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MANAGEMENT REPORT AND RECOMMENDATION
IN RESPONSE TO THE
INSPECTION PANEL INVESTIGATION REPORT

PARAGUAY
REFORM PROJECT FOR THE WATER AND TELECOMMUNICATIONS
SECTORS (LOAN NO. 3842-PA)

ARGENTINA
SEGBA V POWER DISTRIBUTION PROJECT (LOAN NO. 2854-AR)

April 6, 2004

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Pursuant to paragraph 23 of the Resolution Establishing the Inspection Panel (IBRD Resolution 93-10 and IDA Resolution 93-6), attached for consideration by Executive Directors is Management's Report and Recommendation in response to the findings set out in the Investigation Report No. 27995, dated February 24, 2004, of the Inspection Panel on the captioned Project: Paraguay – Reform Project for the Water and Telecommunications Sectors (Loan No. 3842-PA); and Argentina – SEGBA V Power Distribution Project (Loan No. 2854-AR).

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CONTENTS

Abbreviations and Acronyms	iv
List of Operational Policies, Operational Directives, Operational Manual Statements, and Operational Policy Notes.....	iv
I. Introduction.....	1
II. Status of the Projects.....	1
III. Findings of the Panel	14
IV. Management’s Action Plan in Response to the Findings	19
V. Conclusion	27

Annexes

- Annex 1. Findings, Comments and Actions
- Annex 2. Background on Loans supporting the Yacyretá Project

Tables

- Table 1. Timeline of Key Events in the Yacyretá Project History
- Table 2. Families Resettled in Paraguay by Location
- Table 3. Relocation and Compensation of Brick and Roof-tile Enterprises in Paraguay
- Table 4. Summary of Actions

Figures

- Figure 1. World Bank Support for Yacyretá
- Figure 2. Components of the Resettlement and Environmental Management Plan (EMP)
- Figure 3. Number of Affected Families in Paraguay

Maps

- Map 1. IBRD 33057 – Yacyretá Hydroelectric Project
- Map 2. IBRD 33058 – Existing and Expanded Sewer Network
- Map 3. IBRD 33056 – Cities of Encarnación and Cambyretá
- Map 4. IBRD 33005 – Clay Deposits

ABBREVIATIONS AND ACRONYMS

BP	Bank Procedures
EA	Environmental Assessment
EBY	Entidad Binacional Yacyretá
EMP	Resettlement and Environmental Management Plan
ESSAP	Empresa de Servicios Sanitarios del Paraguay (the State water supply company)
FEDAYIM	Federación de Afectados por Yacyretá de Itapúa y Misiones
IBRD	International Bank for Reconstruction and Development
ICR	Implementation Completion Report
IDA	International Development Association
IDB	Inter-American Development Bank
IPN	Inspection Panel
M ³ /s	Cubic meters per second
Masl	Meters above sea level
MW	Megawatt
NGO	Non-Governmental Organization
OD	Operational Directive
OP	Operational Policy
PARR	Plan de Acción para el Reasentamiento y la Rehabilitación (Resettlement and Rehabilitation Action Plan, component of the EMP)
PDA	Programa Desborde de Arroyos (Urban Creeks Program)
Plan A	Pending Actions Program (1996)
Plan B	Base Program (1997)
PMMA	Plan de Manejo del Medio Ambiente (Environmental Management Plan, component of the EMP)
SEGBA	Servicios Eléctricos del Gran Buenos Aires, S.A.
USD	United States Dollars

OPERATIONAL POLICIES AND OPERATIONAL DIRECTIVES

- OD 4.01, Environmental Assessment (October 1991)
- OD 4.30, Involuntary Resettlement (June 1990)
- OD/OP/BP 13.05, Project Supervision (March 1989 and July 2001)
- OD 10.70, Monitoring and Evaluation (November 1989)

I. INTRODUCTION

1. On May 30, 2002, the Inspection Panel registered a Request for Inspection, IPN Request RQ02/1 (hereafter referred to as “the Request”), concerning the Yacyretá Hydroelectric Project (hereafter referred to as the “Project”). The Project has been partly financed by several Bank loans—the Argentina Yacyretá Hydroelectric Project (Loan No. 1761-AR, 1979), the Argentina Electric Power Sector I Project (Loan No. 2998-AR, 1988), the Argentina Second Yacyretá Hydroelectric Project (Loan No. 3520-AR, 1992), and the Argentina SEGBA V Power Distribution Project (Loan No. 2854-AR, 1988). The Paraguay Reform Project for the Water and Telecommunications Sectors (originally called the Asunción Sewerage Project, Loan No. 3842-AR, 1995) financed the infrastructure works for the benefit of about 3,000 people resettled in Encarnación, Paraguay. The Request for Inspection was submitted by the Federación de Afectados por Yacyretá de Itapúa y Misiones (FEDAYIM), a Paraguayan non-governmental organization, and is linked to the last two projects mentioned. Six coordinators of affected people also signed the Request (hereafter referred to as the “Requesters”).

2. The Executive Directors and the President of IBRD/IDA were notified by the Panel of receipt of the Request. In transmitting the Request to Management, the Panel cited the Argentina SEGBA V Power Distribution Project and the Paraguay Reform Project for the Water and Telecommunications Sectors. Management responded to the claims in the Request on July 10, 2002. In its Report to the Board, the Panel found the Request eligible and recommended that the Executive Directors authorize an investigation. The investigation was authorized by the Executive Directors on September 9, 2002.

3. On February 24, 2004, the Panel issued its report outlining the findings of the investigation. Management appreciates the Panel’s thorough presentation of its findings. This response is organized in five sections. Project background and status are provided in Section II, and the findings of the Panel are summarized in Section III. Section IV presents Management’s Action Plan in response to the findings, and Section V concludes the report. The Panel’s findings, along with the Management’s responses, are described in detail in Annex 1. Annex 2 provides a summary of the status of the most recent Bank loans to support the Project.

II. STATUS OF THE PROJECTS

4. ***Project Background.*** Yacyretá is a multi-billion US dollar hydroelectric facility constructed on the Paraná River, along the border between Argentina and Paraguay (see Map 1). The Project is the result of a joint venture established in a 1973 treaty between Argentina and Paraguay. To implement the Project, a binational entity, Entidad Binacional Yacyretá (EBY), was created with equal representation of the two countries on its Board of Directors.

5. The Project includes construction of an earth dam about 65 kilometers long with ancillary hydraulic works, a powerhouse containing twenty turbines with the capacity to generate 3,100 MW of electricity, a navigation lock, and a fish passage facility. The dam

was designed to operate at full capacity at a level of 83 meters above sea level (masl). However, since 1994, the reservoir level has been at 76 masl, and the hydroelectric plant consequently has been operating at only 60 percent of its capacity.

6. By December 31, 2003, total costs for the Project¹ had reached approximately USD 13 billion. Of this amount, debt service alone represented approximately USD 7 billion. The majority of the Project's costs—about USD 9 billion—have been financed by the Government of Argentina. The Bank has provided almost USD 900 million in financing since the late 1970s; the IDB has provided an equivalent amount. In addition, suppliers and export credit agencies have financed approximately USD 1 billion of the Project's costs and EBY close to USD 1.1 billion with its own internal cash generation. EBY estimated in July 2002 that the investment costs required to complete the Project would be USD 714 million.² This total includes the estimated costs for expropriations, civil works, and environmental and social programs required to raise the reservoir level to 83 masl, as well as associated contingency and supervision costs.

7. The Bank has channeled support for the Project through five different loans (see Figure 1, and Annex 2 for details). All of these loans have closed and all but two have been repaid. The two loans with outstanding balances are: (i) Loan No. 3520-AR (Argentina Second Yacyretá Hydroelectric Project), with a balance, as of February 29, 2004, of USD 160,593,198, due to be repaid by November 2009; and (ii) Loan No. 3842-PA (the Paraguay Reform Project for the Water and Telecommunications Sectors), with a balance, as of February 29, 2004, of USD 14,548,887, due to be repaid by December 2011. All the relevant obligations concerning the implementation of the Project are reflected in the Loan Agreement, Project Agreement and the Third Owners' Agreement for Loan No. 3520-AR (the Legal Agreements),³ and therefore, pursuant to the terms of the Loan Agreement for Loan No. 3520-AR, the Bank will continue to supervise the Project (as explained in more detail in paragraphs 60-64 below).

1 Entidad Binacional Yacyretá. 2003. Financial Statements.

2 Entidad Binacional Yacyretá. 2002. "Plan Estratégico Yacyretá." In addition to these investment costs, the Yacyretá Treaty calls for about USD 200 million in additional works to be carried out after the reservoir is raised to its final level. These additional works include a railroad, port, and complementary coastal works in Argentina, as well as a railroad and an international airport in Encarnación, Paraguay, which are not technically linked to raising the reservoir to its final level.

3 The term "Legal Agreements" as used in this narrative and Annex 1 means the Loan Agreement for the Second Yacyretá Hydroelectric Project (Loan No. 3520-AR) entered into between the Argentine Republic (the Borrower) and the Bank, the Project Agreement entered into between the Bank and Entidad Binacional Yacyretá (EBY) and/or the Third Owners' Agreement entered into among the Argentine Republic, the Republic of Paraguay and the Bank, all for Loan No. 3520-AR and all dated November 16, 1992, as thereafter amended. The Legal Agreements are the only legal instruments in full force and effect that contain remaining obligations relevant to Project implementation.

Figure 1. World Bank Support for Yacyretá

Argentina

Loan 1761-AR – Yacyretá Hydroelectric Project (1979), USD 210 million equivalent

To provide additional, least-cost, base load hydroelectric energy; improve navigation; facilitate future irrigation projects in Argentina and Paraguay; and to augment the regional fishing industry.

Loan closed November 1982 and has been fully repaid.

Loan 2998-AR – Electric Power Sector Project (1988), USD 252 million (of which USD 250 million later allocated to support Yacyretá) To improve resource allocation within the sector; improve efficiency of power utilities; promote rational use of electricity through a tariff system based on economic costs; strengthen institutional structure of electric power sector; establish and enforce policies and procedures in respect of environmental protection and resettlement aspects in connection with electric power sector projects; implement portion of Argentina's sector investment program for the years 1988 – 1989. **Loan closed June 1991 and has been fully repaid.**

Amended in 1990 to finance works and services included under the Yacyretá Project for the remainder of the Loan.

