

PANGUE HYDROELECTRIC PROJECT (CHILE):
AN INDEPENDENT REVIEW OF THE
INTERNATIONAL FINANCE CORPORATION'S
COMPLIANCE WITH APPLICABLE WORLD BANK
GROUP ENVIRONMENTAL AND SOCIAL
REQUIREMENTS

PREPARED BY PANGUE AUDIT TEAM

TEAM LEADER

JAY D. HAIR, Ph.D.
INDEPENDENT ADVISOR
THE WORLD BANK GROUP
SEATTLE

TEAM MEMBERS

BENJAMIN C. DYSART, Ph.D.
PRESIDENT
DYSART & ASSOCIATES, INC.
ATLANTA

LUKE J. DANIELSON, ESQ.
VISITING PROFESSOR OF LAW
UNIVERSITY OF CHILE
SANTIAGO

RESEARCH ASSISTANT
AVRA O. RUBALCAVA
VISITING SCHOLAR
UNIVERSITY OF CHILE

SANTIAGO

APRIL 4, 1997

IFC is an international organization which is legally, financially and operationally separate from the World Bank. The term World Bank covers the International Bank for Reconstruction and Development and the International Development Association. The World Bank and IFC, together with MIGA, constitute the World Bank Group.

This document has been redacted. Deletions are indicated by carat (^) marks.

PANGUE HYDROELECTRIC PROJECT (CHILE):
AN INDEPENDENT REVIEW OF THE INTERNATIONAL
FINANCE CORPORATION'S COMPLIANCE WITH
APPLICABLE WORLD BANK GROUP ENVIRONMENTAL
AND SOCIAL POLICIES

TABLE OF CONTENTS

EXECUTIVE SUMMARY	1
CONCLUSIONS:	2
RECOMMENDATIONS:	5
A. PANGUE PROJECT	5
B. INSTITUTIONAL RECOMMENDATIONS DIRECTED TO THE WORLD BANK GROUP/IFC	6
RESUMEN EJECUTIVO	6
CONCLUSIONES:	10
RECOMENDACIONES	12
A. PROYECTO PANGUE	12
B. RECOMENDACIONES INSTITUCIONALES DIRIGIDAS AL GRUPO DEL BANCO MUNDIAL/CFI	13
I. INTRODUCTION (Tab A)	16
A. THE PANGUE PROJECT	16
B. THE GABB CLAIM	17
C. THE INDEPENDENT REVIEW	18

II.	OBJECTIVES	19
III.	SCOPE	20
IV.	CONFIDENTIALITY AND IFC DISCLOSURE POLICY	20
V.	METHODOLOGY	23
VI.	PERFORMANCE AUDIT RESULTS	30
A.	OBJECTIVE 1: TO DETERMINE COMPLIANCE OF THE PANGUE PROJECT WITH APPLICABLE WORLD BANK GROUP ENVIRONMENTAL AND SOCIAL REQUIREMENTS (Tab B)	30
1.	AUDIT TOPIC 1.1: Procedure for Environmental Review of IFC Projects (in effect March 1990 to December 1992). (Tab C)	31
2.	AUDIT TOPIC 1.2: Internal Procedure for Environmental Review of IFC Projects (in effect from December 1992 to September 1993). (Tab D)	44
3.	AUDIT TOPIC 1.3: Environmental Analysis and Review of IFC Projects (September 1993). (Tab E)	52
4.	AUDIT TOPIC 1.4: World Bank Operational Directive 4.00: Environmental Policy for Dam and Reservoir Projects (April 1989). (Tab F)	56
5.	AUDIT TOPIC 1.5: World Bank Operational Policy Note 11.02: Wildlands: Their Protection and Management in Economic Development (June 1986). (Tab G)	62
6.	AUDIT TOPIC 1.6: World Bank Operational Policy Note 11.03: Management of Cultural Property in Bank	

	Financed Projects (September 1986). (Tab H)	65
7.	AUDIT TOPIC 1.7: World Bank Operational Directive 4.20: Indigenous Peoples (September 1991). (Tab I)	69
8.	AUDIT TOPIC 1.8: World Bank Operational Directive 4.30: Involuntary Resettlement (June 1990). (Tab J)	90
9.	AUDIT TOPIC 1.9: World Bank Operational Directive 13.05: Project Supervision (March 1989; Revised January 1993). (Tab K)	94
B.	OBJECTIVE 2: TO DETERMINE COMPLIANCE OF PANGUE PROJECT WITH ALL ENVIRONMENTAL AND SOCIAL COMPONENTS AS SPECIFIED IN THE ENVIRONMENTAL MANAGEMENT AND MONITORING PLAN (Tab L)	101
	<i>Audit Topics 2.1 to 2.4 redacted.</i>	
5.	AUDIT TOPIC 2.5: Downstream Environmental Analysis and Impacts Mitigation. (Tab P)	101
	<i>Audit Topics 2.6 to 2.9 redacted.</i>	
VII.	SUMMARY OF SPECIAL CASE STUDY: SUPPLEMENT TO THE EVALUATION OF IFC'S MANAGEMENT OF DOWNSTREAM ENVIRONMENTAL IMPACTS OF THE PANGUE PROJECT. (Tab U) (See Appendix 2, Tab Z for details)	135
A.	GENERAL CONCLUSIONS	135
VIII.	OBJECTIVE 3: TO IDENTIFY ADDITIONAL TOPICS (Tab V)	141
A.	THE HERRERA ARTICLE.....	141
	<i>Sections B, C and D redacted.</i>	

E. ^	143
IX. RESULTS OF THIS INDEPENDENT REVIEW OF THE PANGUE PROJECT (Tab W)	146
A. PANGUE PROJECT AUDIT CONCLUSIONS	146
B. PANGUE PROJECT RECOMMENDATIONS	153
C. INSTITUTIONAL RECOMMENDATIONS DIRECTED TO THE WORLD BANK GROUP/IFC	155
X. ADDING BALANCE: AN IFC STAFF PERSPECTIVE (Tab X)	166
XI. ABBREVIATIONS USED IN REPORT	170
XII. APPENDIX 1: TERMS OF REFERENCE: INDEPENDENT ADVISOR	Tab Y
XIII. APPENDIX 2: SPECIAL CASE STUDY: SUPPLEMENT TO THE EVALUATION OF IFC'S MANAGEMENT TO DOWNSTREAM ENVIRONMENTAL IMPACTS OF THE PANGUE PROJECT	Tab Z

PANGUE HYDROELECTRIC PROJECT (CHILE):

**AN INDEPENDENT REVIEW OF THE INTERNATIONAL
FINANCE CORPORATION'S COMPLIANCE WITH
APPLICABLE WORLD BANK GROUP ENVIRONMENTAL
AND SOCIAL REQUIREMENTS**

This document has been redacted. Deletions are indicated by carat (^) marks.

EXECUTIVE SUMMARY

The Pangué Hydroelectric Project is a dam (completed in September 1996) on the Bío-Bío River in southern Chile. Under the October 1993 Investment Agreement, International Finance Corporation (IFC) holds a 2.5% equity interest in Pangué S.A., a subsidiary of ENDESA, reportedly Chile's foremost electric utility company. IFC authorized USD 170 million of loans and up to USD 4.7 million in equity for the Pangué Project. Pangué S.A. has disclosed that the actual cost of the Pangué Project was approximately USD 100 million less than the originally estimated cost of USD 465 million.

From the beginning, Pangué has been a very controversial project, not only in Chile but worldwide. Because of the potential for a high degree of environmental and social impacts, the Pangué Project was designated as Category A by IFC. In November 1995, a Chilean nongovernmental organization (NGO), the Grupo de Acción por el Bío-Bío (GABB), sent a "claim" to the President of the World Bank Group, Mr. James D. Wolfensohn, requesting that the World Bank's Inspection Panel review GABB's charges that IFC and Pangué S.A. had failed to comply with various World Bank requirements including the environmental and social covenants in the October 1993 Investment Agreement. Forty-seven other NGOs joined in a separate letter to Mr. Wolfensohn in support of the GABB submission and urged him to extend the Inspection Panel process to IFC and the Multilateral Investment Guarantee Agency (MIGA).

Those groups were advised that IFC was not covered by the mandate of the Inspection Panel. As an alternative, the President indicated he would designate an Independent Advisor to undertake a performance audit of the Pangué Project. In May 1996, he appointed Dr. Jay D. Hair, President-Emeritus of the National Wildlife Federation (USA) and Immediate Past President of IUCN--The World Conservation Union (Switzerland), to that position. Subsequently, Mr. Luke J. Danielson, a senior level

attorney with a special expertise in environmental law, and Dr. Benjamin C. Dysart, a highly regarded environmental engineer and management consultant with extensive experience related to private-sector hydroelectric projects, environmental impact assessment, and public involvement, joined Dr. Hair to form the Pangué Audit Team. Ms. Avra O. Rubalcava, a visiting scholar at the School of Law, University of Chile, Santiago, served as the project's Research Assistant.

This Independent Review of the Pangué Project had three objectives:

1. To determine if the Pangué Hydroelectric Project had complied with applicable World Bank Group environmental and social requirements.
2. To determine if the Pangué Hydroelectric Project had complied with all environmental and social covenants, and conditions of disbursement in the October 1993 Investment Agreement.
3. To advise senior management of the World Bank Group if there were other matters arising from this Independent Review that should be brought to their attention.

This Independent Review takes no position on whether or not the Pangué Project should have been built, nor does it take any position on the pending Chilean government decision on the proposed Ralco Dam Project.

^

In summary, key findings from this Independent Review of the Pangué Project--all opinions of the Audit Team--were:

CONCLUSIONS:

1. The Pangué Project has been completed, and, from a traditional engineering and construction perspective, the dam and associated power station appear to reflect high professional standards.
2. The establishment of the Pangué Ecological Station and the successful involuntary resettlement of eight non-indigenous families were important and positive achievements of the Pangué Project.

3.^

4.^

5. There was no evidence that specific standards or criteria had been established by IFC or discussed with Pangué S.A. as to what levels of environmental and social impacts for the Pangué Project were "acceptable to the World Bank" or IFC.

6. Despite a very substantial IFC effort from early 1990 to date, the first step in environmental analysis--identification of potential environmental impacts--has still not been completed in a satisfactory manner even though the Pangué Project is fully operational.

7. The early IFC staff view that environmental and social impacts of the Pangué Project would be "minimal" and could be "mitigated to World Bank standards" was not supported by information in the record.

8. At each stage of the project approval process, key decision-support documents often did not faithfully or accurately reflect the contents of underlying environmental studies.

9. Underlying environmental studies were often regarded as inadequate and incomplete by IFC staff. The extent of these concerns was not conveyed fully to the IFC Board of Directors.

10. The IFC staff failed to disclose key documents to the IFC Board of Directors (and perhaps senior management) that described the potential for significant induced impacts on 12 Pehuenche families residing adjacent to the project reservoir. Had such disclosures been made, it is reasonable to assume that either the IFC Board might have (a) declined to participate in the Pangué Project or (b) required the IFC staff to address indigenous peoples issues in a more focused and effective manner than was the case.

11. There were a number of important Spanish-language documents in the IFC files related to environmental and social issues, including correspondence from ENDESA/Pangué S.A., that had not been translated into English. Upon inquiry there was little or no indication that IFC staff was aware of their contents, conclusions or how they were related to its supervisory responsibilities for the Pangué Project.

12. The Pehuen Foundation (established and funded by the Pangué Project to support programs to benefit the Pehuenche people) was an innovative but experimental concept. Neither IFC nor Pangué S.A. had any experience with the development of this type of organization. Because the Pehuen Foundation's operations were under supervised by IFC, it is now one of the most controversial and diverse aspects of the Pangué Project.

13.^

14. IFC has not been sufficiently aware of the extent to which its actions are looked to as an indication that projects have been subjected to a careful program of environmental and social management, or the impact on others, when it asserts that a project meets "World Bank standards." This is a particular concern when, as was the case for the Pangue Project, those standards have not been met.

15.^

16. IFC's institutional effectiveness and public credibility are seriously and negatively impacted by (a) the cloak of secrecy that surrounds most of IFC's project activities, including total confidentiality of all aspects of Investment Agreements (IFC staff does not even disclose them to the IFC Board of Directors), and (b) the situation whereby environmental and social compliance requirements have lower priorities than IFC's investment decisions.

17. Five months after the Pangue Dam has started the generation of power, IFC has apparently neither received nor requested any data demonstrating that the minimum ecological flow below the dam was maintained during the period when the reservoir was filled. Nor has IFC received any data which would reliably demonstrate that minimum flows have been maintained since that time. We have been unable to determine that IFC ever considered this issue, or ever intended to receive such information. Staff reactions to our inquiries on this subject have been incomplete and unresponsive.

18. From an environmental and social perspective IFC added little, if any value, to the Pangue Project. Its failure to adequately supervise this project--from beginning to end--significantly increased the business risks and diminished the public credibility for both the World Bank Group (particularly IFC) and its private sector partner. There is no indication at this time (April 1997) that IFC has in place the necessary institutional operating systems, or clarity in its policy and procedural mandate, to manage complicated projects such as Pangue in a manner that complies consistently with World Bank Group environmental and social requirements and recognized best practices.

RECOMMENDATIONS:

A. PANGUE PROJECT

1. This Independent Review of the Pangué Project contains no proprietary or confidential business information and should be released in its entirety to the public in English and Spanish.

2. The following actions should be undertaken to mitigate the impacts of the Pangué Project on the Pehuenche people living in the Alto Bió-Bió:

(a)^

(b) To ensure that "culturally compatible benefits" accrue to the Pehuenche people, the legal title to an amount of land deemed appropriate by CONADI (the Chilean indigenous peoples agency), surrounding the Pangué Reservoir^, should be transferred to the appropriate Pehuenche communities.

(c) In order for the Pehuen Foundation to achieve its goals of supporting sustainable socio-economic development programs for the benefit of the Pehuenche people, it must be restructured along the lines suggested in the May 1996 Downing et al. evaluation report and the September 1996 synthesis document. Those reports do not contain any proprietary or confidential business information and should be released to the public in English and Spanish.

3. A qualified archaeologist/anthropologist should be retained to evaluate "the cultural property" situation relative to the Alto Bió-Bió, and to make recommendations accordingly to appropriate officials.

4. Given the intense pace of proposed hydroelectric development in the Bió-Bió River Basin, a comprehensive Wildlands Management Plan would be extremely valuable and should be developed^.

5.^

B. INSTITUTIONAL RECOMMENDATIONS DIRECTED TO THE WORLD BANK GROUP/IFC

1. IFC needs standards by which its performance can be measured. The World Bank Group's top management team must make a decision as to whether World Bank Group's policies and directives for managing the environmental and social impacts of projects apply to the operations of IFC. Assuming they do apply, that fact must be communicated clearly to the IFC staff so appropriate management systems and performance standards can be established, implemented, and monitored. If some changes or adjustments in these policies are needed to make them fit IFC's mission, they should be made.

2. As a World Bank Group institution, IFC management and environmental professionals must be held accountable for their actions. Accountability requires mechanisms for ongoing opportunities for independent reviews of performance. We suggest the following as high priorities for IFC:

- a. The IFC Board of Directors must be accurately, consistently, and routinely informed of the environmental and social aspects of all projects and the commitments made by IFC project sponsors, whether by incorporating those commitments in a separate document apart from the Investment Agreement or otherwise. Regardless, all Investment Agreements should be disclosed routinely to IFC Board of Directors.
- b. IFC projects should be subjected to an Inspection Panel process such as the one currently in place at the World Bank Group's International Bank for Reconstruction and Development (IBRD). Preferable, the IFC would be incorporated into the existing system.
- c. Environmental and social compliance oversight of IFC projects should be handled by a body independent of line management. The preferred alternative would be establishment of an integrated World Bank Group environmental and social development program reporting directly to the Office of the President. This would be a logical step to take as part of the "Strategic Compact" launched recently by the President of the World Bank Group.
- d. All Category A projects (i.e., those with high potential for significant environmental and social impacts), without exception, should have independent environmental and social expert panels.

3. IFC should develop and implement a comprehensive system of operational accountability and the institutional capacity to systematically assess, process, and effectively manage (including an automated document management and project status reporting system) all IFC projects for environmental and social compliance. A new approach of (a) adequately informing potential project sponsors of the World Bank Group's environmental and social compliance expectations and (b) "prequalifying" potential project sponsors to determine their capacity and willingness to comply with World Bank Group requirements should be implemented.

4. IFC should undertake a comprehensive review of its Investment Agreement development and approval process. A new process should be established that includes the clear identification of what is proprietary and confidential business information from that which is rightfully within the domain of the "public's right to know" such as environmental and social issues.

5. Getting environmental and social commitments incorporated into investment agreements is only part of the challenge before IFC. There needs to be an ongoing system to ensure that these commitments are implemented, that impacts are monitored, and that mechanisms exist to analyze the results of monitoring to make the necessary adjustments. This is an area in which the World Bank Group believes it has made progress, as indicated in the recent Second Environmental Assessment Review. However, it has been clear from very recent developments in the Pangue Project that IFC still does not focus sufficiently on what happens after the Investment Agreement has been signed, after the loan has been disbursed, or after the loan has been repaid. The emphasis must be on long term environmental results,^ because there are no mechanisms for evaluating success of environmental and social measures or ensuring their continued implementation.

6. Contemporary environmental and social development programs must be pursued in a transparent manner. Responsible and timely public involvement become the global norm for development projects sponsored by multilateral banks. All relevant information about environmental and social aspects of IFC projects should presumptively be public, and there should be a very heavy burden on anyone to demonstrate that a particular item of information would cause competitive injury to the project sponsor and needs, for that reason, to be withheld for proprietary or confidential business reasons.

7. Informed and effective public participation is an ongoing process that should not be limited to one or two discrete points in project development. Public involvement should continue throughout the development of each project and into the operational phase.

8. Environmental and social-economic requirements of IFC projects should be seen and managed in their broader social, political, and historical context, properly integrated into the actual project, rather than just as narrow, limited "technical issues" that are add-ons separate from the design, construction, and operation of "the project." In addition, staff functions should be organized to reflect an emphasis on countries and regions, rather than type of project.

9. IFC must develop a stronger institutional ability to say "no" to potential project sponsors and projects when it makes good business sense to do so. Without sufficient confidence that potential major environmental and social impacts can be managed effectively, significant risks to project success are created.

10. Organizational management objectives and IFC management and staff incentives should be evaluated and redirected from what appears to be a strict project approval process driven primarily by financial considerations to one that also sufficiently values and recognizes staff responsibilities for assuring that IFC-sponsored projects comply with all relevant World Bank Group environmental and social requirements.

11. IFC must find ways to work with and support national, environmental, and indigenous peoples' authorities. Under no circumstances should IFC find itself in the position of withholding important information from such agencies^.

Finally, on March 6, 1997, as this Independent Review was in its final stages of completion, the President of Chile inaugurated the Pangué Project. On March 11th, Pangué S.A. unilaterally exercised its prerogative to prepay USD 150 million in loans outstanding to IFC and participant banks. In a press release IFC announced that it was "continuing its best efforts to seek a satisfactory resolution of outstanding environmental and social issues."

We do not believe that Pangué S.A.'s prepayment of the Pangué Project loan in any way vitiates the importance of these recommendations. While those who may be uncomfortable with the conclusions we have drawn may suggest it is no longer sensible to examine the Pangué Project since the loan has been repaid, our fundamental conclusions go to the institutional and management failings at IFC which we feel must be addressed in the interest of future World Bank Group projects, regardless of what happens with the Pangué and/or Ralco Projects. This remains true even if ENDESA or others were to buy out IFC's remaining equity interest in the Pangué Project.

PROYECTO HIDROELECTRICO PANGUE (CHILE)

AUDITORIA INDEPENDIENTE DEL CUMPLIMIENTO DE LA CORPORACION FINANCIERA INTERNACIONAL CON LOS REQUISITOS SOCIALES Y AMBIENTALES PERTINENTES AL BANCO MUNDIAL.

RESUMEN EJECUTIVO

El Proyecto Hidroeléctrico de Pangué S.A. se trata de una represa (que se terminó de construir en el mes de septiembre de 1996) sobre el río Bió-Bió al sur de Chile. En el acuerdo de inversión celebrado en octubre de 1993, la Corporación Financiera Internacional (CFI) posee 2.5% de interés (equity) en Pangué S.A., empresa subsidiaria de ENDESA, reconocida como la principal empresa eléctrica de Chile. La CFI autorizó un préstamo de USD170 millones y hasta USD4.7 millones en capital para el proyecto Pangué. Pangué S.A. ha revelado que el costo real del proyecto fue de aproximadamente USD100 millones menos que el costo estimado originariamente de USD465 millones.

Desde un principio, Pangué ha sido un proyecto polémico, no sólo en Chile sino en todo el mundo. Debido a impactos sociales y ambientales en potencia de alto grado, la CFI le dió al proyecto Pangué categoría "A". En noviembre de 1995, una organización chilena no gubernamental (ONG), el grupo de acción por el Bió-Bió (GABB), envió un "reclamo" al presidente del Grupo del Banco Mundial, Sr. James Wolfensohn, requiriendo que el equipo de inspección del Banco Mundial reviera los cargos que GABB había elevado, los que manifestaban que ni la CFI ni Pangué S.A. habían cumplido en su totalidad con algunos requisitos del Banco Mundial incluyendo las cláusulas sociales y ambientales en el acuerdo de inversión del Proyecto. Otras cuarenta y siete ONG en apoyo al reclamo presentado por GABB también enviaron cartas dirigidas al Sr. Wolfensohn y lo instaron a extender el proceso del equipo de inspección a la CFI y al Organismo Multilateral de Garantía^.

En resumen, a continuación la opinión del equipo de auditoría de Pangué, conclusiones importantes y recomendaciones de la Auditoría Independiente del Proyecto Pangué.

CONCLUSIONES:

1. El Proyecto Pangué ha finalizado y desde una perspectiva tradicional de Ingeniería y Construcción, la represa y la central asociada parecen reflejar altas normas profesionales.

2. El establecimiento de la central ecológica Pangué y el exitoso reestablecimiento involuntario de ocho familias no indígenas fueron logros importantes y positivos para el Proyecto Pangué.

3.^

4.^

5. No hubo pruebas de que la CFI hubiera establecido normas o criterios específicos o de que hubiera tratado con Pangué S.A. sobre los niveles de impactos sociales y ambientales para el proyecto "aceptados por el Banco Mundial" o la CFI.

6. A pesar de un gran esfuerzo substancial de la CFI desde comienzos de 1990 a la fecha, el primer paso en el análisis ambiental identificación de posibles impactos en el medio ambiente todavía no ha finalizado satisfactoriamente aún aunque el proyecto Pangué sea enteramente operacional.

7. La opinión previa del staff de la CFI de que los impactos sociales y ambientales del proyecto Pangué serían "mínimos" y podrán ser "mitigados para cumplir con las normas del Banco Mundial" no estaba respaldado por información en los registros.

8. En cada etapa del proceso de aprobación del proyecto, los documentos que apoyaron las decisiones claves a menudo no reflejaron exactamente o fielmente los contenidos de los estudios básicos ambientales.

9. El staff de la CFI a menudo consideró inadecuados e incompletos los estudios básicos ambientales. El alcance de estas preocupaciones no fueron comunicadas en su totalidad a la Junta de Directores de la CFI.

10. El staff de la CFI no reveló los documentos claves a la Junta de Directores (y tal vez a la Dirección Superior) los que describían la posibilidad de impactos significativos inducidos a 12 familias pehuenche que residen junto a la represa. En caso de que se hubieran hecho tales revelaciones, es razonable presumir que (a) la Junta de la CFI pudiera haberse negado a participar en el Proyecto Pangué o (b) que hubiesen

solicitado que el staff de la CFI enfocara los temas de la sociedad indígena de una manera más efectiva que como se hizo.

11. Se encontraron documentos en español en los archivos de la CFI relacionados con los asuntos sociales y ambientales, incluyendo correspondencia de ENDESA/Pangue S.A. que no habían sido traducidas al inglés. Al averiguar, casi no se percibió que el staff de la CFI supiera de dichos contenidos, conclusiones o de como estaban relacionados a las responsabilidades de supervisión del Proyecto Pangue.

12. La fundación Pehuen (fundada y respaldada por el Proyecto Pangue para apoyar a los programas de beneficencia para el pueblo pehuenche) fue un concepto novedoso pero de prueba. Ni la CFI ni Pangue S.A. tenían experiencia en el desarrollo de este tipo de organizaciones. Debido a que las operaciones de la Fundación Pehuenche no fueron supervisadas adecuadamente por la CFI, ahora éste es uno de los aspectos más polémicos que crea desacuerdos en el Proyecto Pangue.

13.^

14. La CFI no ha sido lo suficientemente consciente de la medida en que sus acciones son controladas como una señal que indica que los proyectos han estado sujetos a un cuidadoso programa de control social y ambiental, o a impactos sobre otros, cuando aseguran que un proyecto cumple con las normas del Banco Mundial. Esto es particularmente preocupante debido a que este fue el caso en el Proyecto Pangue; estas normas no se han cumplido.

15.^

16. La eficacia institucional de la CFI y la credibilidad publica son afectadas seria y negativamente por (a) el manto de reserva que rodea a la mayor parte de las actividades del Proyecto de la CFI incluyendo la confidencialidad total de todos los aspectos de los Acuerdos de Inversión (Aún el staff de la CFI no los ha revelado a la Junta de Directores de la CFI) y (b) la forma administrativa en que los requisitos sociales y ambientales a cumplir están subordinados a las prioridades y decisiones de la inversión de la CFI.

17. Cinco meses después del día en que Pangue empezó la generación eléctrica, al parecer la CFI no ha recibido ni pedido ningún informe demostrando que el caudal mínimo ecológico fue mantenido durante el período en que se llenó el embalse. La CFI tampoco ha recibido datos que demuestren en la manera confiable en que el caudal mínimo ha sido mantenido después de aquel tiempo. No hemos podido concluir que la CFI alguna vez consideró esa situación, o propuso recibir los dichos datos. Las respuestas del personal de la CFI a ese punto han sido incompletas y desinteresadas.

18. Desde el punto de vista ambiental y social, la CFI, en el mejor de los casos, ha agregado muy poco valor al Proyecto Pangué. Su falta de superintendencia del proyecto--desde su principio hasta el fin--ha aumentado los riesgos comerciales y ha disminuído la estimación pública del Grupo de Banco Mundial (específicamente CFI) y su socio del sector privado. No hay evidencia hasta el presente (marzo de 1997) de que la CFI tenga ubicados los sistemas necesarios de operación institucional, ni hay claridad en sus normas o mandato procesal para manejar proyectos como el de Pangué de manera tal que cumpla consistentemente con los requisitos ambientales y sociales del Grupo del Banco Mundial ni tampoco con las prácticas reconocidas.

RECOMENDACIONES

A. PROYECTO PANGUE

1. Esta Auditoría Independiente del Proyecto Pangué no contiene ninguna información patrimonial o confidencial empresarial y debe ser publicada en su totalidad para el público en inglés y en español.

2. Las siguientes acciones deben ser tomadas para mitigar los impactos del Proyecto Pangué en el pueblo Pehuenche en el Alto Bió-Bió:

a. ^

b. Para asegurar que los "beneficios culturalmente compatibles" acrecienten el derecho legal del pueblo Pehuenche a una cantidad de sierra considerada -- apropiadamente por CONADI (el organismo del pueblo indígena chileno) -- que rodea la Reserva Pangué^, deberán ser transferidos a las comunidades Pehuenches apropiadas.

c. Con el fin de que la Fundación Pehuen lleve a cabo sus objetivos de apoyar los programas de desarrollo socioeconómico sostenibles para el beneficio de los pehuenches, deberá ser reestructurada según las líneas sugeridas en los informes de evaluación Downing et al de mayo y septiembre de 1996. Los Informes de Evaluación Downing no contienen ninguna información patrimonial o confidencial empresarial y deberán ser comunicados al público en inglés y en español.

3. Arqueólogo/ antropólogo idóneo deberá(n) ser contratado(s) para evaluar la situación de "la propiedad cultural" relativa al Alto Bió-Bió y deberán proponer recomendaciones a los organismos adecuados.

4. Dado el ritmo intenso del desarrollo hidroeléctrico propuesto en la Cuenca del Río Bió-Bió, un exhaustivo Plan de Gestión de Tierras Salvajes sería de absoluta utilidad y debería ser desarrollado^.

5.^

B. RECOMENDACIONES INSTITUCIONALES DIRIGIDAS AL GRUPO DEL BANCO MUNDIAL/CFI

1. La CFI necesita normas a través de las cuales su desempeño pueda ser medida. El equipo principal de gestión del Grupo del Banco Mundial debe tomar una decisión con respecto a si las normas e instrucciones del Grupo del Banco Mundial para manejar los impactos sociales y ambientales de proyectos se aplican o no a las operaciones de la CFI. Asumiendo que si se aplican, ese hecho deberá ser comunicado claramente al staff de la CFI así los sistemas apropiados de gestión y las normas de desempeño pueden ser establecidos, implementados y monitoreados. Si se necesitaran realizar cambios o ajustes en estas normas para que se adapten al objetivo de la CFI, dichas acciones deberán llevarse a cabo.

2. Por ser una institución del Grupo del Banco Mundial, la CFI debe ser responsable por sus acciones. Esta responsabilidad requiere mecanismos para mantener oportunidades continuamente para auditorías de desempeño independientes. Sugerimos a la CFI las prioridades que siguen a continuación:

- a. La Junta de Directores deberá ser informada adecuada, consistente y rutinariamente acerca de los aspectos ambientales y sociales de todos los proyectos y de las obligaciones de los sponsors de los proyectos de la CFI, ya sea incorporando aquellas obligaciones en un documento aparte para el acuerdo de inversión o de cualquier otro modo. Más allá de eso, todos los acuerdos de inversión deberán ser rutinariamente presentados a la Junta de Directores de la CFI.
- b. Los proyectos de la CFI deberán estar sujetos a un proceso realizado por un Equipo de Inspección como el que se encuentra actualmente en el Banco Internacional de Reconstrucción y Fomento (BIRF) del Grupo del Banco Mundial. Preferentemente, la CFI sería incorporada a un sistema existente.
- c. La supervisión del cumplimiento ambiental y social de los proyectos de la CFI sería manejada por un cuerpo independiente de gestión de línea. La alternativa preferida sería la aplicación de un programa integrado de

desarrollo ambiental y social del Grupo del Banco Mundial que informe directamente a la Oficina del Presidente.

- d. Todos los proyectos de Categoría A (es decir aquellos con gran potencial para impactos ambientales y sociales significativos), sin excepción, tendrían equipos especializados independientes de inspección ambiental y social.

3. La CFI debería desarrollar e implementar un sistema exhaustivo de responsabilidad operacional y la capacidad institucional para sistemáticamente acceder, procesar y manejar de manera eficaz (incluyendo un sistema de manejo automatizado de documentos y de informe de status de proyecto) para el cumplimiento ambiental y social de todos los proyectos.

Se debería implementar un nuevo acercamiento de (a) potenciales sponsors de proyectos a quienes se les informe adecuadamente las expectativas pertinentes ambientales y sociales del Grupo del Banco Mundial y (b) precalificar a potenciales sponsors de proyectos para determinar su capacidad e intención para cumplir con los requisitos del Grupo del Banco Mundial.

4. La CFI debería llevar a cabo una investigación exhaustiva de sus procesos de desarrollo y aprobación de los acuerdos de inversión. Un nuevo proceso deberá ser establecido que incluya una identificación que aclare: lo que es información patrimonial y confidencial empresarial de lo que está legalmente bajo el dominio del "derecho de la gente a estar informada" como por ejemplo los temas ambientales y sociales.

5. Incorporar los compromisos ambientales y sociales en los acuerdos de inversión es no más que una parte del desafío para la CFI. Se necesita un sistema que continúe para asegurar la implementación de esos compromisos, el monitoreo de los impactos, y para asegurar que existen mecanismos para analizar los resultados del monitoreo y trazar los cambios que sean necesarios. Ese es un área en que el Grupo del Banco Mundial piensa que ha ido progresando, como lo demostró en su reciente Segunda Revisión de Evaluación Ambiental. Pero ha quedado claro en los eventos recientes de el Proyecto Pangué que la CFI todavía no ha enfocado suficientemente bien lo que pasará después de que se firme el acuerdo de inversión, después del desembolso de fondos, o después de su cancelación. El énfasis debe ser en los resultados de largo plazo^ por falta de mecanismos para evaluar el éxito de medidas ambientales o sociales o para asegurar que la implementación continúe.

6. La participación pública informada y efectiva es un proceso en marcha que no debe ser limitado a uno o dos puntos discretos en el desarrollo del proyecto. El compromiso público debe continuar durante todo el desarrollo de cada proyecto y dentro de la fase operacional.

7. Los requisitos ambientales y sociales de los proyectos de la CFI deberán ser considerados y manejados en su más amplio contexto social, político e histórico, y apropiadamente integrados al proyecto actual, en vez de restringidos y limitados a los "temas técnicos" que son agregados separadamente del diseño, la construcción y la operación "del proyecto". Las funciones del staff deberán ser organizadas para reflejar un énfasis en países y regiones más que en el tipo de proyecto.

8. La CFI deberá desarrollar una habilidad institucional más fuerte para decir "no" a los potenciales sponsors de proyectos y a los proyectos cuando el decirlo tiene un correcto sentido empresarial.

9. Los objetivos organizacionales de la gestión y los incentivos del staff de la CFI deberán ser evaluados y redirigidos desde lo que aparenta ser un proceso estncto de aprobación de un proyecto - encaminado en primeras instancias por consideraciones financieras - hacia uno que también valore y reconozca las responsabilidades del staff para asegurar que los proyectos sponsorados por la CFI cumplan con todos los requisitos relevantes ambientales y sociales del Grupo del Banco Mundial.

10. La CFI deberá encontrar la manera de trabajar con las autoridades del pueblo indígena y las autoridades nacionales ambientales así como también deberá apoyarlas. En ningún caso, la CFI deberá encontrarse en la posición de ocultar información importante de dichos organismos^.

Finalmente, el 6 de Marzo de 1997, mientras esta Auditoría Independiente estaba en sus últimas etapas de consumación, el Presidente de Chile inauguró el Proyecto Pangué. El 11 de Marzo Pangué SA ejerció unilateralmente su prerrogativa para prepagar USD 150 millones en préstamos pendientes a la CFI y a bancos participantes. En un comunicado de prensa la CFI anunció que "continua esforzandose para encontrar una resolución satisfactoria para los.

PANGUE HYDROELECTRIC PROJECT (CHILE):

AN INDEPENDENT REVIEW OF IFC'S COMPLIANCE WITH APPLICABLE WORLD BANK GROUP ENVIRONMENTAL AND SOCIAL REQUIREMENTS

I. INTRODUCTION

A. THE PANGUE PROJECT

In 1989, the International Finance Corporation (IFC), an institution within the World Bank Group, was approached by Empresa Nacional de Electricidad S.A. (ENDESA), reportedly the foremost electric utility company in Chile, to provide financing for its proposed 450-MW hydroelectric power project on the Rio Bío-Bío in south-central Chile. The Pangué dam (completed in late September 1996) is located at a narrow rocky gorge two kilometers upstream of the confluence of the Rio Bío-Bío and Rio Pangué. The Alto Bío-Bío is home for approximately 5,000 Pehuenches, the indigenous people of the region. The Pangué Project is the first dam to be constructed on the main stem of the Bío-Bío River, although five additional potential dam sites have been identified by the Chilean energy authority (CNE). According to IFC's environmental review procedures, Pangué was designated a Category A project since its construction could result in diverse and significant environmental and social impacts.

Under the Investment Agreement signed in October 1993, IFC holds a 2.5% equity interest in Pangué, S.A. IFC authorized USD 170 million of loans and up to USD 4.7 million in equity for the Pangué Project. Pangué S.A. has disclosed that the actual cost of the Pangué Project was approximately USD 100 million less than the originally estimated cost of USD 465 million.

The chronology of key events associated with the Pangué Project was as follows:

1. Early 1990: IFC appraisal process began;
2. November 1992: Environmental Management and Monitoring Plan released in EA summary;

3. December 1992: IFC Board of Directors approved Pangué Project;
4. October 1993: Pangué Project Investment Agreement signed;
5. February 1994: First loan disbursed;
6. November 1995: GABB "complaint" submitted to President of World Bank Group;
7. May 1996: Independent Review of Pangué Project initiated;
8. September 1996: Pangué Reservoir filled;
- 9.^
- 10.^
11. March 6, 1997: President of Chile inaugurated Pangué Project; and
12. March 11, 1997: Pangué S.A. prepaid IFC loan.

B. THE GABB CLAIM

The development of the Pangué Project--the first dam on the main stem of the Bío-Bío River--has been a difficult and controversial process. In part, this reflects (1) legitimate concerns regarding the potential negative consequences of the project on the Pehuenche people living in this region, (2) the loss of important natural resource values (i.e., the Bío-Bío was one of the last major free-flowing, white-water rivers in the world), and (3) the adverse cumulative environmental impacts from the construction of multiple hydroelectric projects on the Bío-Bío River System (including its tributaries).

On November 17, 1995, the Grupo de Acción por el Bío-Bío (GABB), a Chilean nongovernmental organization (NGO), submitted to Mr. James D. Wolfensohn, President of the World Bank Group, a "claim" requesting that the World Bank's Inspection Panel "investigate the IFC financed Pangué/Ralco Dam complex on the Río Bío-Bío in Chile." Forty-seven other NGOs joined in a separate letter to Mr. Wolfensohn in support of

GABB's "claim" and urged him to extend the Inspection Panel to projects undertaken by IFC and the Multilateral Investment Guarantee Agency (MIGA).

