in 1987

[This] choice was confirmed by an LCGEP Update Study completed in 1990....This study included estimates of resettlement costs in its comparative analysis of the various projects, but not the costs of other environmental impacts or economic benefits.”²²

36. *The Panel notes that the major environmental and social impacts of the Arun project are due to the construction of the access road, and not due to the hydroelectric generating facility itself. Given the timing of the change of the choice of road alignment the social impact has been magnified and the environmental impact assessment studies dealt primarily with the original route (Hill Route).*

37. *The Panel finds it necessary to look at this decision in more detail, particularly in view of the fact that almost all of the land of the families on the Hill Route had already been acquired.*

ACCESS ROAD ALIGNMENT

38. In 1987, a detailed feasibility study was carried out by the Department of Roads for the so-called "Hill Route". Detailed designs and tender documents were completed in 1988, in anticipation of an early start of construction, and further refined in the following years. The final alignment chosen, designs and construction methods were referred to in the SAR as environmentally the "state of the art" for a major road project in Nepal.

39. The SAR for the Arun III Access Road Project of May 12, 1989 refers to the selection of alignment for the access road in para 3.08:

"The route selected as being most economical in terms of construction and maintenance, consistent with sound environmental planning, is in mountainous terrain and follows the ridges wherever possible, descending only for crossings of the Piluwa Khola near Chainpur, the Sabhaya Khola at Tumlingtar and at the sites of the powerhouse, adit and dam. The streams and rivers of this area are unpredictable and can be very violent and destructive. They cause excessive steepening of the valley sides and consequent instability of the slopes. The route has therefore been chosen to avoid rivers as far as possible, and to follow the contours closely in order to minimize the quantities of cut and fill, and to reduce negative environmental impact. The contract documents for road construction also incorporate environmental conservation measures."²³

40. The Panel notes that within three years of this decision, the project design for the road took the opposite approach, selecting a route where more than 50 percent runs close to the previously described unstable, steep, unpredictable and hazardous slopes of the Arun River.

41. In 1992, according to the EA Summary, following a decision to revise Arun III's design and reduce initial expenditure and given the sole criterion of providing access to the power sites as quickly as possible, the feasibility of a "Valley" route was investigated again. Engineering and construction planning studies had shown that although the construction costs would be similar to those of the Hill Route, there would be a time saving of one year and a total length construction of only 122 KM.²⁴ The EA Summary points out however, that:

"The speed of construction of a project can have a considerable effect on its environmental impact.

- Slower construction of the access road would allow a less capital-intensive approach with a higher local labor demand (and therefore local benefits), and modified construction techniques with lower physical impact.
- Slower construction of the hydropower components of Arun III would reduce the size of the labour force required, reduce the volumes of spoil to be excavated and disposed of annually, and permit more gradual institutional development."²⁵

Comparative data on the two routes is given in Tables 6.1 and 6.2. are in Annex B.

42. *The proposed change in routes was presented to the Panel of Experts (POE) and approved in principle by them.²⁶ However, the POE pointed to the apparent disadvantages of the Valley Route:*

- “- increase of forested land in the RoW and possibly less disturbed and higher quality forest and protected wildlife habitat in the ROW: approximately 209 ha vs. 145 ha*
- closer proximity to the Makalu-Barun Conservation Area*
- losses and uncertainties resulting from the circumstance that land compensation for the hill route is already 94 percent completed*
- additional impacts associated with future construction of spur roads or other connections to hill villages that would have been connected by the hill route.”²⁷*

The POE also concluded, inter alia, that:

“The recommendation from the environmental perspective therefore is to proceed with the design and tendering of the project using the valley route, to drop the hill route from further consideration at this time, to establish a clear and equitable policy concerning the families within the hill route who have already received compensation, and to update and amend project environmental documents, in parallel with the detailed engineering and along the following lines, to reflect the change in route.

1. *It would be useful if the September 1992 Joint Venture EIA of the valley route would make a more detailed comparison of the impacts of the hill route and the valley route, including implications for associated changes in transmission line impacts, if any, and options and implications for families within the RoW of the hill route who have already received compensation.*

2. *Regardless of which route is adopted, the recommendations and cost estimates (about US\$14 million) of the King Mahendra Trust report on “Environmental Management and Sustainable Development in the Arun Basin” should be released to the public, reviewed, screened and prioritized to facilitate the development of an action plan for implementation. Without such a plan there will be no mechanism in place for controlling off-site impacts (especially encroachment on forests and wildlife) in the vicinity of the access road and power station, south and east of the Makalu-Barun Conservation Area.”²⁸*