Loan 3520-AR – Second Yacyretá Hydroelectric Project (1992), USD 300 million

To put into operation the first six generating units of the Yacyretá power plant; ensure appropriate environmental protection and efficient handling of the social aspects related to the construction and operation of the Yacyretá power plant and motivate participation of private parties in EBY's capital or administration

Loan closed December 2000 and as of February 29, 2004, had an outstanding balance of USD 160,593,198.

Amended in 1997 (with Loan 2854-AR) to provide support to resettlement and environmental actions in **Plan A** and **Plan B**.

Loan 2854-AR – SEGBA V Power Distribution Project (1988), USD 276 million (of which USD 135 million later allocated to support Yacyretá)

To support the 1988-1992 portion of the Borrower's expansion program.

Loan closed September 2002 and has been fully repaid.

Amended in 1994 and also in 2000 to support putting into operation the first six generating units of the Yacyretá power plant; and ensure appropriate environmental protection and the efficient handling of the social aspects related to the construction and operation of the Yacyretá power plant. **Amended in 1997** with Loan 3520-AR to provide support to actions in **Plan A** and **Plan B**.

Paraguay

Loan 3842-PA – Reform Project for the Water and Telecommunications Sectors (formerly Asunción Sewerage Project) (1995), USD 276 million (of which USD 1.2 million allocated to infrastructure for Encarnación)

To improve the provision of urban water and sewerage services within Paraguay; improve the health conditions and the quality of life of about 250,000 inhabitants in the city of Asunción; and improve the living conditions of about 3,000 inhabitants in the city of Encarnación through the construction of infrastructure works.

Restructured in 2000 to support reform of water and telecom sectors.

Loan closed December 2003 and as of February 29, 2004, had an outstanding balance of USD 14,548,887.

8. A great deal has transpired in the thirty-one years since the launching of the Project, including much that is positive. First, despite lengthy delays, the hydroelectric facility itself is well-constructed and has operated relatively efficiently, although only at 60 percent of capacity. From a technical perspective, the accomplishments of the partnership between Argentina and Paraguay are impressive. Second, the power facility has provided the foundation for increased commercial activity and improved living conditions for thousands of people in the surrounding area. The Project has also contributed positively by improving services and municipal infrastructure, as well as housing, especially for low-income families.

9. To understand the present Inspection Panel Investigation and Management's response, it is useful to review the key events in the Project's chronology, particularly in the 1990s (see Table 1). In 1992, in order to move the dam toward operation, the Bank and EBY agreed on a strategy to flood the reservoir incrementally over three phases, beginning at 76 masl in 1994, increasing to 78 masl in 1995, and ending at its full planned height of 83 masl in 1998. An important element of this strategy, spelled out by the Bank in the legal documents for Loan No. 2854-AR and the Legal Agreements, is that a series of resettlement and environmental measures to protect affected people and areas would be carried out by EBY before Phase I (raising the water level to 76 masl).

10. The reservoir was raised to 76 masl in 1994, but the phased reservoir filling did not progress as planned and not all elements of the Resettlement and Environmental Management Plan (EMP) were completed by EBY. The principal reason for the delay was the 1995 financial crisis in Argentina, which in turn placed constraints on EBY's resources. As a result, EBY was unable to complete important works and land purchases. In addition administrative bottlenecks, primarily procurement-related, contributed to the delay. Although operation at 76 masl was supposed to be a short-term transitional situation, it has lasted a decade, up to the present.

11. Following discussions begun in 1995, Management agreed with EBY and the Argentine and Paraguayan authorities on two action plans (Plan A and Plan B)⁴ designed to address the outstanding resettlement and environmental issues affecting the Project. Plan A aimed at completing some actions that were not finished prior to the raising of the reservoir to 76 masl. Plan B aimed at addressing problems that surfaced because of the prolonged duration of the reservoir water level at 76 masl. Both these Plans were incorporated into the Project's Legal Agreements, and the legal documents for Loan No. 2854 AR pursuant to the terms of the 1997 amendment. To date, the majority of activities under both Plans have been completed. Despite this progress, however, work remains to be done in several areas, such as the provision of property titles to all resettled

4 Plan A, "Pending Actions Program," means the program of actions, set forth in EBY Executive Committee Resolution 3096/96, to be carried out by EBY with regard to works and other activities required, in connection with the EMP, as a result of the prior raising of the level of the reservoir of the Yacyretá power plant to 76 masl (as measured at the cities of Encarnación and Posadas). Plan B, the "Base Program," means the program of actions, set forth in annexes to EBY Executive Committee Resolution 3164/97 and approved by EBY Administrative Council Resolution 744/97, to be carried out by EBY with regard to works and other activities required because of prolonged operation of the reservoir of the Yacyretá power plant at 76 masl (as measured at the cities of Encarnación and Posadas).

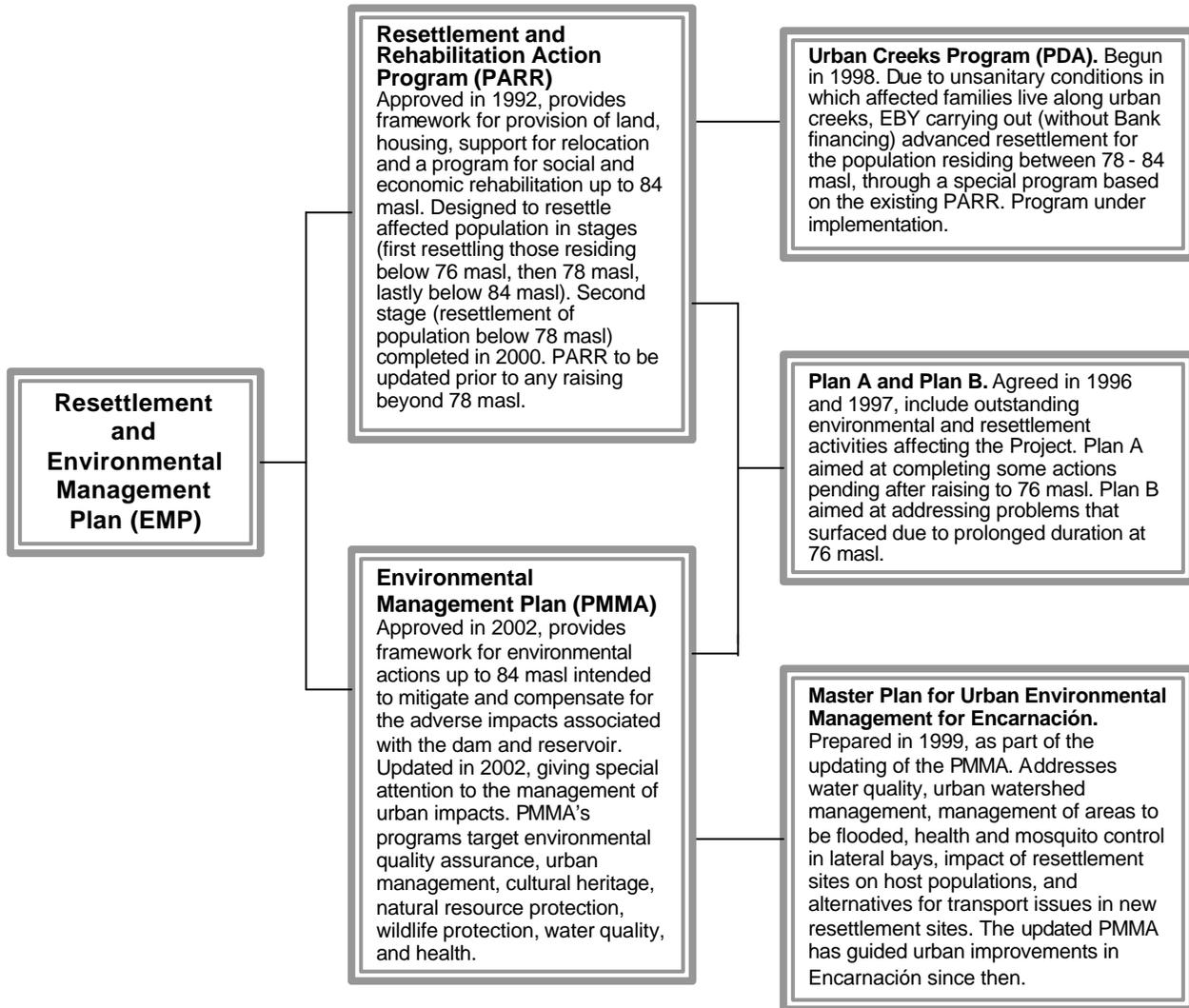
beneficiaries, signature of a legal accord transferring responsibility for all works and services to the appropriate governmental entities, implementation of a social communication program, the implementation of community emancipation programs, and the relocation of the Encarnación municipal slaughterhouse.