GABB alleged that IFC had failed to ensure that ENDESA, the private-sector parent company, and Pangué, S.A., its subsidiary responsible for constructing the dam, had complied with all of the environmental and social covenants in the October 1993 Investment Agreement. GABB claimed that, though IFC had refused to make public the specific environmental and social covenants in the October 1993 Investment Agreement, they had strong reason to believe that Pangué S.A. had violated terms of that agreement, specifically as it related to the failure to conduct cumulative environmental impact studies, to fully evaluate the downstream impacts of the dam complex, and to ensure that the rights of the Pehuenches were protected as required by the World Bank Group's indigenous peoples policy. GABB also identified in their claim a number of other alleged violations of World Bank Group policies and IFC environmental review procedures.

C. THE INDEPENDENT REVIEW

In a letter to GABB dated December 6, 1995, President Wolfensohn responded to their claim by clarifying that the Inspection Panel does not have jurisdiction over IFC's operations. The letter also stated that it was important for GABB to understand that IFC had provided financing only for the Pangué Project, which IFC considered to be an independent and economically free-standing investment that was separate from the proposed Ralco Project. Also, he noted, IFC had not been asked, nor was it planning, to invest in Ralco.

With regard to the Pangué Project, and in light of the GABB request, Mr. Wolfensohn decided that the best course of action was to undertake an Independent Review of the environmental and social issues associated with the Pangué Project. This review, the first of its kind for IFC, would seek to determine whether the Pangué Project was in compliance with applicable World Bank Group requirements, whether there had been any violations of the environmental and social covenants the October 1993 Investment Agreement, and whether any of the actions proposed in the GABB claim should be undertaken by IFC.

Based on this, in May 1996, Mr. Wolfensohn appointed Dr. Jay D. Hair, President-Emeritus of the National Wildlife Federation (USA) and Immediate Past President of IUCN--The World Conservation Union (Switzerland), as an Independent Advisor to the World Bank Group to undertake a review of the Pangué Project. Subsequently, Mr. Luke J. Danielson, a senior level attorney with a special expertise in environmental law, and Dr. Benjamin C. Dysart a highly regarded environmental engineer and management consultant with extensive experience related to private-sector hydroelectric projects, environmental impact assessment, and public involvement, joined

Dr. Hair to form the Pangué Audit Team. Ms. Avra O. Rubalcava, a visiting scholar at the School of Law, University of Chile, Santiago, served as the project's Research Assistant.

The Terms of Reference (TOR) for this assignment are provided in Appendix 1 (Tab Y). The time schedule for completion of this Independent Review of the Pangué Project was extended at the request of the Pangué Audit Team. Also, on January 1, 1997, an IFC Vice President for Operations, who had been specified in the TOR as one of the reviewers of our draft report, resigned. Subsequently the Executive Vice President of IFC assigned the responsibility for the review of the Pangué Project to the Vice President and General Counsel of IFC. Accordingly, the 30-day period for review of the draft document was extended from 13 December 1996 to 7 February 1997 in order to allow the opportunity for that individual to become fully familiar with the details of the Pangué Project.

II. OBJECTIVES

The objectives of this Independent Review of the Pangué Hydroelectric Project were to answer the following questions:

- 1. Has the Pangué Hydroelectric Project complied with applicable World Bank Group environmental and social policies, directives, and procedures?**
- 2. Has the Pangué Hydroelectric Project complied with all environmental and social components set forth in the Environmental Management and Monitoring Plan (dated November 1992)?¹**
- 3. Were there other matters arising from this Independent Review that should be brought to the attention of senior-level officials of the World Bank Group?**

¹ The November 1992 Environmental Management and Monitoring Plan, a public document, identified and provided the basis for the environmental and social issues around which appropriate covenants were developed and included in the IFC Investment Agreement for the Pangué Project. At the request of the IFC Vice President and General Counsel we agreed not to include specific language of the Investment Agreement in this document. Although we do not feel that the Environmental Guidelines in the Investment Agreement constituted confidential business information we did this as a good faith effort to help maintain compliance with IFC's interpretation of their disclosure policy. In the unanimous opinion of the Pangué Audit Team, the alternative reference used herein was appropriate and resulted in no material deletions of relevant information or conclusions from this Independent Review of the Pangué Project.

III. SCOPE

The scope of this Independent Review focused on all applicable environmental and social issues associated with the Pangue Hydroelectric Project[^]. This Independent Review has expressed no opinion and was not asked to express an opinion on whether or not the Pangue Project should have been built.

IV. CONFIDENTIALITY AND IFC DISCLOSURE POLICY

In July 1994, the IFC Board of Directors adopted a "Policy on Disclosure of Information" that the Executive Vice President of IFC noted in the published policy statement (October 1994) "embodies the Corporation's commitment to undertake its investment activities with transparency and accountability . . . the disclosure policy is designed to balance the need for openness and transparency with the need for confidentiality to protect the legitimate business interest of [IFC's] private sector clients . . . [IFC has] an obligation to protect information provided to us by our clients regarding their business plans and objectives, their cost structure and price assumptions, much of which can be sensitive for competitive reasons . . . In general this obligation requires IFC not to disclose any information about the prospective or existing client without their consent."

In IFC's Policy on Disclosure of Information in the section entitled "Constraints" (page 4) it was noted: "While every effort is made to keep constraints to a minimum, the effective functioning of the Corporation necessarily requires some derogation from complete openness. . . Some documents and information are provided to IFC on the explicit or implied understanding that they will not be disclosed outside the Corporation, or that they may not be disclosed without the consent of the source; or even, occasionally, that access within IFC will be limited . . . Finally, external release of some information may be precluded on an ad hoc basis, when because of its content, wording or timing, disclosure would be detrimental to the interest of the Corporation, a member country or IFC staff. . . Information is not withheld solely because it is negative; the Corporation, as an open, technically competent institution which learns from its mistakes, seeks to provide balanced information, reporting the failures or disappointments in its operations as well as the successes."

This policy is inherently contradictory. On one hand, it speaks eloquently of the need to make information public, and the benefits of transparency. On the other hand, as it has been applied, IFC works to keep confidential much more information than is appropriate, including information in which the public clearly has a legitimate interest.

It is the opinion of the Pangu Audit Team that a reasonable and commonsense interpretation of IFC's Policy on Disclosure of Information makes it appear that IFC wants the best of all worlds. It desires to convey an appearance of transparency and accountability but in reality does not release any information from its private-sector clients without prior consent. This extends even to information that is already in the public domain. Further, as an omnibus-type rationale for not disclosing information, it has retained the option to evoke confidentiality on whatever ad hoc basis deemed appropriate. This means that the confidentiality policy could be used in an inappropriate manner to further the momentary interests of IFC staff or others.

The sporadic and partial release of information invites abuse, engenders suspicion, and fails to capture the benefits that a fuller policy of disclosure would bring. IFC's Policy on Disclosure of Information is, in our view, being selectively invoked at times to further the desire to avoid subjecting IFC to criticism as much as to serve any legitimate business purpose of the project sponsor or IFC.

Obviously, such a "policy" is confounded with internal conflict and contradiction. Overall it does not provide an informed and timely opportunity for involvement of IFC's internal and external stakeholders. This is illustrated by the circumstances surrounding this Independent Review whereby key external public interest groups felt totally alienated by IFC's Policy on Disclosure of information. Internally, we were quite surprised to learn from IFC's General Counsel that the terms of IFC's Investment Agreements were not even disclosed to own Board of Directors. Such an arrangement would appear to limit the IFC Board's opportunity to provide effective oversight and maintain accountability for IFC operations and staff actions and/or to discharge their trust, due diligence, and fiduciary obligations to the corporation.

The issues of "confidentiality" and "disclosure of information" were quite relevant to this Independent Review. Our deliberations have been conducted under the provisions of signed IFC Confidentiality Agreements. Further, the Terms of Reference for this project specified that IFC has the right to determine what information in our report is confidential.

The matter of what IFC considers "confidential" has not affected what we reviewed, what we reported, or what we concluded. We consider our entire report to Mr. Wolfensohn to be confidential until he releases it. Therefore, we have proceeded with the clear understanding that the ultimate authority for determining what is and what is not "confidential" information in this Independent Review resides with the President of the World Bank Group (since he also serves as President of IFC and Chair of the IFC Board of Directors) and/or the IFC Board of Directors.

Further, we have been advised that it is the intention of the World Bank Group's senior management to release this Independent Review of the Pangué Project to the public. To facilitate that process of public disclosure and to be able to assure the President of the World Bank Group that we had carefully considered these important confidentiality issues, we evaluated them in detail. Our conclusions are as follows:

1. The topic of "confidentiality" is not addressed in the IFC Investment Agreement for the Pangué Project.[^] Therefore, we believe that what determines "confidentiality" in this situation is a policy matter rather than a legal question.

2. In terms of IFC's Policy on Disclosure of information referenced above, the Pangué Audit Team supports fully the overall intent as stated for IFC to be more transparent in its deliberations but not to release "confidential business information" to the public. We believe it was the correct intent of that policy to avoid "competitive injury" to IFC's private-sector clients. In the IFC documents available to us it was clear, that when the IFC Board of Directors adopted the above-noted policy in July 1994, they intended it to be used for truly confidential "business" information and not for preventing the responsible and timely release of legitimate "public's right-to-know" types of information to interested and affected stakeholders.

The environmental and social consequences of World Bank Group projects, including those of IFC such as the Pangué Project, fall into the category of the "public's right to know" by today's global standards for social responsibility and organizational transparency.

3. The October 1993 Investment Agreement was written under the authority of New York State law. To better understand how the confidential information matters might be interpreted in that jurisdiction, we determined that the New York Energy Commission defines "confidential information" as that which "may consist of, but shall not be limited to: proprietary data concerning past, present or planned future energy distribution, sales volumes, or prices; customer lists; proprietary energy conservation or renewable energy resource devices, processes or plans; and other information which is not published or divulged, disclosure of which would cause substantial injury to the competitive position of the submitter" (Rules of New York State Energy Office S7843.2). While, of course, not identical to IFC's definition of confidential information, it seems remarkably consistent with the comments noted above from IFC's Executive Vice President's October 1994 introduction to IFC's Policy on Disclosure of information.

In our view, IFC cannot operate an effective program of environmental and social monitoring of projects in secret, without the public's being fully aware of all relevant information. It is too easy for environmental programs, operated outside the public view, to succumb to pressures to cut corners or to accept 'solutions' which

appear on the surface plausible but on deeper examination are found to lack substance.

As noted in footnote 1, we have structured this Independent Review to avoid any direct references to specific sections or language in the October 1993 Investment Agreement. In the opinion of the Pangué Audit Team, the alternative approach used herein to document our findings was appropriate and resulted in no material deletions of relevant environmental or social information, conclusions, or recommendations from this Independent Review of the Pangué Project.

Therefore, as noted in recommendation section of this Independent Review (see Tab W), in the opinion of the Pangué Audit Team this Independent Review of the Pangué Project contains no proprietary or confidential business information. We therefore believe the entire report should be released to the public in English and Spanish.

V. METHODOLOGY

Because of the complexities and controversies surrounding the Pangué Project, it was important to develop a methodical, professional process for conducting this Independent Review. To provide structure for what was, in essence, a performance audit of compliance with all applicable World Bank Group requirements, the guidelines prepared by the United States General Accounting Office in the publication titled "Government Auditing Standards" (GAO/OCG-94-4, 1994 Revision. See Chapter 6, "Field Work Standard for Performance Audits," pp. 62-87, and Chapter 7, "Reporting Standards for Performing Audits," pp. 88-102) were followed to the extent appropriate.

As specified in the TOR for this Independent Review of the Pangué Project (see Appendix 1, Tab Y), all applicable policies, procedures, notes, and operational directives (i.e., requirements) of the World Bank Group (particularly, those directly applicable to IFC) related to environmental and social matters were identified and reviewed in detail. Likewise, the environmental and social components set forth in the Environmental Management and Monitoring Plan for the Pangué Project (and from which the environmental and social covenants of the October 1993 Investment Agreement was developed) were identified (see below) and audited for compliance.

Throughout this Independent Review, the terms "World Bank Group" or "World Bank" are used interchangeably and are intended to refer to all World Bank Group institutions, including the International Finance Corporation (IFC). Also references to compliance with applicable World Bank Group policies, procedures, guidelines, notes,

operational directives, and/or requirements are meant to refer to any (or all) of the nine documents listed above.²

² Terminology has been a serious problem throughout this independent Review. As recently as February, 1997, IFC stated "[i]n early 1990 IFC did not specifically detail the criteria against which the project's acceptability would be judged." Lessons Learned and Retrospective at 5. We have been told repeatedly by IFC staff from late 1996 through March 24, 1997, that it is clear to them that World Bank "procedures"--including environmental analysis and supervision--never applied to IFC. They also made the point to us that World Bank policies have to be evaluated by IFC staff to see if they apply to IFC projects or not. Oftentimes it is their interpretation that they do not apply. The reason given to us by IFC staff is that World Bank policies say, for example, that the borrower--a government for non-IFC projects--will or must undertake such activities as passing laws. And since IFC's private-sector borrowers cannot pass laws the IFC Vice President and General Counsel explained to us, then those World Bank policies cannot apply to IFC's projects. This argument is, to say the least, not compelling.

It was not at all clear to us that this law-passing criterion somehow precluded any borrower--government or private-sector--from performing adequate environmental and social impact assessment studies and developing effective impact management programs that complied with the presumed high expectations of the World Bank Group that have been touted from 1990 to date by IFC for the Pangué Project. In fact, we see absolutely no reason why IFC should presume that a private-sector borrower could not do environmental and social analysis and impact management at least as well as a government entity. It was specifically pointed out to us by IFC staff that "supervision" of any environmental and social studies is different at IFC from "supervision" at the World Bank under OD 13.05. At IFC, the staff contends that "supervision" begins only after the Investment Agreement has been signed. This would be after all of the environmental and social studies had been completed, the Environmental Assessment, etc. prepared, and the project had been approved by the IFC Board of Directors. Prior to the Investment Agreement being signed, according to IFC staff, they "appraise" rather than "supervise" projects.

While the Pangué Audit Team does not agree with IFC's rather narrow interpretation of OD 13.05 and its applicability to IFC projects, it did help explain why, (notwithstanding the supervision requirements specified in all of the other applicable World Bank Group directives) as insisted on by the IFC staff, they had not "supervised" the environmental and social analysis work during the early years of the Pangué Project. Further, IFC legal staff has emphasized to us that there are important distinctions between World Bank directives, policies, guidance, etc. that are "relevant" to IFC and those which are "applicable" to IFC. The IFC legal staff has expressed serious concern to our Audit Team about some of our statements on applicability of World Bank policy, procedures, etc. to IFC. They are concerned that our "misuse" of some of these terms will create "distractions" in the mind of the reader from the substance of our report. This implies that the readers of this Independent Review will be more concerned that we used the correct IFC interpretation of the terminology associated with World Bank Group policies, directives, guidance, procedures, etc. than with the substance of our report. With all due respect to IFC staff, we categorically reject that view. IFC's Vice President and General Counsel has told the Audit Team that the terminology such as that discussed in this footnote is indeed "arcane and confusing." We completely agree with her assessment on that point. We believe IFC's environmental and legal staff is seriously concerned and indeed preoccupied about such matters at the expense of substance, performance and results. But we seriously doubt that most knowledgeable readers (inside and outside of IFC) will be troubled or too distracted by the common-sense interpretation and plain-English (or plain-Spanish) communication we have tried to use in this

The nine specific World Bank Group documents provided to us at the beginning of this assignment by IFC, and on which this Independent Review of the Pangué Project was based, were as follows:

1. Procedure for Environmental Review of IFC Projects (March 1990 to December 1992);
2. Internal Procedure for Environmental Review of IFC Projects (December 1992 to September 1993);
3. Environmental Analysis and Review of IFC Projects (September 1993);
4. World Bank Operational Directive 4.0 (Annex B): Environmental Policy for Dam and Reservoir Projects (April 1989);
5. World Bank Operational Policy Note 11.02: Wildlands: Their Protection and Management in Economic Development (June 1986);
6. World Bank Operational Policy Note 11.03: Management of Cultural Property in Bank-Financed Projects (September 1986);

Independent Review. We acknowledge we have done this at the expense of getting the "arcane and confusing" (even to IFC insiders) terminology exactly right as vigorously advocated by some IFC staff members. We believed it was far more important to focus on the substance of our work and to communicate it as clearly as possible to the World Bank Group's senior management and other interested external stakeholders. Given the importance that so many stakeholders place on IFC's presumably operating in conformance with the World Bank's policies, directives, guidelines, procedures, etc. and IFC's making a major point of the fact that the Pangué Project did, would, will, and/or should have met these presumably high World Bank standards--and thereby presumably conformed with World Bank policies--it is now surprising and disturbing to learn that within some quarters within IFC the belief is that World Bank "procedures" and some World Bank "policies" simply do not apply to IFC projects.

Finally, the Pangué Audit Team believes this confused situation over which World Bank Group requirements and associated terminology applies or does not apply to IFC is absurd. It should be resolved immediately by the World Bank Group's senior management. In the view of the Pangué Audit Team, there should be only one set of World Bank Group environmental and social standards and, without exception, IFC should adhere to them. And that should be made clear to all interested parties within and outside of the World Bank Group, particularly IFC. There should be more focus on substance, performance, and results than on perpetuating the "arcane and confusing."

7. World Bank Operational Directive 4.20: Indigenous Peoples (September 1991)³;
8. World Bank Operational Directive 4.30: Involuntary Resettlement (June 1990); and
9. World Bank Operational Directive 13.05; Project Supervision (March 1989; Revised January 1993).

NOTE: Based on what we were told by the IFC staff at the beginning of this assignment it was our clear understanding that the above nine World Bank Group directives were the same ones provided to Pangué S.A. as the environmental and social requirements they would be expected to adhere to during the development and construction of the Pangué Project. In correspondence from IFC's environmental advisor to ENDESA's consultant (April 26, 1990) and to Pangué S.A.'s Chief of Project (May 7, 1990) it was stated: "Under separate cover I am forwarding a number of World Bank Documents that you may find of interest." While that was hardly strong language, we presume that IFC made it clear to Pangué S.A. elsewhere (although we could not document that fact) that they were to conduct the environmental and social dimensions of their project strictly in accord with World Bank Group requirements. There was no mention in either of those memoranda, or elsewhere in the IFC files to which we had access, that there were any "exceptions" for IFC projects that differed from World Bank Group requirements, or any mention of specific criteria or standards that Pangué S.A. had to follow in order to demonstrate their compliance with "World Bank Group standards."⁴

³ Technically, when IFC began to appraise the Pangué Project in early 1990, the appropriate indigenous peoples policy statements and objectives were contained in Operational Manual Statement 2.34: Tribal People in Bank-Financed Projects, February 1982. Although this was not brought to the attention of the Pangué Audit Team until this assignment was nearly completed, it had no material or other effects on any aspects of this Independent Review.

⁴ In correspondence from the IFC Vice President and General Counsel to the Independent Advisor dated March 28, 1997, it was stated: "There is no written record of which World Bank Group directives were provided to Pangué S.A., but the IFC staff is quite certain that OD 13.05 was not included among them, because IFC has never considered that OD 13.05 applies to IFC projects." While this in itself is an important statement confirming the manner in which IFC failed to "supervise" the Pangué Project it, also contradicts what the IFC staff has been telling us for months regarding the applicability of OD 13.05 to IFC projects. They have insisted adamantly that OD 13.05 only applies to IFC projects after the Investment Agreement has been signed. We are now told at this late date by IFC's chief legal officer that it does not apply at all and never did. Further, it is important to point out that, while IFC staff apparently do not recall what they sent to Pangué S.A. in the way of World Bank Group requirements to be followed in their environmental and social analysis and impact management, they now recall vividly what they did not send. It is also interesting that, in the absence of clear written guidance, IFC seems to be deciding unilaterally what World Bank Group requirements "apply" and do not apply to them. This ad hoc approach perpetuates a lack of accountability and is, in our view, the basis for the

These points are important because the IFC staff contends (written comments transmitted to the Pangué Audit Team on December 11, 1996 and February 6, 1997) that World Bank procedures do not apply to IFC: "IFC, as a separate corporation deals with private sector clients, does not follow World Bank procedures but has its own operational procedures and rules which guide its day-to-day activities (emphasis added)." The Pangué Audit Team neither found nor was provided any written documentation that predates the beginning of this Independent Review in support of that rather broad sweeping statement and, therefore, disagrees with that opinion or "justification" provided by the IFC staff during the latter stages of this assignment.

In a letter dated March 28, 1997, the IFC Vice President and General Counsel advised us that, in an IFC report to the Board (February 24, 1993) entitled "Internal Procedure for Environmental Review of International Finance Corporation Projects: Background Information" (paragraph 3), it was noted: "All IFC projects must comply with World Bank policies, environmental guidelines, and occupational health and safety guidelines . . . IFC's operating procedures are different because its role and task are different . . . IFC does comply, however, with all relevant environmental policies, both explicitly stated policies and policies embedded in the Operational Directives."

While the above information was helpful in setting forth the distinction she wanted to make between "substance" and "procedure", it did not provide adequate justification or clarification for IFC's failure from the very beginning of the Pangué Project (1990) to identify which World Bank Group environmental and social standards it was required to have followed. We have found no supporting documentation that states which (or why) World Bank Group environmental and social policies are, or are not, applicable to IFC because of what it presumes to be justifiable differences in their private- versus public-sector clients.

We reject the IFC argument that there is any substantive difference in the roles of private-sector and government clients or sponsors regarding performance standards for environmental and social impact analysis and management. It would seem logical that the World Bank Group would desire no less quality performance from a private-sector partner of IFC than a government partner of IBRD. It appears that IFC decides which World Bank Group requirements are "relevant" to it (or now for the Pangué Project wants to retrofit which requirements are relevant after the project has been completed) on an unsound basis. Those it deems to be "relevant" it "complies" with and/or reports it has

many of the IFC failures associated with the Pangué Project. The existing situation is confusing persons such as ourselves outside IFC who presumed there was logic, internal consistency, and accountability within IFC. This serious matter of IFC's differing views within its own staff as to what World Bank Group policies apply and how such determinations are made should be addressed immediately by the World Bank Group's senior management.

complied with them, thereby allowing IFC to assert to all the world that its projects meet "World Bank standards", thereby providing their project sponsors with a seal of approval that is, apparently, considerably less justified than IFC would have those outside IFC believe. See footnotes 2, 3 and 4 for additional information.

INFORMATION AND DATA BASE

Our review has generally been limited to information provided to us by IFC staff and management. While in some cases we have included information of obvious relevance obtained from other sources, our work has not included any investigation of the reliability or completeness of the files provided us by IFC, or systematic comparison of those records with information derived from other sources, but it is based on our assumption that such records were adequate and complete. These concerns about our ability to obtain complete and timely information from IFC to ensure that we had an accurate picture of the relevant facts, increased substantially during the latter stages of this assignment.

The database for this Independent Review included the following:

- World Bank Group documents;
- IFC documents;
- ENDESA/Pangue S.A. documents including those of their consultants and contractors;
- File correspondence;
- Reports of other consultants to IFC; and
- Personal interviews and discussions.

All information was evaluated for significance, validity, relevance, and applicability to the TOR for this Independent Review. It should be noted that IFC does not have an automated document information management system (i.e., documents were not coded systematically for identification and retrieval); therefore, it was not possible to certify that 100 percent of all documents relevant to the Pangue Project were in the IFC Environment Division files to which we were directed. Although those files were extensive, and were reviewed at least twice by the Independent Advisor for relevance, there were numerous documents in Spanish that had not been translated and for which it appeared IFC was unaware of their contents. Even though two members of our team are

fluent in Spanish, it was obviously beyond our capacity to review and/or translate all Spanish-language documents in the IFC files. We concluded that it was reasonable to presume that, had IFC determined that the Spanish-language documents contained relevant and/or important information, it would have had them translated into English for its own use prior to the initiation of this Independent Review.

As was determined toward the end of this assignment, that presumption proved not to be true; and there were a number of key Spanish-language documents that would have facilitated our deliberations had they been translated and readily available. As documented in this Independent Review, some of the information they contained was quite significant and would have been valuable for IFC to have known about during the development, assessment, and supervision of the Pangué Project. However, it is important to emphasize that we believe the information in the IFC files to which we had ready access allowed us to understand the overall process for IFC's management of the Pangué Project, and, while there may have been other details, we are fully confident we have reviewed sufficient information to fully and objectively support all of our conclusions and recommendations.

Although recent developments associated with the Pangué Project, such as Pangué S.A.'s unilateral decision on March 11, 1997, to prepay the loan to IFC, are referenced herein, January 31, 1997, was jointly selected by IFC and the Pangué Audit Team as the official cutoff date for consideration of materials relevant to this Independent Review.

Finally, we wish to thank all of those at the World Bank Group, ENDESA/Pangué S.A., involved NGOs (particularly GABB), Chilean government officials, and others for their assistance in providing information for this Independent Review of the Pangué Project.

VI. PERFORMANCE AUDIT RESULTS

A. OBJECTIVE 1: TO DETERMINE COMPLIANCE OF THE PANGUE PROJECT WITH APPLICABLE WORLD BANK GROUP ENVIRONMENTAL AND SOCIAL REQUIREMENTS

As noted above, nine World Bank Group policies, operational directives, notes, and procedures were applicable to this Independent Review of the Pangué Project. From those nine documents, 28 distinct environmental and social requirements were identified. Although it was recognized that some criteria were more important than others in terms of their potential environmental and social impacts, no effort was made to weight or rank order them.

^

Details for the respective audit topics for Objective 1 are given in Tabs C-K.^

**1. AUDIT TOPIC 1.1: Procedure for Environmental Review of IFC Projects (in effect March 1990 to December 1992).
(Tab C)**

AUDIT ISSUES:

Did the Pangué Project comply with World Bank guidelines and policies, including the four-step environmental review process (i.e., (a) project screening; (b) issuance of environmental information requirements; (c) environmental review; and (d) project supervision) that was in effect from March 1990 to December 1992 (i.e., the start-up phase of the Pangué Project)?

AUDIT CRITERIA:

1. Compliance With World Bank Guidelines and Policies:

"IFC projects will be subject to an environmental review process to ensure that they are consistent with the spirit and intent of the appropriate Bank guidelines and policies."

2. Areas of Concern

The IFC environmental review process will involve [among others] consideration of the following:

- Assessment of baseline environmental situation;
- Sustainable use of natural resources;
- Protection of human health, cultural properties, tribal peoples, endangered species, and sensitive ecosystems; and
- Resettlement issues.

Responsibility

"The environmental review of IFC projects is the responsibility of IFC's Environmental Advisor.... The approval of the project, taking into consideration the findings of the environmental review, remains the responsibility of the Investment Director.... It is the Environmental Advisor's responsibility to coordinate with the Bank, to determine if the project conforms with the appropriate Bank guidelines and policies or to make IFC management aware of any issues that are not in conformity with these requirements."

3. Step 1: Screening

Was the Pangué Project screened and assigned to one of the three categories (A, B or C) based on the degree of potential environmental impacts and thus the required level of environmental analysis?

4. Step 2: Environmental Information Requirements

Environmental information requirements needed for the project review will be determined by the Environmental Advisor as part of the screening process. Immediately after the Initial Project Review and approval by the Investment Review Committee, the Environmental Advisor will document the information requirements and the appropriate Bank guidelines and policies against which the project will be reviewed.

It is primarily the project sponsor's responsibility to prepare and submit the necessary environmental information during the project appraisal process. However, the Environmental Advisor can provide guidance to project sponsors to ensure that this activity is completed in a responsible manner. The environmental information provided to IFC is the sponsor's property, but IFC encourages the sponsor to release relevant information to the appropriate interested parties.

- a. Did the IFC Environmental Advisor document the environmental information requirements and the appropriate Bank guidelines and policies against which the Pangué Project [would] be reviewed?
- b. Were these requirements communicated in an appropriate and timely manner to Pangué S.A.?
- c. As required, did the project sponsor (i.e., ENDESA/Pangué S.A.) prepare and submit the necessary environmental information during the project appraisal process?

5. Step 3: Environmental Review

"The purpose of the environmental review process is to determine if the project is in compliance with the appropriate Bank guidelines and policies. When the project is deemed by the Environmental Advisor to comply with appropriate Bank requirements, the Advisor will give his opinion to that effect in writing to the Investment Department. Monitoring requirements necessary to determine compliance with appropriate Bank guidelines and policies will also be identified as will recommendations regarding any other obligations of the sponsor. The Appraisal Team will convey these requirements to the sponsor and agreed to requirements will then become part of the Investment Agreement."

For Category A projects (i.e., like Pangué), were the following steps taken:

- Visits to the project site to gain firsthand knowledge and meet the project sponsor to discuss environmental information needs and determine issues to be addressed in the environmental assessment and,
- Desk review done of environmental information provided by the project sponsor and engineer?
- Were monitoring requirements for determining compliance with World Bank guidelines and policies identified?
- Were the necessary requirements specified above documented in writing and incorporated into the Investment Agreement?

6. Step 4: Project Supervision

"During project supervision it will be necessary to monitor the project to ensure compliance with the appropriate Bank guidelines and policies. . . . The Environmental Advisor will be responsible for project monitoring activity. In the case of noncompliance with Bank requirements, the Environmental Advisor will discuss an appropriate course of action with the Investment Department and assigned Engineer. The project sponsor will be notified of this action and any necessary follow-up requirements."

- Has supervision of the Pangué Project (i.e., periodic reports, supervision missions, project site visits) for compliance with appropriate World Bank Group requirements been undertaken in a timely and consistent manner?

CRITERIA EVALUATION:

1. Compliance With World Bank Guidelines and Policies

The "appropriate Bank guidelines and policies" that were in effect during the period prior to December 1992 (i.e., the ending period covered by this "Procedure for Environmental Review") and that IFC projects were to have been reviewed against for compliance were as follows:

- a. OPN 11.02: Wildlands (1986) (see Audit Topic 1.5, Tab G).
- b. OPN 11.03: Cultural Property (1986) (see Audit Topic 1.6, Tab H).
- c. OD 4.0: Environmental Policy for Dam and Reservoir Projects (1989) (see Audit Topic 1.4, Tab F).
- d. OD 13.05: Project Supervision (1989) (see Audit Topic 1.9, Tab K).
- e. OD 4.30: Involuntary Resettlement (1990) (see Audit Topic 1.8, Tab J).
- f. OD 4.20: Indigenous Peoples (1991) (see Audit Topic 1.7, Tab I).

Thus, with the exception of the two subsequent updates of environmental procedures, all the World Bank Group operational directives identified by IFC for this review of the Pangue Project were in effect during the earliest phases of project development. It was appropriate, therefore, to assume that they would have served as the basis for determining the specific criteria that would be followed to ensure compliance of the Pangue Project with appropriate World Bank Group requirements.

As summarized in the remaining sections of this Audit Topic, and in Audit Topic 1.2 through 1.9, from the very beginning of the Pangue Project in 1990 to its completion in late 1996, there were no indications in the record that IFC implemented a systematic and comprehensive process to ensure that the Pangue Project was in compliance with relevant World Bank guidelines and policies.

It seemed reasonable to expect that, at a minimum, a simple checklist of the relevant criteria for the above listed World Bank environmental requirements, along with their specific application to the Pangue Project, should have been developed. There was no evidence that this occurred, and, although considerable attention was given to the environmental components of the Pangue Project by IFC staff, it appeared to be an ad hoc approach that was not correlated in any objective or documentable manner with World Bank Group requirements.

As a result, a number of important issues were not addressed and consequently it was not possible for IFC to monitor, in an accurate and ongoing manner, ^ compliance with all applicable World Bank "guidelines and policies." **This was a fundamental and serious failure for which IFC must be held accountable.** Further details are provided below and in subsequent Audit Topics.

2. Areas of Concern/Responsibility

In the March 1990 to December 1992 version of the IFC "Procedure for Environmental Review," it was stated clearly that IFC projects must "conform with appropriate Bank guidelines and policies" and that IFC's management must be made "aware of any issues that are not in conformity with these requirements."

The single most important conclusion of this performance audit (because it drove so much of what was dysfunctional about the environmental and social aspects of the Pangue Project) was (as noted above) that IFC did not follow fundamental World Bank Group requirements in any consistent or comprehensible manner throughout the development and implementation of the Pangue Project. While the project documentation was replete with references to compliance with World Bank Group environmental standards, etc., there were no indications in the files as to what those specific requirements were, how they were to be implemented, or what were relevant measurements, benchmarking criteria, monitoring protocol, etc.

It was particularly troubling, once this pattern of noncompliance with World Bank Group requirements was documented, to discover in the very first Pangue Project document--the Project Date Sheet (March 8, 1990) the statement that although "it appears that...the project has significant environmental and socioeconomic-economic impacts, proper design, planning and implementation should reduce such impacts to levels acceptable to the World Bank and others."

How, at that early stage in the development of the Pangue Project, could a conclusion of such magnitude been reached without any identified performance standards, compliance criteria or supporting data? The only logical conclusion is that the environmental and social aspects of the IFC project were secondary to financial, construction design and technology considerations. This is consistent with these IFC environmental procedures which stated: "The approval of the project, taking into consideration the findings of the environmental review, remains the responsibility of the Investment Director."

Sadly, the misleading and inaccurate line of reasoning that the Pangué Project was in full compliance with World Bank Group standards was maintained by IFC consistently in subsequent project documentation.

Equally troubling to the Audit Team were several important instances throughout the development of the Pangué Project where key environmental/social information was not disclosed in an objective and/or timely manner as required by World Bank policy to senior management or the IFC Board of Directions. For specific examples see Audit Topics 1.7 (Tab I) and 2.5 (Tab P).

Finally, we state this overall conclusion of IFC's failure to comply with World Bank Group requirements is stated now because this trend began at the very earliest stages of the Pangué Project. Regrettably, it set the tone for subsequent events associated with the environmental and social aspects of the Pangué Project throughout the development and implementation process.. We recognize this is a serious and difficult conclusion. We have not made it lightly.

3. Project Screening

At its earliest stages, the Pangué Project was identified as a Category "A" project under IFC's environmental review procedures.

References:

- IFC Project Data Sheet, March 1990, p. 3.
- Proposal Investment in Empresa Electrica Pangué S.A., Chile. IFC Board of Directors Report (R92-182, p. 13). November 24, 1992.

4. Environmental Information Requirements

- a. There was extensive documentation in IFC files regarding the need for Pangué S.A. to comply with environmental information requirements. For example:
 - IFC Environmental Unit visit to Chile to discuss with ENDESA environmental measures to be taken[^]. April 1990.
 - IFC Memorandum: IFC Environmental Specialist to Pangué Manager[^]. November 21, 1990.

- b. Overall World Bank guidelines and policies were identified in what appeared to have been a timely manner. However, as noted in Sections 1 and 2 above, the specific World Bank Group requirements, etc., were never defined by IFC; the relevant documents were sent to Pangué, S.A., but as far as we can determine from the written record, no specific guidance for their comprehensive application and systematic implementation was provided to Pangué S.A. by IFC.
- c. With the previously noted shortcoming, ENDESA/Pangué S.A. prepared and submitted several environmental documents during the project appraisal process. The key studies were:
- Estudio Preliminar para la Evaluación del Impacto Ambiental del Sistema de Centrales Hidroeléctricas del Alto Bío-Bío, Universidad de Concepción, 1989.
 - Análisis de Posibles Impactos de la Central Pangué en el Alto Bío-Bío, Universidad de Concepción, 1989.
 - Proyecto Pangué: Planificación y Gestión Ambiental, Alejandro Colomes, 1990.
 - Evaluation of Environmental Impacts Relevant to the Pangué Project, Ecology and Environment, Inc. and Agrotec Ltd., 1991.

5. Environmental Review

- a. April 1990: IFC Environmental Unit representatives visited Pangué Project site. Meetings were held with Pangué S.A., appropriate governmental agencies, Comisión Nacional de Energía (CNE), Comisión Nacional pro Defensa de la Fauna y Flora (CODEFF), University of Concepción (EULA/Chile Center), indigenous community (Pehuenche) representatives and other local groups.
- January 1991: IFC Environmental Unit representatives visited Chile to continue Pangué Project review.
 - October 1991: World Bank social anthropologist visited Chile; Pehuen Foundation "concept" discussed.
- b. The following reviews of the Pangué EA and related environmental studies were completed:

- A Review of the Report "Evaluation of Environmental Impacts Relevant to the Pangué Project" IFC Consultant, March 1992.
 - Analysis of the Report Entitled: "Evaluation of Major Environmental Impacts of the Pangué Project" by EULA/Chile, University of Concepcion for the Natural Resources, National Properties and Environmental Committee of the Chamber of Deputies, Chile, August 1992.
 - Assessment of Electric Power Generation Alternatives in Chile, Monenco Inc., October 1992.
 - Evaluation of Environmental Impacts Downstream of the Pangué Project. Phase Ia, Ecology and Environment Inc. and Agrotec Ltd., November 1992.
- c. There was no evidence in the record that comprehensive and systematic monitoring requirements to determine compliance with relevant World Bank Group requirements were either
- (a) identified within IFC or to the project sponsor or
 - (b) subsequently monitored.
- d. Once again, while the Environmental Guidelines in the IFC's Investment Agreement for the Pangué Project had some innovative provisions they did not appear to track in any recognizable manner the well-identified and substantive requirements listed in the respective World Bank documents noted in Audit Topics 1.2 through 1.9. See Audit Topics 2.1 through 2.9 for details on compliance with the Environmental Management and Monitoring Plan.