43. *The decision to pursue the Valley Route led NEA to commission a study to “revise and update the existing environmental impact assessment study of the access road in accordance with World Bank guidelines” (Terms of Reference for JV Consultants). This update was supposed to*

be carried out in a period of four months although the road alignment had not been completed. The following clause was included in the Terms of Reference:

*"In order to complete the update of the EIA within the four months of Period A, it is mandatory to have a preliminary alignment or alignment options available at the latest six weeks after the commencement of the services with respect to the access road, and in the first week of August [1992] regarding the transmission line."*²⁹

Also included in the terms of reference is the following disclaimer:

*"The time available will not allow it to perform a detailed socio-economic and ecological survey along the entire alignment. Rather, surveys will be of a qualitative nature and will concentrate on selected areas from which conclusions will have to be drawn to the total length of alignment."*³⁰

44. The Environmental Impact Assessment for Arun Access Road-Valley Route published in September, 1992, concludes that the impact on biological resources is significant since the Valley Route transverses forested areas for the major part of its length (71 Km out of 124 Km), and that most of the areas show high species diversity and presence of rare, endemic and endangered species of trees and other plants. In addition, the loss of habitat will result in significant impact on vertebrae. The EIA for the access road concludes that:

*"The road runs close to the Arun River for 67 km and therefore construction of the road will have direct impact on mammalian and reptilian wildlife due to direct habitat, severance of territory, disturbance and increased access to hunting. Quantitative data on population sizes are not available."*³¹

45. The Panel finds the process of choosing the access road has created uncertainties of a serious nature with regard to IDA's ability to follow OD 4.01 on environmental assessment. The Response cites three major components to the Environmental Action Plan: an Environmental Mitigation Plan, A Land Acquisition Resettlement and Compensation Plan and a Regional Action Plan ("RAP"). During consultations with the proposed borrower and executing entity, the Panel learned that the updated RAP will not be completed until January 1995. On the basis of the evidence reviewed, the Panel concludes that the environmental assessment and processing of the proposed loan do not appear to be consistent with the provisions of OD 4.01 and its annexes. The potential of direct, serious long-term damage is significant.

CUMULATIVE EFFECTS AND INADEQUACIES

46. THE REQUEST states that cumulative impacts of all three Arun Valley hydropower schemes (i.e. Arun III, Upper Arun and Lower Arun) have not been evaluated and that there should be a comprehensive study of the long term effects including those of additional road construction; that other inadequacies of the EIA include no thorough assessment of the impact of the transmission lines, mitigation plans for natural disasters, effects on fish and disposal of construction spoils.³²

47. **THE RESPONSE** refers to the 1991 basin-wide environmental sustainability study as meeting the Bank's requirements.³³ "The effects of Upper Arun which are likely to be environmentally more sensitive than Arun III were studied separately in a 1991 feasibility study." It notes that Lower Arun "is generally recognized to have less significant impacts"; it is acknowledged that further work will be undertaken in the first year of the project to verify that effects on fisheries are minimal and identify mitigation measures as necessary.³⁴

48. Mention is also made of the approval of environmental mitigation measures by the project's POE³⁵, referring to paras 3.23. and 3.44(b) of the SAR.

THE PANEL

49. *Observes that, according to the SAR, the POE included a single "expert in environmental management and resettlement"³⁶ and that in June 1994 a decision was made to "reconstitute the POE by the end-December 1994 for review of assistance and guidance on the critical technical and safety aspects and dam safety monitoring during construction and supervision." It is also noted that the reconstituted Panel will be "expanded to include environmental expertise to advise effectively on detailed RAP and resettlement issues."³⁷ In addition the MOP states that a POE, "both international and Nepali, will advise, on, inter alia, the RAP and resettlement implementation, and propose modifications where appropriate." It is pointed out that the reconstituted Panel will "include a core of specialists in area development, resettlement, biodiversity and agriculture management;" and that other experts will be consulted as needed.³⁸*

50. *Applicable IDA policies provide for Regional Environmental Assessments and special provisions relating to Dam and Reservoir projects.³⁹ In particular Environmental Advisory Panels are recommended:*

"For major, highly risky, or contentious projects with serious and multi-dimensional environmental concerns, the borrower should normally engage an advisory panel of independent, internationally recognized, environmental specialists to advise on (a) the terms of reference (TORs) for the EA, (b) key issues and methods for preparing the EA, (c) recommendations and findings of the EA, (d) implementation of the EAs recommendations, and (e) development of environmental management capacity in the implementing agency."⁴⁰