Table 1. Timeline of Key Events in the Yacyretá Project History

1926	Argentine-Paraguayan Protocol signed to begin discussions on the use of the Apipé Rapids for energy generation.
1958	Argentine-Paraguayan Technical Commission created to assess Paraná River's potential for energy generation at the islands of Yacyretá and Apipé.
1973	Yacyretá Treaty signed by Argentina and Paraguay on December 3, 1973 for the construction of the Yacyretá dam.
1973	Entidad Binacional Yacyretá (EBY) created under the Treaty.
1974	International consortium of consultants contracted to prepare design and bidding documents for Project.
1977	Total Project cost estimated at USD 3 billion.
1979-1980	Census carried out as part of EBY's Social Action Plan, identifying 8,179 families to be resettled (5,101 in Argentina and 3,078 in Paraguay).
1983	Construction of the Yacyretá dam began.
1989-1990	Census conducted as basis for EBY's Resettlement and Rehabilitation Action Plan, reporting 9,446 families still to be resettled (4,558 in Argentina and 4,888 families in Paraguay).
1992	Argentina and Paraguay agreed to a phased implementation of the Project, in which the reservoir would be raised incrementally (to 76 masl in 1994, 78 masl in 1995, and its final design level of 83 masl in 1998).
1994	Reservoir level raised to 76 masl.
1994	First turbine-generating unit was commissioned and began to supply energy on September 2, 1994.
1996-1997	Argentina and Paraguay agreed to two action Plans (Plan A and Plan B): Plan A (1996) is the Pending Actions Program, to address outstanding resettlement and environmental issues pending after raising to 76 masl; and Plan B (1997) is the Base Program, for actions needed for operation at 76 masl for a prolonged period.
1998	Last (twentieth) turbine-generating unit commissioned on July 7, 1998. Total installed capacity 3,100 MW, but operating at 60 percent capacity.
2000	Census carried out, identifying 11,497 families still to be resettled (5,350 in Argentina and 6,147 in Paraguay) up to the final design level.
2002	EBY estimated cost of completing the Project at USD 714 million.
2004	Total Project cost estimated at USD 14 billion, including debt service of approximately USD 7 billion.
2004	Presidents of Argentina and Paraguay reconfirmed their country's commitment to complete the Project within four years.

12. A summary of the current EMP for the Project is provided in Figure 2.

Figure 2. Components of the Resettlement and Environmental Management Plan (EMP)



The Project's Environmental Aspects

13. As part of the preparation of the Second Yacyretá Hydroelectric Project, an Environmental Assessment (EA) was carried out in 1992 in compliance with the Bank's Environmental Assessment policy, OD 4.01, which had become effective in 1991. The EA found that, at the Project's final design level of 83 masl, the majority of the 107,600 ha to be flooded (approximately 78,200 ha in Paraguay and 29,400 ha in Argentina) was sparsely populated grasslands, wetlands and riverine and other forests. The EA found that

this flooding would have an impact on: (i) flora and fauna in the affected area, including blocking of fish migrations, and diminishing habitat for fish and other aquatic life; (ii) water quality conditions in and around urban areas (although overall reservoir water quality would not be seriously affected); (iii) human health, associated with worsening water quality conditions in urban lateral bays; and (iv) urban infrastructure and the need for resettlement of people living in the flood plain. The resulting Environmental Management Plan (the PMMA), approved by the Bank in 1992, provided a comprehensive framework for environmental actions intended to mitigate and compensate for the adverse impacts associated with the dam and reservoir. The PMMA encompassed a broad number of programs targeting natural habitats and biodiversity through establishment of compensatory reserves, wildlife rescue (for terrestrial species as well as fish and other aquatic life); water quality, especially in urban areas; environmentally sound management of water levels and releases in the reservoir; functional relocation of urban infrastructure; management of downriver impacts; public health measures and vector monitoring; and cultural property, as well as measures to address indirect environmental impacts, such as from power transmission lines and potential irrigation development.

14. With the decision in 1992 to raise the reservoir incrementally, the PMMA also established sequenced environmental mitigation requirements necessary for raising the reservoir to 76, 78 and 83 masl. For example, while the river's capacity to absorb and dissipate large volumes of urban sewage and industrial effluents is relatively high, the EA identified that the urban lateral bays created by the flooding at 83 masl in Posadas and Encarnación removed an important environmental service performed by the urban creeks (namely, the rapid removal of untreated urban sewage and effluents away from populated areas). Therefore, at 83 masl, if untreated urban sewage continued to flow into the urban lateral bays created by flooding, it would pose a serious environmental and public health risk. Thus, the PMMA called for the construction of sewerage systems and sewage treatment plants in both cities. The 1997 amendment to the Legal Agreements stipulated that the sewerage collection and treatment systems (see Map 2) must be completed before raising the reservoir to 78 masl.

15. Activities completed under the PMMA for dam operation at 76 masl included the establishment of a network of compensatory protected areas in both countries, representing ecosystems similar to those originally affected, to mitigate the loss of natural habitats due to reservoir inundation. Five protected areas totaling 59,175 ha—three in Argentina and two in Paraguay—were established and continue to be funded by EBY and managed with the participation of NGOs and local environmental institutions. Since the dam posed a barrier to fish migration, the Project constructed fish transfer stations to provide for sufficient fish passage upriver to maintain diversity of the fish genetic pool.

16. Other programs completed under the PMMA include: reorganization and strengthening of EBY's environmental unit; endangered species studies and management programs (including a species of snail first identified as a result of Project investigations); the development of operational guidelines for the reservoir that emphasize environmental sustainability; definition and maintenance of a minimum ecological flow of 1,500 m³/s in the Aña Cuá Branch (see Map 1) to prevent fish mortality, harm to adjacent wetlands and

riparian forests, and adverse public health impacts; archaeological investigation and salvage in all islands to be flooded; and selective biomass removal in areas to be flooded near population centers, along navigation channels, and in areas of low circulation in the reservoir. Construction also was initiated for works such as potable water and sewerage systems in Encarnación and Posadas. Gas over-saturation, an unforeseen impact on fish that came about after the start of operation, was addressed through research and modeling that led to retrofitting of deflectors on the main branch and Aña Cuá spillways and establishment of spillway opening and closing procedures, thus minimizing fish mortality. Ongoing environmental monitoring programs address water quality, public health and disease vectors, fish migration, groundwater levels of downstream wetlands, and urban groundwater levels and quality. The PMMA's programs addressed the Project's significant environmental impacts and represented state-of-the-art techniques for environmental management.

17. Starting in 1999, the PMMA was updated through a three-year public process that involved civil society, more than 100 NGOs, and national, provincial and local authorities. EBY's Executive Committee and Administrative Council formed oversight committees to supervise its implementation as well as to assist in its periodic updating. The updated PMMA is based on the lessons learned after seven years of operation and gives special attention to the management of urban impacts. The Bank provided its no objection to the updated PMMA in June 2001.

18. As acknowledged in the Panel's report, the biophysical environment affected by the dam and reservoir is being managed competently.

The Project's Social Aspects

19. The Yacyretá dam and reservoir has required and still requires extensive resettlement of both households and commercial/industrial properties. Under the initial Yacyretá Loan (1979-1991), resettlement was guided by the Plan de Acción Social (PAS), or the Action Plan, which was designed on the basis of a census of affected people in 1980. This plan was prepared and adopted by EBY, ten years before the Bank's resettlement policy OD 4.30 had become effective. At that time, EBY identified 3,078 affected families in Paraguay. However, due to implementation delays, by 1990, only 61 rural families had been resettled. In 1990, when EBY conducted a second census, it recorded 4,888 families remaining to be resettled, 419 brick and roof-tile enterprises and 560 commercial businesses on the Paraguay side.

20. As part of the preparation for the Second Yacyretá Loan, EBY prepared a new "Resettlement and Rehabilitation Action Plan" (PARR) which formed part of the EMP. This Plan was designed according to the Bank's Resettlement Policy (OD 4.30) and was approved by the Bank and adopted by EBY in 1992. Registration in the 1990 census was the PARR's main eligibility criterion. The PARR includes the provision of land, housing, support for relocation and a program for social and economic rehabilitation. All people affected by the reservoir and regardless of land tenure status, were entitled to a new house, at no cost. PARR implementation was sequenced according to the agreed timetable for filling the reservoir: up to 76 masl by 1994; up to 78 masl by 1995; and up

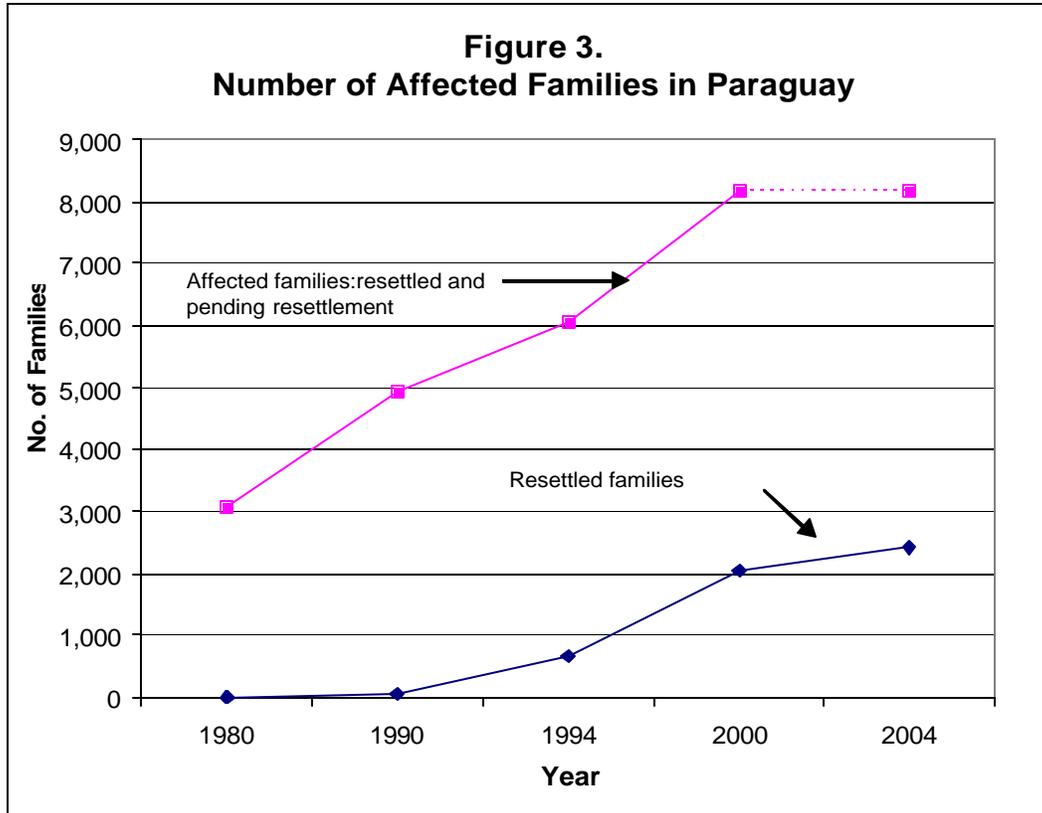
to 84 masl (which includes a one meter buffer zone above 83 masl for reservoir fluctuations) by 1998.