6. Project Supervision

The IFC staff contends emphatically that it has no responsibility for "supervision" of projects until after the Investment Agreement has been signed (see Audit Topic 1.9, Tab K for further details). For the Pangué Project that would have been after October 1993. As demonstrated throughout this Independent Review there were several occasions where IFC staff failed, in our opinion, to supervise project activities, particularly at the beginning of the development process. Those failures in supervision have contributed to many of the controversies surrounding the Pangué Project today.

While we concur that IFC staff does have a major responsibility to supervise compliance with legal agreements, we found no documentation that supported the opinion that IFC staff's responsibilities for supervision of project is limited to only those activities that occur after the Investment Agreement has been signed. Indeed in World Bank OD 13.0: Project Supervision (at paragraph 64), on the topic of measuring the quality of supervision, it is noted: "The quality of supervision and its effectiveness are more difficult to determine, and are to some extent reflected by early and precise identification of implementation problems, clear definition of actions taken to overcome them and the ability to get appropriate actions taken." (Emphasis added.) That "early and precise identification of implementation problems" appears to have been one of the major supervision activities not undertaken by the IFC staff in its "supervision" of the Pangué Project.

IFC's "monitoring" of the Pangué Project appeared both extensive and time-consuming. File documentation and personal communication of individuals associated with this project indicated that literally dozens of contacts (formal and informal) were made during the period 1990 to 1992 (see below). However, during this initial phase of the Pangué Project, several key issues (i.e., cultural property management, wildlands, indigenous people issues, and downstream environmental impacts) were not identified and/or addressed adequately by ^ IFC ^. These were material omissions and form the basis for many of the controversies surrounding the Pangué Project today (for example, see Audit Topics 1.5, 1.7, 1.8 and 2.5).

DATE	ACTIVITY
April 1990	IFC Environment Unit representative visits Chile. Meetings with Pangué, CNE, Univ. de Concepción (EULA), CODEFF, representatives of the Pehuenche Communities and other local groups. Visit to the project site.
January 1991	IFC Environment Unit representative visits Chile. Meetings with Pangué, CONAMA, CONAF and CODEFF.
March 1991	IFC Investment Department representative visits Chile. Meetings with Pangué and representatives of Ecology and Environment and Agrotec Ltd., Pangué's environmental consultants.
October 1991	World Bank social anthropologist visits Chile. Meetings with Pangué, CODEFF, GABB, representatives of the Pehuenche Communities and other local groups. Initial discussion of the idea of a Pehuen Foundation. Visit to the project site.
October 1991	Monenco contracted by IFC to begin Assessment of Electrical Power Generation Alternatives in Chile.
December 1991	Draft EA submitted to IFC by Pangué.
January 1992	Meeting with U.S. Treasury representatives.
March 1992	IFC consultant's review of project EA submitted to IFC.
April 1992	Monenco's first draft report submitted to IFC.
April 1992	Meetings with Pangué to discuss plans and programs to respond to IFC consultant's and IFC's comments on the EA.
May 1992	Nine IFC Directors and Alternates (including USA and UK) visit the project site in Chile.
May 1992	IFC consultant social anthropologist visits Chile. Meetings with Pangué, CEPI, NGO's (including GABB), representatives of the Pehuenche Communities and other local groups. Visit to the project site.
June 1992	Draft report submitted to IFC by Pangué on implementation of the EA recommendations, as commented on by IFC consultant and IFC
June 1992	Report submitted to IFC by consultant social anthropologist.
July 1992	Meeting with Monenco to discuss the draft report: also attended by Pangué representative.
July 1992	Meeting with Pangué representative to discuss plans and programs regarding outstanding environmental and socioeconomic issues.

July 1992	IFC team visits Chile. Meetings with Pangué, CONAF, CEPI, CNE, MIDEPLAN, CONAMA, EULA and GABB and representatives of the Pehuenche Communities and other local groups. Visits to the project site and two other existing hydro-dam sites in Chile.
October 1992	Further meetings with Pangué to discuss plans and programs, specifically, details of the Pehuen Foundation and the terms of reference for the downstream impacts study.
October 1992	After extensive negotiations, approval of the terms of reference for the downstream impacts study to be carried out by consultants to Pangué and of the details of the Pehuen Foundation.
November 1992	Monenco's second draft Assessment of Electrical Power Generation Alternatives in Chile submitted to IFC.
November 1992	Monenco's second draft report made publicly available.
November 1992	IFC's Environmental Unit prepares the comprehensive summary of the EA.
November 1992	Environmental data log, register and monitoring and impact minimization programs initiated by the Ecological Station.
December 1992	IFC Board of Directors approves IFC investment. Management agrees to provide a report to the Board when specific downstream mitigation measures are identified.

See Audit Topic 1.9 for additional details.

CONCLUSIONS:

- 1. There was no systematic and comprehensive identification of specific World Bank Group requirements on which compliance could be measured.**
- 2. The Pangué Project complied with some aspects of the four-step environmental review process that was in effect from March 1990 to December 1992, including identifying it as a Category A project.**
- 3. Insufficient attention was paid to downstream environmental impacts, induced impacts on indigenous peoples, cultural properties management, and wildlands protection issues during the early phases of project development.**
- 4. Several of the important controversies surrounding the Pangué Project today probably resulted directly from the failure to identify and/or address these issues (see Audit Topics 1.4, 1.5, 1.7 and 2.5).**

5. Overall, IFC did not provide adequate supervision of the Pangué Project during the early phases of project development when these environmental review procedures were applicable.

RECOMMENDATIONS

1. The World Bank Group management team must make a decision as to whether World Bank operational directives and policies for managing the environmental and social impacts of projects apply to the operations of the International Finance Corporation. Assuming they do apply, that fact must be communicated clearly to the IFC management and staff. If the current Operational Directives and procedures are not satisfactory or not workable, they should be amended or revised, but there needs to be some clearly defined set of objectives or there is no way to decide whether the program is succeeding or failing.

Most interests outside World Bank do not distinguish clearly between IFC and the rest of the World Bank Group. Particularly in countries that do not have highly developed legal or regulatory systems for controlling environmental and social impacts, a high degree of reliance is placed on "World Bank guidelines" for managing impacts. As in the case of the Pangué Project, approval by IFC was seen as a certification that the impacts would be properly managed.

No aspect of our review of the Pangué Project was more troubling than the inability of IFC to articulate clearly what procedures it was to follow, and whether the World Bank Operational Directives were or were not guidelines applicable to it. If IFC is not in fact following the World Bank policies because its different lending focus makes that inappropriate, or for any reason, it should be made absolutely clear that this is the case to all stakeholders, including the public.

2. IFC must develop and implement a comprehensive system of operational accountability for environmental and social components of IFC projects.

Even the most sustained, intense and sincere efforts of staff may not lead to anything that can be called organizational success if there is no agreement on what the goals are or who decides if they are met. IFC and its staff must be accountable for achieving defined levels of performance for compliance with World Bank guidelines and policies for managing environmental and social impacts of IFC projects.

A basic system of accountability requires both that there are understood organizational objectives and that they are based on rigorous processes rather than retrospective self-evaluation for determining whether those objectives were consistently obtained. As noted above, clearly understood organizational standards of performance are

absent at IFC. Consequently, there was no effective process for objective independent evaluation of environmental and social compliance or overall performance for the Pangué Project. See Audit Topic 1.9, Tab K (Project Supervision) for additional institutional recommendations.

2. AUDIT TOPIC 1.2: Internal Procedure for Environmental Review of IFC Projects (in effect from December 1992 to September 1993).(Tab D)

AUDIT ISSUE:

Has the Pangué Project complied with this updated version of the IFC environmental review process?

AUDIT CRITERIA:

1. Specifically, these revised procedures note: "It is the policy of the International Finance Corporation that all operations are carried out in an environmentally responsible manner and that investment projects meet the highest environmental standards"; and, the procedures for environmental review are to ensure that

- Due diligence is applied to each investment project;
- Environmental issues are addressed early enough in the project cycle to consider technology and site alternatives, mitigation measures and efficiency improvements;
- There are adequate public participation and disclosure of environmental information; and
- No IFC funds are disbursed unless all environmental issues are satisfactorily addressed.

The purpose and outline of IFC's environmental review process are as follows:

- a. IFC projects are subject to an environmental review process to ensure consistency with the spirit and intent of the appropriate World Bank policies and guidelines. All IFC projects must also meet the environmental requirements of the host country.

b. The five steps of the environmental review process are (1) project screening, (2) issuance of environmental information requirements, (3) environmental review, (4) consultation and disclosure, and (5) project supervision.

c. The procedure outlined in this document ensures that information necessary for the environmental review is available to IFC in a timely fashion, and that the necessary environmental review and clearance are completed prior to submission of investment proposals to the IFC Board of Directors.

2. Areas of Concern

The environmental review process involves (among others) consideration of the following:

- Assessment of the baseline environmental situation;
- Sustainable use of natural resources;
- Protection of human health, cultural properties, endangered species, and sensitive ecosystems;
- Resettlement issues; and
- Socioeconomic concerns.

3. Responsibility

a. The Environment Unit has the overall responsibility for the review and will issue a formal clearance memorandum (para. 15) describing the environmental situation, mitigation measures, outstanding issues and all environmental information relevant to the investment decision. . . . In case of significant outstanding environmental issues or concerns at the conclusion of the appraisal, Senior Management will decide on whether to present the project to the Board on the condition that outstanding issues are addressed before disbursement of IFC funds to the project. . . . [C]ommunications with the sponsor regarding additional information requirements or conditions associated with the environmental clearance are the responsibility of the

Investment Officer. This includes obtaining from the sponsor the authorization to publicly release environmental information deemed necessary by IFC."

b. The environmental review process involves consideration of a number of different disciplines. As required, the Environment Unit seeks necessary technical assistance from specialists within the World Bank Group, or from outside consultants. It is the responsibility of the Environment Unit to determine if the project conforms with the appropriate policies and guidelines, to coordinate with the World Bank, and to make IFC management aware of any issues that are not in conformity with these requirements.

4. Step 1: Project Screening

Early in the review process all IFC projects are categorized by the Environment Unit into one of four categories (A, B, C or FI [Financial Intermediary]) based on their potential environmental impact, and thus the required level of environmental analysis.

5. Step 2: Environmental Information Requirements

Prior to the Initial Project Review (IPR), the Investment Officer or Technical Specialist provides a project description to the Environment Unit, and the Environment Unit determines the category of each project. The Environment Unit then prepares an environmental information memorandum, which documents the following:

- a. The category of the project and the rationale for the categorization;
- b. The major environmental concerns associated with the project;
- c. The draft of the environmental information for the IPR and the monthly operational report;
- d. The details of the environmental information required from the project sponsor to enable the Environment Unit to complete the review process; and
- e. Typical standards for a project of this type (e.g., World Bank policies and guidelines, host country requirements)

and/or internationally accepted standards) against which the project will be reviewed.

6. It is primarily the project sponsor's responsibility to prepare and submit the necessary environmental information to IFC during the project appraisal process. However, the Environment Unit can provide guidance to the project sponsor to ensure that this activity is completed in a responsive manner.

7. IFC must have sufficient information on the environmental aspects of a project to allow for proper project screening and preparation of the environmental information memorandum. If insufficient information is available and during the project appraisal process significant additional environmental issues are revealed, the Environment Unit may reevaluate the category of the project as well as the environmental information requirements for the project.

8. Step 3: Environmental Review

The environmental review of a project is an interactive process requiring communication between the Regional or Specialist Department, the Legal Department, the Technical and Environment Department and the project sponsor. Specific activities associated with the environmental review process of Category A (i.e., Pangué Project) are as follows:

Category A Projects

- Visit to the project site by a member of the Environment Unit or an IFC-selected consultant to gain firsthand knowledge of the project and to meet with the project sponsor to discuss environmental information needs and to determine the issues to be addressed in the Environmental Assessment; and
- Desk review of the Environmental Assessment provided by the project sponsor and other relevant information provided by the Project Team.

9. "The purpose of the environmental review process is to determine if the project is in compliance with appropriate World Bank policies and guidelines, host country requirements and/or internationally accepted standards. . . . In all cases, the report to the Board of Directors must provide an outline of the findings of the environmental review process including the category of the project, major issues and mitigation measures, and other details deemed appropriate."

10. Step 4: Consultation and Disclosure

For Category A projects IFC requires the project sponsor to consult with local interested parties and affected groups during the preparation of the Environmental Assessment. Consultation is a process of working with local communities and affected groups to identify possible project impacts and to reconcile opposing views about the project as much as possible. A draft of the Environmental Assessment must be made available to local interested parties and affected groups by the project sponsor.

11. The environmental information provided by the project sponsor to IFC is the property of the project sponsor. For Category A projects, on completion of the environmental review by IFC and as early as possible in the project cycle, the Environment Unit prepares a comprehensive summary of the Environmental Assessment, including any outstanding and related issues, and makes it available to interested parties as early as feasible and, in any event, not later than submission of the project documents to the IFC Board of Directors.

12. Step 5: Project Supervision

IFC monitors the environmental performance of projects in its Investment Portfolio. Project monitoring in practice usually occurs in one of the following ways:

- Review of progress reports prepared by the project sponsor;
- Supervision missions carried out by the Regional or Specialist Department and the Technical and Environment Department; and
- Project site visits by the Environment Unit.

The Environment Unit is responsible for this environmental monitoring activity. In the case of noncompliance, the Environment Unit discusses an appropriate course of action with the Regional or Specialist Department and the Technical and Environment Department. The project sponsor is notified of this action and any necessary follow-up requirements by the Investment Officer. Project completion reports will evaluate the actual environmental impacts of the project against the impacts anticipated in the Environmental Assessment, and will assess the effectiveness of the mitigating measures adopted by the project sponsor.

CRITERIA EVALUATION:

NOTE: The procedures for the environmental review of IFC projects were modified (clarified and improved) three times during the period March 1990 to September 1993. Thus the performance audits for each of the topics involving these procedures (i.e., Audit Topics 1.1, 1.2, and 1.3) should be viewed as components of a cumulative process rather than as isolated events. Accordingly, Audit Topic 1.2 (which was just taking effect when the IFC Board of Directors approved investment in the Pangue Project, December 1992) builds on items considered in Audit Topic 1.1 (Tab C).

1. Does the Pangue Project meet the highest environmental standards as required by IFC policy? Did it comply with the spirit and intent of the appropriate World Bank policies and guidelines?

Regretfully, the Pangue Audit Team concludes that the Pangue Project does not meet the highest environmental standards" or "comply . . . with appropriate World Bank policies and guidelines." It was not possible to determine how the IFC staff identified those criteria to include in the Investment Agreement for the Pangue Project. As a result of this performance audit, it was clear that several important topics were not included or, in some instances, not considered adequately.

2. Were areas of concern (i.e., sustainable use of natural resources, cultural properties, endangered species, sensitive ecosystem and resettlement issues) considered adequately?

Several of these areas were identified and addressed^ (i.e., sustainable use of natural resources, endangered species and involuntary resettlement); others (i.e., cultural properties and sensitive ecosystem) were not considered adequately. See respective Audit Topics for further details.

3. Did the Pangue Project comply with the five steps of the environmental review process:

Step 1: PROJECT SCREENING (See Audit Topic 1.1)

**Step 2: ENVIRONMENTAL INFORMATION REQUIREMENTS
(See Audit Topic 1.1)**

**Step 3: ENVIRONMENTAL REVIEW
(See Audit Topic 1.1)**

Step 4: CONSULTATION AND DISCLOSURE

a. ^

b. ^

See Audit Topic 1.3 for further discussion of this topic.

c. IFC was required to prepare a comprehensive summary of the EA; that document was to have been made available to "interested parties. prior to submission of project documents to the IFC Board of Directors. See document entitled: EMPRESA ELECTRICA PANGUE S.A. HYDROELECTRIC PROJECT, CHILE ENVIRONMENTAL ASSESSMENT SUMMARY Prepared by International Finance Corporation, November 1992

Also see Audit Topics 1.1 (Tab C) and 2.5 (Tab P) for specific discussion regarding the adequacy of various aspects of the environmental assessment of the Pangue Project.

Step 5: SUPERVISION

(See Audit Topic 1.9, Tab K for details)

CONCLUSIONS:

1. **With the major exceptions noted in Audit Topic 1.1, the Pangue Project complied with several aspects of the updated version of the "Internal Procedure for Environmental Review of IFC Projects (in effect from December 1992 to September 1993)."**

2. ^

3. **The IFC staff did not provide adequate supervision for several aspects of the Environmental Assessment of the Pangue Project during the period December 1992 to September 1993 when these procedures were in effect. This was particularly true for those IFC supervisory activities that should have been undertaken in association with the downstream environmental impact analysis (see Audit Topic 2.5, Tab P and supplemental study, Appendix 2, Tab Z)**

As noted in Audit Topics 1.1, 1.7 and 2.5, environmental issues such as downstream flows and impacts of the project on indigenous peoples were of critical public importance. Once it was decided to approve the Pangue Project prior to their being resolved, there was not an adequate opportunity for public participation in subsequent

reviews. Noting that reports were "made available" does not provide adequate assurance that, in fact, the public had a meaningful or timely opportunity for input at this crucial stage in the development of the Pangué Project. Repeated deferral of the critical downstream impact issues by approvals on condition of future studies meant that key portions of the decision process were based on information^ that is vital to informed comment but that has never been made public. The records were not clear how (or if) IFC followed up^ effectively implement this phase of the public participation process.

A further and serious concern is the potential negative impact all of this has on the World Bank Group as an institution. If IFC is not in fact following World Bank environmental and social policies (for whatever reasons) but asserting that it has, there is a very high risk that (a) the project impacts will not be properly managed and (b) the IFC (and the World Bank Group) will lose significant credibility with important stakeholders (i.e., governments, affected parties, NGO's and the public at large) when situations like those associated with the Pangué Project occur. These serious problems require immediate attention by IFC and the World Bank Group's senior management team.

RECOMMENDATION:

1. If IFC is to establish and maintain public credibility for compliance with environmental and social objectives, it must do business in a timely and transparent mode.

Issues of immediate and long-term environmental impacts, indigenous peoples, involuntary resettlement, dramatic changes in regional social and economic conditions, etc., are so suffused with the public interest that they cannot be resolved adequately in a process in which directly affected parties and the public lack timely and informed access to relevant information.

While IFC has a legitimate interest in the financial and commercial aspects of the relationship with project sponsors, as well as other proprietary aspects of the project, this kind of situation has been successfully managed in a way consistent with informed public participation by virtually every environmental impact review process in the world. There is no reason why this cannot be achieved successfully throughout the decision-making process and implementation phases of every project IFC proposes to undertake.

3. AUDIT TOPIC 1.3: Environmental Analysis and Review of IFC Projects (September 1993). (Tab E)

This updated document provides guidance to the IFC staff on the procedures for conducting the environmental review of proposed projects. Substantive changes from the previous "Internal Procedure for Environmental Review of International Finance Corporation Projects" issued on December 11, 1992 are:

- Clarification of the purpose and content of environmental analysis, environmental assessment (EA), and environmental review;
- Clarification of roles and responsibilities; and
- Strengthening of public consultation and disclosure requirements.

Of these, the only item directly relevant to the review of the Pangue Project that was not covered adequately in the audits of the previously published IFC environmental procedure (i.e., Audit Topics 1.1 and 1.2) was the issue dealing with the "strengthening of public consultation and disclosure requirements." Also, the relevant section on project supervision is considered herein.

AUDIT ISSUE:

Since September 1993, has the Pangue Project complied with these updated and/or new requirements for strengthening public consultation and disclosure requirements for IFC projects?

AUDIT CRITERIA:

Has the Pangue Project met the following criteria?

1. Involvement of Affected Groups and Nongovernmental Organizations

a. IFC expects the project sponsor to take the views of affected groups and local interested parties into account in project design and implementation, and in particular in the preparation of Environmental Assessments.

b. Such consultations should occur at least at the following two stages of the EA process: (i) in the early stages of project development and (ii) once a draft EA has been prepared. In projects with major social components, which require consultations pursuant to other World Bank policies, the consultations on social issues and on the EA may be linked.

c. It is the responsibility of the project sponsor to address issues or concerns raised by affected groups and interested parties.

2. Disclosure of Information for Category A Projects

a. In order for meaningful consultations to take place between the project sponsor and affected groups and local interested parties, it is necessary that the project sponsor provide relevant information prior to consultations. The information should be provided in a timely manner and in a form that is meaningful, and accessible to, the groups being consulted.

b. Environmental information provided by the project sponsor to IFC is the property of the sponsor. IFC policy is that, soon after a project has been screened as a Category A project, IFC requests the sponsor's advance permission to release the EA to the IFC Board of Directors and the public.

c. Once the Investment Department has received a copy of the EA from the sponsor and obtained permission for their release, IFC releases the EA and Executive Summary (without IFC endorsement) to the public not later than 60 days prior to the proposed Board date.

3. Project Supervision

As stated in Annex A (page 2, paragraph 14), "IFC monitors the performance of all active projects in its portfolio to ensure compliance with environmental and other conditions. In the case of non-compliance, an appropriate course of action is determined by IFC, and the sponsor is notified as to required follow-up actions. Investment Assessment Reports include evaluation of the actual environmental impacts of the project

against the impacts anticipated in the environmental analysis and review and assess the effectiveness of the mitigating measures adopted by the project sponsor."

CRITERIA EVALUATION:

During the development of the Pangué Project three sets of IFC environmental procedures were in effect. The proper basis for assessing IFC's compliance with environmental analysis and review procedures should be the requirements of those World Bank (IFC) procedures in place at the time specific activities occurred. (See Audit Topics 1.1 and 1.2.) The vast majority of the environmental review requirements of the Pangué Project, particularly in support of the Environment Assessment, occurred prior to September 1993 when this particular document went into effect. However, these updated procedures note that "IFC expects the project sponsor to take the views of affected groups and local interested parties into account in project design and implementation."

Thus, for Audit Topic 1.3, it was relevant to evaluate how the Pangué Project[^] complied with these updated and/or new requirements for strengthening public consultation and disclosure requirements for IFC project activities after September 1993.

^

Informed participation is a clear and fundamental component of World Bank policy for involving indigenous people in activities that directly affect them. The Pehuen Foundation was the mechanism developed to address the wide range of issues associated with the impacts of the Pangué Project on the Pehuenches. The failure to inform the Pehuenche community of the findings of the Downing Report, or to participate in the development of an appropriate response to it,[^] does not comply with the spirit or intent of World Bank policy expressed herein or in other relevant directives.

As noted in Audit Topic 1.7, Tab I as this Independent Review was being finalized in early April 1997 IFC reportedly dispatched a non-Spanish speaking staff member to Chile to take an incomplete and unedited copy of the May 1996 Downing Report to present to the Pehuenches.[^] In the opinion of the Pangué Audit Team it is not difficult to understand why a situation like this falls far short of meeting the standards of the World Bank Group requirements for informed participation[^].

This entire situation of how IFC has dealt with the indigenous peoples associated with the Pangué Project is very unfortunate. A more detailed independent examination of this entire matter should be undertaken by the President of the World Bank Group.

Another major difficulty relative to the topic of public involvement/disclosure of information for the Pangué Project (and presumably other IFC projects) is that IFC takes

the position that it "does not have the right or responsibility to release reports that have been commissioned by others[;] only the company has the right to release these type of reports."

^

CONCLUSIONS:

1.^

2.^ IFC ^ appears to have "attempted to be responsive" to the inquiries from numerous interest groups and individuals. The effectiveness of its overall approach, and hence IFC's credibility, has been impeded by IFC's restrictive information disclosure policies.

3. As has been noted in other Audit Topics (see in particular Audit Topic 2.5 and the special case study entitled Supplement to the Evaluation of IFC's Management of Downstream Environmental Impacts of the Pangué Project, Appendix 2, Tab Z), IFC failed to adequately supervise a number of environmental requirements that were operative in September 1993.

RECOMMENDATION:

^

See Audit Topic 1.2 (Tab D) for further recommendations.

**4. AUDIT TOPIC 1.4: World Bank
Operational Directive 4.00: Environmental
Policy for Dam and Reservoir Projects
(April 1989). (Tab F)**

AUDIT ISSUES:

Has the Pangu Project complied with relevant World Bank environmental policy directives for dam and reservoir projects?

AUDIT CRITERIA:

1. Project Cycle (pp. 2-3)

a. Environmental Reconnaissance

During identification and environmental reconnaissance by independent recognized experts or firms (selected by the borrower and approved by World Bank) it is essential to:

- (i) Ensure that potential environmental effects are identified;
- (ii) Ascertain the scope of further environmental studies and actions needed;
- (iii) Assess the ability of the borrower to undertake them; and
- (iv) Advise on the need for an environmental assessment.

b. Environmental Assessment

During preparation, the World Bank should review the draft Terms of Reference (TOR) for the environmental assessment part of the feasibility study, the short list of consultants, and their technical proposals. Environmental assessment of IFC projects should be consistent with the following requirements on appraisal:

"The appraisal mission should include environmental specialists to assess the environmental analysis, the design of measures to minimize or mitigate adverse environmental impacts,

and the capacity of the borrower's staff to implement them. The environmental panel, where required (para. 18), should be convened during project appraisal and future activities of the panel reviewed. The Staff Appraisal Report should describe the environmental issues and their resolution, as well as the institutional arrangements."

c. Project Supervision

The environmental monitoring system, dam construction contractors' performance, adequacy of the environmental measures, institutional arrangements, training and performance of the in-house environmental unit (para. 17), and reports of the environmental panel should be reviewed with the borrower during supervision, and any necessary corrective actions identified and agreed upon.

2. Institutional Aspects

a. Interagency Coordination

Environmental agencies should be consulted in project planning and preparation to ensure that relevant line ministries and other decision makers are made aware of potential environmental impacts and recommended mitigatory measures.

b. In-House Environmental Unit

Each project involving large dams or having significant environmental implications requires an in-house environmental unit with adequate budget and professional staffing. The unit should be established as early as possible to help ensure that pre-project baseline data are collected and environmental problems anticipated at an early stage. It should exist during project implementation plus an additional period to be agreed upon with the World Bank.

c. Environmental Panel

For projects involving large dams, or having major environmental implications, the borrower should normally engage an advisory panel of independent, internationally recognized, environmental specialists, the composition of which should be determined by the environmental reconnaissance. However, in certain cases, the reconnaissance study may advise, based on the significance of the environmental issues and the borrower's (including consultants') capacity to deal with them, that the panel is not needed. The panel should advise the borrower periodically on environmental aspects of the project, including:

- (i) Analysis of the findings of the environmental reconnaissance;
- (ii) The TOR and findings of the environmental assessment;
- (iii) Environmental plans, procedures, budgets, and progress throughout the life of the project; and
- (iv) The in-house environmental unit's staff, training, functions, and relations with the ministry of environment.

Depending on circumstances, panel reviews would normally be held once or twice a year during preparation and implementation, or when the in-house environmental unit requests.

- d. Consultation with Nongovernmental Organizations (NGOs) and Affected Groups

Community organizations, research centers, environmental advocates, and other NGOs can often provide valuable perspectives on improving both project design and implementation. To tap these perspectives, World Bank encourages consultations by project authorities (including consultants preparing the project) with appropriate NGOs, particularly local NGOs. World Bank staff, too, should consult with NGOs as appropriate, bearing in mind the capacity of NGOs to offer important perspectives on project design, and the need to protect the confidentiality of information shared between World Bank and the borrower. In addition, World Bank encourages consultation between project executing agencies and the population affected by the project as part of the project design process.

CRITERIA EVALUATION:

1. Project Cycle

- a. Environmental Reconnaissance
- b. Environmental Assessment (see Audit Topics 1.1 and 1.2)

2. Project Supervision

Background Information

In the early 1990s when IFC's involvement began with the Pangué Project, Chile was in the process of democratization and was just beginning to develop a legal basis for

natural resources conservation and environmental protection. While Chile had some environmental laws, at that time there was no effective method for enforcing most of them, or for developing a coherent national environmental policy prior to the enactment, in 1994, of Chile's comprehensive environmental law, the Ley de Bases del Medio Ambiente, and the organization of the national (CONAMA) and regional (COREMA) environmental authorities. No environmental impact study system existed prior to this.

Chile has now established a viable environmental agency, CONAMA, and has not only a sophisticated environmental framework law, but specific regulations for the enactment of environmental air quality and emission standards.

Environmental impact assessment is currently undertaken on a voluntary basis while the applicable regulations to implement the law are being developed. Although the process is voluntary, there is significant incentive to submit to the process; and participation is expected for any significant project. Participation not only ensures a positive public image for the project, but the applicant receives a benefit in the form of the "one-stop shopping" provision in the law, which provides that all environmental permits issue automatically once the study has been approved.

In addition, Chilean policy has over many years alternated between governments protective of the rights of indigenous peoples, including land titles, and governments that did not regard special legal protections of the rights of indigenous peoples a priority. During the military government, the legal regime was not particularly favorable to the rights of indigenous peoples. Subsequently, in 1993, a broadly protective Indigenous Peoples' Law was enacted.

The rights of indigenous peoples are protected not only by the new Indigenous Peoples' Law, but by an agency, CONADI, created particularly for that purpose.

There is also a state forestry agency, CONAF, which deals with watershed management and other natural resources conservation matters.

a. Interagency Coordination

^

b. In-House Environmental Unit

^

c. Environmental Panel

We see no indication that IFC pursued the appointment of an Environmental Panel for the Pangué Project; there was an expert geotechnical panel that advised on seismic/volcanic issues. The failure to appoint an Environmental Panel has proved to be a serious shortcoming of this project. For example, an outside panel of environmental (and social) experts could have assisted with the identification of a number of the difficulties that occurred in the early phases of the Pangué Project (i.e., management of cultural property, indigenous peoples impacts, downstream environmental assessment, etc.) or as a mechanism for ongoing dialogue with the project critics and for other public interests. This situation was particularly important in view of the lack of an institutional structure for addressing environmental and social concerns with the Chilean government during that period of time. ^

d. Consultation With NGOs and Affected Groups

^ IFC ^ has attempted to be responsive to inquiries about the Pangué Project. There were literally hundreds of letters in the files on these matters; this did not include what must have been comparable numbers of telephone and e-mail communications.

It is important to point out, however, that IFC's (and hence the World Bank Group's) ability to respond in as forthright manner as possible to the public is severely impacted by IFC's current internal policies that (i) restrict the disclosure of certain information and (ii) maintain a total confidentiality requirement for all aspects of investment agreements.

e. Project Supervision

As has been documented in great detail in Audit Topic 2.5 (Tab P) and in the special case study entitled: "Supplement to the Evaluation of IFC's Management of Downstream Environmental Impacts of the Pangué Project" (Appendix 2, Tab Z), IFC failed, in almost all respects, to supervise the development and implementation of a downstream environmental analysis and impact management program that met World Bank Group requirements.

CONCLUSION:

Overall, the Pangué Project did not comply with the World Bank OD 4.00: Environmental Policy for Dam and Reservoir Projects.

In terms of consultation with outside public interests, IFC's credibility is diminished by its current policies on information disclosure and strict confidentiality requirements and nondisclosure for all aspects of investment agreements.

It is certainly understandable why IFC (and its project sponsors) would want to restrict public access to confidential business information. However, none of the environmental and social components of the Environmental Management and Monitoring Plan or the subsequent Environmental Guidelines in the Investment Agreement, appear to constitute confidential business information. By contrast, these components represent legitimate "public's right-to-know" issues and should be disclosed routinely for future IFC projects.

Finally, for the many controversies surrounding the Pangué Project, this lack of transparency by IFC has both (a) increased the general level of "suspicion" about IFC's operation among outside interests and (b) prohibited IFC from taking appropriate credit for those environmental and social commitments it did obtain from ENDESA and Pangué S.A.

5. AUDIT TOPIC 1.5: World Bank Operational Policy Note 11.02: Wildlands: Their Protection and Management in Economic Development (June 1986). (Tab G)

POLICIES:

1. World Bank's policy is to seek a balance between preserving the environmental value of the world's more important remaining wildlands, and converting some of them to more intensive, shorter-term human uses (p. 1).

2. World Bank's general policy regarding wildlands is to seek to avoid their elimination . . . specifically (p. 6):

(a) World Bank normally declines to finance projects involving conversion of wildlands of special concern, even if this conversion occurred prior to World Bank's being invited to consider financing.

(b) When wildlands other than those of special concerns may become involved, World Bank prefers to site projects on lands already converted sometime in the past, rather than in anticipation of a World Bank project.

(c) Where development of wildlands is justified, then less valuable wildlands would be converted rather than more valuable ones.

(d) When significant conversion (e.g., 100 sq. kms., etc.) of wildlands is justified, the loss should be compensated by inclusion of wildlands management components in the project concerned, rather than in some future project.

AUDIT ISSUES:

1. **To what extent were wildlands involved with the development of the Pangué Project?**
2. **If involved, what steps were taken to comply with relevant World Bank policies?**
3. **Did IFC provide adequate supervision?**

AUDIT CRITERIA:

1. Preservation of wildlands, particularly those of special concern (as defined in Section 2.3 of OPN 11.02) associated with the Pangué Project.
2. If wildlands were involved, did the project include an adequate wildlands management component?
3. Level of supervision.

"Supervision missions should routinely review implementation of the wildland component with the Borrower. Such aspects are handled as for environmental issues in general. Implementation of important wildland components should, as a general principle, be well underway before a project's major land clearing construction works are allowed to proceed." (Annex III, page 2.)

CRITERIA EVALUATION:

Although the Bío-Bío River is one of the longest rivers in southern Chile, the area immediately associated with the project site was not, by strict definition (i.e., unmodified by human activity), characterized as "wildlands." Various reports refer to this area as being highly populated (i.e., 5000 Pehuenches), severely deforested and overgrazed (i.e., see consultant report, August 8, 1992, pp. 6-7 re: comments from individual representing CODEFF (Fauna and Flora Commission). There was no evidence however, that IFC ever considered issues associated with "wildlands" in the Alto Bío-Bío and whether, if present, wildlands would be impacted by the Pangué Project. Since this was a potentially relevant World Bank directive, in our view IFC should have documented, for the record, that wildlands issues were considered, why they were not included in the Environmental

Management and Monitoring Plan and/or how they would be addressed in subsequent studies.

In the future as development of the land adjacent to the Pangué Project continues[^], important wildlands in this region will be threatened. Among the most important will be the Araucaria Forest (this species was listed as "protected" by the Chilean government in 1990), which occurs at an altitude above 1000 m. That is well above the Pangué Reservoir, with a surface 510 meters above sea level. It is possible that such issues will be addressed in the Bío-Bío River Watershed Protection and Management Plan.[^]

CONCLUSION:

1. There was no evidence in the IFC record that OPN 11.02 was ever considered during the development of the Pangué Project by [^] the IFC staff [^]. Although the land inundated by the Pangué Reservoir did not appear to qualify as "wildlands," there was no systematic determination of that fact or, more importantly, any assessment of wildlands in the Alto Bío-Bío and how they might be impacted by the project.

2. The potentially-induced impacts of the Pangué Project on adjacent wildlands throughout Alto Bío-Bío were not evaluated and, therefore, remain unknown. In our opinion one aspect of IFC's responsibilities for supervision of the Pangué Project should have been to evaluate the degree to which wildlands in the Alto Bío-Bío were directly or indirectly impacted by these development activities.

RECOMMENDATION:

Given the intense pace of hydroelectric development in the Bío-Bío River Basin, a comprehensive Wildlands Management Plan would be extremely valuable.[^]

**6. AUDIT TOPIC 1.6: World Bank
Operational Policy Note 11.03:
Management of Cultural Property in Bank
Financed projects (September 1986).
(Tab H)**

AUDIT ISSUES:

Did the Pangué Project comply with World Bank's general policy regarding the preservation (i.e., avoiding elimination) of cultural properties?

AUDIT CRITERIA:

Note: World Bank⁵ recognizes that the management of cultural property of a country is the responsibility of the government.

1. Before proceeding with a project, World Bank staff must determine what is known about the cultural property aspects of the proposed project site.
2. If there is any question of cultural property in the area, a brief reconnaissance survey should be undertaken in the field by a specialist.
3. World Bank normally declines to finance projects that will significantly damage nonreplaceable cultural property, and will assist only those projects that are sited or designed so as to prevent such damage.
4. World Bank will assist in the protection and enhancement of cultural properties encountered in Bank-financed projects, rather than leaving that protection to chance.
5. Deviations from this policy may be justified only where expected project benefits are great, and the loss of or damage to cultural property is judged by competent authorities to be unavoidable, minor, or otherwise acceptable.

⁵ OPN 11.03 (at footnote "a") states: "The World Bank includes the International Bank for Reconstruction and Development (IBRD), the International Development Association (IDA) and the International Finance Corporation (IFC)."

6. This policy pertains to any project in which World Bank is involved, irrespective of whether World Bank is itself financing the part of the project that may affect cultural property.

7. World Bank staff must determine whether Procedural Guidance (i.e., supervision) was adequate to achieve the requirements of OPN 11.03, which states:

"Before proceeding with a project .. Bank staff must (1) determine what is known about the cultural property aspects of the proposed project site [and] (2) [i]f there is any question of cultural property in the area, a brief reconnaissance survey should be undertaken in the field by a specialist."