51. *Given that OD 4.01 was applicable when the Valley Route was chosen and the Arun III Hydroelectric Project appraised, the environmental assessment should have included a comprehensive approach to the Arun basin, including a long term perspective that also considered the Upper and Lower Arun Projects, access roads (including the Valley Route and additional spurs), as well as transmission lines. Environmental assessments should be integrated into project design from its inception and, must go beyond descriptive studies, focusing on the interaction of all project components and decisions that affect the natural and social environment, including mitigation plans and the institutional capacity to develop, implement and monitor them. It is not clear that the composition of the POE properly reflected the requirements set out by IDA policies.*

52. *Given the nature and complexity of the environmental and social risks of the project, IDA policy would appear to require the existence of a POE solely devoted to environmental and social issues. Instead, IDA and the borrower agreed in 1994 to consolidate planning for such an environmental panel into the existing POE.*

III. DISCLOSURE OF INFORMATION

53. *The World Bank Policy on Disclosure of Information*, September 1993, states in part that the Bank "recognizes and endorses the fundamental importance of accountability and transparency Dissemination of information to local groups affected by the projects supported by the Bank, including non-governmental organizations, particularly as it will facilitate the participation of those groups in Bank-financed projects, is essential for the effective implementation and sustainability of the projects.... It follows that there is a presumption in favor of disclosure."⁴¹

PROJECT INFORMATION DOCUMENT ("PID")

54. **THE REQUEST** complains that the PID was not prepared before January 24, 1994 and has subsequently not been updated to include all the information required by BP 10.00 Annex A.

55. **THE RESPONSE** states that the "content and dissemination of the Arun PID were substantially in line with Bank policy and procedures."

THE PANEL

56. *IDA's Procedures for operations in which major changes are made after appraisal, require preparation of a final revision of the PID following appraisal.*⁴²

57. *The Panel notes that the PID is an effective means of providing timely and concise information on proposed projects. It is highly desirable, for projects that command this degree of interest at the national and international level, that this document be updated in accordance with emerging Bank policies. The September 1993 BP 17.50 Annex D required a completed PID for all projects beyond the IEPS stage but not yet presented to the Board by January 1, 1994. The document was not available at the Public Information Center ("PIC") until March; and not subsequently updated or expanded after the issuance in June 1994 which of BP10.00 Annex A.*

ENVIRONMENTAL ASSESSMENT ("EA")

58. **THE REQUEST** asserts that this provision was not followed by IDA and notes that the environmental impact assessment was one of the documents for which release was requested in the law suit filed with the Supreme Court on December 31, 1993.⁴³

59. **THE RESPONSE** claims that the "dissemination of the results of the Environmental Assessment was substantially in line with Bank policies and procedures."⁴⁴

THE PANEL

60. *Notes that the 1993 procedures on information disclosure require that "before the Bank proceeds to appraisal, the EA [Environmental Assessment] must be made available in the borrowing country at some public place accessible to affected groups and local NGOs."*

61. *The Panel notes that the EA for the Hill Route (the RAP in this case) was completed in 1991; that the EA Summary was published in Kathmandu in May 1993, and the "Due Process Manual" prepared in Nepali by NEA in November 1993 is restricted to information on land acquisition and compensation procedures. While the Response provides detailed information on*

the timing and applicability of specific IDA policies on disclosure of information, it does not refer to the relevant policies relating to Environment Assessment.

62. *Considerable efforts have been made to gather and release environmental data about the project and the IDA appears to have made substantial efforts to make it available in Washington. However, much of the relevant information was not available in Nepal.*

FACTUAL TECHNICAL INFORMATION

63. **THE REQUEST** claims that factual technical information was requested during project preparation to enable the Requesters to have an input into the design and promote alternatives but such information was received too late (after appraisal) to allow input. In particular it is noted that the study of alternatives was not released until after appraisal and the completion of loan negotiations.⁴⁵

64. **THE RESPONSE** mentions initial delays in implementing the new disclosure policy in this respect but notes that sections of the SAR have been available at the PIC since September 1994.

THE PANEL

65. *IDA policy allows for the release, by the Country Director concerned, of additional factual technical information for projects under preparation through the PIC.⁴⁶*

66. *The Panel notes Management's prompt disclosure of relevant parts of the SAR but the Request suggests this is not available in Nepal. In light of the high degree of interest in the project in Nepal it appears unfortunate that delays in implementing the new policy occurred and that no mention is made in the Response of supplying such factual technical information to NEA's Arun Information Center.*

67. *The Panel is concerned about the serious problem of enforcing release of information in borrowing countries; and notes a gap in the availability of information in Washington, on the one hand, and in the country where the project is located on the other - in particular in the actual project area.*

68. *With regard to overall disclosure of information, the Panel recognizes the progress made by the Management in last two years in relation to projects such as Arun III. In the borrowing countries progress varies, as evidenced by the need to take cases to the Nepalese Supreme Court twice this year to obtain release of project information.*

69. *Disclosure is not an end in itself, according to Bank policy, but rather a means of enhancing the ability of affected people to participate in the design and consideration of project alternatives.*

70. *Meeting the requirements of Bank policy on release of information in Nepal appears to have been difficult. The Panel urges continued attention to this evolving issue.*

IV. Involuntary Resettlement

71. **THE REQUEST** claims that (a) specific violations of IDA's policies or involuntary resettlement have occurred (Hill Route) and that (b) violations of the policies are likely to occur (Valley Route).