Resettlement of Families

21. Although EBY completed the first stage on schedule by 1994, with 446 families from lands below 76 masl and 218 families from lands above 76 masl resettled, subsequent resettlement stages advanced slowly. In Paraguay, the resettlement of the second stage, up to 78 masl, was completed by 2000. For the population living between 78 and 84 masl, EBY—in agreement with the Bank—gave priority to families located in the wide network of urban creeks (see Map 3) that are prone to periodic flooding (even though such flooding, is not associated with the reservoir, as confirmed by the Panel). In order to resettle these families, EBY developed and is implementing the Urban Creeks Program (PDA).

22. Given the delays in the Project (see paragraph 10), EBY has not established a firm cut-off date for determining eligible beneficiaries. Also, given the lack of funds, EBY has not been able to purchase the land between 78 and 84 masl required to raise the reservoir water level, which means it has no legal basis for preventing new settlement (see also Annex 1, Item 36). As a result, the number of affected parties continues to grow. In 2000, EBY carried out a new census, which recorded, in Paraguay, 6,147 families (5,813 urban and 334 rural) remaining to be resettled. Since EBY still has not determined a final cut-off date, the total number of affected families may increase even further.

23. The trends in the total number of affected families and the numbers actually resettled are shown in Figure 3.



Source: EBY. Census 1980, 1990, 2000 and data to March 2004 for families resettled from below 76 masl to 84 masl. For 2004, the total number of families (resettled and pending resettlement) is taken from the 2000 census. The actual number could be higher.

24. The 2,416 families resettled in Paraguay to date have been resettled in five urban and seven rural resettlement sites (see Table 2 and Maps 1 through 4). All urban and rural families received new houses, adequately equipped with basic services. Additionally, the resettlement sites are equipped with community infrastructure such as school, health center, church, recreational centers. Rural populations also received food supply to allow for variations within growing seasons, as well as technical assistance and support for productive activities for several years. One rural resettlement site, Pindó, is a highly successful resettlement of an indigenous Guarani community.

Table 2. Families Resettled in Paraguay by Location

Resettlement Site	Periods of Resettlement	Families Resettled by end 2003
Urban		
Buena Vista	1990 to date	320
San Pedro	1994 to date	399
Arroyo Porá I and II	1999 to date	668
Los Arrabales	1997 – 1998	25
Itá Paso	1996 – 2001	674
Subtotal		2,086
Rural		
Atinguy	1984 – 1995	80
Pindó	1988	21
San Miguel Potrero	1993 – 1995	59
Caraguatá	1994	28
Yacarey	1994 – 1997	25
Ex-Cibils	1995	14
San Nicolás	1995	13
Carmen de Paraná (1)	1995	5
San Cosme y Damián (1)	1994 – 1997	85
Subtotal		330
Total		2,416

(1) These are rural families that selected resettlement in urban areas of Carmen del Paraná and San Cosme y Damián.

Source: EBY, Resettlement data, March 2004.

25. The PARR has been independently monitored and evaluated regularly. According to these evaluations, the majority of resettled urban and rural families have either restored or improved their living standards (consistent with OD 4.30, paragraph 3), including adequate housing and greater access to infrastructure and public services. The vast majority of urban and rural families inhabited high flood risk areas prior to resettlement, and are now relocated above natural flood levels. Many also possess title to their land and houses for the first time. However, there have been some claims related to restoration of income from those resettled in Arroyo Porá and Itá Paso, largely due to their distance from Encarnación's urban center (approximately 6 and 9 kilometers, respectively).

Brick Makers and Roof-tile Makers

26. Most of the affected enterprises are makers of brick and roof-tiles. The brick makers are mostly small enterprises, while the roof-tile makers are medium and large sized businesses. Although only a small proportion of these enterprises was affected by the filling of the reservoir up to 76 masl, EBY decided to compensate all those that would be affected if the reservoir were raised to 83 masl. Some enterprises required compensation only for the loss of access to clay deposits, while others required relocation or compensation for their property and assets. Table 3 shows the brick and roof-tile making enterprises that were compensated or resettled by EBY.

Table 3. Relocation and Compensation of Brick and Roof-tile Enterprises in Paraguay

Compensation Alternative	No. of productive units
Brick Makers	
Relocation	97
Compensation for brick makers choosing to change economic activity	268
Compensation for loss of clay deposits (paid to brick makers located above 84 masl but using deposits below 84 masl)	159
Subtotal	524
Roof-tile Makers	
Cash compensation for self relocation	53
Compensation for loss of clay deposits (paid to tile makers located above 84 masl but using deposits below 84 masl)	49
Compensation for roof-tile enterprise choosing to change economic activity	1
Subtotal	103
Total, Brick and Roof-tile Makers	627

Source: EBY. Resolutions authorizing compensation payments that were approved by EBY between May 1994 and April 2000.

27. It is important to point out that those receiving compensation for loss of clay deposits up to 84 masl have not, in fact, actually lost access to this resource since the water level has remained at only 76 masl. In addition, clay deposits on EBY-owned property are available to all brick and roof-tile makers free of charge. (See Map 4.) Similarly, of the 53 medium and large sized roof-tile makers who received compensation for self-relocation, 19 of them continue production in the original location.

Commercial Businesses

28. As noted above, 560 commercial businesses were identified in the 1990 census in Encarnación as needing resettlement. To date, none have been resettled, since none were located between 76 and 78 masl. In accordance with the 2000 census, the number of commercial businesses between 78 and 84 masl increased to 807, and is likely to have grown since then. For those businesses that choose to relocate, EBY has acquired land in Encarnación..

“Extra Censales”

29. The Government of Paraguay was responsible for the resettlement of all additional families who were located in the affected area after the 1990 census (“extra censales”). The extra censales up to 78 masl were resettled in Itá Paso, a site selected and approved by the affected families. In 1995, these families received a compensation

package inferior to that of the census beneficiaries (the Government of Paraguay provided a plot with basic services, and the families built their own homes). This difference caused dissatisfaction. In 1998, the Bank requested the Government of Paraguay to build new houses for the extra censales with the same specifications as houses built for families formally included in the 1990 census. By 1999, a financial arrangement between the Government of Paraguay and EBY made this possible. As a result, EBY has been providing the same resettlement assistance to all extra censales, thus erasing any differential treatment between different groups of affected parties. For all practical purposes, all families included in any of the EBY censuses (1980, 1990, 2000) are expected to benefit from the same resettlement policies.

Resettlement Claims

30. The main problem with EBY's implementation of the PARR is related to larger Project delays. Some families included in the 1980 census waited to be resettled for years. EBY will not have a viable program for completing the resettlement up to the final design level of the reservoir, until adequate financing is confirmed and the PARR has been updated as part of the Revised EMP.

31. Other problems with the PARR are common to many resettlement plans. Some people have claimed that they were excluded from the 1990 census. Some complaints are related to the appraisal value of assets or to minor problems in the houses that are provided. Claims for cash compensation surged in 1998, exacerbated by EBY's payment of cash for non-dam related impacts (e.g., the alleged loss of fisheries resources associated with the reservoir), and the active promotion of such claims by stakeholders.

32. In order to minimize the social pressure stemming from claims related to income loss, the Paraguayan Congress created a USD 6 million "Productive Fund" in 2001. This fund, managed by the Secretariat of Social Action and EBY, was created to assist affected parties with small grants in support of new productive activities. The Fund also provides technical assistance to beneficiaries to better identify their needs and design feasible activities. A consolidated list of beneficiaries of this Fund is expected to be finalized by EBY by the end of April of 2004. On the expectation that disbursements from this Fund will begin later this year, the Fund is reducing social tensions surrounding the Project.

33. Improved communications between EBY and the affected parties will help dispel confusion on several issues (see paragraphs 66-68), not least of which are the timetable for Project completion, the types of claims being honored, and the procedures to follow for all types of claims. Other aspects of improved communications and related grievance mechanisms are detailed in Section IV.

III. FINDINGS OF THE PANEL

34. **Introduction.** This section is divided into three parts: (i) a summary of Panel findings regarding the original claims; (ii) a summary of findings regarding Bank Operational Directives, as well as other important findings of the Panel; and (iii) a brief commentary on the Panel findings. Detailed Management commentary on the findings is contained in Annex 1.

Claims and Panel Findings

35. Four sets of claims are discussed below. The Panel's findings dismissed the first two of these. These findings are important not only because they pertain to Bank management of the Project, but because they dispel widespread confusion concerning the Project's environmental impacts.