CRITERIA EVALUATION:

By definition in World Bank OPN 11.03, "cultural property" includes sites having archaeological (prehistoric), paleontological, historical, religious, and unique natural values (i.e., canyons and waterfalls). It was unclear from the IFC records to what extent potential impacts of the Pangué Project on the "cultural property" of the Alto Bío-Bío were considered. Although there were social anthropologists associated with the initial phases of the Pangué Project, there was no mention of "cultural property" concerns in the Environmental Assessment Summary (November 1992) or in an analysis of the report entitled: "Evaluation of Major Environmental Impacts of the Pangué Project" (Section 2.3: Social, Economic and Cultural Conditions), conducted by EULA/Chile Center, University of Concepcion (August 1992).

However, as reported to us by a noted North American academic expert on archaeological/anthropological issues in Chile, on behalf of ENDESA, a Chilean anthropologist from Santiago reportedly flew over the Alto Bío-Bío around eight years ago (1989+ or -) and from his aerial observation concluded (in a letter to IFC) that there were "no archaeological or historic resources of importance in the area."

To the contrary from ground-level observation made by the above-noted academic expert and his Chilean colleagues, several cultural resources that are of significant archaeological and historical value have been identified in the Alto Bío-Bío. This individual emphasized, however, "that from a professional viewpoint, there have been no systematic surveys of the archaeological and historic resources for the Alto Bío-Bío." (Comments made to the Independent Advisor during a telephone conversation, November 7, 1996.)

It appears reasonable to conclude, based on the personal knowledge of this highly credible source and the lack of documentation in the written record, that IFC^ did not

comply with relevant World Bank requirements for evaluation of the archaeological/historical cultural property for the Pangué Project. It is not clear why IFC failed to raise these issues during early stages of the project development process.

Further, as was clear in World Bank OPN 11.03, "unique natural values" meets the definition of "cultural property." The Bío-Bío was recognized widely as a world class, free-flowing, white-water river. The MIDEPLAN (i.e., Chilean government planning agency) report (October 1992) stated in the "Loss of Natural Scenery" section:

"One of the most important impacts of building the Pangué plant in the upper Bío-Bío basin is the change of its scenic beauty, the alteration of its ecological relationships now in balance and the alteration of its low degree of human intervention, three characteristics of the area. Also considering that the world now has very few major rivers that have not been affected by mankind, it is possible to conclude that the upper Bío-Bío has a special value for the natural heritage of Chile.

For these reasons, the upper Bío-Bío has a value in and of itself, no matter what direct use might be made of it. Such a value could be related to the concept of value of existence, coined by several economists, to speak to society's willingness to pay for some resource to continue as is even though society might not use it directly.

The value of existence of the upper Bío-Bío would be determined by its unique characteristics: scenic beauty not found anywhere else, the product of unique geological and hydrological accidents, the habitat of one of the most important Indian cultures in Chile, and its performance of a determining ecological function which maintains the ecosystem balances in the channel of the water basin."

Given the "world-class" status of the Bío-Bío, as a free-flowing, white-water river, these unique natural values should have received more consideration in the preparation of the Environmental Assessment for the Pangué Project.

Finally,^ cultural property issues overall were not identified at any stage of IFC's involvement with the development of the Pangué Project^. If "cultural property" issues had been evaluated properly--even if they had been considered as not applicable to the Pangué Project--that fact should have been stated in documents provided to IFC, its Board of Directors and the public^.

In summary, in our opinion, IFC[^] failed to follow any of the World Bank Group procedural guidelines for evaluating or supervising the management of cultural property issues for the Pangué Project.

CONCLUSION:

Since no cultural property evaluations were undertaken by IFC the Pangué Project was not in direct compliance with World Bank OPN 11.03, "Management of Cultural Property in Bank-Financed Projects" (September 1986).

^

**7. AUDIT TOPIC 1.7: World Bank
Operational Directive 4.20: Indigenous
Peoples (September 1991). (Tab I)**

POLICIES:

World Bank's broad objective toward indigenous peoples is to ensure that the development process fosters full respect for their dignity, human rights, and cultural uniqueness . . . to ensure that indigenous peoples do not suffer adverse effects during the development process, particularly from World Bank-financed projects, and that they receive culturally compatible social and economic benefits (pp. 1-2).

1. World Bank's policy is that the strategy for addressing issues pertaining to indigenous peoples must be based on the informed participation of the indigenous peoples themselves (p. 2).

2. For an investment project that affects indigenous peoples, the borrower should prepare an Indigenous Peoples Development Plan that is consistent with World Bank's policy. (See p. 3 for details.)

AUDIT ISSUES:

1. Was there informed participation by the Pehuenche people in the development of relevant project matters?

2. Was an appropriate Indigenous Peoples Development Plan prepared^?

3. Has Pangué S A. established the Pehuen Foundation as required?

4. Did IFC supervise these activities adequately and in accordance with World Bank Group requirements?

AUDIT CRITERIA:

1. Evaluation of whether or not the Pehuenche people have been provided opportunities for informed participation in relevant Pangué Project matters.

2. Was an Indigenous Peoples Development Plan prepared according to World Bank Group guidelines?
3. Status of Pehuen Foundation.
4. Implementation and supervision.

CRITERIA EVALUATION:

1. Informed Participation

^ While the establishment of the Pehuen Foundation was an innovative concept for potentially addressing indigenous peoples issues (i.e., to provide support for the social and economic development of the Pehuenche people), it was clear throughout this Independent Review that there has not been an effective process in place to involve the Pehuenche people on various aspects of the development of the Pangué Project that were (are) of direct relevance to them. ^ This constitutes a significant and ongoing violation of World Bank OD 4.20.

2. Indigenous Peoples Development Plan

As detailed in World Bank OD 4.20, prerequisites of a successful development plan for indigenous peoples (paragraph 14) include, inter alia, the following:

- (1) The key step in project design is the preparation of a culturally appropriate development plan based on full consideration of the options preferred by the indigenous people affected by the project.
- (2) Studies should make all efforts to *anticipate adverse trends* likely to be induced by the project and develop the means to avoid or mitigate harm. [Emphasis in original text.]

Further, "the development plan should be prepared in tandem with the preparation of the main investment . . . The project component for indigenous peoples development should include the following elements" (paragraph. 15):

- (a) *Legal Framework.* The plan should contain an assessment of (i) the legal status of the groups covered by this OD, as [effected in the country's constitution, legislation, and subsidiary legislation (regulations, administrative orders, etc.); and (ii) the ability of such

groups to obtain access to and effectively use the legal system to defend their rights. Particular attention should be given to the rights of indigenous peoples to use and develop the lands that they occupy, to be protected against illegal intruders, and to have access to natural resources (such as forests, wild-life, and water) vital to their subsistence and reproduction.

(b) *Baseline Data.* Baseline data should include (i) accurate, up-to-date maps and aerial photographs of the area of project influence and the areas inhabited by indigenous peoples; (ii) analysis of the social structure and income sources of the population;

(c) *Strategy for Local Participation.* Mechanisms should be devised and maintained for participation by indigenous people in decision making throughout project planning, implementation, and evaluation. . . .

(d) *Implementation Schedule.* Components should include an implementation schedule with benchmarks by which progress can be measured at appropriate intervals.

(e) *Monitoring and Evaluation.* Independent monitoring capacities are usually needed when the institutions responsible for indigenous populations have weak management histories. . . . Monitoring units should be staffed by experienced social science professionals, and reporting formats and schedules appropriate to the project's needs should be established. Monitoring and evaluation reports should be reviewed jointly by the senior management of the implementing agency and by World Bank. **The evaluation reports should be made available to the public.**

PROJECT PROCESSING AND DOCUMENTATION

Identification

During project identification, the borrower should be informed of World Bank's policy for indigenous peoples. The approximate number of potentially affected people and their location should be determined and shown on maps of the project area. The legal status of any affected groups should also be discussed. Task Managers (TMs) should ascertain the relevant government agencies, and their policies, procedures, programs, and plans for indigenous peoples

affected by the proposed project (see paragraphs 11 and 15(a)). TMs should also initiate anthropological studies necessary to identify local needs and preferences (see paragraph 15(b)).

Implementation and Supervision

Supervision planning should make provisions for including the appropriate anthropological, legal and technical skills in Bank supervision missions during project implementation (see paragraph 15(g) and (h), and OD 13.05, *Project Supervision*). Site visits by TMs and specialists are essential. Midterm and final evaluations should assess progress and recommend corrective actions when necessary.

Documentation

The borrower's commitments for implementing the indigenous peoples development plan should be reflected in the loan documents; legal provisions should provide Bank staff with clear benchmarks that can be monitored during supervision.

APPLICATION TO THE PANGUE PROJECT

BACKGROUND: ANTICIPATING INDUCED IMPACTS

Over the years land tenure and ownership issues related to the indigenous peoples of Chile have been complicated and controversial. They remain so today. IFC raised the issues of land tenure, land use, and legal status of lands around the Pangué Reservoir as they would impact the Pehuenche communities with ENDESA as early as November 1991 (see Summary Note left with ENDESA, November 7, 1991-- attached to World Bank social anthropologist report, November 8, 1991).

In commenting on the draft Environmental Assessment prepared by Ecology and Environment and Agrotec Ltd., IFC stated[^] that "[^]Revisions should (i) indicate extent of landholdings and lands used by the Pehuenche; (ii) identify legal status of lands in the affected area; (iii) identify areas of land conflict and ambiguity; (iv) anticipate impacts on land tenure and use induced by the project. For example, increases in land prices, land speculation . . . are risks commonly associated with large infrastructure projects of this nature; and (v) propose steps for resolving any current land claims and preventing land alienation associated with the project. Interview excerpts included in the EA show concern over the impacts on land to be a high priority for the affected population, and this concern should be carefully addressed in the final document" (late 1991).

^

To clarify this complicated situation for the purposes of this Independent Review of the Pangué Project, the World Bank anthropologist who assisted IFC with the early phases of the Pangué Project was contacted. He provided the following information:

1. "[O]n the question of whether the families on Richard's Ranch [i.e., El Avellano] should have been included in the Pangué resettlement plan... my view at the time has not changed very much. . . . It would take a lot to convince me that preemptive relocation of indigenous communities is ever a good idea, and in Pangué's case I was (and am) opposed to resettlement when better solutions were and most probably still are available.

Regardless of the ultimate resolution of the various land tenure claims in that area, the reservoir itself was not going to cause the physical displacement of those families. This distinguished them from the non-indigenous groups who were covered by the resettlement plan, whose farms and homes were going to be submerged. I therefore classified the impacts in the general group of "indirect" impacts caused by induced development. Other differences would include the likelihood of future integration into the resettlement sites being proposed, and, perhaps most importantly, people's willingness to move. The non-indigenous families (we spoke to 2-3 families) being resettled seemed to like the idea of becoming landowners even if it meant resettling some distance away; they had clear ideas of where they would go and under what conditions. By contrast, all of the Pehuenche were very much against any kind of relocation that would have taken them away from their communities." (Memorandum to Independent Advisor, October 2, 1996.)

2. "[W]e definitely did think that the Pehuenche on El Avellano qualified under OD 4.20 (Indigenous People). Environmental Assessment segments concerned with induced impacts also applied to this and other Pehuenche groups affected by Pangué.

The policy document that I didn't apply to the Avellanos group was OD 4.30 (Resettlement)... I thought better solutions than resettlement were available, and that the [Pehuen] Foundation was expressly intended to make it possible for them and others to buy land when needed. But the main reason, again, was because I didn't think preemptive resettlement of people not being physically displaced was either a good solution or one any Pehuenche had given any sign of wanting. It was more accurate to use the

equally mandatory OD 4.20 to classify impacts and identify mitigation solutions.

The other point that I forgot to mention on the phone was that at the time, despite much active discussion ... the law [being] draft[ed] to promote indigenous rights through constitutional reform, a more salient piece of legislation that was much further along [in] the system was the one dissolving all forms of collective landholding. It was pretty clearly aimed at putting indigenous people's land on the market. So part of our (the project team's) push to get IFC to back the [Pehuen] Foundation was to provide a legal structure based in national law--either as a corporation or as a foundation--that could provide a model for maintaining corporate landholding by indigenous people. I hope it is apparent from the documentation that IFC has on file just how prominent land tenure issues were in the impact assessments." (October 10, 1996 memorandum to Independent Advisor as follow-up from telephone conversation, October 9, 1996.)

It appears, therefore, that in late 1991 IFC concluded that all aspects of the impacts of the Pangué Project on indigenous peoples could be addressed through the establishment of the Pehuen Foundation (see Charter Document, December 1992).[^]

Importantly, in compliance with the Terms of Reference for this performance audit, World Bank OD 4.20: Indigenous People (p. 3, paragraph 14b), requires (among other things) that in the preparation of an "Indigenous Peoples Development Plan" . . . all efforts should be made to *anticipate adverse trends likely to be induced by the project* and develop the means to avoid or mitigate harm.

For reasons that were not clear (i.e., no documentation in the Pangué Project files), no considerations were given (except as might be suggested by the general work of the Pehuen Foundation) to the specific impacts of the Pangué Project on the 12 Pehuenche families (belonging to the community of Quepuca-Ralco) who reside on the land adjacent (north) to what is now the Pangué Reservoir.

This was surprising to the Pangué Audit Team since the situation involving those specific families and their tenure on that land was raised in August 1992 in the government report "Territorio y Comunidades Pehuenches de Alto Bío-Bío" (i.e., "Jurisdicción Pehuenche sobre 'El Avellano,'" pp. 183-86, et al., August 1992) prepared by CEPI (Commission Especial de Pueblos Indígenas, the predecessor to CONADI), and in the MIDEPLAN (Chilean government planning agency) document, "Economic-Social and Environment Report of the Pangué Project (October 1992)."

The MIDEPLAN report was particularly noteworthy because of (a) the extensive consultations that were undertaken with key stakeholders during its preparation (i.e., Empresa Electrica Pangué S.A., Grupo de Accion por el Bío-Bío (GABB), EULA Project (University of Concepcion), Grupo de Accion por el Bío-Bío of Concepcion, Intendent, Region VIII, Special Commission on Indigenous Peoples (CEPI), City Government of Los Angeles, council members of the community of Santa Barbara, Deputy Octavio Jara, Pehuenche communities bordering the dam: Callaqui, Pitril and Quepuca-Ralco, International Finance Corporation (IFC) of the World Bank, and the Institute for Energy Conservation), and (b) its overall conclusion that supported construction of the Pangué Project.

In the section of the MIDEPLAN report entitled "Study and Evaluation of Land Tenure Situation" (page 8), it was noted that the report included:

- "1. An estimate of the number of families living in irregular situations, meaning de facto settlement of others' lands.
2. A list of the legal owners of the occupied lands mentioned as point 1 above.
3. Information and opinion about the risk of future and conflicts as a consequence of building the Pangué dam and a proposal on possible solutions."

In the section entitled "Lands" (page 12), it stated:

"Fortunately, most of the inhabitants of the Pehuenche communities hold individual title to the lands they live on. Accordingly, there is no danger that the indirect impacts of the project such as tourists trade or forestry development will result in involuntary uprooting of those Pehuenche families.

However, one possible conflict has been seen in the Pehuenche families who live on lands bordering the future dam that they do not have land titles or land grants as mentioned above, (this matter was a subject of a special study which appears as Annex No. 2).

To avert these possible conflicts, the land tenure problem would have to be solved as promptly as possible. Because the number of affected persons does not exceed 100, it is believed this problem could be resolved by the measures set out in section IV of this report."

RECOMMENDATIONS TO MINIMIZE IMPACTS:

(a) Socioeconomic-cultural Environment

Transfer of land ownership

"At the extreme northeastern end of the future reservoir, Pehuenche families live on two farms, Las Huellas and El Avellano. These persons might eventually be involuntarily removed because of the stronger demand for land generated as an indirect consequence of this project.

For distributive and political reasons, a good recommendation would be to take measures today to ward off any possible conflict in the future. One possible action to be taken would be having the state or Pangué S.A. buy the lands in question and later transfer them to people of the area.

Since the amount of land involved is less than 3,000 hectares, and the total investment cost in the Pangué project is US \$ 470 million, buying the land would not be a major financial obstacle for the company. More information on this issue appears in Annex No. 2."

Because of the importance of the MIDEPLAN report to the conclusions of this section of this Independent Review of the Pangué Project and OD 4.20, Annex Number 2 of the MIDEPLAN report is included as follows in its entirety (designated by italicized text below); all points of emphasis were added by the Pangué Audit Team.

MIDEPLAN ANNEX NUMBER 2

LAND TENURE IN THE AREA OF INFLUENCE OF THE PANGUE HYDROELECTRIC DAM

INTRODUCTION

The purpose of this document is to provide information on the land tenure structure in the area of the upper Bío-Bío river with a view to the prediction of possible conflicts arising out of construction of the Pangué dam. The focus of this report is on the indirect impacts of the dam, the direct impacts in the flooding area having already been covered in earlier studies.

APPRECIATION OF LAND VALUES IN THE AREA

Construction of the Pangué dam could give rise to two phenomena that would change land values in the area. Firstly, the road infrastructure built by the company could intensify forest cutting. The pace of felling of native forest trees could quicken, and the reduction of transportation costs could make it profitable to plant exotic species in areas where it was not so before.

In addition, given the relative proximity of this area to the cities of Concepcion and Santiago (it is nearer than the lakes farther south), the reservoir to be impounded will attract a massive influx of tourists.

Both tourism and the development of forest activity can raise the demand for land in the environs of the dam. In consequence, the inhabitants of lands to which they hold no legal title will be more at risk of eviction than before, which can be a source of future conflict.

As to forest cutting operations, there are already signs of an active market in native woods. This activity will probably increase with the improved access to the area provided by the modern road built by the electric power company. There is also evidence of a potential for plantations of exotic species. On the south bank of the Bío-Bío near the area of the dam, across from the settlement of Ralco, there are now plantations of Monterey pine. However, the steep slopes of most of the lands around the future dam give their soils little potential for plantations.

There are also indications of touristic activity in the area. The Escuela de Yoga Clasico de Santiago (Santiago School of Classical Yoga) leases a tract for touristic purposes at what will be the upstream end of the future reservoir. The School has even erected facilities such as baths, a dining room, and fencing on these grounds. The land at this end of the future lake probably has the best potential for tourism owing to the presence of hot springs. Unfortunately, as is described further on, this is the area of greatest land tenure conflict.

Seven kilometers before the settlement of Ralco (about 10 kilometers from the future dam), several pleasure cabins have been built over

the last few years. Talks with the proprietress confirm that an important spur to this investment is the increase of tourists activity when the dam has been built.

ILLEGAL LAND OCCUPANCY

The present inhabitants of the area, especially those of the Pehuenche ethnoses, are liable to eviction if they are now living on lands that are the legal property of others. Though their illegal occupancy itself exposes these groups to the possibility of eviction, an increase in the demand for land in the area, or interest on the part of the legal owners in developing timber or tourism projects could set off the process and ignite a social conflict.

According to information supplied by Pangué based on information of the Fichas CAS of February 1991, the three communities in the vicinity of the project area (Quepuca, Pitiril and Callaqui) have a combined population of 1,200 persons. Fortunately, information of the Department of Indigenous Affairs of the INDAP, indicates that the people in these communities possess individual deeds of ownership under Article 25 Law 17.729 of 1972 and amendments. Hence most of the Pehuenches in the area are not at risk of eviction. However, a possibility of conflict does exist on the Las Huellas and El Avellano farms near the community of Quepuca-Ralco.

The source of possible conflict is a dispute dating back almost a century.⁶ Put briefly, a clan of Quepuca Ralco, the Curriaos, believe the El Avellano farm and part of the Las Huellas farm (as far as El Moro Creek) belong to the community. In 1941 the cacique, Antonio Acanao, presented a petition for settlement to the Indian Affairs judge of Victoria. Though this judge actually ruled that the lands belonged to the community, his judgment was overturned in 1945 by a Supreme Court decision upholding the titles of the Sociedad Bunster Gomez, which asserted ownership of them. Despite this Supreme Court decision, many Pehuenche families still live on the lands in question.

⁶ Complete information on this case may be found in the report "Territorio y Comunidades Pehuenches del Alto Bío-Bío," written by Raul Molina and Martin Correa for the Comisión Especial de Pueblos Indígenas (Special Commission on Indigenous Peoples).

THE LAND AND ITS PRESENT OCCUPANTS

According to its registered deed, **the El Avellano farm has an area of 2,585 hectares. It is bound to the south by the Bío-Bío river, to the northeast by the Nireco creek as far as the Las Mellizas hill, and to the northwest by the Las Carpas creek to the Las Mellizas hill (see attached map). According to its registered deed, the Las Huellas farm has an area of 1,220 hectares, and is bordered to the south and west by the Bío-Bío, to the north by the El Saltillo de San Pedro creek as far as the Las Mellizas hill, and to the east by the El Avellano farm.**

The El Avellano farm plus the part of the Las Huellas farm as far as the El Moro creek have a combined area of about 3,000 hectares. Both El Avellano and Las Huellas are today the legal property of Mr. Enrique Richard Waugh, and are registered in the Los Angeles Real Property Register at Record #219-17.

These farms, up to the El Moro creek, are inhabited by an estimated 100 persons (12-14 families). Though it was not possible to verify directly the ethnic affiliation of all the people in the area, the locals say that the great majority of them are Pehuenches. Those who are not have direct family ties to Pehuenches. For example, Mr. Virorino Nunez, who lives on the El Avellano farm but is not a Pehuenche, is married to a Curriao woman of the Quepuca-Ralco community.

These families are the social group that will be at greatest risk, for the stated reasons, once the Pangué dam has been built.

The lands in question are adjacent to the northeastern end of the future reservoir. In this area there are several hot springs of high touristic potential. Indeed, the facilities of the Santiago School of Classical Yoga are situated less than 50 meters away from them, and the School uses them as a drawing card. In addition, recreational rafters on the Bío-Bío are in the habit of resting in the vicinity of the hot springs, which are maintained by a local inhabitant.

Photo #5 shows the area of the El Avellano farm that will be the upstream extremity of the Pangué reservoir. The hot springs are on the river bank, and the houses of the Nunez-Curriao family and their descendants are in view. In addition, some of the structures of the

Santiago School of Classical Yoga may be seen at the far end of the open ground.

OPINION AND RECOMMENDATIONS

In view of the above information, it may be concluded that there is a risk of social and political conflict as an indirect consequence of building the Pangué dam.

This possible conflict would involve only a small portion of the inhabitants of the area of influence of the project. However, for distributional and historical reasons it is recommendable that measures be taken today to avert conflict tomorrow.

Like that of other Mapuche ethnic groups, the territory of the Pehuenches has shrunk from its original extent. Though the causes of this contraction have been many, it is also true that on many occasions the reduction resulted from actions that could be regarded as unjust. Loss of lands historically occupied by indigenous peoples is a highly sensitive subject for the country's ethnic groups and international institutions.

In addition, the Pehuenches of the upper Bio-Bio live in extreme poverty. Though their occupancy is illegal, the lands they live on yield them a subsistence livelihood from crops and livestock. Eviction could worsen their economic situation.

The only way to avert future conflict would be for the Government or Empresa Electrica Pangué S.A. to buy up the land in question and then transfer it to its inhabitants.

Since the area to be transferred is not more than 3,000 hectares and the investment cost of the dam is US \$470 million, purchasing the land would pose no significant financial impediment to Pangué S.A. In addition, the purchase would be facilitated by the fact that all the land in question belongs to one owner. Pangué S.A. has already advised Mr. Richard of its interest in buying the El Avellano and Las Huellas farms as an area of protection for the future reservoir.

The land to be transferred to the inhabitants of the area can be less than the total area of the Las Huellas (as far as the El Moro Creek) and the El Avellano farm, and it would hence be strictly necessary to transfer only the lands they now occupy. It is important to

note, however, that the lands used by the Pehuenches are not confined to the river banks, where they live in winter, the so-called "invernadas" (winterings). In the summer they move to their summer grounds and pine stands in the mountains. In order not to disturb the basic conditions for their economic and cultural survival, the lands of both their winter and summer grounds would have to be transferred to them.

(END OF MIDEPLAN ANNEX NUMBER 2)

It is important to note that both the MIDEPLAN report (October 1992) and the CEPI report (August 1992, referenced earlier) was available to IFC prior to the December 1992 meeting of the IFC Board of Directors where the Pangué Project was approved. For reasons that were not clear, with the exception of the transfer of the translated MIDEPLAN report among the IFC staff members directly involved with the Pangué Project, there were no indications from the written record that the important and sensitive issues raised in those reports were disclosed and/or discussed with IFC senior management or the IFC Board of Directors prior to or during the development/approval process for the Pangué Project. Although we cannot be certain, we assume this reflected the situation noted previously that IFC felt all relevant impacts of the Pangué Project on indigenous peoples could be addressed through the activities of the Pehuen Foundation.

In our opinion, if that was the case, it does not justify the failure of the IFC staff to disclose this important information to IFC senior management and the IFC Board of Directors prior to the meeting when the Pangué Project was authorized.

CURRENT STATUS:

Thus, the Pangué Audit Team concludes that IFC was not in compliance in evaluating and/or monitoring the potential impacts and, if necessary, implementing appropriate mitigation measures for the 12 Pehuenche families living adjacent to the Pangué reservoir who will, in all probability, be impacted and/or displaced by development induced by the project.

Further, for the record, it should be noted that, as of late September 1996, IFC had no listing of those families or a map of where they resided. However, on November 22, 1996, IFC forwarded a map of where those families were located to the Pangué Audit Team. Apparently, IFC has requested its (October 1996) in-country counsel "to look into the matter," involving those particular Pehuenches.

In summary, the apparent failure to monitor and/or address the land tenure status of these specific Pehuenches was based on the position taken by IFC early in the project

development process that all relevant indigenous peoples issues for the Pangué Project would be addressed properly through the program activities of the Pehuen Foundation.

When the IFC document for the November 1990 Pangué Project decision meeting was prepared, it stated in the Indigenous Population Section (9.11 (c), p. 16):

"Three Pehuenche Indian communities (Callaqui, Pitiril, and Quepuca-Ralco), with a population of 1,185, reside in the project vicinity. The nearest community, Callaqui, is located 10km downstream from the dam site; therefore, the dam and reservoir should physically interfere little with indigenous properties or land use."

At that meeting, on November 16, 1990, IFC management asked "if there were any issues regarding the local indigenous people and resettlement." The IFC staff answered that "about 44 non-indigenous people would have to be resettled, but that they would be adequately compensated. The project will have an impact on the indigenous culture by increasing the contact with outsiders. Nevertheless, measures would be taken to minimize the contact. The indigenous people, themselves, favor the project as a source of jobs." IFC management asked that an Issue Note be written, after the completion of the Environmental Assessment Report, which would have to include the "Indigenous People" issue.

Subsequently, various IFC documents maintained this line of thought by noting "none of the lands acquired by the project belong to the Indian communities." (See World Bank Office Memorandum, "Resettlement/Indigenous People," from World Bank social anthropologist to Investment Officer, November 7, 1991.) "Pangué will have virtually no direct impacts (i.e., no Pehuenche land acquisition or resettlement) on the Pehuenche population." (See World Bank Office Memorandum, "CHILE: Pangué Dam Project Social Issues," from World Bank social anthropologist to management, November 8, 1991.) "[T]he project will have virtually no direct impacts on the Pehuenche as no land acquisition or resettlement of Pehuenche is involved." (See IFC "Environmental Assessment Summary" (November 1992) (p.13, paragraph 46.))

However, the Pehuenches have resided on these lands for decades or, as they told the Pangué Audit Team, "for as long as we have memory," and regardless of current "land-tenure/legal ownership" issues, they will be impacted adversely (directly and indirectly) by the development of the Pangué Hydroelectric Project. For reasons noted above, we believe any reasonable interpretation of the relevant sections of World Bank Operational Directive 4.20 must conclude that (a) these Pehuenches are "affected parties" who (b) will be subject to adverse impacts induced by the Pangué Project and (c) should have been identified and monitored for appropriate mitigation measures, including development of a contingency plan and/or possible inclusion in the project's resettlement

plans in a manner consistent with the clear intent and spirit of prevailing World Bank policies.

^

(b) Status of Pehuen Foundation

One of the requirements of the Environmental Management and Monitoring Plan was to establish the Pehuen Foundation as a mechanism to address a number of issues associated with the Pehuenche communities. Specific criteria notes in the Environmental Management and Monitoring Plan and in Attachment 2 to the Environmental Assessment Summary included:

- (a) Establishment of an appropriate not-for-profit institution with its own legal identity and corporate body;
- (b) Establishment of specified governing body;
- (c) Allocation of specified annual funds to the Pehuen Foundation by Pangué S.A.;
- (d) Development of an active Pehuenche community involvement program for social and sustainable economic development;
- (e) Appointment of the Pehuen Foundation Board of Directors; and
- (f) Establishment of the Pehuen Foundation Advisory Council.

CRITERIA EVALUATION:

CRITERIA 1-7:

^the "Pehuen Foundation" was established as a not-for-profit organization under Chilean law (see Pehuen Foundation Charter Document, December 1992, and Ministry of Justice Decree, June 3, 1993). The Pehuen Foundation has a seven-member Board of Directors, one from each of the three Pehuenche communities, three from Pangué S.A., and the seventh a recognized authority in the area of indigenous community development, also appointed by Pangué S.A. The Pehuen Foundation receives its funding from Pangué S.A. (i.e., up to and including the year 2001, the greater of (i) an annual amount equal to 0.30% of the company's net income and (ii) the equivalent of USD 140,000. After 2001, Pangué S.A. will provide the Pehuen Foundation with an annual amount equal to 0.30%

of the company's net income. As of May 1996, the Pehuen Foundation had received USD 535,000.00.

8. One of the goals of the Pehuen Foundation was to make its best efforts to provide electrical power to the designated Pehuenche communities.^ This matter remains a high priority with the Pehuenche people (see Independent Advisor's Chile Trip Notes, June 5, 1996, p. 10).

9. Pehuen Foundation Evaluation

During the latter part of 1995, IFC contracted with Downing and Associates through AGRA Earth and Environment to undertake a comprehensive evaluation of the Pehuen Foundation. On May 7, 1996, a report was submitted to IFC entitled: "A Participatory Interim Evaluation of the Pehuen Foundation." It was 101 pages long and contained some 231 findings plus a ten-point action plan.

Although the report recognized the innovative nature of the Pehuen Foundation, from the viewpoints of IFC^ the report was controversial and not well received. The Executive Summary of the report was released by an unknown source to the Chilean press.

Some of the key points contained in this May 1996 report were:

1.^

2.^ the Foundation to alleviate the state of extreme poverty by organizing a welfare-like system focusing upon provisioning of short-term, material assistance to alleviate the deplorable socioeconomic circumstances of indigenous communities of Callaqui, Pitiril and Quepuca-Ralco.

3. Measured by a welfare distribution test, however, the discount group purchase (DPG) program is not capable of alleviating poverty. Potential indigent beneficiaries are systematically excluded from Foundation programs because they cannot afford the modest co-payments required for discount purchases.

4. In sharp contrast to the DGP which focuses on providing material assistance to individual families, the Foundation expenditures for community-wide initiatives and training are small and dwindling. Without a community development or strategic plan, without consultations with the Pehuenche community, the Foundation's community-wide initiatives have, essentially, been non-Pehuenche Board and staff purchases and gifts dispersed in many directions.

5. Without the agreed-upon focus on sustainable socioeconomic development, sustainability, mitigation, cultural development, and provisioning of electrical power, the impacts of the Foundation programs are negligible.

6. The Foundation's inability to initiate the [IFC] objectives is a result of ^tight circumscription on Pehuenche "participation" within the Foundation. ^ the absence of a properly constituted, effective, Advisory Board ^.

7. Pehuenche participation is narrowly circumscribed primarily to issues and decisions related to the discount group purchase program. From the Project's inception, the Pehuenche have not been informed participants of^ actions which have a substantial bearing on their future. Pehuenche Board members had little knowledge of Foundation statutory objectives, finances, their juridical and fiduciary rights and obligations as Board members, or staff salaries or benefits. Several leaders were uncertain that the Foundation would outlast the construction phase. Misunderstandings and lack of information are even greater within the community. Most commonly, the belief was that signing up with the Foundation as a member was a prerequisite for employment on the Project. Some Pehuenche leaders who are not Board members and members of the communities believe that criticism of the Foundation may lead to loss of benefits and opportunities for employment with the Company.

8. Measured against the generally accepted standards to sustain the organization integrity, the Foundation is found wanting. Pehuenche Board members need increased training in their fiduciary and legal obligations. Policy guidelines have not been prepared to resolve the material conflicts of interest of Board members and support of training and hiring of Pehuenche staff. The organization's purpose is oblique to the IFC [objectives] by not focusing on mitigation, sustainable development, preservation and reinforcement of Pehuenche identity. Program operations outside the three communities fall outside the Foundation charter, especially those in Ralco-Lepoy^. Information on Foundation activities is not shared with the beneficiaries. No mid- or long-range planning and budgeting takes place, even though a solid financial platform has been provided. Audited statements do not include all Pangué contributions and expenditures to the Foundation. And program and management categories do not match the audited financial statement in the annual report.

9. ^on the shore of the Pangué Reservoir, at Los Avellanos, in the northwestern sector of Quepuca-Ralco, ^a potential indigenous resettlement problem is materializing exactly as predicted by the government planning agency, MIDEPLAN, before Board Presentation in 1992. A resettlement plan has neither been prepared nor contemplated.

10.^

The Downing Report recommended the following proactive strategies to guide the Pehuen Foundation in the future:

- (a) realign the Foundation statutes and organization^;
- (b) reorganize the Foundation's policies, internal affairs, and operations^, especially those pertaining to resolution of conflicts of interest, to increased informed participation, and to promote of pluralism and diversity;
- (c) embed Indigenous development expertise into the Foundation by incorporation of persons with recognized Indigenous development expertise, regularizing communications between the Foundation and other organizations working on Indigenous development, and recognizing the Pehuenche language as one of the two official languages of the Foundation;
- (d) initiate an emergency mitigation action plan to a) halt the high rate of deforestation without causing harm to the communities, b) regularize and secure the land tenure situation of the Quepuca-Ralco population threatened with a Pangué-related resettlement; c)^; and d) mitigate the multiple socioeconomic and environmental impacts of the Project road;
- (e) prepare and implement a participatory, strategic sustainable development plan which places high priority on natural resource management controlled by the Pehuenche which emphasizes participatory, social forestry;
- (f) institutionalize full and informed participatory development, including involvement of Pehuenche representatives--with voice and vote--in all Foundation decisions^;
- (g) establish a monitoring component which includes the training and employment of Pehuenche;
- (h) increase IFC supervision and provision of technical assistance, including training workshops for present and potential Pehuenche leaders;
- (i) Disseminate the participatory interim evaluation findings to the Pehuenche in a culturally appropriate format; and
- (j)^

Finally, the Downing Report noted that "IFC under-supervised this Project and did not receive the necessary support by the sociological staff of the IBRD, who suggested this experiment in the first place."

Subsequent to the submission of the above report IFC convened a number of individuals on June 25, 1996 to discuss the report. In September 1996, a draft report entitled "Pehuen Foundation: Synthesis of Evaluation Finding" was released by IFC and sent to Pangué S.A. for review.

Overall, the Pangué Audit Team felt that both the May 1996 Downing Report and the September 1996 synthesis document were excellent. They provided important insights into the culture of the Pehuenche people and the Pehuen Foundation's priorities and program activities. In both documents several important and difficult issues were identified along with recommendations for constructive redirection of the Pehuen Foundation in the future.

It is regretful that there has been no substantive follow-up by IFC to implement an opportunity for culturally appropriate informed participation of the Pehuenche people with the results of the Downing Report--something that is required by applicable World Bank Group requirements. Now, 11 months after the Downing Report was submitted to IFC, the complete document has still not been translated into Spanish. In February 1997 IFC began the process of translating portions of that document. In early April 1997, IFC dispatched a non-Spanish speaking staff member to the Alto Bío-Bío with an unedited and incomplete Spanish-draft of the Downing Report with the nominal purpose of presenting the Downing Report to the Pehuenche people. If that was the case, in our opinion, that does not constitute culturally appropriate and informed participation of indigenous peoples as envisioned by OD 4.20.

^

This entire matter of how IFC has dealt with the indigenous peoples associated with the Pangué Project has been and continues to be very unfortunate. A more detailed independent examination of this entire episode should be undertaken by the President of the World Bank Group.

^

CONCLUSIONS:

1. IFC have not complied with many of the requirements of OD 4.20, including the failure to provide opportunities for culturally appropriate "informed

participation" by the Pehuenche people in the development and implementation of relevant project matters.

While the initial intention[^] to address indigenous peoples issues appears to have been positive (i.e., establishment of the Pehuen Foundation), the overall results to date have not been consistent with the requirements of OD 4.20. The Pehuenche people have not been communicated with in an ongoing and effective manner (including the failure to communicate with them in their nature language, particularly important to older, non-Spanish-speaking individuals), and thus, a basis for "informed participation" was not established.