HILL ROUTE

72. With reference to the cash compensation raised by two of the Requesters it is claimed that the central objective of improving or at least restoring affected people to former living standards has already been violated.⁴⁷ It points out that the effect of ACRP has been to inflate prices far beyond compensated value.; and that in violation of para 14 of the policy, land has been undervalued.⁴⁸ The Request also criticizes the fact that land for land compensation was not appropriately offered

VALLEY ROUTE

73. The Request notes that the proposed project benefits will be electricity but affected people will not benefit⁴⁹ that employment benefits will be temporary but the adverse effects of displacement are permanent - SPAFs are to be given only first priority for employment on road construction.⁵⁰ The Request also notes that the EIA shows that cash compensation was already failing in case of the Hill Route and that the Valley Route people will have even less ability to deal with cash because they are poorer: this raises whole question of land for land compensation and actual implementation. According to the Request the law is basically limited to cash compensation and PAFs are not being informed of a land option.⁵¹ The Requesters are not aware that any socio-economic survey has been done to determine value of land.⁵² In addition the Request notes a violation of the policy as no resettlement plan has been established before appraisal for those to be displaced by the transmission lines.

74. **THE RESPONSE** explains IDA's compliance with the Operational Directive ("OD") on Involuntary Resettlement in relation to the Valley Route, noting that implementation arrangements have been agreed at negotiations; SPAFs are to be offered and are to chose replacement land to be purchased by NEA; PAFs will receive cash compensation; a cadastral survey of all areas expected to be affected by the project was completed prior to land acquisition.⁵³

75. Furthermore, the Response suggests that the OD contains no requirements as to how project benefits should be shared;⁵⁴ nor does it require that permanent employment be provided to displaced persons but in this case the ACRP provides that at least one person from every SPAF is to be offered temporary employment by NEA;⁵⁵ full socioeconomic surveys covering all PAFs were carried out for the Hill route in 1990 and the Valley Route in 1993⁵⁶; resettlement planning was timely and that only 8 families will be affected by transmission lines.⁵⁷ The Response refers to preparation of a *Due Process Manual* in Nepali which describes the ACRP policies and procedures and designed to inform affected people of their rights.⁵⁸

THE PANEL

76. *The Staff Appraisal Report for the original Access Road (Credit 2029-NEP) describes the resettlement plan:*

"Resettlement. To provide necessary compensation and rehabilitation measures for the population whose land, buildings and means of livelihood would be either temporarily or permanently affected by the road/dam construction, the project includes implementation of an ACRP. The ACRP contains an overall plan for the resettlement to be carried out under the project as well as details on the nature and magnitude of the operation, compensation packages offered to the affected families,

development plans for relocation sites, transfer/transport arrangements, implementation timetable and costs. The legislative basis for implementing the ACRP is contained in the Land Acquisition Guidelines 2045 approved by HMG on January 5, 1989.”⁵⁹

77. *When the Hill road was designed IDA approved a resettlement plan regarded as a model at that time. The resettlement plan for the proposed Valley route is based on it.*

Hill Route

78. *A very large number of families (estimated at about 1600) were deprived of their land for purposes of this project. After the change in access route alignment it appears that this land is not needed for project purposes. Nevertheless, the “Hill Route RoW will be retained in government ownership for future road construction purposes.”*⁶⁰

79. *The POE Report No. 7 pointed out that among the apparent disadvantages of the Valley Route were “losses and uncertainties resulting from the circumstance that land compensation for the hill route is already 94 percent completed,” and concluded that “[i]f the valley route is selected, NEA’s ‘Environmental Assessment and Management Executive Summary’ should be updated and amended to reflect the selection of the valley route, [and] address the issue of impacts on families within the RoW of the hill route who have already received compensation,”*⁶¹

80. *A decision was made, in 1992, to change the Arun access road to the Valley Route. The Panel notes that apart from the reference to completion of a socio-economic survey, the Response does not address the issue of impacts on families within the RoW of the now abandoned Hill Route who have already received compensation. Those affected appear to have been forgotten which gives rise to a number of issues:*