36. The first set of claims states that more than 4,000 families living in the areas directly affected by the Yacyretá Project at the reservoir's current operating level (76 masl) have had severe impacts, including: (i) constant flooding of urban creeks and a higher water table, (ii) contamination of the Paraná River and the creeks, and (iii) spreading of diseases. The Panel rejects each of these claims. The Panel further concludes that the *"biophysical environment affected by the Yacyretá dam and reservoir is being managed competently and that the initial environmental problems that arose when the reservoir was first filled have been satisfactorily resolved."*

37. The Panel did not substantiate the Requesters' claim that the reservoir causes constant flooding of urban creeks: *"Although it is clear that the urban creeks of Encarnación are flooding and causing severe hardship, the Panel finds that the Requesters' contention that this flooding is a consequence of the Yacyretá reservoir itself cannot be sustained... The urban creek flood conditions are mainly due to local conditions, such as upstream urbanization, lack of urban storm water drainage, and waste accumulation impeding water flow in the creeks, in that order."*

38. The Panel also finds that the reservoir does not cause contamination of the Paraná River and the creeks. According to the Panel: *"[...]Bank Management has ensured that proper monitoring of water quality has been conducted in the reservoir. Water quality monitoring has been an ongoing activity since before the filling of the Yacyretá reservoir. The Panel verified the existence of the water quality monitoring data and the reasonableness of Management's claim that 'the reservoir's water quality is constantly monitored, [and] falls within satisfactory parameters.'"*

39. With respect to the claim that the reservoir has caused the spread of diseases and severe health problems, the Panel notes that *"the Yacyretá reservoir is not the cause of the polluted water used by the complainants for washing clothes and that there are potentially many different reasons why such skin irritations might occur[...] The Ministry of Health and Social Welfare of Paraguay has a long-term ongoing study that shows no increase in abundance or species composition of disease vectors. The Panel verified the existence and findings of this study and found no evidence to the contrary."*

40. The second set of claims alleges that a proposed wastewater treatment plant, to be built in Encarnación, would further pollute the environment because its location and design are based on a defective environmental assessment and are in violation of Paraguayan environmental regulations. According to the Panel: *“While the Requesters are opposed to the location selected for the planned wastewater treatment plant, the Panel finds that the site selected is not inappropriate for the purpose and that the environmental assessment for the wastewater treatment plant is not defective either procedurally or substantively.”*

41. The third set of claims alleges that the families affected by the raising of the reservoir level were not all identified. According to the Panel there is *“persuasive evidence that a number of people who were present at the time of the 1990 census were erroneously omitted and that they fear they will be ineligible for the Project compensation and resettlement benefits.”*

42. The fourth set of claims alleges that the resettlement and income restoration programs are not being properly implemented, leaving hundreds of affected families and businesses with no or inadequate compensation, poor resettlement housing and facilities, and prolonged economic hardship. The Request gives particular attention to the situation of the employees of the brick making and tile making factories who allegedly were not compensated for their loss of income because only factory owners, and not their workers, were compensated for their losses.

43. The Panel finds that the impacts of specific resettlement sites were not fully assessed, and that alternative sites for resettlement areas were not considered. It finds that there was inadequate consideration of urban and peri-urban environments, induced effects and impacts of resettlement sites on the urban system, including water supply, sewers and drainage. The Panel also finds that there was no evaluation of water and sewerage facilities and urban drainage for resettlement sites.

44. Concerning the resettlement plan, the Panel finds that it has not been properly implemented by EBY and other authorities. Reasons for this include: (i) inadequate grievance procedures to correct census or other resettlement related omissions and errors; (ii) inadequate assessment and mitigation of effects on host populations due to resettlement and burdens on local infrastructure; (iii) inadequate effort to inform and consult with host populations in planning and carrying out construction of resettlement sites; (iv) inadequate consultation and information about provisional appraisals and need to monitor actual appraisal values when properties are expropriated; (v) failure to consider acceptable resettlement alternatives; and (vi) inadequate analysis of the legal framework so as to prevent an influx of population.

Panel Findings with Regard to Bank Operational Directives

45. The Panel found the Bank in compliance with its policies and procedures with regard to the following issues:

OD 4.01	<ul style="list-style-type: none"> • Environmental screening process; • Preparation of EA – 2nd Yacyretá; • Analysis of alternatives – 2nd Yacyretá; • Consideration of current biophysical environment; • Wastewater treatment plant design and EA
OD 4.30	<ul style="list-style-type: none"> • Use of provisional appraisals for valuation procedure (partial); • Compensation for usufruct or customary rights to land; • Compensation for loss of access to natural resources (partial); • Provision of new Paraguayan law regarding expropriation; • Adequacy of resettlement plan but plan, budget and timetable have not functioned as intended (partial)
OD 13.05	<ul style="list-style-type: none"> • Supervision of main civil works components.

46. The Panel found that the Bank was not in compliance with its policies and procedures regarding the following issues:

OD 4.01	<ul style="list-style-type: none"> • Inadequate or no EA(s) for resettlement sites in Encarnación • No consideration of resettlement site alternatives • No evaluation of water and sewerage facilities and urban drainage for resettlement sites
OD 4.01 and OD 4.30	<ul style="list-style-type: none"> • Inadequate consideration of urban and peri-urban environments • Inadequate assessment and mitigation of effects on host populations
OD 4.30	<ul style="list-style-type: none"> • Reliance on principal occupation as a basis for income restoration • Inadequate grievance procedures to correct resettlement related omissions and errors • Inadequate effort to inform and consult with host populations • Inadequate consultation and monitoring of property appraisals • Denial of compensation to some affected people (partial) • Inadequate grievance procedures when reservoir level raised to 76 masl • Need for better rationale for resettlement sequencing • Failure to consider acceptable resettlement alternatives • Restoration of income earning capacity inadequate • Exclusion, in practice, of informal workers in brick and tile industries from compensation program • Restoration of income earning capacity to brick makers not fully met (partial) • Resettlement plan, budget and timetable not functioning as intended • Analysis of legal issues did not occur or was inadequate; therefore legal framework could not prevent influx of ineligible population • Losses directly attributable to delays in resettlement should be recognized
OD 13.05	<ul style="list-style-type: none"> • Inadequate supervision of resettlement activities with respect to standards of design, construction and implementation • Lack of adequate technical and social expertise during supervision

47. In addition to issues related to the claims discussed above, and the finding of compliance or non-compliance, the Panel made other key findings as well. These are briefly summarized below and Management's corresponding comments are provided in Annex 1.

48. **Water Levels.** The Panel found that the construction of the Yacyretá dam has a negligible effect on water levels of the Paraná River at Encarnación, especially in times of flood. However, it found that the dam is frequently operated in such a fashion that it produces water levels of up to one meter in excess of 76 masl at Encarnación, which was

not consistent with the provisions of the legal document for Loan No. 2854-AR (as amended) and Legal Agreements.

49. **Environment.** The Panel made additional findings related to: (i) concerns for future environmental management of the Project; (ii) inappropriate road and drainage design; (iii) inadequate dissemination of information about the coverage of the sewer system beyond the southern part of Encarnación; (iv) need to finance household connections to the sewer system; and (v) need for adequate staff, budget and training for the operation of the sewage system.

50. **Social Impacts and Resettlement.** The Panel made additional findings related to: (i) the need to ensure that census and survey data will be updated and verified prior to further raising of the water level; and (ii) the need to systematically inform and consult with people about the Urban Creeks Program.

51. **Supervision.** The Panel found: (i) evidence of poor quality of design and construction within resettlement sites that would have been identified if supervision had been stronger; (ii) need for a greater level of supervision of technical design and construction in all facets of the resettlement scheme; (iii) failure to anticipate foreseeable delays in construction and operation of the wastewater treatment plant and lack of interim arrangements for waste discharges; (iv) need for better documentation of consultations with affected persons; (v) need for a higher than usual level of supervision to ensure that corruption does not occur; (vi) absence of an effective communication strategy between those implementing the Project and the affected population; (vii) recommendations made in 2003 that adequately reflect Bank policies but that should have come sooner; and (viii) overly optimistic reporting to the Board and understatement of difficulties in Project implementation.

52. **Economic Context.** The Panel acknowledged, in several instances, that the economic crisis in Argentina and related economic and social crises in Paraguay have precluded effective implementation of mitigative measures foreseen in the PMMA and the PARR. The Panel also recognized that rectification of past problems will be difficult.

Overview of Management Commentary on These Findings

53. Concerning the environmental management aspects of the Project, perhaps the most important general issue raised is the appropriate level of due diligence on resettlement sites and other small urban investments. On this Project, in EBY's judgment—with which the Bank concurred—most non-dam civil works did not pose significant issues and therefore, were not analyzed. Civil works that were not subject to environmental assessment included urban infrastructure (small bridges, urban streets, buildings), small networks for water supply and sewage, and resettlement housing programs. Civil works that were subject to EAs included a 1.5-kilometer bridge, a slaughterhouse near Itá Paso, a marketplace near Buena Vista, the wastewater treatment plant, and other transportation infrastructure changes associated with higher reservoir levels.

54. In Management's detailed commentary to the Panel's findings in Annex 1, care is taken to acknowledge the finding that adequate screening and analysis of alternatives was not always done prior to 1995, and that more could have been done both in the screening and consultation process itself. More could also have been done in the documentation of decisions taken. Nevertheless, the standard of due diligence on this Project improved throughout the 1990s, including in the areas mentioned above, and improvements are continuing with the current updating of the Project EMP. One specific example of improvements are the construction manuals (including good environmental practices), quality assurance programs, enhanced supervision, and contractor insurance requirements that, taken together, have improved the quality of the non-dam related civil works since the mid-1990s.

55. **Social Issues.** Management's overall commentary on the social aspects of the Project is that the resettlement process was made extremely difficult by unexpectedly long Project delays. Also, since many of these delays were linked to the Argentine economic crisis, there were direct spill-over effects in terms of EBY's ability to generate revenues needed to acquire land, resettle people, close businesses, and accomplish the other interim requirements. The delays resulted in severe impacts on all parties involved, from the affected parties having to wait years to be relocated, to the Governments of Argentina and Paraguay who have yet to receive the planned benefits of their investment. As for World Bank lessons learned, Management acknowledges that tighter adherence to Borrower deadlines might have helped—even as it also asserts that it was correct in its continued decision *not* to invoke its right to either suspend disbursements or demand accelerated repayment of the loan due to safeguard noncompliance. In the case of Paraguay, safeguard non-compliance was a central concern—along with poor country macroeconomic and portfolio management—that led to multiple visits by the Vice President of the Bank's Latin America and Caribbean Region in 1998, 1999, and 2001 in order to apply pressure on the Government. Given the lack of progress in these three areas, there was a sharp contraction in the Bank's assistance to Paraguay until this fiscal year.

56. As stated above for environmental management, Management finds that EBY's performance on resettlement-related issues has improved. Its relationship with the great majority of affected parties is improving, as is the resolution of claims received over the past few years. Communications with affected parties, an important element of EBY's work, should benefit from implementation of the social communication program to comply with Plan B (see Footnote 4) and its updating. The collection of baseline data essential to future resettlement in the event of reservoir level rise is also improving, as are procedures for public access and correction of such baseline data. Finally, restoration of income-earning capacity is expected to be addressed through both the rehabilitation programs of the PARR and the Productive Fund being managed in partnership between EBY and the Government of Paraguay.