2.[^]

It should be noted that, with the assistance of CONADI (National Commission for Indigenous Development) and a private attorney a lawsuit involving 30 landownership issues has been filed on behalf of those Pehuenche families residing on the E1 Avellano farm (see Independent Advisor's Chile Trip Notes, August 30, 1996, Pangué Project, 20-21). Regardless of the outcome of the pending litigation, those particular Pehuenche families will be subjected to impacts induced by the development of the Pangué Project. In part, this is because the economic value of the land on which they reside has increased substantially, as was predicted by various studies. The Pangué Project is the sole reason for this increase in land value, and those Pehuenches should have been considered from the initial stages of this project for monitoring and implementation of appropriate mitigation measures (i.e., purchase of the appropriate lands for the Pehuenche people) or, as a last option, resettlement to another area.

3. The Pehuen Foundation was an innovative, but experimental, concept. We believe it has not been adequately supervised by IFC[^]. [^]the development and operation of the Pehuen Foundation was under supervised by IFC.

4. The serious situations described in this Audit Topic 1.7 have had--and continue to have--negative consequences for the Pehuenche people. Collectively, these matters constitute significant violation of World Bank Group Operational Directive 4.20, which was designed to ensure that the rights of indigenous peoples were maintained and enhanced throughout the development and implementation processes for World Bank-sponsored projects.

5. For the reasons noted herein it is the opinion of the Pangué Audit Team that IFC has not supervised the requirements of OD 4.20 in an overall manner sufficient to meet World Bank Group standards.

RECOMMENDATIONS:

1. ^

2. To ensure that "culturally compatible benefits" accrue to the Pehuenche people, the legal title to an amount of land deemed appropriate by CONADI (the Chilean indigenous peoples agency), surrounding the Pangué Reservoir^, should be transferred to the appropriate Pehuenche communities.

3. If the Pehuen Foundation is to achieve its originally stated desirable goals of supporting the socioeconomic development of the Pehuenche, it must be restructured along the lines suggested in the reports referenced herein.

4. Both the complete May 1996 Downing et al. reports and the September 1996 synthesized version should be released to the public in English and Spanish.

Those reports do not contain any confidential business information. Further, the Executive Summary of the May 1996 report has already been released to the Chilean press, and, most important, the public release of this information is what is required by World Bank OD 4.20, (paragraph 14(g)), where it states: "Monitoring and evaluation reports should be reviewed jointly by the senior management of the implementing agency and by the Bank. The evaluation reports should be made available to the public."

**8. AUDIT TOPIC 1.8: World Bank
Operational Directive 4.30: Involuntary
Resettlement (June 1990). (Tab J)**

AUDIT ISSUES:

- 1. Does the Pangué Project comply with the following World Bank policy objectives for involuntary resettlement?**
- 2. Did IFC[^] supervise resettlement activities adequately?**

The objective of World Bank's resettlement policy is to ensure that the population displaced by a project receives benefits from it. Involuntary resettlement is an integral part of project design and should be dealt with from the earliest stages of project preparation, taking into account the following policy considerations:

- (a) Involuntary resettlement should be avoided or minimized where feasible, exploring all viable alternative project designs.
- (b) Where displacement is unavoidable, resettlement plans should be developed.
- (c) Community participation in planning and implementing resettlement should be encouraged.
- (d) Resettlers should be integrated socially and economically into host communities so that adverse impacts on those communities are minimized.
- (e) Land, housing, infrastructure, and other compensation should be provided to the adversely affected human population who may have usufruct or customary rights to the land or other resources taken for the project.

AUDIT CRITERIA:

1. The content of resettlement plans (see World Bank OD 4.30 for details) should normally include a statement of objectives and policies and provision for the following:

- (a) organization responsibilities;
- (b) community participation and integration with host populations;
- (c) socioeconomic survey;
- (d) legal framework;
- (e) alternative sites and selection;
- (f) valuation of and compensation for lost assets;
- (g) land tenure, acquisition, and transfer;
- (h) access to training, employment, and credit;
- (i) shelter, infrastructure, and social services;
- (j) environmental protection and management; and
- (k) implementation schedule, monitoring, and evaluation.

2. Implementation and Supervision

"Resettlement components should be supervised throughout implementation. Supervision that is sporadic or left until late in implementation invariably jeopardizes the success of resettlement. Bank supervision missions should be staffed with requisite social, economic, and technical expertise. [It is often] necessary to continue Bank supervision until well after populations have been relocated, sometimes even after a project has been closed."

CRITERIA EVALUATION:

As stated in World Bank OD 4.30 (page 3, paragraph 6), "the responsibility for resettlement rests with the borrower." A component of the Environmental Management and Monitoring Plan addresses the issues of the involuntary resettlement of individuals displaced by the Pangué Project. This plan included three phases:

1. Development of an information register on each family, its possessions and relocation expectations;

2. Establishment of an accord on the best resolution to meet the needs and expectations of the families; and
3. Implementation of the relocation plan (to be completed by the first half of 1996).

While, for the most part, this relocation plan was developed and implemented in an acceptable manner, it addressed only those individuals (i.e., eight non-Pehuenche families) residing in the area directly adjacent to the Bío-Bío River that was flooded by the Pangué Project. It should be noted that all of those families were relocated successfully, and, reportedly, their respective qualities of life have improved substantially.

Overall, it appears that IFC implemented and supervised the involuntary resettlement of eight non-indigenous families in a manner consistent with World Bank Group requirements.

CONCLUSIONS:

1. **The Pangué Project was in compliance with the resettlement of non-indigenous families impacted directly by the project.**

- All eight non-Pehuenche families residing within the area flooded by the Pangué Project have been successfully relocated.

2. **The Pangué Project was not in compliance in evaluating the potential impacts and implementing appropriate mitigation measures for the Pehuenches living adjacent to the Pangué Reservoir who will be impacted and/or displaced by development induced by the project.**

^

Apparently, as noted in Audit Topic 1.7 (Tab I), the failure to monitor and/or address the potential resettlement of these specific Pehuenches was based on the position taken by IFC early in the project development process that all relevant indigenous peoples issues for the Pangué Project would be addressed through the program activities of the Pehuen Foundation.

When the IFC document for the November 1990 Pangué decision meeting was prepared, it stated in the Indigenous Population section (9.11 (c), p. 16):

"Three Pehuenche Indian communities (Callaqui, Pitril, and Quepuca-Ralco), with a population of 1,185, reside in the project vicinity. The nearest community, Callaqui, is located 10km downstream from the dam site; therefore, the dam and reservoir should physically interfere little with indigenous properties or land use."

At that meeting, on November 16, 1990, the Chairman asked "whether there were any issues regarding the local indigenous people and Resettlement." Staff answered that "about 44 non-indigenous people would have to be resettled, but that they would be adequately compensated. The project will have an impact on the indigenous culture by increasing the contact with outsiders. Nevertheless, measures would be taken to minimize the contact. The indigenous people, themselves, favor the project as a source of jobs." The Chairman asked that an Issue Note be written, after the completion of the EA Report, which would have to include the "Indigenous Peoples" issue.

Subsequently, various IFC documents maintained this line of thought by noting that "none of the lands acquired by the project belong to the Indian communities." (See World Bank Office Memorandum, "Resettlement/Indigenous People," from World Bank social anthropologist to Investment Officer, November 7, 1991.) "Pangue will have virtually no direct impacts (i.e., no Pehuenche land acquisition or resettlement) on the Pehuenche population." (See World Bank Office Memorandum, "CHILE: Pangue Dam Project Social Issues," from World Bank social anthropologist to management, November 8, 1991.) "[T]he project will have virtually no direct impacts on the Pehuenche as no land acquisition or resettlement of Pehuenche is involved." (See IFC "Environmental Assessment Summary" (November 1992) (p. 13, paragraph. 46.))

However, the Pehuenches have resided on these lands for decades, and, regardless of current "land-tenure/legal ownership" issues, they will be impacted (directly and indirectly) adversely by the development of the Pangue Hydroelectric Project. For reasons noted above, any reasonable interpretation of the relevant sections of World Bank Operational Directive 4.20 (see Audit Topic 1.7, Tab I) must conclude that (a) these Pehuenches are "affected parties" who (b) will be subjected to adverse impacts induced by the Pangue Project and (c) should have been identified and monitored for appropriate mitigation measures and/or possible inclusion in the project's resettlement plans in a manner consistent with the clear intent of prevailing World Bank policies.

^

**9. AUDIT TOPIC 1.9: World Bank
Operational Directive 13.05: Project
Supervision (March 1989; Revised January
1993). (Tab K)**

AUDIT ISSUES:

Has the IFC complied with applicable World Bank Group requirements for supervision of the Pangué Project?

As stated in World Bank OD 13.05, "project supervision is one of the Bank's most important activities." Its main purposes are

- a. to ensure that the borrower implements the project with due diligence to achieve the agreed development objectives and to conform with the loan agreement;
- b. to identify problems promptly as they arise during implementation and help the borrower resolve them, and to modify as necessary the project concept and design as the project evolves during implementation or as circumstances change;
- c. to take timely action to cancel a project if its continuation is no longer justified; and
- d. to disseminate significant lessons learned during project supervision to World Bank staff and management, and the IFC Board of Directors, to enhance the standards of day-to-day World Bank operations.

AUDIT CRITERIA:

The above-noted supervisory activities are to be carried out through studying periodic reports and correspondence from project authorities, visits to borrowers and project sites, and sector and country implementation reviews covering several senior World Bank officials.

The details of World Bank's normal policies, procedures and responsibilities for supervising projects it finances are outlined in World Bank OD 13.05 (paragraphs 3-65). Those most relevant for evaluating environmental and social compliance are summarized as follows:

1. Compliance with legal covenants (paragraph 30)
2. Disbursement policies and procedures (paragraph 40)
3. Project Supervision planning (paragraph 44)
4. Mission planning (annual visits; paragraph 48)
5. Monitoring and Reporting Progress Reports (paragraphs 53 and 54)
6. Mission reporting (paragraphs 56, 57 and 58)

See respective paragraphs for details.

CRITERIA EVALUATION:

1. IFC files contained numerous documents supportive of the active and ongoing involvement of IFC staff with the Pangue Project. Particularly noteworthy were those from the IFC Environmental Division (beginning in April, 1990) and the three Investment Officers for the Pangue Project. For a chronology of IFC's involvement with the Pangue Project and 222 key references in the file, see "Major Items, Dates and Events" extracted from IFC and the Pangue Project: Environmental and Social Analysis and Review. A BACKGROUNDER, June 1996.

2. The above-noted list was impressive in its length and reflects the active involvement of IFC's staff with the Pangue Project from 1990 through mid-1996. There is no question that the IFC staff work on this project has been extensive. Indeed it contends that no IFC project to date has received the level of attention--particularly from the environmental and social perspectives--that has been required by the Pangue Project. However, given the overall results of this Independent Review, it seems reasonable to conclude that the considerable efforts of IFC staff were not focused on those activities required to ensure that the Pangue Project was in compliance with World Bank Group requirements.

Further, IFC staff actions did not agree to the clear distinctions drawn in World Bank OD 13.05 (paragraph 30) between the **quantity** of effort expended in supervision and the **quality** of those efforts:

"The quality of supervision and its effectiveness are more difficult to determine, and are to some extent **reflected by early and precise identification of implementation problems, clear definition of**

actions taken to overcome them, and the ability to get appropriate actions taken."

From the very beginning, the Pangue Project was recognized as controversial. We believe it has become even more controversial in recent years because IFC created difficult and time-consuming problems for itself by not identifying problem areas^.

However, the IFC staff contends (memorandum dated September 25, 1996 to the Independent Advisor):

"At IFC, project supervision relates to the ongoing review and monitoring of the project sponsor's compliance with the terms and conditions of its Investment Agreement with IFC There is no IFC requirement to supervise activities that are not a part of the Investment Agreement. Similarly, it is not possible by definition of the term to have problems with IFC supervision prior to the signing of the Investment Agreement."

We advised the IFC staff working on the Pangue Project that we did not agree with that opinion and requested information on where those distinctions were documented in World Bank Group records. However, the IFC staff did not provide this requested documentation but rather in written comments transmitted to the Pangue Audit Team on February 6, 1997 maintained their opinion, which is stated as follows:

"IFC, as a separate corporation which deals with private sector clients, does not follow World Bank procedures but has its own operational procedures and rules which guide its day-to-day activitiesIFC maintains that [OD 13.05] is not applicable to IFC since a) it contains no environmental and/or social policy statement and/or objectives, and b) IFC has its own procedures for project supervision which are detailed in the appropriate environmental review procedure."

In summary, despite numerous requests to verify where such distinctions were recorded in the written record, we received no evidence to support this opinion of the IFC staff that it is exempted from the overall requirements of World Bank OD 13.05: Project Supervision. Further, for all the World Bank Group directives provided to the Pangue Audit Team for this assignment by the IFC staff, "supervision requirements" were clearly identified as responsibilities to be undertaken by World Bank Group staff, including those employed by IFC.

It was the unanimous view of the Pangue Audit Team that the World Bank Group requires and expects its employees to "supervise" projects at every stage of their

development and implementation. Accordingly, for this Independent Review of the Pangué Project, in addition to overall project supervision as specified in World Bank OD 13.05, the Pangué Audit Team evaluated IFC's compliance with supervision requirements for each of the applicable World Bank Group directives. See respective Audit Topics for details.

CONCLUSIONS:

1. The Pangué Project was not in overall compliance with the World Bank Group's operational directive for project supervision.
2. There was not sufficient due diligence demonstrated by IFC at the initial stages of the project.
3. IFC does not have in place at this time (April 1997) the necessary operational systems, or clarity in its policy and procedural mandate, to manage to World Bank Group standards the environmental and social aspects of reasonably complicated development projects such as Pangué.

RECOMMENDATIONS.

1. IFC projects should be subjected to an Inspection Panel process comparable to (or be included in) the one currently in place for the IBRD.
2. IFC needs to develop the institutional capacity to systematically assess, process and effectively manage all environmental and social aspects of projects it undertakes and to do so in a responsible and transparent manner.

This should include, among other components, a totally new approach to "prequalifying" potential private-sector project sponsors to ascertain objectively their capacity and willingness (both culturally and from a human/financial resources perspective) to comply with specific World Bank requirements. Where a potential partner lacks this capacity, IFC should either (a) decline to enter into an investment agreement with it until it has demonstrated an acceptable level of organizational capacity or, particularly for private companies from Level II countries, as part of the investment agreement (b) include an "institutional development" component (with specific, auditable performance standards and goals) or, where appropriate, (c) require a project sponsor to post a "performance bond" to ensure, in the event of default, that adequate financial revenues would be available for achieving compliance with World Bank directives and policies.

While a more transparent and timely public involvement process will do much to bring increased accountability to IFC's management of environmental and social aspects of projects, that alone is not sufficient.

3. An independent oversight body should be created.

We recommend the creation on an independent directorate of highly qualified persons from outside IFC, with a mandate for ongoing formulation of goals and standards in these areas, review of performance in attaining those goals, and the responsibility for recommending policy and other relevant options to World Bank senior management.

4. In the alternative, an integrated World Bank environmental and social development program should be established.

If, as we believe is the case, there are no irreconcilable differences between the mission of IFC and the World Bank Operational Directives pertaining to environmental and social issues, and since most outside interests do not distinguish between IFC and the rest of World Bank, we cannot identify a rationale for IFC's having its own separate environmental and social program with a different approach to the implementation of World Bank policies.

Indeed, if there is really one set of "World Bank guidelines," and one process for environmental and social review of projects, the process should be managed in the same manner by the same organization for all World Bank Group institutions.

This would further reduce the problems inherent in having staff responsible for managing environmental and social problems reporting to staff who are responsible for developing and processing projects. The environmental and social aspects of IFC's project management must have goals beyond quick project approval or lowering barriers to loaning funds.

Further, since the confidential or truly proprietary information pertaining to the project would presumably remain within IFC, this should also facilitate the development of a policy of transparency in managing environmental and social issues.

5. The environmental and social program, wherever it is located, should become a recognized world-class center of excellence in these fields. Its mission should include capacity building in the developing world, government environmental and social agencies, educational institutions and the private sector, including both development interests and consulting firms.

Whether the environmental and social function is centered inside or outside IFC, there is absolutely no reason it should not and cannot become the most advanced, efficient, and effective center for the effective and proper management of the environmental and social aspects of projects anywhere in the world.

If World Bank is truly convinced that effective and fair management of social aspects of projects, or successful and innovative management of their environmental impacts, is good business, and that it is important to bring this message to the world as an integral part of a strategy for sustainable development, World Bank should have the best center in the world for the necessary work of maximizing the impact of this message. This implies the best in professional personnel, in links with other institutional centers of excellence, in techniques and standards, and in training.

The variety and depth of expertise, and the level of understanding of the cultural, political, and economic issues so vital to capacity building, would be increased by centralizing World Bank management functions in these areas into an integrated unit.

6. Environmental and social management must be seen in its social, political, and historical context, rather than as "technical issues."

The IFC managers of environmental and social issues need to be knowledgeable about the countries and cultures in which they are making loans. To be effective, the IFC staff must understand the social and political context of the countries in which project management is occurring. There is no way that "capacity building" can be successful without understanding the current capacities of the governmental agencies, universities, and private consulting firms in the host country.

This perspective has to include, but not be limited to, the views of the project sponsor. IFC will not have a balanced perspective on host country capabilities and needs if its only understanding comes through the project sponsor.

The environmental and social function must include, and to some extent be led by, people with detailed current knowledge of national and regional language, history, politics, and culture.

While there are specific "technical and scientific" issues involved in projects in particular industries, there are also particular social, political, and economic issues in each country that are at least equally important to effective and equitable environmental management. We suggest a reorientation of staff from focus on specific industries, in which a staff member may have responsibility for projects in a dozen countries on several continents, to focus on projects in specific countries or groups of countries, and on

developing detailed knowledge of the functions, capabilities, and needs of indigenous peoples, governmental agencies and other environmental/social interests.

7. IFC must develop a stronger institutional ability to say "no" to potential project sponsors.

There clearly are other potential lenders in the private sector besides IFC. Creation of cumbersome bureaucratic procedures would indeed be a disadvantage in situations where project sponsors have available alternative lending institutions.

However, the identification in this assignment of management of environmental and social aspects of this project with delay and inefficiency was reflective of an outmoded system and attitude, inconsistent with the best current capabilities and concepts in the resource management field, and incompatible with the goal of creating a center of excellence for this important area of IFC project development.

Separating the environmental and social management functions from the lending function (as noted in Section 4 above) will facilitate IFC's ability to turn down loans in which project sponsors are unwilling or unable to cooperate in the effective and timely management of these concerns.

There are clearly projects that make good economic sense to private development interests and their supporters that are not compatible with the World Bank Group's mission or its environmental and social requirements. It is asking for trouble for World Bank Group or IFC to work too hard to be able to say "yes" to projects that clearly warrant a "no."

B. OBJECTIVES: TO DETERMINE COMPLIANCE OF PANGUE PROJECT WITH ALL ENVIRONMENTAL AND SOCIAL COMPONENTS AS SPECIFIED IN THE ENVIRONMENTAL MANAGEMENT AND MONITORING PLAN (Tab L)

^

Audit Topics 2.1 to 2.4 redacted

5. AUDIT TOPIC 2.5: Downstream Environmental Analysis and Impacts Mitigation. (Tab P)

AUDIT ISSUE:

Have IFC ^ implemented all measures identified in the "Assessment of the Downstream Impacts: Pangué Power Station, Region ^ VIII, Chile," to mitigate environmental impacts to acceptable levels?

AUDIT CRITERIA:

Reference: Pangué S.A. Memorandum T-40/92, Pangué Project: Supplementary Assessment of Environmental Impacts Downstream of the Dam, Terms of Reference, 8 pp., September 1992.

1. Phase I--Object: "To identify the impacts of the power plant operation on the river's ecology and users downstream of the dam, and to design recommendation for action to mitigate or eliminate those impacts."

Activities:

- a. Collection of background data;
- b. Interpretation and analysis of background data;
- c. Impact analysis;

- Biota in general, but particularly fish
- Water quality
- Erosion downstream of Pangué dam
- River users

d. Recommendation for action.

2. Phase II--Object: "To collect the necessary background data to assess whether the actions taken in compliance with the first stage recommendations have fully achieved the objective of mitigating or eliminating the impacts identified, and to determine whether there is a call for corrective action as a means of improving the river's ecology or putting the water to better use."

Activities: Monitoring water quality.

CRITERIA EVALUATION:

1. The proposed Pangué Project was recognized by IFC as having the potential for major environmental impacts and was classed a "Category A" project.⁷ It was recognized by IFC from the beginning that the project could have significant environmental impacts.⁸ Included was the fact that downstream flows would be changed and negative downstream impacts would occur.⁹ The Pangué Project was clearly known to IFC from the beginning to be a very controversial high-profile issue within Chile and internationally. Within the NGO community and other civil society interest groups, questions had been raised about IFC's getting involved.^{10 11 12}

⁷ IFC Initial Project Review (IPR) attached to Project Data Sheet 3/8/90: "The Pangué Project is a 'Category A' project which requires an Environmental and Socio-economic Assessment Study."

⁸ IFC Initial Project Review (IPR) attached to Project Data Sheet 3/8/90: "[T]he project has significant environmental .. impacts"

⁹ IFC Initial Project Review (IPR) attached to Project Data Sheet 3/8/90: Previous to the current IFC consideration of the Pangué Project, LATEN "undertook an initial review of Pangué's environmental and socio-economic impacts" and "identified three primary areas of environmental and socio-economic impact," one of which related to downstream impacts: "[T]he flow of the free-flowing Bio-Bío River will be prejudiced." This must be "analyzed to ensure minimal environmental impact."

¹⁰ World Bank environment staff 6/15/89 memo to IFC environmental specialist.

¹¹ IFC Initial Project Review (IPR) attached to Project Data Sheet 3/8/90: "The project has come under criticism and is being opposed by some international environmental NGO's."

Given that this was known by IFC from the beginning to be a high-profile controversial project with important environmental dimensions, we believe it is reasonable to expect that there should have been appropriate review, evaluation, and quality control of the professionals who performed the environmental aspects of the early project planning and those who would be performing other necessary environmental analysis if IFC elected to become involved with the Pangué Project. That appears not to have been afforded, in our view, consideration equivalent to that which IFC provided for the traditional design, engineering, and construction aspects.^{13 14}

This seems to us to be an especially reasonable expectation given World Bank Group policy that indicates a positive presumption for an environmental panel for major dam projects with major environmental implications.¹⁵ The Pangué Project would surely have qualified.

By March 1990, the first phase of an Environmental Assessment Study prepared for ENDESA by the University of Concepcion had been received by IFC.¹⁶ In May 1990, the University of Concepcion's 1988 Bío-Bío basin regional impact study and their April

¹² IFC environmental specialist 10/19/90 memo to Pangué S.A. manager noting "there is substantial opposition to this project.... This vocal opposition, and the impact it could have on IFC's Board of Directors, makes it all the more urgent that a full EA be completed as quickly as possible."

¹³ IFC manager 1/16/91 letter to ENDESA CEO: "We sincerely believe an EA is not only a prerequisite to IFC financing but would be a prerequisite to any other institution outside of Chile which is considering significant financing to the project. Environmental criticism of the project is increasing and . . . will probably get worse. It is in ENDESA's interest to make sure that the EA is carried out as quickly as possible and addresses all material environmental . . . issues and be prepared in the most professional manner."

¹⁴ IFC engineer office memo dated 4/27/90 to IFC manager: "Under the topic of "Environmental Impact," no negative environmental impacts are cited. The author states positive environmental opinions, however, in his review for IFC that there is "no endangered fauna . . . Fisheries would not be affected . . ." and high discharges "should not affect the lower stretch of the river."

¹⁵ Environmental Policy for Dam and Reservoir Projects, World Bank Operational Directive 4.00, Annex B, p. 4, April 1989: "For projects involving large dams, or having major environmental implications, the borrower should normally engage an advisory panel of independent, internationally recognized, environmental specialists, the composition of which should be determined by the environmental reconnaissance (para. 8). However, in certain cases, the reconnaissance study may advise, based on the significance of the environmental issues and the borrower's (including consultants') capacity to deal with them, that a panel is not needed." (Emphasis added.)

¹⁶ IFC Project Data Sheet 3/8/90: "The first stage of the study, a Baseline Environmental and Socio-economic Study . . . has been received by IFC and will be reviewed . . ."

1989 Pangué Project environmental impact overview--both prepared for ENDESA--were reviewed by IFC and found to be too "academic" and determined to be inadequate for Pangué Project impact assessment.¹⁷

In March 1990, it was first concluded by IFC--based on the record we reviewed--that environmental impacts will, could, would, and/or should be reduced to be "acceptable to the World Bank" with "proper design, planning, and implementation."¹⁸ This rather optimistic view from IFC has persisted, in our opinion, throughout the Pangué Project. For example, in April 1990, an IFC Technical Appraisal of the Pangué and Pehuenche Projects was submitted citing no expected environmental impacts on endangered fauna, fisheries, or river banks downstream for the Pangué Project.¹⁹ (See also materials provided to the IFC Board of Director when the Pangué project was approved in December 1992 and prior to the first loan disbursement in 1993. Also, see material from the IFC staff decision meeting on environmental issues in November 1992.)

In April 1990, an ENDESA report defined general environmental impacts, suggested^ impacts to be focused on, cited downstream impacts, said it expects "minimal" residual impact, and recommended more studies.^{20^}

In April and May 1990, World Bank Group environmental policies and requirements were reviewed with ENDESA management by IFC,²¹ and World Bank

¹⁷ IFC environmental specialist 5/1/90 memo to IFC manager: "These studies have a strong academic flavor and do not clearly identify project impacts, required mitigation measures, or needed monitoring programs."

¹⁸ Initial Project Review (IPR) attached to Project Data Sheet 3/8/90: "[P]roper design, planning, and implementation should reduce such impacts to levels acceptable to the World Bank and others." But nowhere in the record we examined did anyone ever indicate, in our opinion, what such acceptable levels are or how they are, have been, or should be determined by professionals or decision makers in the "proper design, planning, and implementation."

¹⁹ IFC engineer 4/27/90 memo to IFC manager: Actually, under the topic of "Environmental Impact," no negative environmental impacts are cited. In fact, the author states there is "no endangered fauna . . . Fisheries would not be affected . . ." and high discharges "should not affect the lower stretch of the river."

²⁰ ENDESA, Proyecto Pangué. Planificación y Gestión Ambiental Informe Inicial dated 4/25/90: "The existing knowledge of the characteristics of the location area of the Plant, allows to define the main possible environmental impacts and the design, in general terms, of recommendations for action to be performed for reducing and managing the impacts produced. The management of impacts will attain different degrees of fulfillment of the aim proposed, leaving residual impacts. These will set the basis to design and carry out new and more specific recommendations for action."

Group environmental policy and procedures were provided by IFC to both ENDESA and ENDESA's environmental analysis consultant at the time.²² We found no evidence in the record that this World Bank Group policy was interpreted to ENDESA or their consultants or contractors in a way that effectively informed the environmental analysis that has taken place in the subsequent years in order to achieve results in line with what we believe is the intent and spirit of that World Bank Group policy.

In May 1990, IFC (a) expressed repeatedly the opinion that the Pangué Project will have "minimal" environmental impact, (b) stated more than once that such impacts can be mitigated to be "acceptable to the World Bank," and (c) seemed to agree with ENDESA that the major impacts were water quality in the river and impacts on the fishery resource.²³ The basis for the "belief" that the impacts would be "minimal" and would be "acceptable to the World Bank" was not cited. No insight was afforded as to what was, in fact, "acceptable" to the World Bank Group or what the World Bank Group considered to be "minimal" environmental impact. Examples of citations of this steady early and continuing message by both IFC and ENDESA as to "minimal" impact and meeting "World Bank" standards--in addition to those already cited--are numerous.^{24 25 26 27 28 29 30}

²¹ IFC manager memo to IFC environmental specialist 4/6/90: Under "specific objectives of this mission" was "c) Review the environmental issues associated with this project as well as relevant Government of Chile and World Bank requirements with company management."

²² IFC environmental specialist 4/26/90 letter to Pangué S.A. manager and 5/7/90 letter to ENDESA consultant.

²³ IFC environmental specialist 5/1/90 memo to IFC manager: "[T]he University of Concepcion has completed a number of studies on the Bio-Bio River. A review of the available information suggests that this project will have minimal impact on the environment. The major environmental issue is the impact on water quality in the Bio-Bio River, with a related concern being the impact of the dam on the River's fishery resource. However, despite the lack of a full impact statement (EIA), it is believed that any environmental impacts will be minimal and subject to mitigation to bring them to levels acceptable to the World Bank." Later it states that "the environmental impacts associated with this project are not considered to be significant, if the project is considered in isolation of other proposed hydroelectric developments on the Bio-Bio River. There is no doubt that the construction of all 6 proposed hydroelectric projects will have serious environmental implications for the Bio-Bio River. Environmental groups (NGO's) tend to consider the Pangué project as the 'tip of the iceberg' in terms of development on the Bio-Bio River." Later the memo states: "In the case of the proposed Pangué project, environmental impacts are considered to be minimal during both construction and operation. However, studies are continuing to identify specific environmental impacts and, where necessary, to recommend mitigative measures to reduce impacts to acceptable levels." (Emphasis added.)

²⁴ Initial Project Review (IPR) attached to Project Data Sheet 3/8/90: "[P]roper design, planning, and implementation should reduce such impacts to levels acceptable to the World Bank and others." (Emphasis added.) But nowhere does anyone indicate, in our opinion, what such acceptable levels are

or how they are determined by professionals and decision makers in the "proper design, planning, and implementation."

- ²⁵ ENDESA, Proyecto Pangué. Planificación y Gestión Ambiental Informe Inicial dated 4/25/90: The report concludes that "the present project is not likely to have such negative effects on the environment as to affect its viability neither the actual design.... It is also expected that persistent residual impacts after the implementation of the recommendation for actions will be minimal." (Emphasis added.)
- ²⁶ Engineer 4/27/90 memo to IFC manager: Under the topic of "Environmental Impact," no negative environmental impacts are cited. The author states there is "no endangered fauna Fisheries would not be affected . . ." and high discharges "should not affect the lower stretch of the river." (Emphasis added.)
- ²⁷ IFC environmental specialist 5/1/90 memo to IFC manager: "A review of the available information suggests that this project will have minimal impact on the environment However, despite the lack of a full impact statement (EIA), it is believed that any environmental impacts will be minimal and subject to mitigation to bring them to levels acceptable to the World Bank." Later it states that "the environmental impacts associated with this project are not considered to be significant, if the project is considered in isolation of other proposed hydroelectric development on the Bio-Bío River. There is no doubt that the construction of 6 proposed hydroelectric projects will have serious environmental implications for the Bio-Bío River. Environmental groups (NGO's) tend to consider the Pangué project as the 'tip of the iceberg' in terms of development on the Bio-Bío River." Later the memo states: "In the case of the proposed Pangué project, environmental impacts are considered to be minimal during both construction and operation." (Emphasis added.)
- ²⁸ IFC, Chile-Empresa Electrica Pangué S.A.--Minutes of Decision Meeting held 11/9/92: A very positive situation was portrayed vis-à-vis downstream impacts and mitigation. In para. 6: "Minimum Flow. The staff said that on Friday, November 13, IFC would receive a report from Ecology and Environment, the consultants hired by Pangué to study the downstream impacts of the project. The study would determine the potential major downstream impacts of building the dam, whether positive or negative, and whether there would be any negative impacts that could not be mitigated by standard industry practice.... [N]o major negative impacts were expected to be identified." In para. 13, dealing with List of Environmental Concerns: "The Chairmen asked staff whether there were any environmental issues which, to the best of their knowledge, should stop the project. The staff responded 'no'.
- ²⁹ Secretary, IFC, to distribution (Directors and Alternates, President Executive Vice President, VPs, Directors and Dept. Heads), Proposed Investment in Empresa Electrica Pangué S.A.--Chile dated 11/24/92 for consideration at 12/8/92 Board of Directors' meeting including 11/23/92 one-page memo from the President plus Report to the Board of Directors on a Proposed Investment in Empresa Electrica Pangué S.A.--Chile, Report No. IFC/P-1169 dated 11/23/92: Under the Environment subsection of the Risks and Issues section: "While hydropower projects do have environmental impacts, review of this project, including its substantial mitigation programs to be implemented by Pangué, shows that these impacts are expected to be minimal." (Emphasis added.)
- ³⁰ IFC investment officer memo to IFC lawyer dated 12/7/(presumably) 92, 9 pp., 26 para.: IFC staff positions are presumed to be indicated in the following Q and A's: "Q4. It looks like the downstream impacts haven't yet been adequately studied. A4. The original EA did study the project's downstream impacts, although IFC's internal and external review revealed a number of deficiencies in the

We understand that IFC staff contends that what is or is not minimal and what does or does not meet World Bank standards "have to be viewed within the context of the size and scope of the Pangué project...."³¹ Everything is, of course relative. We do not pretend to know what a "minimal" overall residual impact would have been for the Pangué Project and have no project-specific criteria to suggest, as part of our Independent Review, but we neither conducted nor supervised the project's environmental analysis that has continued for some years.

It is, of course, not realistic or even desirable for either the private sector, the public sector, or society as a whole to have "minimal" environmental impact per se as an absolute constraint or goal for a real-world infrastructure project. Any such endeavor involves a series of trade-offs involving a number of desirable and often competing objectives. Whether a proposed project is sound or not from any perspective depends on whether and how well the trade-offs and balancing such as we believe are referred to and called for in the World Bank Group guidance have been done.

We believe such trade-off and balancing are necessary in developing a sound project including proper environmental analysis that must include proper environmental and social mitigation. This requires well-established principles, criteria, and expectations as well as personnel who are both able and willing to implement, interpret, and use sound professional judgment to achieve defined objectives. This is challenging work if environmental and social considerations are effectively integrated into major infrastructure projects. This includes IFC management and professional staff, the private-sector sponsor's management and professional staff, and consultants and contractors to both IFC and the sponsor. The matter of World Bank Group environmental principles,

downstream impacts section of the IA. IFC therefore encouraged the Company to undertake an additional study, which is now underway. As a result of the first phase of the study, IFC is satisfied that the project complies with World Bank environmental guidelines and that the potential impacts can be appropriately mitigated...." (Emphasis added.) "Q7. Why won't IFC release the Phase Ia report of the Downstream Impacts Study? A7. a) . . . The EA Summary, prepared by IFC and available to all interested parties on request, is the basis for IFC's decision to proceed at this time.... c) Last but most importantly, IFC is satisfied that the project will not result in any major negative impacts that cannot be mitigated by standard industry practice. The precise mitigative measures will be determined by the next phase of the Downstream Impacts Study (DIS.)" "Q10. Does the project comply with the new Chilean environmental law (now pending approval from Congress)? A10. . . . The various project studies undertaken consider all the environmental impacts and Pangué has designed a comprehensive mitigative plan to reduce these to a minimum...." (Emphasis added.)

³¹ Anon., "Draft [Independent Advisor] Report - IFC Comments on Deficiencies," pp. 2 and 15 of undated IFC staff paper accompanying 2/6/97 letter from IFC VP and General Counsel.

criteria, professional judgment, and interpretation was spoken to very recently by IFC staff:

"IFC must establish clear criteria against which projects will be judged as to their acceptability. The existing World Bank policy statements and/or objectives do not provide the clear criteria necessary - they tend to be a set of general principles which require extensive interpretation for a private sector project.... Professional judgment ... is required to interpret the criteria

"³²

We are troubled in our review of this project's overall environmental analysis not by an absence of perfection or the failure to achieve zero, minimal, or negligible residual environmental impact, but by the fact that, in our opinion, no sufficiently comprehensive coherent process and no sufficient set of criteria were developed in advance of or during the environmental analysis. Because of this, no notion of what could be confidently and justifiably represented as being minimal or, more properly, acceptable based on a comprehensive identification, assessment, mitigation, and balancing process was presented in the record we examined. Since we developed this position, we have unsuccessfully sought documentation from IFC staff supporting an alternative conclusion.

With respect to the period 1990 to mid-1992 when the environmental die was being cast for the Pangué Project, IFC staff states:

"IFC adopted the approach of working with the client to improve the project rather than relying on confrontation to move the process forward. IFC's environmental staff were insistent about certain 'bottom line' environmental and social requirements, but in other areas compromises were reached in an attempt to move forward. While it is easy now to criticize this approach, it should be borne in mind that in the early 1990s environmental concerns were not yet as important in overall corporate decision making as they are today."³³

IFC staff believes that environmental performance expectations in the private sector have changed in recent years. We believe they have too, but certainly not drastically. Leading corporations have been aware that there were substantive community

³² Anon., "Lessons Learned and Retrospective," p. 7 of undated IFC staff paper accompanying 6/6/97 letter from IFC VP and General Counsel.

³³ Anon., "Lessons Learned and Retrospective," p. 2 of undated IFC staff paper accompanying 6/6/97 letter from IFC VP and General Counsel.

and societal expectations of them in the environmental and social arena since well before "the early 1990s." Just a couple of indications are the passage of the US National Environmental Policy Act of 1969 (NEPA) and the environmental mitigation regulations promulgated in 1978 that are discussed elsewhere herein.

In our opinion this--i.e., the very early decision and public announcement that the Pangué Project's impacts would be "minimal" and would be "acceptable to the World Bank"--has caused real problems throughout the project's subsequent environmental analysis efforts in that all parties had been informed at the beginning--before a thorough environmental review had been done and before an adequate and comprehensive mitigation plan or program had been devised--that all was or would be acceptable to the World Bank Group.