- *land has been purchased from those who will not longer share in any benefits the construction of an access road might confer*
- *there is no systematic information on what adverse impacts the acquisition has caused except for the claims of the two Requesters*
- *there does not yet appear to be any mitigation plan for the Hill Route people*
- *under Nepalese law it appears that HMG/N is supposed to return land no longer needed for the project for which it was acquired.*

Valley Route

81. *Although no foreign exchange resources have been utilized under the Arun III Access Road Project of 1989, this project triggered actions by HMG/N that could have negative impacts on local populations since the land of a large number of families was expropriated for the RoW of the original route.*

82. *By the time the change of route was introduced in 1992, most of the land purchases had been completed for the original route. According to the Panel of Experts’ Report No.7, by September 1992, 94 percent of the land purchases of the RoW had been completed, supposedly according to specific Land Acquisition Guidelines approved by HMG/N. The total number of affected families by the Hill Route is estimated at 1661.*

83. *Therefore, the comparison between the number of families affected by the Hill and Valley Routes must clarify the fact that over 1600 families have already been affected in the Hill Route, while an additional 1146 families will also be affected by the RoW of the Valley route.*

84. *The Panel has received a specific request from two people who claim to be directly and adversely affected by acquisition of their land for the now abandoned Hill Route. This claim requires further study. Prima facie these material adverse effects appear to be a direct result of omissions by IDA during preparation and appraisal of the project and appear to be a serious violation of IDA's resettlement policies.*

85. *Because this gives rise to uncertain future implications regarding implementation of the resettlement process for the proposed Valley Route, steps need to be taken to ensure the apparent adverse effects of the Hill Route will not be repeated.*

V. INDIGENOUS PEOPLES

86. **THE REQUEST** claims that there are no benefits provided for the Indigenous peoples, who will suffer only adverse impacts and lists those impacts; there is no mitigation or indigenous peoples plan--it is unclear whether documents contain actual work plans or just recommendations--many recommendations in EIA are not taken into consideration; there are many issues to be resolved in bidding documents - which are secret; mitigation of negative effects on indigenous peoples does not constitute a development plan; land appropriation on the Hill Route started before completion of the cadastral survey; the policy on participation in the decision making process was violated as stated in 1991 EIA - "the road alignment and dam site were already decided and the study team did not have mandate to change these decisions".⁶²

87. **THE RESPONSE** explains that all aspects of the policy have been met, mostly by reference to documents. It notes that the cadastral survey is nearing completion in Sankhuwasabha and acknowledges that, despite all precautions "a close watch will be necessary throughout project implementation to ensure that the objectives of the OD are met. To this end, the project supervision plan involves careful monitoring and evaluation of the impact of project related activities on vulnerable groups in the valley".⁶³

88. *IDA's policy on Indigenous Peoples requires a specific "Indigenous Peoples Development Plan" that is comprehensive, that avoids or mitigates potentially adverse effects and ensures that the indigenous people receive culturally, socially and economically compatible benefits.*⁶⁴

THE PANEL notes that:

89. *There are a variety of different ethnic groups along the Arun basin. The original regional action plan (RAP) which focuses on the Hill Route reviews an extensive range of social and environmental issues including vulnerable groups, indigenous peoples and women. Some of these groups are unfamiliar with a cash economy which poses additional risks to their welfare requiring special attention.*

90. *IDA's policy is that an Indigenous Peoples development plan should be prepared. The NEA has informed the Panel that a revised RAP will be ready in January 1995: it may be that this will contain an appropriate Indigenous Peoples development plan and provisions for implementation. Provision for technical assistance to support the RAP Secretariat at base cost of US\$2 million aimed at facilitating implementation of the RAP was introduced and agreed during June 1994 negotiations.*⁶⁵

ENDNOTES

¹ The President of IDA has circulated to the Board, for information, a Memorandum and Recommendation on Arun III (Report No. P-6381-NEP, dated August 29, 1994, hereinafter referred to as "MOP"), and the Staff Appraisal Report No. 12643-NEP, dated August 29, 1994 (hereinafter referred to as "SAR").

² Request, 4.A.

³ Response, Chapter 3, paras 2-3: unless otherwise noted references to paras in the Response refer to Chapter 3.

⁴ The Hydro Fund (base cost US\$ 5 million) to provide funding to assist Nepal's private sector to undertake feasibility studies of micro/mini hydro schemes and to implement viable schemes was agreed to as an additional project component during negotiations in June 1994. (See *Agreed Minutes para 4.(b)*)

⁵ Response, para 4.