57. None of these statements are meant to imply that serious challenges with regard to the ongoing resettlement process do not remain; they do. Nevertheless, given the lessons that have been learned by EBY, communities, and other government authorities, the processes to be followed in the future will be more transparent than in the past.

58. **Project Supervision.** Management agrees that supervision of this Project requires a high degree of expertise and flexibility, and will continue to supervise the Project in this fashion. In addition, the Bank will continue to employ information-gathering approaches that provide independent verification of the practices and policies pursued by EBY. Management remains committed to continuing this level of supervision for the life of the Second Yacyretá Loan. Details concerning suggested changes in staff expertise, staff location, and reporting practices (both in Aide Memoires and to the Board and Panel), are provided in Annex 1 and summarized in Section IV.

IV. MANAGEMENT’S ACTION PLAN IN RESPONSE TO THE FINDINGS

59. **Matrix of Actions.** Management’s Action Plan is summarized in Table 4 below.

Table 4. Summary of Actions

Environment – OD 4.01
<p>Resettlement sites and civil works (Items 3, 8, 9, 40)</p> <ul style="list-style-type: none"> ◆ Management will request that EBY update the screening process for non-dam related civil works and that it include a quality assurance protocol to evaluate the environmental conditions and the quality of the civil works in the resettlement sites. The Bank will continue to monitor engineering supervision and contractor insurance practices and will request improvements, as necessary. ◆ The Bank will monitor the system EBY has in place to supervise civil works and request that contracts continue to include required clauses. The Bank will also continue to pay careful attention in future supervision missions to construction deficiencies.
<p>Biophysical environment – long-term (Item 6)</p> <ul style="list-style-type: none"> ◆ The Bank will continue to monitor closely compliance with the Legal Agreements, including the environmental and social mitigation measures, and will ensure that EBY is apprised of its findings, with a view to improving EBY’s capacity to maintain adequate environmental management practices for the Project over the long term.
<p>Urban and peri-urban environments – population growth, induced impacts and host populations (Item 7)</p> <ul style="list-style-type: none"> ◆ The Bank will continue to supervise compliance with the implementation of the PMMA component of the EMP, in accordance with the provisions of the Legal Agreements.
<p>Reservoir level verification (Item 11)</p> <ul style="list-style-type: none"> ◆ Management will urge the Governments of Argentina and Paraguay and EBY to establish a means for independent verification of the reservoir level. Bank staff will monitor this and confirm that the reservoir is operated at 76 masl, in accordance with the Legal Agreements. Management will also request EBY to validate the height-flowrate curves every year.
<p>Sewerage system (Items 15, 16, 17, 41)</p> <ul style="list-style-type: none"> ◆ Management will request EBY to make all relevant drawings of sewerage systems, pumping stations, and the wastewater treatment plant, as well as any other non-dam-related civil works, available to the community. In addition, the Bank will monitor inclusion of activities to clarify the areas being covered and the proposed time frame for the coverage in EBY’s social communication program ◆ Management will confirm that the sewerage system has been completed prior to the raising of the reservoir level to 78 masl, in accordance with the pertinent provisions of the Legal Agreements, and will urge EBY and the Paraguayan authorities to pursue IDB or other financing for the household connections . ◆ It is expected that actions pertinent to transfer and supervision will be undertaken by IDB prior to the raising of the reservoir level to 78 masl. ◆ Management is urging EBY to accelerate efforts to improve the outfall of effluent from the Itá Paso resettlement site even prior to the completion of the wastewater treatment plant.

Social – OD 4.30**Social Communication Program (18, 23, 24, 27, 28, 38, 44)**

- ◆ The Bank will monitor EBYP's provision and dissemination of information on the criteria and procedures to be used in order to confirm beneficiary status, as part of its implementation of the social communication program to comply with Plan B.
- ◆ The Bank will monitor inclusion in EBYP's social communication program of specific programs of information and consultation with host populations for planning and carrying out construction in resettlement sites.
- ◆ The Bank will monitor inclusion in EBYP's social communication program of provisions for strengthening the dissemination of information to affected people on the procedures that EBYP employs for property appraisals. Moreover, the Bank will assess the adequacy of valuation procedures for the properties that will be expropriated prior to raising the water level further.
- ◆ The Bank will monitor inclusion of improved plans for dissemination of procedures for property valuation and appeals in EBYP's social communication program .
- ◆ Management will confirm that the social communication program includes information on the resettlement sequence to be incorporated in the PARR component of the Revised EMP.
- ◆ Management will confirm that EBYP implements a social communication program, to comply with Plan B, and will urge EBYP to address communication issues under the Urban Creeks Program.
- ◆ During supervision, the Bank will monitor EBYP's implementation of the social communication program, to improve the relations between people implementing the Project and those affected by it.

Updated PARR (Items 19, 22, 29, 30, 35, 37)

- ◆ Management will confirm that the updated PARR component of the Revised EMP, when completed, is in full compliance with OD 4.30 and the Legal Agreements, before the reservoir level is raised beyond 78 masl. Management will also urge EBYP to make the census and relevant topographical data public, and will advise EBYP on ways to improve its procedures for public review.
- ◆ Management will confirm that the updated PARR component of the Revised EMP includes specific programs to promote the better integration of resettled and host populations (discussions are underway).
- ◆ Management will confirm that the updated PARR component of the Revised EMP considers alternative sites and different resettlement strategies, and that both be subject to consultation.
- ◆ In the updated PARR component of the Revised EMP, the Bank will confirm that the required socioeconomic data has been included. The Bank will also facilitate a workshop, planned for the third or fourth quarter of 2004, to train EBYP staff and to discuss additional measures to improve the rehabilitation programs.
- ◆ Management will confirm with EBYP that the updated PARR component of the Revised EMP (which is required to be revised prior to raising the reservoir beyond 78 masl in accordance with the Legal Agreements), includes a realistic plan, budget and timetable for completion of resettlement activities.
- ◆ Management will confirm that the updated PARR component of the Revised EMP has included provisions to continue giving priority in resettlement sequencing to the most vulnerable and most impacted groups, particularly those located in areas prone to periodic flooding as well as the sick and elderly.

Monitoring (Items 20, 30)

- ◆ The Bank will continue to advise EBYP and monitor compliance with implementation of the PARR. Also, the Bank will continue to advise EBYP that cash compensation is not a satisfactory means, nor is principal occupation the sole criterion for income restoration.
- ◆ Management will continue to urge EBYP to collect the necessary baseline data, and it will monitor how the current PARR responds to the impacts caused by displacement.

Dispute resolution / grievance procedures (Items 21, 22)

- ◆ The Bank will oversee a review during the second quarter of 2004 of existing claims against EBYP in order to address issues of dissatisfaction, and propose a renewed effort (together with the IDB) to develop a credible and transparent dispute resolution process. The Bank will continue to work closely with EBYP to establish this process as soon as possible.
- ◆ Management will urge EBYP (and provide guidance as necessary) to include in the grievance procedures a means for the reception and solution of claims that could emerge from host communities during the

resettlement process.

Brick makers (Items 26, 31, 32, 33, 34)

- ◆ Management will request that EBY continue to provide small brick makers with access to clay deposits. Management also will monitor inclusion in EBY's social communication program (to comply with Plan B) of activities to ensure brick makers are aware of the location of clay deposits on EBY-owned property.
- ◆ Medium and large sized industries will continue to have access to clay deposits on the land that EBY owns until the reservoir level is raised.
- ◆ Management will request EBY and the Paraguayan authorities to meet the 2004 timetable for disbursing benefits under the Productive Fund to the informal workers already identified. Management will also request that EBY make every effort to identify former workers of brick and tile-making industries who did not previously receive compensation for loss of employment due to their informal status and utilize the Productive Fund to provide them with appropriate compensation. Finally, Management will confirm with EBY that the updated PARR component of the Revised EMP includes provisions for employment alternatives for both informal and formal workers who lose their employment due to industry closure or relocation.

Influx of people into the Project area (Item 36)

- ◆ The Bank will urge the Paraguayan authorities to explore all available legal and administrative means, such as licensing, permitting or fiscal policies, to discourage new development or influx into the land between 78 and 84 masl until such time as EBY has adequate financial resources to acquire this land.

Supervision – OD 13.05 – OP/BP 13.05

Technical quality and expertise (Items 7, 40, 44)

- ◆ The Bank will continue to monitor the system EBY has in place to supervise civil works and request that contracts continue to include required clauses. The Bank will also continue to pay careful attention in future supervision missions to construction deficiencies.
- ◆ To strengthen Bank supervision, an architect/urban planner with experience in environmental and social assessments will join the task team to supervise issues related to infrastructure and housing for resettlement sites.
- ◆ EBY has informed the Bank that it will contract independent ex-post evaluations for the resettlement sites of Arroyo Porá and Itá Paso.

Consultation (Item 42)

- ◆ In accordance with the Panel's findings, future Aide Memoires will be expanded to document the subject matter of Bank meetings with affected people, with summary findings and notes of follow-up actions needed.

Level of supervision (Item 43, 46)

- ◆ The Bank will emphasize to EBY that among the works required to complete the Project, the most urgent are those related to resettlement, and that local actors and organizations must be involved in overseeing resettlement activities. In addition, the Bank will continue to send any Project-related corruption complaints received to the Department of Institutional Integrity.
- ◆ The Bank has recently upgraded and expanded its Asunción office, and is recruiting a civil society specialist to join in April or May 2004. Among this person's duties will be local supervision of progress implementing the PARR and other Project-related requirements.
- ◆ The Bank will continue to review and comment on proposals for raising the reservoir level and monitor compliance with the pertinent provisions in the Legal Agreements. In addition, the Bank intends to continue supervising the Project through the final repayment of the Second Yacyretá Loan.

Reporting (Item 45)

- ◆ Based on the results of the Panel's investigation and related data gathering, Management will take into account all available information and prior experience in order to improve the quality of future reporting.
- ◆ In addition, Management will report to the Board annually on the implementation of the proposed Action Plan.