This tendency to limit the scope of the environmental analysis to the extent that it might have produced an effectively "mitigated" project in line with World Bank Group guidance and prevailing best practices seems to be well illustrated by IFC staff comments from mid-1993 concerning signing the Pangué loan. On July 9, 1993, it was stated by IFC:

"3. ^

4. Of course, we should not sign if there is a significant risk that any of the disbursement conditions could not be met (or if we felt that we might not ultimately want to stick with this project, for whatever reasons). I believe this risk (inability to meet disbursement condition) is minimal, since we already know that all anticipated downstream impacts can be mitigated simply by proper operation of the dam" (Emphasis added.)³⁴

On July 14, 1993, it was stated by IFC:

"2. As you may recall, we told the Board at the presentation last December that IFC would not proceed to disbursement until IFC had received . . . a satisfactory study on downstream projects and the specific actions which the Company would be committed to take to mitigate the impacts identified. We had expected to receive the so-called 'Phase I(b)' downstream impacts study sometime during this Spring, and had promised to report directly to the Board on the findings and recommendations of the study. So far, we have not received a satisfactory study" (Emphasis added.)

³⁴ IFC investment officer office memo to IFC manager dated July 9, 1993.

In our opinion, this seems to demonstrate the IFC staff's belief that the impacts were known--as were the necessary and appropriate mitigation measures to reduce environmental impacts to levels acceptable to the World Bank Group--to their satisfaction even before "a satisfactory study" was completed by Pangué's consultants and reported to IFC.

We believe a high level of credibility in important NGO, governmental agency, political, professional business, financial community, and other circles was attached to these very clear certifications by IFC (i.e., minimal impact and would be at level acceptable to the World Bank Group) by a respected institution like IFC, a member of the World Bank Group. This occurred during a period when the World Bank Group was publicly emphasizing its significant elevation of the importance of sound environmental protection and environmental responsibility--including institutional strengthening--in the conduct of its business around the world.

^ This early and strong IFC approval provided no real further incentive for anyone to devise a sufficiently creative, innovative, and defensible impact management program that was comprehensive and systematic as we believe would be necessary to comply with the intent of World Bank Group environmental policy then in force.

^ This was especially troublesome for a very controversial project that had the potential for great environmental impacts on a consensus "world-class" river³⁶ and a stream generally recognized as an important river in Chile.

In our opinion this previously cited strong focus from the very beginning on what we believe to be a subset of impacts--without the benefit of a systematic and comprehensive identification and evaluation of impacts using identified and recognized methodology--is a very serious flaw in the environmental analysis process. No matter how thorough a job one might or might not have done on studying some impacts and attempting to mitigate them to some extent, there was no case made in the record as to what all the residual unmitigated impacts were, how acceptable they were, and why it could be maintained that they were--or would have been--indeed acceptable to the World Bank Group, the sponsor, or Chileans or that a proper balancing would be--or had been--

³⁵ IFC investment officer office memo through IFC Vice President to IFC Executive Vice President dated July 14, 1993.

³⁶ IFC environmental specialist 5/1/90 memo to IFC manager: "The dam will flood approximately 14 kilometers of the Bio-Bio River, a popular world class white water river."

accomplished as anticipated in World Bank Group guidance and prevailing mitigation or environmental analysis best practices.

In June 1990, IFC (a) reviewed an ENDESA environmental study based mainly on a previously reviewed University of Concepcion work, (b) commended ENDESA for preparing the study in less than a month, (c) declared that ENDESA was correct in focusing on water quality and quantity and fish impacts, (d) found some of the University of Concepcion's recommendations too theoretical, (e) called this a good start, and (f) cited the need to pressure ENDESA to move ahead with a full environmental assessment.³⁷

In early 1992, the Ecology and Environment/Agrotec study dated 1991 (but submitted in early 1992)^{38, 39, 40} was received by IFC.

In their 1992 review of the Ecology & Environment/Agrotec environmental analysis for the Chamber of Deputies,⁴¹ the EULA Center research staff of the well-

³⁷ IFC environmental specialist 6/26/90 memo to IFC manager: "ENDESA has done an excellent job in pulling together this report in a very short time frame (less than 1 month)." The report draws "extensively [on] an environmental study of the Bio-Bio River basin completed by the University of Concepcion. ENDESA's report accurately highlights the major environmental issues as being the project's impact on the hydrology and water quality of the Bio-Bio River, and particularly the impact on the fish in the River. Additional studies are required [S]ome of the 15 recommendations may be too theoretical and vague—further study should result in a more practical approach to certain of the issues.... ENDESA should now move ahead to complete the full environmental assessment (EA) as quickly as possible.... In summary, ENDESA ha[s] made an excellent start, but we should continue to pressure them to move ahead...."

³⁸ Ecology and Environment, Inc., and Agrotec LTDA, Evaluation of Environmental Impacts Relevant to the Pangué Project--Executive Summary, dated 1991 but submitted in early 1992: General recommendations related to downstream impacts were: "Control dam discharges to prevent wide variations in flow regime of the Bio-Bio River downstream of the dam and implement a program to evaluate the actual effect of flow variation.... Implement a water quality monitoring program.... Develop and implement a fisheries conservation plan and production program...." In its conclusions, the report stated: "The recommended mitigation actions . . . should offset many negative impacts. Long-term impacts are associated with the interruption of natural river flows and the change in downstream flow regime. Dam operation procedures have been proposed, and additional studies and environmental monitoring are recommended to further minimize adverse effects."

³⁹ ^

⁴⁰ ^

⁴¹ EULA/Chile Center, University of Concepcion, Analysis of the Report Entitled "Evaluation of Major Environmental Impacts of the Pangué Project" conducted for Pangué S.A. by Ecology and Environment, Inc. and Agrotec LTDA, Evaluation conducted by the EULA/Chile Center, for the

respected University of Concepcion stated in no uncertain terms that they considered the E&E/Agrotec report to be deficient and

"[a] hydroelectric project such as the Pangué plant spawns a variety of impacts [and t]hese need to be quantified and their positive or negative meanings, and their direct or indirect nature, determined. In this sense, the basic criterion for evaluating these environmental impacts is that such information be available before starting the project. (p. 2)" (Emphasis in the original.)

They state further:

"The consultants' [E&E/Agrotec] study provides scientific information which, in large part, confirms existing facts and proposes a series of research projects after the dam is built, whereas the 1989 [University of Concepcion] study recommended such studies before dam construction.... [W]e believe that the consultants' study does not contribute any more information to predict the impact on the aquatic system of the Bío-Bío river (p. 29).... The major error underlying [the consultants' recommendations] is that the research studies proposed would be done after the dam is built (p. 32)." (Emphasis in the original.) [Note: Research studies are still being proposed in 1997--even though the dam and reservoir are now finished and the project is producing electricity.]

While referring specifically to the identification of impacts and mitigation recommendations in the socioeconomic or cultural area in the early-1992 E&E/Agrotec report, we believe it is more generally instructive that the University of Concepcion stated:

"[O]ne can see no relationship between the findings of these analyses, the methodological procedures used to develop them and the identification and evaluation of the impacts (p. 40).... Throughout the report, the so-called 'environmental impacts' have no logical counterpart in the chapter. This is a consequence of the potential impacts not being sufficiently identified (p. 42).... [I]n discussing possible actions that could 'mitigate' the impacts, the report does not explain the criteria for setting priorities and applying them (p. 45)."

Natural Resources, Natural Properties and Environment Committee of the Chamber of Deputies, Chile, August 1992.

While referring specifically to mitigation measures, we believe it is more generally instructive that the University of Concepcion stated:

"The report does not give serious consideration to the possibility of implementing mitigation measures or changes in the basic engineering design to offset the potential negative impacts of the dam. This is for the simple reason that, in most cases, these impacts are unknown, that is, they are either not mentioned or called 'minor' without any intervening explanation.... It is good to insist that the project must be qualified by the findings of the impact study that is made, and not the opposite, as in this case, in which a report was prepared assuming, in advance, that the project was environmentally benign. This latter approach rules out adapting the project engineering design to the environmental requirements and thus the study becomes a mere administrative formality, with no relationship to safeguarding the natural environment (p. 61)."

^

In their 1987 and 1989 environmental impact studies conducted for ENDESA, the University of Concepcion used the International Committee on Large Dams (ICOLD)-recommended methodology--based on a matrix procedure developed by Dr. Luna Leopold in 1971--to systematically and comprehensively identify and present the importance of potential environmental impacts. In the record we examined, no one ever proposed what we view as a comprehensive methodology for the Pangué Project that they represented as either equivalent to or better than the ICOLD-Leopold methodology used by University of Concepcion investigators to demonstrate how they would systematically and comprehensively identify and evaluate all of the environmental impacts on the Bio-Bio River downstream of the Pangué dam.

In April 1992, IFC insisted that Pangué S.A. focus on four issues arising from the environmental report and its reviews, one being the downstream impacts, especially water quality and quantity, fisheries, and downstream water users.⁴² What IFC is recommending

⁴² IFC environmental specialist to Pangué S.A. manager fax dated 4/10/92, one-page memo plus IFC environmental specialist's five-page meeting notes from 4/2-3/92: "[T]here are four issues which require particular attention as follows: the impact of the project downstream of the dam. This is largely related to flows in the Bio-Bio River, particularly maximum and minimum flows. Impacts on water quantity, water quality, fisheries and downstream water users need to be addressed."

or insisting that Pangué S.A. focus on in 1992 is, in our opinion, essentially what Pangué S.A. had laid out in early 1990.⁴³

The downstream impacts of the Pangué dam have been a controversial topic from the beginning of this controversial project. For example, in August of 1992, IFC noted:

"Although all of the above issues [environmental and social] are important, the one that is most open to public criticism is the downstream impact. Unfortunately, for a variety of reasons, this was a glaring omission from the Environmental Assessment."⁴⁴

In late August 1992, IFC expressed continuing concern to Pangué S.A. over downstream impacts and minimum flows with another proposed IFC Board of Directors date only two months away.⁴⁵

In the middle of September 1992, Pangué S.A. provided IFC with its TORs for the downstream impacts study (see above) to address this matter. The TORs indicated that impacts and mitigating measures will be identified in Phase I, and Phase II will be

⁴³ ENDESA, Projects Pangué. Planificación y Gestión Ambiental Informe Inicial dated 4/25/90: The focus of all future environmental analysis studies for the Pangué Project is set here: "Analysis of these preliminary evaluations of impacts based upon the existing update information leads to conclude that [these] two are the most important effects of the Pangué project. One [of these two is] concerning the hydrological system For this reason, the existing information plus specific contributions, were used to make a revision and to orientate the study of these two systems [one of which was hydrologic] towards the more relevant situations. Thus possible impacts on water quality, effects on water quantities and conservation of fish species were considered in detail for the hydrological system." The report concludes that "the present project is not likely to have such negative effects on the environment as to affect its viability neither the actual design.... [T]he impacts described for the hydrological system--water quality and quantity and fish conservation-- . . . should be confirmed with specific quantitative studies.... It is also expected that persistent residual impacts after the implementation of the recommendation for actions will be minimal."

⁴⁴ IFC investment officer August 14, 1992 BTO report to IFC manager.

⁴⁵ IFC investment officer to Pangué S.A. senior management fax memo dated 8/26/92: "As we have discussed, this issue of 'no-flow' in the river and downstream impact is the most serious outstanding potential environmental problem for the project." ^ it is extremely important that Pangué make substantial progress on studies of the downstream impact of the project prior to the proposed November 1992 Board date. In this regard, please provide the following as soon as possible: . . . an interim report on the status and preliminary results of the downstream impact study. ^ We will need this interim report for our final meeting with IFC management which takes place about three weeks prior to the Board presentation." In closing, a commitment is requested from Pangué: "It goes without saying that we will request Pangué to adhere to the recommendations from the downstream impact study."

monitored to verify the effectiveness and to refine the mitigation measures.⁴⁶ The consulting firm Ecology & Environment, Inc. undertook Phase I of the downstream environmental impacts analysis. Their report⁴⁷ says it "will be followed with the Phase Ib report, which will . . . identify the measures needed to mitigate the expected downstream impacts of the Pangué project."

⁴⁸

The Phase Ib report dealing with needed mitigation measures was expected in 1993.^{49 50 51} The Audit Issue cited above⁵² indicates the importance placed on having the downstream impacts study completed prior to the first disbursement of the IFC loan.

It is reasonable, in our opinion, to assume that the expectation of what "completed" meant was that all of the downstream environmental impacts would be thoroughly identified, that the level of appropriate mitigation would be determined for the various impacts, that mitigation measures would be well defined and clearly specified to achieve that level, and that the spirit and intent of World Bank Group guidance would be adhered to throughout the process. It was recognized that, with additional data being collected, the mitigation measures to be specified in Phase Ib for implementation could be refined before the station went into operation and also thereafter.

⁴⁶

⁴⁷ Ecology & Environment, Inc., Evaluation of Environmental Impacts Downstream of the Pangué Project [the "Phase Ia study"], November 1992.

⁴⁸ IFC environmental specialist to IFC investment officer office memo dated 9/22/92: In para. 2: "[T]he dam certainly can significantly change the Bio-Bio River's natural flow pattern (e.g., during the no flow operation of the dam)." In para. 4: "[A two-phased study] does raise the question of what happens if the consultants conclude that there is insufficient existing information on which to define downstream impacts with any confidence, to recommend needed mitigation programs and to design a Phase II field program. If this were to occur, IFC would have to carefully evaluate when to take this project to our senior management" In para. 10: "Phase I, Study Timeframe--the Phase I report must be completed as soon as possible and in any event before we recommend this project to IFC senior management and the Board."

⁴⁹

⁵⁰

⁵¹ Ecology & Environment, Inc., Downstream Impacts Associated with the Pangué Power Station--Region VIII, Chile, November 1993.

⁵²

In our opinion, the term "mitigation" is widely used and misused today. It would be useful to clarify what we believe it means. When the term "mitigation" is used today by professionals in environmental analysis, it has a well-recognized meaning and has for a number of years. Since at least 1978, it has been recognized to properly involve a wide range of measures including (i) avoiding, (ii) minimizing, (iii) rectifying, (iv) reducing, and (v) compensating. This is illustrated in the NEPA regulations.⁵⁶

In 1981, the notion of "sequencing" was made official in the US Department of the Interior's Fish and Wildlife Service Mitigation Policy.⁵⁷ The applicability of the sequencing approach in particularly sensitive environments is illustrated in the Mitigation Memorandum of Agreement between the US Army Corps of Engineers and the US Environmental Protection Agency involving wetlands.⁵⁸

⁵³ ^ In our opinion, the study, according to our view of the 1989 World Bank dam and reservoir project guidance and good environmental management practice, should have been done in 1992 or earlier--before the loan was approved. So everyone, in our view, is already starting out behind the actual project (i.e., the hydropower facility proper), which was, in our opinion, on its own schedule with respect to design, engineering, and construction. ^

⁵⁴ ^

⁵⁵ ^

⁵⁶ 40 C.F.R. pt. 1508.20(a-e); 43 Fed. Reg. 55078, 56005 (Nov. 29, 1978). "'Mitigation' includes: (a) Avoiding the impact altogether by not taking a certain action or parts of an action, (b) Minimizing impacts by limiting the degree or magnitude of the action and its implementation, (c) Rectifying the impact by repairing, rehabilitating, or restoring the affected environment, (d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action, (e) Compensating for the impact by replacing or providing substitute resources or environments." While not specifically mentioned in the document, this is considered by the US Fish & Wildlife Service to be the beginning of the concept of "sequencing" wherein a clear sequential preference is provided for avoidance, then minimization, etc.

⁵⁷ Federal Register, v. 46, n. 15, Jan. 23, 1981 (as corrected in Federal Register of Feb. 4, 1981). In addition to restating the items contained in 40 C.F.R. pt. 1508.20(a-e), the following paragraph was added: "The Service supports and adopts this definition of mitigation and considers the specific elements to represent the desirable sequence of steps in the mitigation planning process." (Emphasis added.) This is, in our view, clearly a creative, proactive process that is intended to be an integral part of planning a sound, balanced project as opposed to being a mostly reactive or after-the-fact exercise independent of project planning and design.

⁵⁸ Cover letter to Memorandum of Agreement (MOA) between the Environmental Protection Agency and the Department of the Army Concerning the Determination of Mitigation under the Clean Water Act

In our view, the extensive debate and experience that led to the adoption of the sequencing approach to mitigation by major expert development and regulatory agencies such as the US Army Corps of Engineers, The US Environmental Protection Agency, and the US Fish and Wildlife Service--agencies recognized for expertise in water resources infrastructure development, hydropower, river regulation, dam building, water quality, hydrology, aquatic and terrestrial habitat impacts etc. is clearly indicative of this approach being well established as recognized best practices well prior to the Pangué Project's environmental analysis. Sequencing as discussed herein is considered to be recognized as best practices internationally vis-à-vis mitigation of environmental impacts. A good review of the sequencing approach is provided by Gardner.⁵⁹

It is our view that the spirit and intent of the guidance on "mitigation" provided by the World Bank Group in policy documents provided to us by IFC, as part of this Independent Review of the Pangué Project is consistent with what we described above as being recognized best practices. If effectively communicated, understood, internalized, prioritized, integrated, and utilized in the overall Pangué Project environmental analysis, the World Bank Group guidance should, in our opinion, have been sufficient to have produced a sufficiently sound, comprehensive, and coherent environmental impact mitigation program that effectively balanced economic, social, environmental, and other dimensions.

⁶⁰ ⁶¹ ⁶² ⁶³ ⁶⁴ ⁶⁵ ⁶⁶ ⁶⁷ ⁶⁸ ⁶⁹ ⁷⁰

Section 404(b)(1) Guidelines, Nov. 1989, from the Director of Civil Works, US Army Corps of Engineers. It states in part: "Mitigation should occur in a clear sequence of avoidance of wetlands impacts through the evaluation of practicable alternatives, minimization as the second step in the sequence, and lastly, compensation of unavoidable impacts through restoration or creation. Some flexibility in narrowly defined circumstances is allowed in the applicability of the mitigation sequence."

⁵⁹ Royal Gardner, The Army-EPA Mitigation Agreement: No Retreat From Wetlands Protection, 20 E.L.R. 10337 (Aug. 1990).

⁶⁰ Environmental Policy for Dam and Reservoir Projects, World Bank Operational Directive 4.00, Annex B, p. 1, April 1989: "1....[T]here may be adverse as well as beneficial environmental impacts (see Annex B1). With careful planning, such adverse impacts can be minimized or mitigated, and the beneficial effects enhanced.... 4. Adverse environmental impacts should be avoided, minimized, or compensated for whenever possible during project design (e.g., by modification of dam location or height), and measures implemented as part of the project, bearing in mind the need to balance environmental, economic, social, and other concerns. Opportunities to increase benefits should be sought in the design of the project, such as by using the reservoirs for waterfowl, tourism, and fisheries. Cost-benefit analyses should explicitly include estimates for all necessary mitigatory measures, as well as for quantifiable environmental losses and enhancements due to the project." (Emphasis added.)

^ The November 1993 report claimed that impacts ^ had now been identified and mitigation measures were to be treated:

"This impact assessment has . . . identified downstream impacts on environmental and socioeconomic concerns. This section presents mitigation measures for the identified impacts and provides the study's recommendations." (p. 4-1) (Emphasis added.)

"This report ... outlines mitigation measures and monitoring programs for managing impacts, and presents recommendations to minimize environmental impacts resulting from the project." (p. 1-1) (Emphasis added.)

^

⁶¹ IFC, World Bank Environmental Policy, Nov. 4, 1996: "Dam and reservoir projects," p. 6, "Adverse environmental impacts should be avoided, or minimized, or compensated for whenever possible during project design and by measures implemented as part of the project. Opportunities to increase benefits should be sought, such as use of reservoirs for waterfowl, tourism, and fisheries. Cost-benefit analyses should explicitly include estimates for all mitigatory measures, as well as for quantifiable environmental losses and enhancements due to the project.... Source Operational Directive 4.00--Annex B: World Bank Operational Manual, April 1989." (Emphasis added.) Note: At bottom of p. 6 is the following note: "This document was prepared as guidance for IFC's financial intermediaries and should not be considered as a comprehensive treatment of subjects covered."

62 ^

63 ^

64 ^

65 ^

66 ^

67 ^

68 ^

69 ^

70 ^

"A monitoring program is recommended to refine the Flow Release Management Plan (FRMP) and to evaluate and select other mitigation measures (should they be needed) in the environment downstream of the proposed Pangué dam.... The results of the monitoring program will be used to update the FRMP, as necessary, and to implement additional mitigative measures, if indicated by the results of the monitoring." (pp. 4-6, 4-7) (Emphasis added.)

It is our opinion that, as of November 1993, the downstream impacts still had not been thoroughly enough identified, quantified, and understood. Nor had measures been sufficiently well defined and specified that adequately considered the full spectrum of impact management measures cited in World Bank Group guidance, i.e., avoidance, minimization, mitigation, compensation, and enhancement. Nor had the matter of just what levels of downstream impact--total and for the several types of impact--were indeed acceptable to the World Bank Group been adequately considered.

At the same time, design, engineering, and construction were proceeding on schedule. In our opinion, the environmental analysis, including the catch-up efforts to consider downstream impacts, was still not an integral part of planning, designing, or constructing the Pangué Project.

In November 1992, the decision meeting on the Pangué Project's environmental issues was held where, before the project was approved, it was reported by the IFC staff that no major negative impacts were expected to be identified in the Phase Ia downstream impacts report and that a minimum flow might not be required due to some pools in the river bed below the dam.⁷¹ It is reported by the IFC staff that the E&E/Agrotec

⁷¹ IFC, Chile--Empresa Electrica Pangué S.A.--minutes of Decision Meeting held 11/9/92: A very positive situation was portrayed, in our opinion, vis-à-vis downstream impacts and mitigation. In para. 6: "Minimum Flow. The staff said that on Friday, November 13, IFC would receive a report from Ecology and Environment, the consultants hired by Pangué to study the downstream impacts of the project. The study would determine the potential major downstream impacts of building the dam, whether positive or negative, and whether there would be any negative impacts that could not be mitigated by standard industry practice.... [N]o major negative impacts were expected to be identified." With respect to minimum flows before the hydro facility, even more positive reports were provided: "However, a minimum flow may not be required. The Company had provided a graph showing a longitudinal cross section downstream of the dam that indicated deep recesses in the river bed. This would mean that the downstream area from the dam to the first major river inflow (2 km) would not be totally dry. These pools would allow fish and other aquatic organisms to survive, even with no flow for a period of hours." In para. 9, on the topic of Quantification, the Divisional Manager raised an issue that had been mentioned but, in our view, not dealt with much in the studies. He "asked whether the World Bank had established some way of quantifying environmental-related factors difficult to value

downstream impacts report covering Phase I was to arrive the following week for IFC review of the impacts identified and the mitigation measures to be used.⁷²

In late November 1992, the report to the IFC Board of Directors indicated "minimal" impacts from the Pangué Project, cited compliance with all World Bank Group policy, stated that the project is "environmentally sound," referred to the "substantial mitigation program," and recommended IFC Board of Directors approval of the Pangué Project.⁷³

such as the aesthetics of beautiful scenery. The staff replied that numerous studies had been done, but no numbers could be attached to these concerns. Where possible, however, the effects of the project had been quantified. For example, white-water rafters would lose 14 km of 130 km of one of the world's most renowned white-water rafting rivers. The potential loss to rafting businesses, and especially to Chile, might be minimal because it was felt that the rafters would continue to use the river above the reservoir area, although they would lose some of the most exciting rapids for rafting." In para. 13, dealing with List of Environmental Concerns: "The Chairman asked staff whether there were any environmental issues which, to the best of their knowledge, should stop the project. The staff responded 'no.'" In para. 17, Pre-Board Strategy: "The staff discussed the next steps prior to the Board meeting, tentatively scheduled for December 3. (Recommendation to IFC's senior management would be contingent upon a satisfactory Phase Ia report being received by IFC on November 13.)" The remainder of the meeting was devoted to developing, in our opinion, lobbying efforts directed to the IFC Executive Directors and major NGOs. "A fact sheet outlining the positive aspects of the project would be prepared to counter negative reactions. This could be used as the basis for a press release prior to the Board if IFC faced negative press." In para. 19, it is reported, "The Chairman approved the proposed IFC investment in Empresa Electrica Pangué."

⁷² IFC, Chile--Empresa Electrica Pangué S.A.--Minutes of Decision Meeting held 11/9/92: In para. 6: "Minimum Flow. The staff said that on Friday, November 13, IFC would receive a report from Ecology and Environment, the consultants hired by Pangué to study the downstream impacts of the project."

⁷³ Secretary, IFC, to distribution (Directors and Alternates, President, Executive Vice President, VPs, Directors and Dept. Heads), Proposed Investment in Empresa Electrica Pangué S.A.--Chile dated 11/24/92 for consideration at 12/8/92 the IFC Board of Directors' meeting including 11/23/92 one-page memo from the President, plus Report to the Board of Directors on a Proposed Investment in Empresa Electrica Pangué S.A.--Chile, Report No. IFC/P-1169 dated 11/23/92: Under the Environment subsection of the Risks and Issues section: "The Pangué project has been subject to criticism on environmental and socioeconomic grounds. While hydropower projects do have environmental impacts, review of this project, including its substantial mitigation programs to be implemented by Pangué, shows that these impacts are expected to be minimal. The environmental and socioeconomic work on this project far surpasses prior work on any power project in Chile. Pangué is Chile's least cost alternative to increase its electricity generation capacity on both a financial and an environmental basis. The project complies with the relevant World Bank environmental and socioeconomic guidelines." In para. 1.02: "IFC's Role IFC has been working closely with ENDESA/Pangué since early 1990 to develop the Pangué project, in particular guiding the Company in the preparation of all the necessary environmental studies. IFC has also been instrumental in helping formulate a series of appropriate environmental . . . mitigation measures and procedures. Such efforts have significantly heightened the

Shortly before the December 1992 IFC Board of Directors meeting, IFC staff prepared draft questions and answers for the IFC Board of Directors meeting indicating, in our view, minimal impacts, good mitigation, no unresolved environmental issues, and that the Pangué Project meets--or would meet--World Bank Group environmental policy.⁷⁴

Company's environmental awareness, contributing to making this project environmentally sound and allowing the Company to far surpass prior environmental . . . work on power projects in Chile. . . IFC's involvement has also resulted in the preparation of a detailed environmental assessment (EA), . . . and the undertaking of further analysis of the project's downstream impacts through an ongoing, long-term study. The project complies with relevant World Bank environmental . . . guidelines." In our opinion, throughout the document, the impression is given or one could reasonably conclude that there is much specificity in the knowledge of what mitigation measures should be implemented, that there is a comprehensive coherent systematic program of measures, that the ongoing efforts are refining what is known, that all relevant impacts have been identified and thoroughly dealt with, that all impacts can and will be mitigated to acceptable--albeit unspecified--levels, that the net residual impact is acceptable, that the process and results are up to high international standards, and that the spirit and intent of World Bank Group policy has been adhered to by the parties.

⁷⁴ IFC investment officer to IFC lawyer + 3 memo dated 12/7 (presumably 92), 9 pp., 26 para.: IFC staff positions are presumed to be indicated in the following Q&As: "Q1. Why is IFC taking the project to the Board at this time? A1. a) IFC did not previously present the project to our Board until now because until very recently we had not reached agreement with the Company on the measures necessary to ensure that the project meets the World Bank's environmental and socioeconomic guidelines. We are now satisfied that the project meets these guidelines. . . ." "Q4. It looks like the downstream impacts haven't yet been adequately studied. A4. The original EA did study the project's downstream impacts, although IFC's internal and external review revealed a number of deficiencies in the downstream impacts section of the IA. IFC therefore encouraged the Company to undertake an additional study, which is now underway. As a result of the first phase of the study, IFC is satisfied that the project complies with World Bank environmental guidelines and that the potential impacts can be appropriately mitigated. Pangué has committed to implement all reasonable recommendations of the DIS, including maintenance of a minimum flow if that is recommended." "Q5. What will the additional downstream impacts study do? A5. The first phase of the study, which was recently completed, answers the questions of what are the expected impacts of the project and can these impacts be mitigated by standard industry practices. The next phase, to be ready in early 1993, will recommend specific operational mitigative measures. The third phase, which is ongoing through project implementation and operation, will monitor various parameters in the river and assess the mitigative measures theretofore taken to see if any adjustments are needed." "Q7. Why won't IFC release the Phase Ia report of the Downstream Impacts Study? A7. a) . . . The EA Summary, prepared by IFC and available to all interested parties on request, is the basis for IFC's decision to proceed at this time. . . . c) Last but most importantly, IFC is satisfied that the project will not result in any major negative impacts that cannot be mitigated by standard industry practice. The precise mitigative measures will be determined by the next phase of the Downstream Impacts Study (DIS)" "Q8. Does Pangué comply with IFC's Environmental Procedures? A8. The Pangué project fully complies with IFC's environmental review procedure. . . . Finally, IFC's Board documentation outlines the environmental and socioeconomic issues associated with the project, as well as the proposed mitigation programs and monitoring plans." "Q9. How does IFC maintain objective oversight of the project? A9. . . We have

In our opinion, the basis for some of the more positive or optimistic suggested answers for the Board meeting--e.g., why IFC was now "satisfied that the project meets these [World Bank Group environmental] guidelines," why IFC was now "satisfied that . . . potential impacts can be appropriately mitigated," and why "IFC is satisfied that the project will not result in any major negative impacts that cannot be mitigated by standard industry practice"--is not provided.

Based on the information provided to it, on December 12, 1992, the IFC Board of Directors approved the Pangué Project.⁷⁵ A press release reported that this was based on the "comprehensive environmental review of the project by IFC." The Board members "voiced strong approval of the work done by IFC in setting high environmental . . . standards with respect to the Pangué project." The IFC Board of Directors concluded that the Pangué Project would generate power "in a sustainable and environmentally responsible manner."

This is, in our opinion, where things stood when the first loan disbursements for the Pangué Project were made in February 1994.[^]

^76 ^77 ^78 ^79 ^

strict conditions of disbursement of IFC funds to assure compliance; IFC supervises projects carefully during implementation.... Finally, we have compliance covenants that allow us to declare the loan in default if the covenants are not being respected." "Q10. Does the project comply with the new Chilean environmental law (now pending approval from Congress)? A10. ... The various project studies undertaken consider all the environmental impacts and Pangué has designed a comprehensive mitigative plan to reduce these to a minimum...." "Q18. Why is IFC helping to finance ENDESA, one of Chile's largest private sector companies? Can't they get financing on their own? A18. IFC has played several key roles in this project: a) first, on the environmental side, IFC's involvement has substantially heightened the Company's environmental awareness and has resulted in a series of studies and mitigative measures that make this an environmentally sound project...." "Q23. If there is a drought period in the Bio-Bio basin, what are the Pangué's obligations (in terms of minimum flow) and what is IFC's ability to enforce? A23. Pangué's obligations to implement mitigating measures will be determined by the second phase of the downstream impacts study, which will include analysis of various scenarios. We therefore do not know the exact parameters of these measures. However, Pangué has committed to implementing all reasonable recommendations of this study, including a minimum flow if that is recommended...."

⁷⁵ IFC Board Approves Pangué Dam, press release dated 12/17/92: "Board ratification of the proposed investment followed a comprehensive environmental review of the project by IFC.... Board members voiced strong approval of the work done by IFC in setting high environmental and social standards with respect to the Pangué project.... The Pangué project will add substantially to the existing power generation capacity of Chile in a sustainable and environmentally responsible manner." (Emphasis added.)

76 ^

2. The Pangué Ecological Station has undertaken Phase II (i.e., long-term monitoring) of the downstream environmental impacts analysis.[^]

CONCLUSIONS

[^]

1. Is the study actually “completed”?

[^]IFC is responsible for supervising the sponsor's environmental analysis. If the environmental analysis process and its results are not in line with World Bank Group procedures, policy, and/or guidance, in our opinion, the responsibility must be borne by[^] IFC.

In our opinion, it can be considered “complete” until a comprehensive set of measures is presented that can be demonstrated to be reasonably likely to manage all downstream environmental impacts to attain a level of overall impact and impact in the several impact areas that would be acceptable to the World Bank Group. This should include all environment-related impacts of concern to the various stakeholders (including, of course, Pangué S.A., the private-sector partner with IFC) that the World Bank Group believes should be involved. This implies a thoughtful balancing of economic realities, the diverse goals and interests of all stakeholders, and a sense of equity. It would also imply, in our opinion, that World Bank Group and IFC environmental analysis guidelines and other sources of good recognized practices in the environmental management field had been effectively utilized--and that such practices were clearly evident in the product or results of the environmental analysis.

[^]

2. [^]

3. [^]

⁷⁷ Meeting between IFC environmental, investment, and legal staff and Pangué Audit Team members on November 21-22, 1996, at IFC's offices in Washington, DC.

⁷⁸ [^]

⁷⁹ [^]

Another reason it is difficult to say whether impacts have been mitigated to "acceptable levels" is that no specific standards have been proposed, advocated, cited, requested, or discussed as to just what is--or is not--"acceptable" to the World Bank Group and IFC in the way of overall net environmental impact for a project such as this or what is acceptable--or not--in the way of environmental impact for the various types of impact. (We are not referring to scientific or ecological parameters such as the minimum dissolved oxygen concentration for survival of some species of fish, number of changes of water per day in a pool, and the like.) Nor is there any World Bank Group or IFC guidance on the criteria or procedures for ^professionals to use in determining whether the impacts associated with some type of measure would or would not likely produce "acceptable levels" of impact in the eyes of IFC and the World Bank Group.

Without any such definitive criteria, standards, or guidance either provided by IFC or approved by IFC, it is not clear how IFC did determine--or would determine--whether ^ recommendations were or were not adequate or acceptable to the World Bank Group as a systematic program to manage the downstream impacts as part of the overall Pangué Project environmental impacts management effort.

4. ^

5. ^ 80 ^

6. ^

World Bank Group guidance and recognized good environmental management practices cite the importance of properly treating positive or beneficial impacts that exist or can be created.

^

7. ^

There is a great deal of difference between (a) doing scientific and engineering studies in the environmental area and (b) good solid impact management that can be considered credible and likely to enhance the overall value of a major infrastructure project.

^ Other uses and users such as sport fishing, aesthetics, paddling, ecotourism, tourism, and recreation have received very little attention, in our opinion, despite their

80 ^

potential for mitigation, compensation, and enhancement--and despite the great interest expressed repeatedly in these areas by various stakeholders.^{81 82 83 84 85 86 87 88}

81 ^

⁸² IFC Environment Advisor 5/1/90 memo to IFC Manager: ^ IFC ^ added that the loss would not be great since "adequate" miles or kilometers of white-water river were available both "above and below" the proposed Pangué reservoir: "The dam will flood approximately 14 kilometers of the Bio-Bío River, a popular world class white water river. Rafting and related activities provide limited revenue to the area, and these activities are mainly undertaken by foreign visitors to Chile. However, in the broader context, this project will not limit the River's tourism potential since there is adequate white water above and below the reservoir, with good road access around the dam structure."

⁸³ Pangué S.A., Questions Related to Some Environmental Aspects of Pangué Project, Environmental Management and External Affairs Office, dated 5/91: "This activity [canoeing and rafting] is practiced mainly by foreign tourists operating through tourism offices, also foreign.... The river section used for canoeing and rafting at present has a length of 79 miles. Pangué Dam will flood 8 miles of the final part of this section so it will be possible to continue the practice of this sport. The creation of the reservoir will allow other sport practices that could be available to regional and local population. Also sport fishing, which at present is very low in the river, will be greatly increased with the dam. In summary, the dam will cause a small restriction on an elite sport, while creating the condition for a regional sport development of broad reach and thus of more economical and social significance." This continues to minimize the importance of some recreational uses due to its use by elite foreigners. ^ The matters of developing sport fishing which "will be greatly increased with the dam," other recreation, and economic and social benefits were not emphasized in subsequent mitigation studies we reviewed.

⁸⁴ IFC consultant report, A Review of the Report "Evaluacion de Impactos Ambientales Relevantes del Proyecto Pangué" (Ecology and Environment, Inc., and Agrotec LTDA), prepared for IFC dated 3/92: IFC's own external reviewer properly raised questions directly to IFC's environmental staff early on about the aesthetic as well as the economic treatment of this impact and mitigation area and its adequacy: "The report appears to be quite optimistic about the tourism potential for the reservoir, but little information is presented to support this, either in terms of market-based surveys or using case-history experience from other reservoirs or lakes in the region.... Is the area sufficiently 'attractive' that it might be able to draw to it a large number of ecotourists (including, but not limited to, river rafters). Would these ecotourists still come if the Bio-Bío were to be dammed and if land degradation in the basin were to increase? Might the magnitude of these and other related values be such that they would enter in as significant components to comparative cost-benefit analyses . . . ?" These are the sort of factors that the World Bank dam and reservoir policy, procedures, or guidance mentioned as needing to be considered in mitigation and benefit-cost analysis of such projects.