⁶ Request, para 4.A.

⁷ Response, para 8.

⁸ Ibid, para 6.

⁹ Ibid, para 7.

¹⁰ Request, para 5.A.

¹¹ Response, Chapter 1, paras 8, 10, 11.

¹² MOP, paras 47-48.

¹³ OP 10.04, paras 1, 5 and 6.

¹⁴ See para 24.

¹⁵ MOP, para 54.

¹⁶ See "*Nepal - Fiscal Restructuring and Public Resource Management in the Nineties*", Report No. 12281-NEP, dated March 17 1994 (para 8 at p. iv). The same document recognizes that:

- "the high costs and financing requirements of AHP [Arun III] pose risks to the orderly management of the Nepal's overall development program, including investments in human resources and rural infrastructure." (para 3.6)
- "The simulation shows local resource availability coming under severe pressure....The local financing gap would be equivalent to 3.1 percent of GDP or approximately US\$125 million a year, which would be too large to be filled by reasonable revenue effort and additional domestic borrowing, and steps would have to be taken to redress the imbalance. Inevitably, expenditures other than Arun would have to contract. It is difficult to map out the exact nature of the expenditure contraction in the absence of a meaningful prioritization, but based on past experience, non-wage O&M activities and capital intensive programs would be the most vulnerable, and this would affect the recurrent cost financing for various sectors, such as transport, irrigation, forestry, agriculture services and drinking water, thereby limiting the productivity of these activities and the growth process. Also with the limits on local resources, aided activities and on-going programs would have longer implementation delays." (para 3.7)
- "...a cut back in social programs would be unavoidable for accommodating the local financing gap." (para 3.8)

¹⁷ "Environmental Impact Assessment - Valley Route" - Main Report, September, 1992.

¹⁸ Request, 4.D.

¹⁹ "*Arun III Hydroelectric Project: Environmental Assessment and Management - Executive Summary*", National Electricity Authority, Kathmandu, May 1993.

²⁰ Response, para 15.

²¹ OD 4.01 Annex B, para (f) requires a "systematic comparison of the proposed investment design, sitein terms of their potential environmental impacts; capital and recurrent costs; suitability under local conditions; and institutional, training and monitoring requirements. For each of the alternatives, the environmental costs and benefits should be quantified to the extent possible, and economic values should be attached where feasible. The basis for the selection of the alternative proposed for the project design must be stated."

²² EA Summary, para 6.1.

²³ For details see SAR (para 3.26).

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- ²⁴ EA Summary 1993, para 6.32.
- ²⁵ Ibid, 6.2.3.
- ²⁶ At its seventh meeting of September 26-October 2, 1992. (See: Panel of Experts Report No. 7)
- ²⁷ Panel of Experts Report No. 7, p. 21.
- ²⁸ Ibid, pp. 22-24.
- ²⁹ "Environmental Impact Assessment for Arun Access Road - Valley Route" Volume 2, September 1992, Joint Venture Arun III: Annex A, p A-1.
- ³⁰ Ibid. Annex A, p. A-3
- ³¹ "The Environmental Impact Assessment for Arun Access Road-Valley Route", September, 1992, pp. 4-13.
- ³² Request, para 4.D.
- ³³ Response, para 17.
- ³⁴ Ibid, paras 18-20.
- ³⁵ Ibid, para 19.
- ³⁶ SAR, para 3.23.
- ³⁷ Ibid, para 3.44b.
- ³⁸ MOP, para 32.
- ³⁹ OD 4.01 para 5 calls for Regional EAs "where a number of similar but significant development activities with potentially cumulative impacts are planned ... [and] are particularly useful when they precede the first in a series of projects ... in an undeveloped region ..where cumulative impacts are anticipated ..." See also, OD 4.01 ANNEX B Environmental Policy for Dam and Reservoir Projects: all provisions (4/89);
- ⁴⁰ OD 4.01, para 13; para 15 of Annex B "**Environmental Capacity of National and Sectorial Institutions:** Major dam and reservoir projects should be used to help build environmental capacity (analytical, regulatory, and enforcement) in the institutions at the national and sectorial levels through training, consultancy, and policy dialogue, and to foster coverage of dams and reservoirs by environmental legislation." For more detail on the selection and functions of the panel, see para 18 of OD 4.00, Annex B.
- ⁴¹ Section II, pp. 2-3.
- ⁴² BP 17.50 (para 4).
- ⁴³ Request, para 4.C.
- ⁴⁴ Response, para 14.
- ⁴⁵ Request, para 4.C.
- ⁴⁶ BP 17.50 para 5 (and the September 1993 document on Disclosure of Information, para 12)
- ⁴⁷ Request, para 4.E.
- ⁴⁸ Ibid.
- ⁴⁹ Ibid.
- ⁵⁰ Ibid.
- ⁵¹ Ibid.
- ⁵² Ibid.
- ⁵³ Response, paras 22-25.
- ⁵⁴ Ibid, para 26.
- ⁵⁵ Ibid, para 27.
- ⁵⁶ Ibid, para 28.
- ⁵⁷ Ibid, para 29.
- ⁵⁸ Ibid, para 31.
- ⁵⁹ SAR para 3.11.
- ⁶⁰ EA Summary at 6.3.2
- ⁶¹ POE Report No 7, pp. 23-24.
- ⁶² Request, para 4.F.
- ⁶³ Responst, para 36.
- ⁶⁴ OD 4.20
- ⁶⁵ Agreed Minutes, para 4.