Legal Context

60. **Continuing Bank Supervision.** The Bank's principal means of influencing the course of the Project stems from the Legal Agreements (see Footnote 3 above), which require the Argentine Republic, EBY and the Republic of Paraguay to allow the Bank to continue supervision as long as Loan 3520-AR has not been fully repaid. Of the four loans to Argentina for the Project, all are closed. All have been repaid except for the Second Yacyretá Project (Loan No. 3520-AR). The loan to Paraguay for the Asunción Sewerage Project (the name of which was changed to Reform Project for the Water and Telecommunications Sectors, Loan No. 3842-PA), is closed but not yet repaid. This loan (see Annex 2) included only a small component, completed in 1998, of civil works in Encarnación for the benefit of the people to be resettled. The Loan Agreement in support of Loan No. 3842-PA does not contain any remaining obligation with respect to the execution of the Project.

61. Given the complexity of the Project and the fact that environmental and resettlement actions need to be undertaken as prescribed in the Legal Agreements, Management will continue to supervise the Project until Loan 3520-AR is fully repaid. This approach is consistent with BP 13.05 (Project Supervision; paragraph 21), which states that: "Bank supervision of a project normally ends with the Implementation Completion Report (ICR). However, in special cases the country director and sector manager may decide to continue supervision beyond project completion for defined periods." BP 13.05 (Footnote 28) provides examples of special cases, such as concerns about implementation of resettlement action plans.

62. During this extended period of supervision, should there be lack of compliance with any obligation under the Legal Agreements, and this continues for a period of sixty days after the Bank has so notified the Borrower, the Bank may then notify the Borrower that it will accelerate the repayment of the outstanding principal of the loan amount together with the interest and other charges. Acceleration of the maturity of the loan is the only remedy applicable to the Project under the Loan Agreement (Loan No. 3520-AR), given the fact that Loan proceeds have been fully disbursed. It should be noted that the Borrower can on its own initiative also "accelerate maturity" by repaying the loan ahead of schedule, thus terminating the Legal Agreements and all obligations thereunder (including the obligation to allow continued Bank supervision) before the currently stipulated 2009 final amortization date.

63. **Legal Context for the Proposed Action Plan.** Management's Action Plan, as reflected in Section IV and in Annex 1, contains a number of actions, some of which can be legally enforced and some of which cannot. Contingent obligations are those that must be undertaken by the Borrower, EBY and the Republic of Paraguay prior to raising the level of the reservoir. For any raising short of 78 masl, obligations include: (i) all actions in the Pending Actions Program and Base Program (Plan A and Plan B); and (ii) all other actions in the EMP and all other actions set forth in Schedule 2 to the Project Agreement Loan No. 3520-AR). In order to raise the level beyond 78 masl, the agreement of the Bank and the Republics of Paraguay and Argentina must be obtained and the following further conditions must be met: (i) a Revised EMP has been presented to the Bank

(including a financing plan for its execution); and (ii) the Revised EMP is executed in a manner satisfactory to the Bank, in accordance with the pertinent provisions of the Legal Agreements. The obligations continue to be binding on the Borrower, EBY and the Republic of Paraguay until, as mentioned above, the Loan Agreement (Loan No. 3520-AR) is terminated by means of full loan repayment.

64. Other recommended actions are not legally enforceable (in the absence of a future amendment to the Legal Agreements voluntarily agreed to by the Bank's Project counterparts), because they are not specifically linked to a particular obligation under the Legal Agreements. Among these are the dispute procedures, and various recommendations that are part of enhanced monitoring and supervision, e.g., a quality assurance protocol to evaluate civil works in resettlement sites and updating of the screening process for non-dam related civil works. In these cases, the Bank will continue to use its best efforts through the supervision process to encourage the Borrower, EBY and the Republic of Paraguay to undertake the recommended actions in a manner acceptable to the Bank.

Key Issues in the Proposed Action Plan

65. The proposed Action Plan entails a wide variety of suggested actions, but they can be loosely clustered into three themes: (i) working with EBY on the social communication program that would serve many objectives in improving the social management of the Project; (ii) working with EBY on an improved grievance procedure, to ensure fairness and reduce the social tensions surrounding the Project, particularly on the Paraguay side; and (iii) an enhanced supervision strategy for the Bank itself, to better support and monitor the completion of all key Project deliverables. These three topics are discussed below.

66. ***Social Communication Program.*** Despite improvements in EBY's provision of information on the Yacyretá Hydroelectric Project, significant communications challenges remain, such as the need for EBY to: (i) clarify the compensation schemes available to the affected community and key issues for both households and commercial properties; (ii) dispel the expectation that opportunistic behaviors will be rewarded; (iii) reduce the uncertainty among people awaiting resettlement; (iv) establish a system of two-way communications, in which people can both obtain information in an adequate format and express their concerns; and (v) provide information about the Project beyond resettlement-related topics, such as the plans for constructing the sewerage and wastewater treatment facilities, and for raising water levels in the future. The Bank has stressed the need for EBY to develop and implement a comprehensive social communication program to comply with Plan B, which takes into account the national and local context. In the development of the plan, the objectives, primary and secondary audiences, behaviors and attitudes that need to be changed, and channels and messages used to convey information to each of the target audiences should be defined. In addition, the program needs to involve the Governments of Argentina and Paraguay.

67. ***Dispute Procedures.*** In addition to improving communication, it is essential to provide fair, efficient and transparent procedures for addressing disputes. As the Panel

noted, it is not reasonable to expect those who allege grievances to have no option but to wait for the completion of judicial proceedings before resolving disputes. This view is reflected in OD 4.30, which identifies the need for procedures to assist affected people. The OD also notes that it is important, “as far as possible, to take into account existing procedures for settling disputes in the country or areas concerned.”

68. Since 1998, the Bank has drawn attention to the need for an effective dispute resolution mechanism. In response, EBY contracted Green Cross in 2000 to serve as such a mechanism. Certain design issues served as an impediment to this effort, and relatively little was accomplished. Building on that experience, however, alternatives have been discussed at length with both EBY and the IDB, and all parties have worked to improve the situation, including meetings in March 2004. The result of this effort is an agreement to, among other things, better and more efficiently categorize and process claims. As the Panel indicated, the process of addressing claims has often been *ad hoc* and poorly organized. During the March 2004 mission, a consultant’s report identified some twenty-six different categories of claims that EBY has addressed. This report proposed that EBY reduce the number of these categories to make them clearer and more manageable, through the use of a uniform data base and a set of procedures and rules applicable to each of them. EBY appears willing to move ahead along this line. The report also proposed that EBY agree to minimize the number of claims rejected on the grounds that they have no evident link to the project. When EBY decides to reject such claims, it should have a procedure in place to state its position clearly and promptly, so that the claimant can challenge the decision before a judicial tribunal, if desired, without undue delay. In this manner, the process of resolving claims should become both more standard and transparent.

69. Looking ahead, the Bank has also discussed with EBY how to address future claims so that they do not languish. If after the steps outlined in the previous paragraph are taken, claims against EBY are still slow to be resolved, then the Bank will urge EBY and the Paraguayan authorities to adopt an independent review mechanism to facilitate the process.

70. ***Enhanced Supervision and Monitoring.*** Management will strengthen supervision in several ways, including level, country presence, expertise and duration, in the following ways:

- Ensure continued formal, full supervision missions twice per year;
- Augment local supervision with the addition of, by May 2004, a civil society/social specialist to the Asunción office, who will be specially tasked with on-call supervision;
- Assign an architect/urban planner with experience in environmental and social assessment to the task team to strengthen supervision of issues related to infrastructure and housing in resettlement sites;

- Expand documentation in Aide Memoires to include the specific subjects discussed in meetings with affected people, summary findings and follow-up actions;
- Build upon the October 2003 and the March 2004 supervision missions to agree with EBY on a monitorable plan for the Project;
- Maintain Bank budget for Project supervision at levels significantly higher than the normal budget coefficient for projects in the region; and
- Supervise the Project through the life of the loan for the Argentina Second Yacyretá Hydroelectric Project (Loan No. 3520-AR).

71. Many components of the recommended Management Action Plan (Table 3) entail enhanced supervision and more intensive monitoring of specific issues, in particular related to resettlement. For resettlement sites and related infrastructure, these include a quality assurance protocol to evaluate the conditions of existing civil works, a review of contractor procedures and practices, confirmation of the adequacy of improvements made especially as they affect host populations, and ex-post evaluations of the Arroyo Porá and Itá Paso resettlement sites. To improve the implementation of the current PARR, the task team will facilitate a workshop to train EBY staff and discuss measures to improve rehabilitation programs, in the third or fourth quarter of 2004. An important activity to guide future resettlement is the updating of the PARR. This encompasses several actions, such as the census of affected people, attention to accuracy of topographical data, better integration of resettled and host populations, consideration of different resettlement strategies and options, and improved socioeconomic data to determine appropriate ways of restoring income earning capacity.

72. Additional components of the Management Action Plan concern environmental management. Management will continue to monitor compliance with the PMMA with a view toward improving EBY's capacity to maintain adequate environmental management practices over the long term and to substantiate compliance with the Legal Agreements. Management will urge that there be independent verification of the reservoir level (76 masl as measured at Encarnación and Posadas) and will confirm that the reservoir is operated at 76 masl in accordance with the Legal Agreements. Yearly validation of the height-flowrate curves will also be requested. Several actions concern the wastewater treatment plant and sewer system. EBY will be requested to make drawings of the sewerage system and non-related dam civil works available to the community and clarify the area of coverage of the sewer system (see Map 2). Management will confirm that the sewerage system, including house connections, has been completed prior to the raising of the reservoir level, in accordance with the Legal Agreements. The Bank will work with IDB, who has informed the Bank that it will take the lead in financing and supervising the sewerage system.

Prospects for Raising the Reservoir Level

73. Since November 2003, the Governments of Argentina and Paraguay have been drafting a plan to complete the Project that will comply fully with the provisions set forth in the Legal Agreements. As a first step in developing this Project completion plan, the Governments are: (i) defining the program's priority (critical path) activities, such as those related to the implementation of the Project's PMMA and PARR; (ii) developing a financing plan for the program; and (iii) ensuring that this program is coordinated with local urban development plans and that local actors and organizations help oversee resettlement and rehabilitation activities under the program.