85 ^

⁸⁶ IFC, Chile--Empresa Electrica Pangué S.A.--Minutes of Decision Meeting held 11/9/92: A very positive situation was portrayed vis-à-vis downstream impacts and mitigation. In para. 6: Minimum Flow. With respect to minimum flows below the hydro facility, positive reports were provided: ". . . This would mean that the downstream area from the dam to the first major river inflow (2 km) would not be totally dry. These pools would allow fish and other aquatic organisms to survive, even with no flow for a period of hours." In para. 9, on the topic of Quantification, the Divisional Manager raised an issue that

^ It is difficult to see where IFC made a significant positive difference in the outcome so far as the environmental and social impact results there in the upper Bió-Bío River of Chile as compared with how ENDESA/Pangue S.A. would have done the project without IFC's supervision. This would seem to require much more attention being paid to the World Bank Group policy on environmental analysis than was the case, and it would appear based on the record we examined.

had been mentioned but not dealt with much in the studies so far as we can determine. He "asked whether the World Bank had established some way of quantifying environmental-related factors difficult to value such as the aesthetics of beautiful scenery. The staff replied that numerous studies had been done, but no numbers could be attached to these concerns. Where possible, however, the effects of the project had been quantified. For example, white-water rafters would lose 14 km of 130 km of one of the world's most renowned white-water rafting rivers. The potential loss to rafting businesses, and especially to Chile, might be minimal because it was felt that the rafters would continue to use the river above the reservoir area, although they would lose some of the most exciting rapids for rafting."^ Recall that, in the 5/1/90 IFC memo dealing with this, it was reported that the river below the Pangue dam could still be used for White-water rafting. While there would reportedly be no flow for periods of hours, there would still be some pools of water. This would seem to preclude the use referred to in 1990 by IFC.

⁸⁷ Ecology & Environment, Inc., and Agrotec LTDA, Evaluation of Environmental Impacts Downstream of the Pangue Project (DRAFT), 11/92: "This evaluation is the first part of a two-part study (Phase Ia and Ib) to assess the impacts of operations of the Pangue project and develop recommendations to mitigate those impacts." The matter of recreational use is spoken to: "Recreational use of the Bio-Bio River for activities such as fishing or rafting is insignificant below the Pangue dam site. Traditionally, most white water rafting excursions concluded in the vicinity of Ralco, approximately 5 km below the dam site, since the gradient of the river decreased and the attributes for white water rafting experiences generally ended." With regard to the water flow during zero-release periods: "Since the river along this reach is steep and rocky, initially pools would be formed with dry lengths of streambed between them. It is not possible to accurately predict how fast these pools would drain." In its recommendations chapter, the report states: "Therefore, the impacts from the operation of the power station are not expected to be highly significant." In the next paragraph, it states: "[U]nder the worst-case operational scenario, the hydrologic (flow variation) impacts of the Pangue dam will be significant." In the next paragraph--the third of four paragraphs in this chapter--it says: "Other facets of the river's health will not be significantly impacted. There are no known recreational users of the river, no commercial fisheries Based on this information, it is our belief that the Pangue project can proceed with some mitigation measures developed to protect as much as possible of the ecological component of the Bio-Bio River downstream of the Pangue dam." ^

ADDITIONAL DOWNSTREAM IMPACT CONCLUSIONS

In addition to speaking specifically to the Audit Criteria as we have above, we have several other conclusions that flow directly from our work preparing to answer the Audit Criteria. All of these conclusions are opinions of the Audit Team members. The first 12 related directly to the Pangué Project.

1. Despite a very substantial IFC staff effort from early 1990 to date, the first step in environmental analysis--identification of potential environmental impacts--has still not been completed in a satisfactory manner.

- a. Opportunities that existed for avoidance of impacts, their minimization, structured mitigation, or compensation have not been maximized--and are likely now lost.
- b. There is no assurance that positive or potentially positive impacts have been enhanced, and certainly not to their fullest. In fact, most have been afforded not or inadequate attention.
- c. ^
- d. There is little evidence in the record of systematic effort or methodology to identify impacts and systematically consider their avoidance, minimization, mitigation, compensation, and/or enhancement.

2. ^

3. The Pangué Project did not comply with applicable World Bank Group environmental policies in important respects. We believe World Bank Group policy provided to ENDESA in 1990 was fully adequate to have produced acceptable environmental analysis including comprehensive and systematic identification of potential impacts and the development of a sound balanced program to manage such impacts. Acceptable environmental analysis includes, in our view, the notions of:

- a. having environmental considerations integrated into the project by having the results of timely environmental analysis actually inform the project's planning, design, construction, and operation in a meaningful project-enhancing way;
- b. properly using the specified hierarchy or sequence of impact management approaches including avoidance, minimization,

mitigation (in-kind and in-place), compensation, and enhancement and combinations thereof--for individual impacts and among impacts to consider overall residual impact; and

- c. balancing the economic, environmental, and social dimensions of an admittedly very complex and challenging real-world private-sector energy infrastructure proposal to yield an economically and technically sound, environmentally responsible, and equitable project of which the World Bank Group could be justifiably proud for having brought their values and expertise--widely perceived as being both extensive and positive--to the process. In fact, we presume this is a major reason for the World Bank Group and IFC to have been involved in such a challenging project as the Pangué Project.

4. There is little evidence in the record that the sort of environmental analysis necessary to produce results consistent with the spirit and intent of World Bank Group policy--which we believe must include comprehensive and systemic identification of environmental impacts using an identified and recognized methodology and best practices and then systematic management of such impacts both overall and individually to levels acceptable to the World Bank Group--has been or is being performed.

5. There is no evidence of any standards or criteria having been provided Pangué S.A. for what level of overall impact or impacts of specific types was indeed acceptable to the World Bank Group. With no coherent criteria or standards specified, suggested, or required throughout the process to date, it is impossible, in our opinion, for anyone to say--or to have said--with any confidence that environmental impact levels "acceptable to the World Bank Group" have been, should be, or will be or could be achieved. There is simply no basis for making such claims--and especially, we believe, before the environmental analysis was done.

6. At each key stage⁸⁹ in the decision process, specific and identifiable deficiencies existed in the environmental review, supervision, and/or appraisal and approval procedures:

⁸⁹ In this context, what we mean by "key stages" in the decision process is: (a) the staff decision to approve the environmental aspects of the project as documented in the November 9, 1992, "Minutes of Decision Meeting," (b) the IFC Board of Directors' approval of the project as documented in the November 24, 1992, memorandum regarding "Proposed Investment in Empresa Electricita Pangué S.A.," and (c) the decision to make the first disbursement as documented in the December 1, 1993, "Environmental Review Update" to the IFC Board of Directors. In our view, the conclusions we express in this paragraph are appreciable to each of the decisions. Most of these conclusions also apply to IFC's "Initial Project Review (IPR)" and the attached "Project Data Sheet" dated March 8, 1990.

- a. Potential downstream impacts had not been adequately identified or characterized.
- b. Much of the information that was available suggested that some downstream environmental impacts could be serious and negative.
- c. ^
- d. Apparent contradictions existed within and between the environmental studies that were on hand.
- e. Approval was granted despite lack of key information, conditional on that information's being obtained through later studies. ^
- f. IFC was not willing, in our opinion to postpone decisions until adequate environmental studies could be done and an actual coherent comprehensive mitigation program developed that could actually be demonstrated to be "acceptable to the World Bank."

7. At each stage of project approval, key decision support documents did not, in our view, faithfully or accurately reflect the contents of underlying downstream environmental impact studies. They did not disclose or did not discuss objectively the extent of deficiencies, or contradictions in the environmental analysis, or substantial evidence that downstream impacts might be serious and negative. They did not cite impacts that were not being actively considered ^, nor did they indicate that World Bank Group policy calling for comprehensive and systematic consideration of avoidance, minimization, mitigation, compensation, and enhancement to effectively manage project impacts was not being adequately adhered to.

8. The early IFC staff view or position⁹⁰ that any downstream negative environmental effects would be "minimal" and could be "mitigated to World Bank standards," we believe:

- a. is not supported by information we found in the record;
- b. is in any case, a misapplication of the World Bank Group policy;

⁹⁰ This was stated on the record by IFC staff consistently from at least March 8, 1990, on.

- c. was first drawn before the relevant studies designed to specify elements of a comprehensive impacts management and balancing program had been reviewed by IFC; and
- d. has not been modified in the face of what we believe to be compelling evidence to the contrary in the reports provided by Pangué S.A. to IFC over the years.

9. There has been no clear willingness on IFC's part to consider withholding approval for the project or funding until legitimate concerns over downstream negative environmental impacts could be satisfactorily resolved in line with World Bank Group policy.

10. ^

11. IFC has not been sufficiently aware of the extent to which its actions are looked to as an indication that projects have been subjected to a careful program of environmental management, or the impact on others of a determination that a project meets "World Bank standards."

12. Environmental management of the Pangué Project has been focused on narrow technical issues. ^ IFC's view of events in Chile appears to have been overwhelmingly through the eyes of the project sponsor. That is, of course, a very important view, but not sufficient to either effectively manage environmental and social impacts or to effectively manage related business risks. It was not clear that IFC environmental managers have had any coherent ongoing sources of information about Chilean developments independent of the project sponsor against which to judge the information they were receiving from that source.

In addition to the above 12 rather Pangué Project-specific conclusions, we also have 14 very general overarching conclusions--again opinions of the Audit Team members--as follows:

13. Since the real concrete decisions on downstream impacts have been deferred repeatedly to future studies throughout the Pangué Project's ^ environmental analysis process, there has not been what we consider to be an effective opportunity for public comment on downstream impact mitigation so far as the record discloses. Yet the issue of flow conditions on one of Chile's major rivers--and an acknowledged world-class river--is a subject of obvious and significant interest to wide segments of the public, indeed the entire range of stakeholders in Chile and beyond, but especially those in Chile.

14. You have what was widely considered to be a free-flowing, world-class, white-water river that is now dammed, a reservoir filled, and electricity being generated ^ and still no document ^ to contain, or to describe a comprehensive program to systematically manage the full spectrum of environmental impacts of the Pangué dam. But you do have more recommendations for continuing monitoring and continuing research. This does not seem to be consistent with either the World Bank Group's--or any of the project's diverse stakeholders'--expectations of environmental analysis on a major, highly visible project believed by the World Bank Group--by virtue of its being a Category A project--to have the potential to cause major negative environmental impacts and having the environmental aspects so publicly and widely sanctioned by the World Bank Group based on information provided the IFC Board of Directors when the project was approved in December 1992.

15. ^ It is our belief that an environmental winner might well have been created. It seems reasonable that such a possibility should have been actually enhanced by the World Bank Group's highly visible presence and leadership in setting the performance expectations much higher in the environmental area than would have been the case had IFC and the World Bank Group not been a major partner with ENDESA and Pangué S.A. on this project. It is at best, unclear that such enhancement actually resulted, and certainly not to the extent that it was widely anticipated and that it could and should have been.

16. Considering the above, the fact that IFC ^ could believe or contend that the net environmental impact and the components of that impact are "minimal" is, we believe, surprising and not justified. The fact that ^ IFC could believe or contend that the environmental impact in the absence of a coherent and comprehensive impact management program is or could be "acceptable to the World Bank" or "meets World Bank guidelines" is, to us, most surprising and not justified. Such contentions have not been supported, in our opinion, from the project's beginning to date.

17. Even when conscientious environmental analysis and socially responsible balancing are present, there are always some categories of winners and losers for a major infrastructure project--in the sense of both environmental resources and uses as well as stakeholder groups. These are always known and identified in the project analysis, review, and planning process if it is effectively conducted. There are seldom impacts--either in terms of magnitude or incidence--that truly fall through the cracks or are surprises. They must be known and identified in order to decide where mitigation, compensation, and enhancement measures are needed to do the necessary balancing and make the trade-offs that are necessary in the real world. The impact management process used may or may not be acceptable to some stakeholders. There is no guarantee that it will, and that may be impossible to achieve in a complex project. This is one reason institutions such as governmental agencies and the World Bank Group have policies concerning what is or is not "acceptable" on projects with which they are associated that

can have major negative environmental impacts. Conscious decisions are made as to what impacts are and are not "mitigated (in all the manners covered under sequencing) and to what degree. This is done to achieve levels of overall residual impact--as well as the residual impact components and the incidence of the impacts among the many stakeholders--"acceptable" to the principals driving the project and sitting at the table--or effectively represented there--when the calls were made.

18. If the methodology for having accomplished this balancing and making the trade-offs--which are typically apparent to the informed observer by the time a major project nears implementation--has not been sufficiently transparent, is not made explicit to interested parties, and has not resulted from adequate, informed, and sufficiently broad stakeholder participation, then there is the basis for well-justified doubt as to the validity of the impact management or "mitigation" process that has been used; and it is very difficult to defend its credibility. The difference between whether the reality that becomes a major infrastructure project is viewed widely as, on the one hand, an equitable, acceptable, and reasonable project or viewed equally widely as, on the other hand, a failure or disappointment is--in great measure--determined by the transparency, perceived fairness, and soundness of the criteria of the environmental impact management process--presumably an integral part of any enlightened environmental analysis effort in recent years--used to do the balancing. This determines the defensibility of the trade-offs made on behalf of all the stakeholders that were afforded standing in the process actually used.

19. ^

20. We believe, based on our review of the record made available, that the critical importance of high-quality environmental analysis including effective impact management was (a) not effectively articulated and/or communicated at a high enough management level at IFC^ . If something is as poorly articulated, communicated, understood, and/or internalized as was the World Bank Group's high and substantive expectation for environmental analysis on the Pangue Project from the very beginning, then no amount of IFC supervision can be expected to produce a real winner. An effective partnership requires that parties clearly understand what must be done from the very beginning and be genuinely committed to achieving the same objectives and values on the same time schedule. In the environmental area, that seemed to us never to have happened on the Pangue Project.

21. Similarly, IFC must have the will and ability to do this assessment, as well as be able to effectively communicate the necessity and importance of meaningful environmental analysis as expected by the World Bank Group--as an integrated part of the project for business and other reasons--to the private-sector sponsor's top management. And IFC must be effective in keeping sound environmental analysis on

track and producing real value for the project sponsor and the project's diverse stakeholders throughout the venture.

22. In order for the quality of environmental analysis including impact management we believe is consistent with World Bank Group policy and expectations to have occurred on the Pangué Project, a sequence of several necessary events would have had to have taken place successfully over the past several years.

- a. IFC would have had to effectively communicate to ENDESA the World Bank Group's sense of importance of and their substantive expectations for effective environmental analysis as a serious part of the Pangué Project partnership.
- b. ^
- c. ^
- d. ^
- e. IFC would have had to effectively supervise the process in a value-adding way.

We believe the record we reviewed showed clearly that these events did not occur. If (i) IFC does not effectively communicate the World Bank Group's sense of importance and expectations for effective environmental analysis,^ and/or (v) IFC did not effectively supervise the process in a value-adding way, then what happens?^ This is unfortunate for a number of reasons.

23. ^

24. Looking strictly at the results, the decisions, and the process that produced them, environmental considerations seem not to have been on the critical path of those who set the Pangué Project's agenda at IFC ^ . While much was said and written and there was much activity, it was obviously not a high priority. ^ It is likely that both of the principals had much to offer to one another's potential success in this partnership. It might have been a big win-win.

25. The opportunities for comprehensively and systematically identifying downstream environmental impacts on the resources and users and then effectively and creatively managing those impacts in a sound manner^ have not been embraced in this project. This might have been a signal opportunity to demonstrate excellence in

environmental analysis and strengthening all the institutions involved, both private and public sector as well as NGOs.⁹¹

26. The greatest value from our considering the treatment of downstream impacts below the Pangué dam will probably not be to significantly change the actual outcome on the Bío-Bío River, but to indicate the importance of some actions that can allow environmental analysis and proper impact management to be effectively done and balancing achieved on future projects, to the end that the net impacts might indeed be truly "acceptable to the World Bank" and beyond. This is admittedly a big challenge, but the sort of environmental analysis that we believe is called for in World Bank Group policy would facilitate just such an outcome--if effectively communicated by IFC to private-sector sponsors and integrated into a project by borrowers or partners committed to attaining environmental excellence and equity in the context of getting important infrastructure projects in place in the real world to produce needed economic, environmental, and social benefits.

NOTE: This important topic of "Downstream Environmental Analysis" for the Pangué Project was treated in detail in the above and in a special case study, "Supplement to the Evaluation of IFC's Management of Downstream Environmental Impacts of the Pangué Project." (See Appendix 2, Tab Z ,118pp.), that was developed to understand and document this complicated and controversial situation.

Audit Topics 2.6 to 2.9 redacted.

91 ^

VII. SUMMARY OF SPECIAL CASE STUDY: SUPPLEMENT TO THE EVALUATION OF IFC'S MANAGEMENT OF DOWNSTREAM ENVIRONMENTAL IMPACTS OF THE PANGUE PROJECT. (See Appendix 2, Tab Z for details)

This Independent Review of the Pangué Project focused on specific audit topics, issues, and criteria as a basis for evaluating IFC's performance. While that was a useful way to proceed, it did not necessarily provide a format for dealing with a series of interrelated issues and how they were dealt with by IFC over an extended period of time. For example, the evaluation of downstream environmental impacts (see also Audit Topic 2.5, Tab P) was one of the key issues associated with the Pangué Project at each stage of its development. Therefore, in order to understand how IFC undertook to manage its responsibilities relative to the determination of downstream environmental impacts and associated mitigation measures, we evaluated numerous documents from the IFC files and developed the special case study summarized below and presented in detail in Appendix 2, Tab Z. Its conclusions were important and, in our opinion, provide additional insights into how IFC supervised the environmental and social aspects of the Pangué Project.

A. GENERAL CONCLUSIONS

The Bió-Bió was a major world-class free-flowing, white-water river. It is a significant and unique resource. It may or may not have been the correct decision to dam the river. Pangué may or may not have been the right dam to build. It was not the purpose of this Independent Review to determine whether it was or was not wise to build the Pangué Project. Many but not all of the river's values still exist after the dam is built and new values have been created. These trade-offs are principally for Chileans to evaluate.

But what clearly was true is that the very high value and unique character of this resource merited the best in terms of careful analysis, systematic approaches to issues, and--if a dam was to be built--a very thoughtful strategy to maximize the value of that dam by creating an optimal mix of identification of effects and the avoidance, minimization, mitigation, and compensation for the ones determined to be negative, and enhancement of the ones determined to be positive.

The Bió-Bió did not receive the quality of analysis and planning that the character of this resource deserved. The overall value of the project was, however, not maximized.

In the process, IFC has repeatedly shown itself willing to run the large and avoidable risks that are always inherent in becoming convinced there was no time to wait for information, that decisions needed to be made without information, and that in all the

millennia this river has been flowing, a few months' delay to plan the best project available somehow could not be spared.

1. Despite a very substantial IFC staff effort, the first step in environmental analysis--identification of potential impacts--has still not been completed in a satisfactory manner.⁹⁵

a. Whatever opportunities existed for avoidance of impacts, their minimization, structural mitigation, or compensation, have not been maximized, and are likely now lost.

b. There is no assurance that positive or potentially positive impacts have been enhanced, and certainly not to their fullest.

2. ^

3. IFC's efforts to ensure proper management of the environmental aspects of the project were undermined by the fundamental misconception that meaningful environmental programs can be successfully conducted by experts in secret. Environmental management as recognized by the 1992 Rio Declaration is fundamentally public business, which necessarily involves a high degree of transparency that has certainly not been present at IFC. When even beneficial and well-motivated efforts are conducted in secret, there is always suspicion that the programs have unknown flaws, or are not really being carried out properly. Thus, project proponents do not get the benefit of the value they create, and it becomes very hard to maintain the morale and commitment of employees trying to operate the program, since their accomplishments are not recognized, and their efforts are met with distrust. IFC should find ways to conduct this portion of its business in public. This implies:

a. IFC should establish a public participation role not just at one discrete point in the development of the project but on into the operational phase of the project. It may be desirable to channel this participation through an ongoing body such as an independent project advisory committee.

b. Either IFC should decide that certain parts of its Investment Agreements are publicly available, or it should embody environmental and social commitments of the project sponsor in a separate document that can be made public.

c. Relevant agencies in the project country should be fully informed in an ongoing process about the environmental and social aspects of projects.⁹⁶ IFC^ should be fully cooperative with them.

⁹⁵ ^

4. The Pangué Project did not comply with applicable World Bank Group environmental and social requirements in important respects. Staff seems unclear whether the World Bank Group Operational Directives apply to IFC, or to what extent, or whether departing from them needs to be rationalized or documented.

5. At each key stage in the decision process, specific and identifiable deficiencies existed in the environmental review and approval procedures.

a. Basic, obviously necessary data had not been gathered.

b. Potential downstream impacts had not been adequately identified or characterized.

c. Much of the information that was available suggested that some impacts could be serious and negative.

d. ^ IFC staff approval in early November 1992 was based on the belief that a consultants' report was subsequently going to be received on November 13, 1992; Board approval of the loan was conditioned on doing another study before the first disbursement^.

e. Important unresolved contradictions existed within and among the environmental studies that were on hand when decisions were made.

f. Approval was granted despite lack of key information, conditional on that information being obtained through later studies. ^

g. ^

h. In apparently failing to make any provisions to receive from Pangué S.A. timely or complete monitoring information on the levels of downstream flows, IFC has demonstrated a remarkable lack of interest in the results of the minimum ecological

⁹⁶ We are aware of instances--not the Pangué Project, or other IFC projects--where environmental reviews have discovered the existence of species that may be limited to the project site and would, without substantial mitigation, be placed in jeopardy of extinction by implementation of the project without the mitigation. Should that kind of information turn up in an environmental review of an IFC project--and it will, if it has not already--we understand that IFC's position would be to try to persuade the project sponsor to adopt the appropriate mitigation measures. But failing this, it appears that IFC's existing policies would require it to stand by silently while the project extinguished a life form. This is not an appropriate role for a confidentiality policy. And this example is, of course, not limited to endangered species questions but could extend to secrecy in the face of many kinds of unacceptable environmental and social impacts.

flow agreement which it has claimed as the "cornerstone" of the mitigation plan and as the principal environmental benefit achieved by IFC's participation in the Pangué project. It is a particular concern that IFC appears to have no information whatever on whether minimum flows were maintained during the several days when the Pangué reservoir was being filled. This is not a failure of the distant past, but a clear demonstration that inadequate supervision and management concerns at IFC are continuing ones.

i. IFC was not willing to postpone decisions until adequate environmental studies could be done and an actual mitigation program developed that could be demonstrated to be acceptable to the World Bank.

6. At each stage of project approval, key decision support documents did not faithfully reflect the contents of underlying downstream environmental impact studies. They did not disclose or did not discuss objectively the extent of deficiencies or contradictions in the environmental analysis, or substantial evidence that the downstream impacts might be serious and negative. They did not identify the many impacts that were not being actively studied, nor did they indicate that World Bank Group guidance that called for comprehensive and systematic consideration of avoidance, minimization, mitigation, compensation, and enhancement to manage project impacts effectively was not being adhered to.

7. The early IFC staff conclusion that any downstream effects would be "minimal" and could be "mitigated to World Bank standards" was

- a. not supported by information we found in the record;
- b. in any case, a misapplication of the World Bank guidelines, since it focused on "mitigation" to the exclusion of avoidance and minimization and certainly not the sort of mitigation that was well established and recognized as sound practice well prior to the start of the Pangué Project; and
- c. was first drawn before any of the relevant studies had been reviewed by IFC.

8. There has been no clear willingness on IFC's part to consider withholding approvals for the project until legitimate concerns over downstream impacts could be satisfactorily resolved in line with World Bank Group guidance.

9. Since the important decisions on downstream impacts have been deferred repeatedly to future studies, there has not been an effective opportunity for public comment on the downstream impact management issues so far as the record discloses.

Yet the issue of flow conditions on one of Chile's major rivers was a subject of obvious and significant interest to wide segments of the Chilean public. ^

10. Accountability implies both some clearly understood goals or requirements by which success is to be judged and some process for independent review of the results in reaching those goals. In the case of IFC's environmental program, neither of these elements is clearly enough established.

11. The practice of putting important social and environmental commitments into the Investment Agreement, then not making that document available even to the IFC Board of Directors, is a major and unnecessary obstacle to the desired level of transparency in IFC's operations. There should be a way to redesign this process so that the Board, or some appropriate Board committee, is and remains fully aware of all aspects and details of environmental and social issues that are stated by the World Bank Group to be so important.

12. IFC has not been sufficiently aware of the extent to which its actions are looked to as an indication that projects have been subjected to a careful program of environmental management, or the impact on others of a determination that a project meets "World Bank standards."

13. Environmental management of the Pangué Project has been focused on narrow technical issues. ^ IFC's view of events in Chile appears to have been overwhelmingly through the eyes of the project sponsor.

14. IFC cannot always guarantee that project sponsors will implement best practices and concepts in environmental management of projects. It should, however, strive consistently to represent and to implement the best and most advanced techniques for environmental management and be an advocate for these best management practices. In the case of the Pangué Project, IFC did not do this, but ^ on occasion even advocated less than accepted practice^. Examples included:

a. telling the sponsor that a "credible" environmental analysis, adequate to obtain the IFC Board of Directors' approval, could be prepared in three months;

b. suggesting that IFC staff would be willing to present to the IFC Board of Directors an environmental analysis in which key issues were deferred to future study;

c. supporting, without adequate technical basis, narrow limits on the scope of the environmental study;

d. willingness to defer key issues to future studies that would be completed only after critical decisions were taken;

e. preparation of studies after the decision they were supposed to affect, not occasionally, in emergencies, but apparently as standard operating procedure;

f. failure to use systematic approaches to identifying impacts, or deciding when it was appropriate not to pursue studies of certain impacts;

g. acceptance of the concept, without adequate analysis, that impacts are somehow more acceptable because they occur in an ecosystem that was said to be already under stress;

h. ^ focus on mitigation to the exclusion of avoidance, minimization, compensation, and enhancement ^;

i. approval of a major dam project with less than a full year of baseline data on many critical variables; and

j. agreeing to a minimum stream flow program as the "cornerstone" of the mitigation effort without making any clear provisions for how compliance with this commitment would be monitored or reported to IFC.

VIII. OBJECTIVE 3: TO IDENTIFY ADDITIONAL TOPICS

Objective 3 of this Independent Review of the Pangué Project was to identify "other matters . . . that should be brought to the attention of appropriate senior-level officials of the World Bank Group." In addition to several topics that were brought to the attention of senior management during the course of this review, the following topics were identified as matters that required disclosure or should receive further consideration by the World Bank Group in the future:

A. THE HERRERA ARTICLE

In 1995, Alejandro Herrera A. published an article entitled "Multinational Corporations and Studies of Socio-Cultural Impacts in Indigenous Areas: Observations of the Pangué Case" (pages 23-30) in the monograph Land, Territory and Indigenous Development, Institute of Indigenous Studies, Universidad de la Frontera, Temuco, Chile.

Key points and/or conclusions in the article are as follows:

1. "[T]his report is an initial attempt to systematize and analyze the material existing in the 'Chile-Pangué' file of the International Finance Corporation of the World Bank (IFC), complemented by interviews of the IFC staff in charge of the process or approving the loan applied for by ENDESA for the construction of the Pangué Dam in the Upper-Bío-Bío."
2. There were "two Pangué Projects," one for which information disseminated for external consumption and one known confidentially and internally by the project staff.
3. The IFC project staff knew from early in the project that they were not "strictly complying" with World Bank guidelines on the environment.
4. The IFC staff kept this to themselves even as others within the Bank began to grow doubtful about the project. The "Pangué group" held the correct information confidentially among themselves and did not even tell senior Bank officials all they knew.
5. The IFC staff group who actually knew what was going on at the professional level was never bigger than six people. Two of these changed from time to time, and four remained throughout.
6. The Pangué group went to extensive lengths (often successfully) to manipulate public opinion to deflect criticism of the project.

7. The IFC staff controlled the opinions and suggestions offered by outside consultants including explicit statements of the need to "not attack" the World Bank for its participation in the project and the exercise of pressure in terms of the consultants' possibilities of future roles as consultants of the World Bank.

This article first came to our direct attention in late February 1997. Although we found the general conclusions in the article consistent with our own, we were surprised that neither the work of this individual nor this publication had been brought to our attention by IFC. We informed the Vice President and General Counsel of IFC (who was also unaware of this individual or the publication) of this situation. After investigating the matter, she informed us that in fact the Spanish version of the article had been included as Annex K to the GABB complaint and thereby had been, in her opinion, "disclosed" to us. While we concur in a very narrow and technical sense with this view, there were a number of Spanish language documents in the GABB complaint that were not translated by IFC. Given the volume of files available to us, we felt it was a reasonable presumption that, if a document in the IFC files were important, the IFC staff supervising the environmental and social aspects of the project would have had it translated into English for its own use as well as that of this Independent Review. The files we were directed to review were represented to us as being the official repository of all documents associated with the supervision of the environmental and social aspects of the Pangué Project. Until we had the article translated in February 1997, to the best of our knowledge, no one at IFC was aware of its existence, contents, or conclusions. There were, in fact, several communications in these files including correspondence from ENDESA/Pangué S.A. and several environmental reports in Spanish that had not been translated when we inquired of responsible IFC staff as to their contents.

Further, we were informed by the IFC General Counsel that no one at IFC could recall having interacted with Mr. Herrera, and there was no evidence in the IFC files that he had been authorized access to IFC's internal documents. She noted, however, that Professor Herrera had confirmed that he had spoken with members of IFC's environmental staff and that he did have copies of internal IFC memoranda in his possession.

The Pangué Audit Team felt it important to disclose this situation in this Independent Review for several reasons. First, we were quite surprised that this matter had not been brought routinely to our attention (although we do acknowledge, as noted above, the publication was "technically" in the IFC files) and that there was no information in the IFC files that such a review of the Pangué Project had taken place sometime prior to 1995. Second, we were concerned that IFC's confidentiality policy was being applied selectively. We have now been assured by the IFC General Counsel "that nothing in Mr. Herrera's article is confidential".

Third, in the course of this Independent Review of the Pangué Project, we found no basis to question many of Professor Herrera's conclusions. We believe his conclusions were important and should have been disclosed by the IFC staff to the President of the World Bank Group when they prepared a detailed briefing book for him on the Pangué Project in December 1995 following the submission of the GABB claim in November 1995.

While the absence of this information has not had any material impact on the conclusions of this Independent Review, had we been aware of its existence, we would have definitely taken the opportunity to interview Professor Herrera in depth about his knowledge of the Pangué Project and the nature of his "engagement" with IFC, including his apparent access to confidential files.

B. ^

C. ^

D. ^

E. ^

^ IFC maintains that Pangué was always considered to be a "stand-alone" project while NGOs refer to that line of reasoning as "IFC mythology--they always were considered to be related"-We undertook to review this conflict and offer the following insights:

In memoranda (IFC Investment Officer to Independent Advisor, September 12 and 16, 1996), the following information was received in support of "Pangué as a Stand-Alone" Project:

1. "IFC's investment was in Pangué only, and our entire appraisal effort was focused on assessing the merits of the Pangué project. The issue of cumulative effects assessment (CEA) was identified early on because, to our knowledge, ENDESA had carried out studies of other possible future developments on the Bió-Bió (6 dams had been studied, referred to in IFC's Board report). To our knowledge, these studies were done by ENDESA on behalf of the Chilean Government, at a time before ENDESA was privatized. IFC was not informed at that time that ENDESA (or any other company, public or private) had plans to develop any other project on the Bió-Bió River.^ IFC felt it was proper to proceed with Pangué on the basis of an EIA which covered only Pangué. To my understanding, in the early 1990's, when Pangué was first being considered by IFC, basin-wide cumulative effects assessments were known in planning and academic circles but were not yet commonly carried out. Today, a basin-wide cumulative effects

assessment incorporating both geographic and temporal boundaries would be considered best practice and state of the art, although there is still no consensus on precisely what needs to be included in such assessment."

2. ^"Our Board report . . . consider[s] only Pangué and make[s] amply clear that Pangué by itself is a feasible . . . project.... Except as regards our requirement for a cumulative effects assessment, there is no reference in our Board report or in any of our related appraisal documentation to any other potential projects on the Bió-Bió which would support or enhance the output of Pangué, and this possibility was simply never considered as part of our financing for Pangué."

3. "Further in this connection, some of Pangué's critics, incorrectly informed, have claimed that the turbines selected for Pangué (2x225 MW Francis turbines) will require water stored ^ upstream for their efficient/economical operation and/or to meet downstream minimum flow requirements. These critics have asserted that Pangué's turbine design is flawed or inappropriate, in that it requires a too-high constant flow to operate efficiently and economically (implying that, in the absence of upstream storage ^, economic operation of Pangué is not possible, and/or that it will be necessary to stop running Pangué's turbines for extended periods each day during periods of low river flow with attendant adverse downstream environmental impacts which cannot be properly managed). These claims are also incorrect and unfounded. Pangué's turbine design is fully consistent with dam operation which is at the same time economical and which will enable adequate minimum flows downstream during all seasons (as is required under the Flow Release Management Plan incorporated as part of the Downstream Impacts Study); the turbine design is likewise fully consistent with the assertion that ^ upstream storage is not in any way required for Pangué's efficient and economical operation."

4. The analysis of the distribution of the flows in the Bió-Bió River to demonstrate that storage upstream would add to Pangué's total production capability by less than 3%--hardly relevant in terms of Pangué's viability as a freestanding project."

5. ^

6. ^

The Pangué Audit Team believes the above information does confirm that the economic viability and/or technical basis (i.e., types of turbine) for the Pangué Project was not dependent upon the eventual construction ^.

Although IFC does not plan to participate in the funding of subsequent hydro-electric projects on the Bió-Bió River, in our view, it does share in the responsibility for the future development of the Bió-Bió River System because it provided the initial

funding--and the "credibility" that goes with (or should go with) a World Bank-sponsored project--that now provides the basis for the long-term multiple dam building process to proceed.

^

The decision to put the first dam on a major world-class, white-water river such as the Bió-Bió was a major and irreversible choice. Although that was a Chilean choice and not IFC's, the World Bank must accept its fair share of the responsibility for that decision being taken without having completed a high-quality, rigorous environmental analysis. Given the magnitude of the consequences of that decision, this was one of the major reasons why (as documented in this Independent Review) the failure of the Pangué Project to comply in a consistent manner with well-established World Bank standards and recognized environmental analysis and impact mitigation best practices was so incredibly important.

^

IX. RESULTS OF THIS INDEPENDENT REVIEW OF THE PANGUE PROJECT

A. PANGUE PROJECT AUDIT CONCLUSIONS⁹⁷

1. From a traditional engineering and construction perspective, the Pangue dam (and associated power station) appears to reflect ^ high professional standards ^.

The Pangue reservoir was filled and the system was generating electricity by late September 1996. While a number of post-construction mitigation activities are underway, the project has been, for all practical purposes, completed.

2. The establishment of the Pangue Ecological Station and the successful involuntary resettlement of non-indigenous families were important and positive achievements of the Pangue Project.

3. Because of its controversial nature, considerable World Bank Group resources (staff and financial) have been expended on the Pangue Project--particularly in recent years, including during the course of this Independent Review.

The IFC staff contends that no previous IFC project has received the level of attention that Pangue has, particularly as it relates to long-standing environmental and social issues. The IFC staff feels strongly that IFC's active involvement in the Pangue Project produced a number of positive contributions that otherwise would not have been included in this project (see Section X: "Adding Balance: An IFC Staff Perspective," Tab X). For the reasons presented in this Independent Review, we believe many of the difficulties encountered with the Pangue Project were the direct result of the inconsistent manner in which the project was "supervised" by IFC including not adequately establishing at the beginning of the project the importance of environmental and social factors or establishing performance standards. While high levels of activity by IFC can be documented, what actually counts are the results achieved in the environmental and social impacts management area.

4. The Pangue Project did not comply with several aspects of ^ applicable World Bank Group environmental and social requirements (including specific IFC procedures) ^.

⁹⁷ All conclusions stated in this Independent Review are the opinions of the Pangue Audit Team.

We believe the World Bank Group requirements, including applicable IFC procedures, provided to ENDESA in 1990 were fully adequate to produce acceptable environmental and social analyses. ^

IFC ^ apparent acceptance that what was widely regarded as a world-class free-flowing, white-water river can today be dammed, the reservoir filled, and power generated without their having developed anything resembling an equally world-class comprehensive, coherent, systematic environmental/social impact identification and management program is, in our opinion, indeed unfortunate. It is our belief, given the fact that the decision to build the Pangué Project was made by Chilean authorities in the late 1980s, that this project might well have been both an economic and environmental "winner" had it been more effectively managed, assessed, and supervised by IFC. It seems reasonable that such a possibility should have been actually enhanced by the World Bank Group's highly visible presence and leadership in setting the performance expectations much higher in the environmental and social areas than would have been the case had IFC and the World Bank not been a major partner with ENDESA/Pangué S.A. on the Pangué Project. It is, at best, unclear that such enhancement actually resulted, and certainly not to the extent that was or should have been anticipated.

5. IFC did not undertake (or require Pangué S.A. to undertake) any activities to evaluate "wildlands" or "cultural property" as required by World Bank Group operational policies.

~~6. ^~~

7. Despite a very substantial IFC staff effort from early 1990 to date, the first step in environmental analysis--identification of potential environmental impacts--has, in our opinion, still not been completed in a satisfactory manner.

a. There was no evidence in the record of systematic comprehensive effort or methodology to identify impacts and systematically consider their avoidance, minimization, mitigation, compensation, and/or enhancement as recommended in World Bank Group guidance and as called for through sequencing in recognized best practices well established prior to the Pangué Project. Whatever opportunities existed for avoidance of impacts, their minimization, structured mitigation, or compensation have not been maximized--and are likely now lost.

b. There was no assurance that positive or potentially positive impacts were enhanced, and certainly not to their fullest. In fact, most were essentially ignored.

c. ^

d. ^

8. The early IFC staff view that any negative downstream environmental effects would be "minimal" and could be "mitigated to World Bank standards" was, in our opinion, not supported by information in the record.

a. This conclusion was first reached in 1990 before any of the relevant studies had been reviewed by IFC.

b. This conclusion has not been modified in the face of what we believe to be compelling evidence to the contrary ^.

c. In any case, it was a misapplication of the World Bank Group guidelines and was not consistent with then-recognized best practices in environmental analysis and impact mitigation based on the concept of sequencing, since it focused on too limited a subset of "mitigation" types to the exclusion of other types including avoidance and minimization.

d. When environmental staff began to express concern over the direction the project was headed, this previously expressed view was quoted against them to help force the project forward despite clear signs of trouble.