Bank Policies and Procedures Applicable to the Different Items of the Request for Inspection

The Response states that a number of policy documents referred to in the Request are not applicable to the proposed project (see its Annex A). According to the Response this approach means that *OP/BP 10.04*, "Economic Evaluation of Investment Operations," would not be applicable to this project because it was issued in September 1994. The applicable policy, according to Management, is to be found *OMS 2.21*, "Economic Analysis of Projects," issued in May 1980, and *CPN 2.01*, "Investment Criteria in Economic Analysis," issued in June 1977. If such is the case however, a number of other CPNs as expressly referred to in *OMS 2.21*, such as *CPN 8.01*, "Contingency Allowances in Project Cost Estimates," *CPN 2.04*, "Economic Analysis of Projects with Foreign Participation," *CPN 2.02*, "Risk and Sensitivity Analysis in Economic Analysis of Projects," etc., as well as several OPNs, such as *OPN 2.05*, "Foreign Exchange Effects and Project Justification," *OPN 2.06*, "Use of the Investment Premium and Distribution Weights in Project Analysis," etc., all of which have been superseded by *OP/BP 10.04*, could also be applicable to the economic evaluation and analysis of the proposed project.

The applicability of policy statements other than the existing ODs and OPs/BPs raises two fundamental issues: (a) what kind of information is available to the public in general, and to potentially affected parties in particular, about IDA policies and procedures which are not contained in the most recently issued and more widely publicly available policy statements; and (b) in the event that two or more policy statements on the same subject could be applicable during the design, appraisal, and implementation of a particular project, what are the substantial policy provisions to be followed by IDA in each of such stages:

(a) It is apparent that current IDA policy statements are not widely available in areas, such as the Arun Valley in Nepal, where people affected by IDA-financed projects live. It is already a heavy burden for such people to identify--even in substance--what policies and procedures IDA may have violated when causing--in fact or potentially--harm to their rights or interests. This problem would be compounded if they were required to be aware of old policy statements that do not seem readily available to IDA staff, let alone any international NGOs that could be assisting them in the preparation of their claims.

This problem may arise in an array of scenarios ranging from policy statements issued right before Board presentation of a given project--as in the present case concerning economic evaluation of projects--to statements issued many years ago (see discussion below). In any event, this problem is one of many faced by an

affected party when trying to lodge a valid request pursuant to the terms of the Resolution.

(b) When policy statements available to the public have been only recently issued, it would not be appropriate to make them immediately applicable to a given project and assess IDA's performance in accordance with the standards and procedures stated in them. To the extent that new policy statements become applicable in the midst of project processing and implementation, and to the extent that these are not followed by IDA in their entirety, the questions would then be: (i) do the new policy statements deviate from IDA's pre-existing policy in a substantial way? and (ii) are the provisions in the new policy statements different and mutually exclusive with the provisions of the old policy. In reviewing the different policy documents referred to by the Requester and Response, the following questions become relevant:

(i) *OP/BP 10.04, "Economic Evaluation of Investment Operations"*: fortunately, in this case the basic premise of project economic evaluation that "[f]or every investment project, Bank staff conduct economic analysis to determine whether the project creates more net benefits to the economy than other mutually exclusive options for the use of the resources in question"¹ has remained unchanged through the years and it is, therefore, fully applicable to the review of the facts alleged in the Request. Several policy statements reiterate and further define this requirement. For example, paragraph 8 of *OMS 2.21* provides that "consideration of alternatives is the single most important feature of proper project analysis throughout the project cycle, from the development plan for the particular sector through identification to appraisal," and *OD.4.01*, "Environmental Assessment," stresses the importance of a "systematic environmental comparison of alternatives in investments, sites, technologies and designs."² The Panel believes, therefore, that regardless of the specific policy statement applicable to the design of the project in question, the Panel believes that IDA policy calls for a systematic and comprehensive analysis and comparison of all existing mutually exclusive options to attain the objectives of the project to be financed by IDA.