9. There was no evidence that any comprehensive set of standards or criteria was specifically discussed with or provided to Pangué S.A. as to what level of overall impact or individual impacts was indeed "acceptable to the World Bank."

With no coherent criteria or standards specified, suggested, or required throughout the process to date, much less having compared such specific anticipated impacts to such a comprehensive set of standards, it was, in our view, impossible to say—or to have said—with any confidence that "minimal" environmental impact levels "acceptable to the World Bank" have been or will be achieved despite the fact that IFC has maintained this to its management and all stakeholders since early 1990. There was simply no basis for making such claims--especially when no environmental analyses were completed.

10. ^ IFC's failure to (a) provide explicit environmental and social guidance for meeting World Bank Group standards, (b) provide specific criteria on which Pangué S.A.'s performance would be evaluated, ^ was (and continues to be) a very serious shortcoming of IFC's overall supervision of the Pangué Project.

^

11. At each key stage in the Pangué Project decision process, in our opinion, specific and identifiable deficiencies existed in the environmental review and approval procedures.

a. Potential downstream impacts had not been adequately identified or characterized.

b. Much of the information which was available suggested that some downstream environmental impacts could be serious and negative.

c. ^

d. Apparent contradictions existed within and between the environmental studies that were on hand.

e. Approval was granted by IFC management on the basis of staff assurances that, despite the lack of key information, such information would be obtained through future additional studies.

f. IFC was not willing to postpone decisions until adequate environmental studies could be done and an actual comprehensive coherent mitigation program developed that could have demonstrated objectively to have been "acceptable to the World Bank."

12. At each stage of project approval, some key decision-support documents did not, in our opinion, faithfully or fully reflect the contents of underlying studies, or the extent to which these studies were considered inadequate and incomplete even by IFC staff.

IFC staff did not disclose or did not discuss objectively, in our opinion, the extent of deficiencies, or contradictions in the environmental analysis, or substantial evidence that downstream impacts might be serious and negative. They did not cite impacts that were not being actively considered^, nor did they indicate that World Bank Group policy calling for comprehensive and systematic consideration of avoidance, minimization, mitigation, compensation, and enhancement to effectively manage project impacts was not being fully adhered to.

13. ^

14. The IFC staff failed to disclose key documents that described in detail the potential for significant impacts induced by the Pangué Project on 12 Pehuenche

families residing adjacent to the project reservoir prior to the December 1992 meeting where the Pangué Project was approved by the IFC Board of Directors.

It is the opinion of the Pangué Audit Team that, had IFC staff disclosed these key documents (available to them in October 1992) in a timely manner (or at all) to its senior management and Board of Directors, it could have (a) influenced the Board's decision in December 1992 on whether or not to support the Pangué Project or (b) focused specific attention on the need to address these critical indigenous peoples issues early in the Pangué Project development process so they could have been included as specific requirements in the environmental and social covenants of the October 1993 Investment Agreement. ^

15. The Pehuen Foundation (established and funded by Pangué Project revenues to support the socioeconomic development of the Pehuenches) was an innovative but experimental concept. We believe its development and operational implementation have been seriously under supervised by IFC. ^

16. ^

17. IFC has not been sufficiently aware of the extent to which its actions are looked to as an indication that projects have been subjected to a careful program of environmental and social management, or the impact on others of a widely disseminated determination that a project meets "World Bank standards."

18. Environmental management of the Pangué Project has been focused, we believe, on narrow compartmentalized technical issues. ^

IFC's view of events in Chile appears to have been overwhelmingly through the eyes of Pangué S.A., the project sponsor. It was not clear that IFC environmental managers have had any coherent ongoing sources of information about Chilean environmental developments independent of the project sponsor against which to judge the information they were receiving from that source. ^

19. ^

IFC's involvement in the Pangué Project has spanned a period of tremendous change in Chile, including passage of the environmental framework law and creation of CONAMA, the national environmental agency.

^IFC represented for years that the Pangué Project was "meeting standards" established by the World Bank. As has been documented extensively in this Independent Review that was not the case. We believe this has had a chilling effect on ability of

Chilean civil society to engage in an important and informed national debate regarding the long-term development and/or protection of the Alto Bió-Bió.

^

20. While IFC cannot always guarantee that project sponsors will implement best practices and concepts in environmental management of projects, it should, however, strive consistently to represent and to implement the best and most advanced recognized techniques for environmental management and be an effective advocate for those best practices. ^ In the case of the Pangué Project, IFC did not do this, but ^ on occasion even advocated, in our opinion, less than either accepted or best practices.

21. ^

22. There was no clear willingness on IFC's part to consider withholding approval for the project or funding until legitimate concerns over environmental and social impacts could have been addressed and satisfactorily resolved.

23. Overall, the Pangué Project was not in compliance with the World Bank Group's (including IFC's own supervisory requirements dating back to 1990) operational directives for project supervision.

-As stated in OD 13.05, "project supervision is one of the Bank's most important activities." The IFC staff contends that this operational directive does not apply to most of its activities since "IFC, as a separate Corporation, does not follow World Bank procedures but has its own operational procedures and rules which guide its day-to-day activities with its private sector clients" (IFC written comments transmitted to Pangué Audit Team, February 6, 1997). Despite numerous requests to verify where such distinctions were recorded in the written record prior to the beginning of this Independent Review, we received no compelling evidence in support of that statement. Indeed, for all of the World Bank Group directives provided to the Pangué Audit Team for this Independent Review, "supervision requirements" were clearly identified as responsibilities to be undertaken by World Bank Group staff, including those who are employed by IFC, throughout the project initiation, development, implementation, and completion phases.

24. There is no indication that IFC has in place at this time (March 1997) the necessary operational systems to manage to World Bank Group standards the environmental and social aspects of reasonably complicated development projects such as Pangué.

Even the most sustained, intense, and sincere efforts of the IFC staff may not lead to anything that can be called organizational success if there is no agreement on what the goals are or who decides if they have been met. IFC and its staff must be accountable for achieving defined levels of performance for compliance with World Bank Group guidelines and policies for managing environmental and social impacts of IFC projects.

25. IFC's institutional effectiveness and public credibility are seriously and negatively impacted by (a) the cloak of secrecy that surrounds most IFC project activities, including total confidentiality of all aspects of Investment Agreements, and (b) the manner in which environmental and social requirements and compliance decisions are, based on the decisions we analyzed in the record, administratively subservient to IFC's investment decisions.

Public- and private-sector institutions worldwide operate in a far more transparent manner than ever before. In our view, it is a major disservice to IFC's private-sector clients, the IFC staff, and civil society when there is no meaningful opportunity to involve various stakeholders in the environmental and social dimensions of a particular development project in a timely, effective, and ongoing manner. We believe responsible private-sector clients will meet applicable environmental and social requirements if they have clear guidance from IFC as to what specific criteria and performance standards they are expected to meet. Likewise, the entire development process (including the early identification of environmental and social concerns along with responsible alternatives for addressing them) is enhanced if there is meaningful, timely, and appropriate involvement of the public in the decision-making process.

Further, most contemporary private-sector companies have found that environmental and social units cannot be effective if they report to "production" management. At IFC, "production" is making loans. There are numerous and excellent reasons why environmental managers must be independent of investment managers at institutions like IFC, which are addressed elsewhere in this Independent Review.

B. PANGUE PROJECT RECOMMENDATIONS

1. This Independent Review of the Pangué Project contains, in our opinion, no proprietary or confidential business information and should be sent to GABB, ENDESA/Pangué S.A., CONAMA, CONADI, CONAF, etc., and released in its entirety (in both English and Spanish) to the public.

Based on our careful consideration of IFC's Information Disclosure Policy and confidentiality requirements (see pages 15-18), it is our considered view that this Independent Review of the Pangué Project contains no proprietary or confidential business information. This recommendation in support of full public disclosure of this Independent Review is particularly important in light of the criticism directed towards IFC (and the World Bank Group) for its lack of transparency and timely disclosure of information. This would be a positive signal that IFC plans to have a more proactive and responsible public outreach process in the future.

2. The following recommended actions should be taken to mitigate the impact of the Pangué Project on the Pehuenche people living in the Alto Bió-Bió.

a. ^

b. To ensure that "culturally compatible benefits" accrue to the Pehuenche people from the Pangué Project, the legal title to an amount of land deemed appropriate by CONADI surrounding the Pangué Reservoir ^ should be transferred to the appropriate Pehuenche communities. This would provide a mechanism for the Pehuenches to have control over how fast, levels of payment, and to what extent (and even whether) such development takes place on those lands.

As part of this recommendation, ^ resolve immediately the land tenure issue of the 12 Pehuenche families living adjacent to the Pangué Reservoir on the El Avellano estate. ^ should acquire the option to purchase (in the event pending litigation rules in favor of the private-party owner) the estate for mitigating impacts induced by the Pangué Project on associated Pehuenche communities. Such an action should also include the transfer of legal title to those lands claimed historically by the 12 families who reside on that property today.

c. In order for the Pehuen Foundation to achieve its originally stated desirable goals of supporting sustainable socioeconomic development programs for the benefit of the Pehuenche people, it must be restructured along the lines suggested in the reports referenced herein. (See Audit Topic 1.7, Appendix H.)

d. **The May 1996 Downing et al. evaluation report of the Pehuen Foundation and the September 1996 synthesis should be released to the public in English and Spanish. In our view, those reports do not contain any proprietary or confidential business information.**

The Executive Summary of the May 1996 report has already been released to the Chilean press, and, most important, public release is what is required by OPD 4.20 (paragraph. 14(g)), where it states: "Monitoring and evaluation reports should be reviewed jointly by the senior management of the implementing agency and the Bank. The evaluation reports should be made available to the public." (Emphasis added.)

3.^ Overall and on a more routine basis, IFC should develop a far more effective action-forcing mechanism to ensure that important compliance issues are, in fact, subject to timely decisions and monitored for continuous and documentable progress.

4. ^

5. **A qualified archaeologist/anthropologist should be retained to evaluate "the cultural property" situation relative to the Alto Bió-Bió and to make recommendations accordingly to appropriate officials.**

^

6. **Given the intense pace of hydroelectric development in the Bió-Bió River Basin, a comprehensive Wildlands Management Plan would be extremely valuable ^.** It would seem reasonable that such a study should be a component of the long-awaited Watershed Management Plan for the region.

^

7. **The IFC's inadequate supervision of the Pangué Project has cost the World Bank Group considerable financial resources as well as loss in public confidence. As part of the "Lessons Learned" process it would be a very useful management tool to undertake an independent accounting of those costs.**

Significant resources (financial and human) have been expended on dealing with Pangué Project "problems" over a number of years. These costs have been direct, indirect, and those associated with opportunities lost. As a financial institution, perhaps the best way for IFC to understand the magnitude of project mismanagement would be to undertake an independent financial accounting of those additional costs. This would

allow senior management the opportunity to objectively evaluate their extent and magnitude.

We do not know what the magnitude of such an audit would be, but it is certainly not unreasonable to project that it would be very substantial indeed. Regardless of the total amount of money involved, we believe that it would illustrate clearly to all concerned that it is far better to manage IFC projects according to World Bank Group requirements in an effective and thoroughly businesslike manner from the beginning than has been the case for the Pangué Project. Significant dollar, human, and political resources have been spent by the World Bank Group on what appears to us to be a failed environmental and social impacts supervision process for the Pangué Project from 1990 to date.

C. INSTITUTIONAL RECOMMENDATIONS DIRECTED TO THE WORLD BANK GROUP/IFC

1. **The World Bank Group's top management team must make a decision as to whether World Bank Group policies and directives for managing the social and environmental impacts of projects apply to the operations of IFC. Assuming they do apply, that fact must be communicated clearly to the IFC staff so appropriate management systems and performance standards can be established, implemented, and monitored in the future.**

No aspect of our review of the Pangué Project was more troubling than the inability of IFC staff to articulate clearly what procedures it was to follow, whether the World Bank Group requirements were or were not guidelines applicable to IFC, what standards are used to ensure these requirements are met, or on what basis the current rather ad hoc approach provided a mechanism for holding IFC staff accountable for its actions and results. (See Footnotes 2,3 and 4 for further details.)

Most interests outside World Bank do not distinguish clearly between IFC and the rest of the World Bank Group. This is particularly true in countries that do not have highly developed legal or regulatory systems for controlling environmental and social impacts. In those situations, a high degree of reliance is placed on "World Bank guidelines" for managing impacts. The presumption outside is usually that World Bank guidelines, policy, procedures, guidance, and expectations--regardless of the specific words used-- are high and conform with best-accepted environmental management practices. As was the case for the Pangué Project, approval by IFC is seen as a "certification" that the impacts would be properly managed to a recognized high standard.

If IFC is not following the World Bank Group policies, procedures, guidance, and/or guidelines because its private-sector lending focus makes that inappropriate, or for any reason, that fact should be made absolutely clear to all stakeholders so they may lower their expectations of this portion of the World Bank Group's environmental and social program.

However, in light of the broad acceptance by the private sector of global environmental performance standards, we see no valid reason for IFC to have a different and largely undefined (to parties outside the IFC culture) set of procedural requirements for environmental and social compliance from the rest of the World Bank Group. The current approach and "rationale" advanced by IFC staff provide for little or no accountability (internally or externally) and are not tenable or consistent with doing business in today's world. Environmental and social responsibility is being internalized and advocated by more and more private-sector business interests today, and it would be difficult, in our opinion, for the World Bank Group, including IFC, to justify partnering with a company that disregards environmental and social responsibility. Likewise, it would not be in the best interests of a responsible private-sector company to partner with a World Bank Group institutions that did not vigorously advocate high environmental and social impact management performance results. If there is something wrong with the current guidelines, procedures, policies, and/or guidance, they should be modified so that they are appropriate; and the stakeholders for IFC projects should be informed of them.

2. There must be independent oversight of environmental and social aspects of IFC's projects. Once IFC's environmental and social programs have clearly expressed and understood objectives, evaluation of the extent to which these objectives are being achieved must take place in a system of checks and balances. Although we recognize there have been improvements in the reporting functions for environmental and social programs within IFC in recent years we believe they should be organized in a separate entity from other technical or legal functions. ⁹⁸ In

⁹⁸ In December 1992 the Investment Director had the staff-level responsibility for the approval of the Pangué Project (i.e., see Procedure for Environmental Review of IFC Projects (in effect March 1990 to December 1992), "...The approval of the project, taking into consideration the findings of the environmental review, remain the responsibility of the Investment Director"). Over the past several years IFC has undergone several changes in organizational structure. From March 1989 through June 1992, the environmental staff, which was then part of the Engineering Department, reported through the Deputy Director to the Vice President Engineering, who reported to the Executive Vice President of IFC. From July 1992 through early April 1995, the Environment Unit, which was part of the then newly-created Technical and Environment Department, reported to the Director of the Department who in turn reported to the two Vice Presidents Operations. Since the April 1995 reorganization, the Technical and Environment Department has reported directly to the Executive Vice President. From April 1995 to December 1996, corporate oversight responsibility for environmental policy (without line authority) was exercised by one of the Vice Presidents Operations. As of December 1996 the Director of the Technical and Environment Department reports directly to

addition to a more active role for the IFC Board of Directors, an inspection panel process, independent project advisory committees, and public availability of information should be established as part of a system of checks and balances for IFC.

There are important reasons why virtually all progressive public and private institutions have chosen to put the environmental and social functions outside the line reporting system in an entity reporting directly to top management. This element of our recommendation is dealt with specifically in Recommendations 12 and 13 below. Further, in a modern business entity, all important functions must be subject to a variety of independent checks and balances. Such a system is lacking at IFC today.

3. IFC should develop and implement a comprehensive system of operational accountability and the institutional capacity to systematically assess, process, and effectively manage (including an automated document management and project status reporting system) all IFC projects for environmental and social compliance.

As a result of not having an adequate environmental management system in place at IFC, supported by automated information management systems, insufficient attention was paid to a number of environmental and social issues during the early phases of the development of the Pangue Project. These included, in particular, inadequate attention to the evaluation of downstream environmental impacts, induced impacts on indigenous peoples, cultural properties management, and wildlands protection. Several of the important controversies surrounding the Pangue Project today probably resulted directly from IFC's failure to identify and/or address these issues in a timely and effective manner. Clear documentation of the sponsor's environmental and social commitments is an important part of the system.

A basic system of accountability requires both that (a) there are clear and well understood organizational objectives and (b) performance evaluations are based on a rigorous process rather than retrospective self-evaluation for determining whether those objectives were obtained consistently. As noted above, clearly understood organizational standards of performance for meeting World Bank Group environmental and social criteria are absent at IFC. Consequently, there has been no effective management process

the Executive Vice President, and the corporate oversight responsibility for environmental policy has been assigned to the Vice President and General Counsel of IFC. We do see difficulties with the current situation in that there will be inevitable conflicts in environmental and social policies with IFC "legal" matters. It is important to emphasize, however that our concerns are not focused on the issues of "reporting relationships" and "organizational charts". Rather, we believe IFC's focus should be on results, actions and decisions relative to environmental and social matters and that senior management factor them fully into the World Bank Group's--including IFC's--investment decisions.

in place for an objective performance evaluation for monitoring environmental and social compliance ^ for the Pangue Project.

A massive amount of activity was documented^ throughout the project. What was not dealt with were the environmental and social performance results. In our opinion, any management system that focuses on activity as opposed to results that conform to clearly identified standards, performance criteria, and measurements is faulted.

We strongly encourage that a "new" approach for addressing these types of management issues within the World Bank Group be pursued by top management. Such an approach should include, among other things, a totally new process for "prequalifying" potential private-sector project sponsors to ascertain objectively, in advance, their capacity and their top management's willingness (both culturally and from a human/financial resources perspective) to comply with specific World Bank Group requirements. Where a potential partner lacks relevant capacity, IFC should either (a) decline to enter into an Investment Agreement with them until they have demonstrated an acceptable level of organizational capacity, or, particularly for private companies from Level II countries, as part of the Investment Agreement, (b) include an "institutional development" component (with specific, performance standards and goals that can be audited objectively) or, when appropriate, (c) require a project sponsor to post an "environmental/social performance bond" to ensure, in the event of default, that adequate financial revenues would be available for achieving compliance with World Bank Group requirements.

A control system for ensuring that sponsor commitments are documented in clear, legally appropriate documents is a necessary part of the loan development process. Such a system (when combined with other relevant recommendations contained herein) would substantially:

- a. enhance IFC's competitiveness and leadership position with its private-sector clients and other stakeholders;
- b. increase efficiency and effectiveness of IFC's internal operation; and
- c. improve the quality and timeliness of IFC staff's and management's, as well as that of the IFC Board of Directors', capacity for meaningful project oversight.

4. IFC projects should be subjected to an Inspection Panel process comparable to the one currently in place for the World Bank Group's International Bank for Reconstruction and Development (IBRD). Preferably, IFC would simply be incorporated into the current process.

There is active discussion within the World Bank Group about the development of an inspection mechanism for private-sector projects (IFC and MIGA). In developing new policies for an IFC inspection process we strongly encourage guidelines that are comprehensive and incorporate appropriate provisions that assure the public that all claims will be dealt with in a transparent and timely manner.

5. Environmental and social-economic requirements of IFC projects should be seen and supervised in their broader social, political, and historical context, properly integrated into the actual project, rather than just as narrow, limited "technical issues" which are add-ons separate from the design, construction, and operation of "the project."

IFC managers of environmental and social issues need to be sufficiently knowledgeable about the countries and cultures in which they are making loans. To be effective, IFC staff must understand the social and political context of the countries in which project management is occurring. There is no way that "capacity building" (which is acknowledged by both IFC staff and the World Bank Group as being very important) can be successful without understanding the current capacities of the governmental agencies, universities, and private consulting firms in the host country.

This perspective has to include, but not be limited to, the views of the project sponsor. IFC will not have a balanced and, we believe, valid perspective on host country capabilities and needs if its only understanding comes through the project sponsor.

The social and environmental function must include, and to some extent be led by, people with detailed current knowledge of national and regional language, history, politics, and culture as contrasted with an emphasis on technical and scientific disciplines.

While there are specific "technical and scientific" issues involved in projects in particular industries, there are also particular social, political, and economic issues in each country that are at least equally important to effective and equitable environmental management and, therefore, important to producing a sound, balanced, successful project. We suggest a reorientation of staff from a focus on specific industries, in which a staff member may have responsibility for projects in a dozen countries on several continents, to a focus on projects in specific countries or groups of countries, and on developing detailed knowledge of the functions, capabilities, and needs of indigenous peoples, governmental agencies, and other environmental/social interests. What diminished the environmental and social impacts management effort on the Pangué Project was definitely not the absence of technical and scientific personnel on either side. It was the absence of capabilities or willingness to focus on the correct larger questions.

6. IFC must develop a stronger institutional ability to say "no" to potential project sponsors and projects when it makes good business sense to do so.

There clearly are other potential lenders in the private sector besides IFC. Creation of cumbersome bureaucratic procedures would indeed be a disadvantage in situations where project sponsors have available alternative lending institutions. Undoubtedly, there are numerous projects that make good economic sense to private development interests and their supporters that would not be compatible with the World Bank's substantial environmental and social guidelines. It is asking for trouble for the World Bank Group, including IFC, to work too hard to be able to say "yes" to projects that clearly warrant a "no" without the environmental and social impact and risk areas having been properly managed. It is not good business to do otherwise. Separating the environmental and social management functions from other technical and legal functions (as noted in Recommendation 2 above) will facilitate IFC's ability to turn down loans in which project sponsors are unwilling or unable to cooperate in the effective and timely management of these important business concerns.

We understand that IFC trains finance experts from lending institutions and/or potential private-sector clients on properly managing risks associated with environmental and social issues such as encountered in the Pangue Project. IFC's publication, Environmental Risk Management for Financial Institutions: A Handbook for Financial Officers (1994), deals with properly managing environmental risks and the consequences to the environment, the company, and the financiers if these matters are not dealt with in a responsible manner. We are pleased that this critical message is being communicated by IFC. We believe the effective management of the environmental and social aspects of a project's business risks is exactly the expertise IFC was supposed to have brought to the Pangue Project. Regretfully, as was documented extensively in this Independent Review, that objective was not, in our view, achieved.

Part of developing this increased capacity to say 'no' to inappropriate projects is for the IFC Board of Directors to be more fully informed. If the principal channel for communication of environmental information is "summaries" prepared by staff who are personally committed to the project going forward, there is too great a likelihood that the Directors will hear only the positive, and not the concerns.

7. Organizational management objectives and staff incentives for IFC staff should be evaluated and redirected from what appears to be a strict project approval process driven primarily by financial considerations to one that also values and recognizes staff responsibilities for assuring that IFC-sponsored projects comply with all relevant World Bank Group requirements for environmental and social matters.

8. IFC should undertake a comprehensive review of its Investment Agreement development and approval process.

From the very beginning, IFC Investment Agreements should be (a) negotiated and structured with the clear goals in mind of rigorous compliance with all applicable World Bank requirements and (b) designed in a manner that permits the development and implementation of an effective, timely, and transparent audit (assurance) performance program. Either environmental and social covenants should be in a separate, nonconfidential document, apart from the Investment Agreement, or IFC should make those portions of the Investment Agreement nonconfidential. This should include the clear identification of what is proprietary and confidential business information and what is within the domain of the "public's right to know." The environmental and social covenants contained in Investment Agreements like those for the Pangué Project are, we believe, clearly in the "public's right to know" category and should be routinely disclosed to all stakeholders in a timely manner.

A number of important aspects of Pangué S.A.'s environmental and social commitments were poorly documented. This has led to unnecessary confusion and dispute as to precisely what those commitments actually were.

9. As a matter of responsible governance IFC Investment Agreements should be disclosed to the IFC Board of Directors (or a subset thereof).

It was quite surprising to learn that the IFC staff does not disclose Investment Agreements even to its own Board of Directors. We can see no justification for that policy (i.e., it somehow implies the Board cannot be trusted with "confidential" information). It severely limits the IFC Board of Directors' ability to oversee the activities of the IFC staff and, more importantly, denies them the opportunity to fulfill their corporate trust, due diligence, and fiduciary responsibilities, or at the very least, is a severe barrier to so doing.

Our serious concerns with the accuracy of information transmitted to the IFC Board of Directors would be much reduced if the Board had full access to underlying documents rather than what seemed to us to be merely staff summaries of selected information.

10. An independent project advisory panel should be required for all Category A IFC projects.

As current World Bank Group guidance recognizes, such panels can be extremely useful in ensuring proper management of environmental and social issues. Guidance in effect at the time of the Pangué Project environmental review strongly encouraged the use

of such panels. In fact, there appeared to be a clear presumption of the necessity for such a panel for a project such as Pangué. A very high cost was paid in terms of the quality of the management of environmental and social impacts of the Pangué Project because this was not done.

11. IFC should develop a transparent, timely, comprehensive, and responsible public information disclosure program. It should be presumed that all information related to environmental and social aspects of a project will be publicly available except where there is a specific and clearly justified reason for any particular item of information would cause competitive injury to the project sponsor and, for that reason, needs to be withheld.

Issues of immediate and long-term environmental impacts, indigenous peoples, involuntary resettlement, dramatic changes in regional social and economic conditions, etc., are so suffused with the public interest that they cannot be resolved adequately in a process in which directly affected parties and the public lack timely and informed access to relevant information. Except where there is a specific showing that a particular piece of information will create injury to a sponsor's competitive position, all information on environmental and social aspects of IFC projects should be released to the public on a routine basis.

If such adverse impacts are tied up in such business competitive matters, it would seem that the World Bank Group should, to avoid the possibility of grave damage to the broad public interest, have an appropriate procedure in place.

Where information is not freely disclosed even positive initiatives by the sponsor that should add real value to the project can be easily misconstrued and become a negative instead.

While we agree IFC has a legitimate interest in the financial and commercial aspects of the relationship with project sponsors, as well as other proprietary aspects of the project, sensitive information disclosure (i.e., the public's right to know) situations have been managed successfully in a way consistent with the principles of informed participation by virtually every other environmental impact review process in the world. There is no reason why this cannot be achieved successfully throughout the decision-making and implementation phases of every project IFC proposes to undertake.

While a more transparent and timely public involvement process will do much to bring increased accountability to IFC's management of environmental and social aspects of projects, that alone is not sufficient. We offer two suggestions:

12. An independent IFC environmental and social compliance oversight body should be established.

We recommend the creation on an independent directorate of highly qualified persons from outside IFC, with a mandate for ongoing formulation of goals and standards in the areas of environmental and social compliance, review of performance in attaining those goals, and the responsibility for recommending relevant policies and other options to the World Bank Group senior management.

13. Or, as the preferred alternative, an integrated World Bank Group environmental and social development program, which reports directly to the Office of the President, should be established.

If, as we believe is the case, there are no irreconcilable differences between the mission of IFC and the World Bank Group requirements pertaining to environmental and social issues (and since most outside interests do not distinguish between IFC and the rest of World Bank), we cannot identify a compelling rationale for IFC's having its own separate environmental and social management program, which would require the addition of several new staff positions, or for there to be a different approach to and different performance expectations for the implementation of World Bank Group policies because of their private-sector clients. If there is really one set of "World Bank Group Guidelines" (as we believe should be the case), one set of standards for having met such guidelines, and one process for environmental and social review of projects, the process should be managed in the same manner by the same organization for all World Bank Group institutions. This recommendation does not imply that the environmental and social management program would be separate from the operating institutions but should be structured as integral parts of the respective World Bank Group institution's operating project teams.

Such an approach would reduce or eliminate the problems inherent in having staff responsible for managing environmental and social problems reporting to staff who are primarily responsible for developing and processing investment projects. The social and environmental aspects of IFC's project management must have goals beyond what appear to many who know the World Bank to be primarily expedited project approval or lowering barriers to loaning funds.

Based on our review of the Pangué Project, it appears that serious and widely recognized at the time problems and inadequacies in the management of environmental and social problems by IFC ^ were not major barriers to project approval and the disbursement of funds. So we must assume that IFC's operational priorities gave much higher weight to project approval and disbursement of funds than in dealing with environmental and social issues in a professional and business like manner.

The variety and depth of expertise, and the level of understanding of the cultural, political, and economic issues so vital to building capacity, would be increased by centralizing World Bank Group management functions in these areas into an integrated unit. Likewise, since the confidential or truly proprietary business information pertaining to the project would presumably remain within IFC, this should also facilitate the development of a policy of transparency in managing environmental and social issues.

An independent environmental and social program outside IFC would have two other benefits. First, we believe that the concern that information reported to the IFC Board of Directors was not always accurate is partly a function of the program's dual role of loan origination coupled with observance of guidelines. Much of this concern should therefore diminish if these functions are separated. Second, this aids in achieving greater transparency in that the environmental and social programs would be centered on information that should presumptively be public, while any confidential business information could and should be centered in the traditional loan origination office.

Finally, and particularly important, as more and more of the World Bank Group's project activities focus on private-sector development, it will be exceedingly important for top management of project sponsors to receive clear guidance up front as to what criteria they are expected to meet and by what performance standards they will be evaluated. As we have stated elsewhere, we are fully confident that responsible private-sector partners will comply with whatever reasonable standards are required by the World Bank Group. What they have a right to expect is that the requirements and performance criteria will be clear, that they will be effectively articulated upfront, and that the playing field will be level for all participants.

This is simply a matter of prudent business. If the World Bank Group is going to be a competitive global finance institution in the future, as envisioned by the recently launched "Strategic Compact," it must bring to the sustainable development process a sophisticated and consistent capacity for environmental management and social-economic program development.

14. The IFC environmental and social program, wherever located within the World Bank Group, should become a recognized world-class center of excellence in these fields and should exemplify "best practices" in their management and technical capabilities and performance. Its mission should include a dimension of capacity building in the developing world, in government environmental and social agencies and educational institutions, and in the private-sector including both development interests and consulting firms.

Whether the environmental and social function is centered inside or outside IFC, there is absolutely no reason it should not and cannot become the most advanced, efficient, and effective center for the sound and proper management of the environmental and social aspects of major projects anywhere in the world.

If the World Bank is truly convinced that effective and fair management of social aspects of projects, or successful and innovative management of their environmental impacts, is good business, and that it is important to bring this message to the world as an integral part of a strategy for sustainable development, the World Bank should have the best center in the world for the necessary work of maximizing the impact of this message. This implies the best in professional personnel, in links with other institutional centers of excellence, in techniques and standards, and in training. The World Bank Group should expect at least the same level of excellence from a project's sponsor and its consultants and contractors as the World Bank expects in dealing with a project's engineering, design, construction, and operations. If not, it becomes apparent that environmental and social aspects are weighted as being inferior to purely economic aspects.

Finally, we were quite concerned to find that IFC's capabilities, and its systems and practices of project management, fell far short of current best practices in private industry. However this program is ultimately structured, there is every reason it should be a recognized center of excellence and remain at the forefront of environmental and social management of projects, with clearly established links to educational institutions and other centers of excellence around the world.

We are particularly concerned at the shortcomings demonstrated in the case of the Pangué Project, because everything we have learned to date leads us to believe that it was given much more than the usual amount of management resources, and should therefore have achieved far better actual results than was the case.

X. ADDING BALANCE: AN IFC STAFF PERSPECTIVE

The conclusions of this Independent Review are difficult and do not reflect well on the World Bank Group, particularly the IFC. ^ We know that IFC was responsible for setting expectations and standards for environmental assessment, environmental analysis and management of environmental and social impacts of the Pangue Project. Also, IFC was responsible for supervising and assessing Pangue S.A.'s performance relative to meeting the standards expected by the World Bank Group. ^ the responsibility lies IFC's to (a) articulate the case effectively up front and (b) make sure problems either got straightened out or stopped. Clearly IFC did not do this. ^

Consequently, many of the conclusions contained herein may not be well-received in certain quarters within IFC ^ . That is not unexpected. However, this Independent Review of the Pangue Project has subscribed explicitly to the Terms of Reference for this assignment. Our findings were based on a detailed professional and objective evaluation; they are well documented and can be verified.

In terms of fairness to the IFC staff the Pangue Audit Team believes it is important to try to "add balance"--something they were very insistent about--to this Independent Review. We understand that no one appreciates being second-guessed. While we do not believe we have "second guessed" them, but have performed an audit based on the verifiable record and performance results.

~~The IFC staff~~ feels that Pangue was a good project. ^ It feels strongly that its active involvement produced a number of positive contributions that otherwise would not have been included in this project. It sincerely believes that the Pangue Project would have been built even if IFC had not participated but without many of the environmental provisions it feels were important.

For example, when the project proposal was being prepared for presentation for approval to the IFC Board of Directors (November 1992), the staff prepared a point-by-point discussion document regarding what it felt were IFC's positive contributions to the Pangue Project.

IFC staff's key points were as follows:

ENVIRONMENTAL MEASURES

- "Required preparation of a comprehensive environmental assessment (EA), using an internationally recognized consultant;

- Insisted that the Company agree to consultations with affected parties and public disclosure of the EA--unprecedented for a private company in Chile;
- Contracted an independent review of the EA;
- Contracted an independent study of power generation alternatives in Chile which also assessed the scope of energy conservation programs;
- Required the establishment of an Ecological Station to monitor environmental conditions in the project area on an ongoing basis;
- Required further studies of the downstream impacts of the project;
- Required acceptance and implementation by Pangué S.A. of mitigation measures identified by the EA and downstream impact study as a condition of disbursement;
- Encouraged agreement with appropriate government authorities on a watershed protection management plan;
- Required agreement on a construction impact minimization plan;
- Engaged in consultations with a wide range of public interest concerned about the project; ^

SOCIAL MEASURES

- "IFC negotiated the establishment of the Pehuen Foundation, an innovative socioeconomic development institution based on the following concept:
 - "- Substantial annual capitalization and a precedent-setting financing mechanism providing a percentage of project profits;

- Institutionalizing an ongoing, long-term relationship between the Pehuenches and Pangué S.A.;
 - Pehuenche participation in the administration and workplan of Foundation; and
 - An Advisory Council with a membership of prominent indigenous development experts to ensure good idea and effective oversight of the Foundation.
- Developed a resettlement plan for non-Pehuenche families displaced by the reservoir.
 - IFC encouraged Pangué S.A. to show preference (i.e., affirmative action) for project construction contractors that employ Pehuenches; the company agreed to establish a training program for the Pehuenches to facilitate project employment opportunities.
 - IFC insisted on a construction impact minimization program specifically designed to reduce disruptions for local communities."

The following additional topics were added to the "Environmental Issues" section of the IFC's "Lessons Learned and Retrospective" document transmitted to the Pangué Audit Team on February 6, 1997:

- "required Pangué S.A. to agree to maintain a minimum flow in the Bió-Bió River at all times of 11m³ /s at the confluence of the Pangué and the Bió-Bió Rivers (a first in Chile)"⁹⁹ and
- "required a downstream monitoring program that has resulted in a set of operational rules for the Pangué project that will protect downstream water users and the ecology of the Bió-Bió River (a first in Chile)."

We believe the above reflects how the IFC staff viewed its contribution to the development of the Pangué Project when it was approved in 1992 and again, in early 1997, six months after the project was completed. In the IFC lessons-learned document referenced above, it was stated:

⁹⁹ ^

"It is clear from the foregoing (i.e., the above IFC staff list) that IFC did achieve its objective of bringing value added to this project, particularly on environmental and social issues. This is not to suggest that the Pangué project is perfect—it is far from it. IFC has learned some very valuable lessons from this project."

Regretfully, as this Independent Review has, as we believe, clearly documented, in great detail, the record does not concur with the view that an acceptable level of actual performance, results, or value added was achieved by IFC for many of these activities that have been associated with the Pangué Project. These are very serious matters and deserve the immediate attention of the senior management of the World Bank Group and the IFC Board of Directors.

CLOSING COMMENT

Finally, the Pangué Audit Team is unanimous in its view that IFC and the private sector have exceedingly important leadership roles to play in the achievement of environmentally sustainable development in the future. We believe the effectiveness and credibility of the World Bank Group and in particular, IFC can be enhanced significantly by truly learning from the many difficult Pangué Project experiences and adopting the several recommendations made in this Independent Review. To that end, we sincerely wish them every success--both institutionally and individually as they move forward to address these important matters and to implement the World Bank Group's recently launched "Strategic Compact".

XI. ABBREVIATIONS USED IN REPORT

CEA	Cumulative Environmental Assessment
CNE	Comite Nacional de Energia
CODEFF	Comite Nacional pro Defensa de la Fauna y Flora
CONAF	Corporacion Nacional Forestal
CONAMA	Comision Nacional del Medio Ambiente
EA	Environmental Assessment
ENDESA	Empresa Nacional de Electricidad S.A.
GABB	Grupo de Accion por el Bió-Bió
NGO	Nongovernmental Organization
OD	Operational Directive (World Bank Group)
Pangue S.A.	Empresa Electrica Pangue S.A.