¹ Paragraph 1 of OP 10.04, see also paragraph 8 of OMS 2.21

² OD 4.01, paragraph 4(c), See also Annex B, paragraph 2(f). The applicability of OD 4.01 is discussed later in this Response.

(ii) *OD 4.00, "Environmental Policies," Annexes A and B; OD 4.01, "Environmental Assessment"; OD 4.20, "Indigenous People"; and OD 4.30, "Involuntary Resettlement."* All of these documents were issued between April 28, 1989 and October 3, 1991, that is, between more than five years to almost three years before the date on which the MOP and the SAR were issued for Board distribution. These policy documents were also issued before the date on which a decision was made to change the major individual component of the project, in terms of environmental and resettlement and financial impact. The Panel sees no merit in the allegations that these policy documents are not fully applicable to Arun III, because of the mere fact that the IEPS was issued before the date on which the policy documents were issued. The applicability of new policies should be interpreted in a manner consistent with their objectives. For example, the Response states that *OD 4.01* on Environment Assessment would not be fully applicable to the new valley route alignment (which raises a number of environment related issues) because of the mere fact that the IEPS was issued in 1987. In the Panel's view, the new valley alignment represented a major departure from the project described in the IEPS and, as such, cannot be exempted from the standards or policies in force when the new project design and executing study for the Access Road were agreed upon and evaluated. In fact there was plenty of time to conform to the new policy requirements.

(iii) *New policy on disclosure and BP 17.50, "Disclosure of Operational Information."* The Panel agrees with IDA Management that this policy cannot be applied retroactively in the case of Arun III but it notes that the new information requirements must be adhered to as soon as possible, to be consistent with the overall aims of the policy on disclosure of information. For example, since the PID is the most accessible document on project information--both because of its comprehensive and yet condensed format and the fact that it is widely available, even on Internet--the Panel concludes that every effort should have been made to update the PID on the proposed project, in line with the new requirements set forth in Annex A of BP 10.00. The fact that the PID has not yet been updated accordingly may not constitute a serious violation of IDA policy but it may be construed as such by the public.

NEA's Environmental Assessment
and Management
Executive Summary
May 1993
(pages 53 and 54)

Table 6.1 ARUN ACCESS ROAD - COMPARATIVE CHART: DISTANCE, LAND USE, LAND TAKE and FAMILIES AFFECTED			
ITEM		Route Options	
		Valley ¹ (including power cavern access)	Hill
Distance (km)	New construction	121.9 ²	197.2
	Travel (Hile-Intake)	116.8 ³	171.4
Land Use (%)	Forest	27	28.5
	Shrub and Grazing	30	16
	Cultivation: Khet	27	41
	Cultivation: Bari	16	15
	Total cultivation	43	56
	Abandoned/Other	-	0.5
	Total	100	100
Land Take (ha)	Forest	106	145
	Shrub and Grazing	119	81
	Cultivation: Khet	106	209
	Cultivation: Bari	63	77
	Total cultivation	169	286
	Abandoned/Other	-	3
	Total Land Take	394 ⁴	510
Average Land Take ha/km ⁵		3.2	2.59
Average Households/km		9.4	8.6
Total Families Affected		1146	1661

¹ This column from draft ACRP Report, April 1993

² Recommended alignment for adit access along right bank of Arun river

³ This figure is based on preliminary engineering and could increase by 1% to 2% during detailed engineering

⁴ 375 ha permanent plus 19 ha temporary

⁵ Hill Route RoW changes from 30 m to 20 m at Chhyangkuti, also powerhouse spur

n.d. No data (available data not disaggregated)

Table 6.2 ARUN ACCESS ROAD: HILL VERSES VALLEY - A QUALITATIVE ASSESSMENT		
Topic	Valley Route	Hill Route
Length:	Shorter	Longer
Physical Impacts: soils, slopes, natural hazards	High	Moderate
Biological Impacts: forests, habitat, wildlife	Direct: Moderate Indirect: High	Direct: Moderate/Low Indirect: Moderate/High
Social Impacts: land take, families affected	Moderate (approx. two thirds Hill Route)	High
Construction: (i) time (ii) costs (iii) construction difficulty (iv) risk of off-site damage/injury	Shorter Equal High Moderate/Low	Longer Equal Moderate Moderate/High
Economic Benefits: (i) immediate connectivity (ii) long-term regional access	Moderate High	High Moderate
Conclusion: Valley Route is preferable, assuming sound management of impacts and risk		