74. The Government of Argentina's interest in completing the Project stems from the need to ensure a low-cost supply of electricity. The Government of Paraguay is also interested in Project completion since the compensation it receives has an important impact on its public finances. In addition, Project completion is a priority for both Governments since it will ensure that the population residing in the flood plain will be resettled to areas not prone to flooding.

75. In April 2004, the two Governments expect to discuss the draft plan to complete the Project. The IDB is organizing the next High Level Meeting for Yacyretá during the third quarter of 2004. Based on the outcome of these meetings, it is expected that by August 2004 the Presidents of Argentina and Paraguay will sign a letter of intent to adopt the plan. This letter will be used as a basis to formalize an agreement between the two governments to amend the Bi-National Treaty. Under the best case scenario, both national congresses will approve the amendment during the first semester of 2005.

76. The Governments' drafting of this plan represents a positive commitment that provides greater clarity to Project completion. However, in order to both approve and implement the plan, the Governments will have to overcome significant obstacles. These include: (i) the risk that the Congresses of Paraguay and Argentina delay or do not approve an amendment to the Bi-National Treaty; (ii) the risk that the Governments do not reach a consensus on a plan and its implementation; (iii) the need to secure Project financing; (iv) adequate strengthening of the institutional capacity within local governmental agencies to implement the proposed programs; and, above all, (v) the need to build local stakeholders' confidence in EBY. Therefore, before any decision is made to complete the Project and raise the reservoir level, a broad consultation process must be initiated with the municipalities in the areas of influence, the provincial governments, and civil society on both sides of the river to help ensure that a consensus is reached regarding the Project completion plan.

77. Based on Management's experience, the best case scenario for raising the level of the reservoir, to achieve the full design height of 83 masl, is three or more years. The actions that must be completed prior to raising the level of the reservoir beyond 76 masl involve both countries and include:

- Installation of infrastructure and construction of housing for urban populations in Argentina and Paraguay who must be resettled from above 78 masl to 1-2 meters beyond the target higher water level (i.e., up to 84 masl);
- Provision of property titles to all resettled beneficiaries;
- Indemnification of properties affected by coastal treatment works in Posadas and Encarnación;
- Implementation of community programs to assist during the pre-transfer, transition and arrival phases of relocation to both urban and rural resettlement sites;
- Replacement of affected roads, highways, bridges, railroad lines and other civil works affected in Argentina and Paraguay;
- Sewage collection and treatment systems completed in Encarnación, including construction of: (i) primary sewage collectors and interceptors; and (ii) sewage treatment plants or other adequate facilities;
- Signature of legal accords transmitting responsibility for new settlements and all works, structures and services provided by the EBY to the cognizant governmental entities; and
- Support to the administration of additional compensatory protected areas to achieve a Yacyretá protected areas system totaling no less than 64,000 hectares.

Many significant steps remain, therefore, before the Bank can give a no objection to further raising of the water level.

V. CONCLUSION

78. Management acknowledges the Panel's recommendations, finds them constructive, and believes that the proposed Action Plan responds to the issues raised in the Panel's Report. Management is committed to applying its policies and procedures in full and will make every effort to pursue its mission statement in the context of the Project.

Annex 1
FINDINGS, COMMENTS AND ACTIONS

No.	Panel Findings and Observations	OD or OP/ BP	Para	Comments and Actions
Environment				
1.	<p>Environmental screening <i>The Panel finds that the environmental screening process for phase two of the Yacyretá Project and for the Asunción Sewerage Project was appropriate.</i></p>	4.01	110	<p>Comment: Management acknowledges the finding of compliance by the Panel.</p> <p>Action: No action required.</p>
2.	<p>Preparation of environmental assessments – Second Yacyretá <i>Management met requirements of OD 4.01 at time of bringing the Second Yacyretá Hydroelectric Project to Board approval in 1992.</i></p>	4.01	113	<p>Comment: Management acknowledges the finding of compliance by the Panel.</p> <p>Action: No action required.</p>
3.	<p>Preparation of environmental assessments – resettlement sites <i>The Panel has reviewed the environmental assessments and finds that they are very inadequate. They do not comply with the requirements of OD 4.01. The range of environmental matters addressed is limited; affected parties were not consulted; and no mitigation measures are suggested. As discussed later, no alternative resettlement sites were considered.</i></p> <p><i>The Panel notes that if the Bank did not require environmental assessments for the provision of infrastructure in Encarnación, as it appeared to the Panel throughout its research, Management did not comply with OD 4.01. If the assessments, which were prepared by EBY consultants are intended to constitute the required assessments, as Management now contends, they are highly inadequate. Thus, the Panel finds that Management is not in compliance with OD 4.01 with respect to the Encarnación portion of [Reform Project for the Water and Telecommunications Sectors and SEGBA V].</i></p>	4.01	116, 117, 128	<p>Comment: The documents on resettlement sites, referenced in the Panel's comment and sent to the Panel in November 2003 in response to their Request for evidence of EAs, were prepared in accordance with Paraguayan regulations. Management acknowledges that these resettlement site documents cannot be considered EAs as the term EA is defined by OD 4.01.</p> <p>Prior to 1995, a formal screening procedure for environmental impacts of the resettlement sites was not followed. EBY's judgment at the time, with which the Bank concurred, was that resettlement-related environmental impacts were not considered significant and, therefore, were not assessed. Nevertheless, Management acknowledges that prior to 1995, more could have been done in the care and documentation of the screening process followed.</p> <p>In 1995, EBY improved its screening procedures for non-dam related civil works, and these procedures were applied to the development of resettlement sites at Arroyo Porá and Carmen de Paraná. They were also formally incorporated in the revised environmental component (PMMA) of the Project. The Bank provided its no-objection to the updated PMMA in June 2001.</p> <p>EBY's standards of due diligence on non-dam civil works have improved throughout the 1990s. For example, for those works where screening procedures did not lead to an EA, construction standards and manuals have been used. Management has ensured that EBY put in place the following engineering and construction procedures: (i) civil works contracts with clauses (containing insurance provisions) to ensure quality of works before they are accepted by EBY; (ii) supervision engineers control quality and enforce standards; and (iii) requirements for contractors to fix any deficiencies up to one year after construction ends.</p> <p>Action: Management will request that EBY update the screening process for non-dam related civil works, and that it include a quality assurance protocol to evaluate the environmental conditions and the quality of the civil works in the resettlement sites. The Bank will continue to monitor engineering supervision and contractor insurance practices and will request improvements,</p>

No.	Panel Findings and Observations	OD or OP/ BP	Para	Comments and Actions
				as necessary.
4.	<p>Consideration of alternatives in Second Yacyretá Hydroelectric Project <i>With respect to the consideration of alternatives under the Second Yacyretá Hydroelectric Project the environmental assessment is in compliance with OD 4.01.</i></p>	4.01	126	<p>Comment: Management acknowledges the finding of compliance by the Panel.</p> <p>Action: No action required.</p>
5.	<p>Consideration of the biophysical environment – current <i>Consistent with OD 4.01, EA discusses a number of biophysical parameters. Biophysical environment affected by Yacyretá dam and reservoir is being managed competently and initial environmental problems that arose when the reservoir was first filled have been satisfactorily resolved.</i></p>	4.01	132	<p>Comment: Management acknowledges the finding of compliance by the Panel.</p> <p>Action: No action required.</p>
6.	<p>Consideration of the biophysical environment – future <i>The Panel finds that future environmental management of Yacyretá Project is critically threatened by the Project's financial position and that both the natural environment and project affected people will suffer additional harm if Project's environmental management practices deteriorate.</i></p>	4.01	135	<p>Comment: Management shares this concern, but also notes recent evidence suggesting that financial sustainability of effective environmental management may be more robust than previously apparent. For example, in 2003, despite the fact that EBY's annual revenue fell a third below 2002 revenues due to the decline in energy prices in Argentina, EBY was nevertheless able to finance the required environment-related recurrent costs adequately. The reservoir's environmental management is competent, as the Panel's report acknowledges.</p> <p>Also, the cost associated with future implementation of the PMAA is not expected to be an issue. It is likely that as part of the broader reforms taking place in the energy sector in Argentina, the price for power paid by the Government of Argentina to EBY will rise from its current low level to one closer to the price paid pre-crisis. If so, the recurring cost of the PMMA will fall from the current 4 percent of annual revenues to approximately 1 percent.</p> <p>Action: Through its supervision, the Bank will continue to monitor closely compliance with the Legal Agreements (Section 2.23 of the Project Agreement), including the environmental and social mitigation measures, and will ensure that EBY is apprised of its findings, with a view to improving EBY's capacity to maintain adequate environmental management practices for the Project over the long term.</p>
7.	<p>Consideration of urban and peri-urban environments. <i>The Panel finds that the EA for the Second Yacyretá Project was inadequate in several respects in its consideration of urban and peri-urban environments. The EA did not adequately consider the effects of population growth on Encarnación, or the effects of the resettlement developments on the city's infrastructure and on urban</i></p>	4.01, 4.30	142, 144, 147	<p>Comment: Management acknowledges that the EA did not assess induced effects and the effects of resettlement sites on the overall urban system. It is also important to note that the resettlement process has had several significant positive impacts. People were moved out of high-risk flood-prone areas into areas constructed with new, more hygienic infrastructure. The new infrastructure, community centers, clinics, sports facilities and the like (see Item 22), benefited the host population as well as those resettled. Any potential additional impacts that might be negative were expected to be negligible. All of these considerations were taken into account by Bank staff at the time, along with the emerging understanding of OD 4.01, which had just recently been</p>

No.	Panel Findings and Observations	OD or OP/ BP	Para	Comments and Actions
	<p><i>creeks. The Panel finds that the safeguards to assess the implications for water supply, sewers, and urban drainage, which ought to have been in place via OD 4.01, were by-passed. Thus, Management is not in compliance with the requirements of OD 4.01.</i></p> <p><i>More generally, the Panel finds that Management's failure to assess the impact of the resettlement sites on the overall urban system is not in compliance with OD 4.30 as well as OD 4.01. The Panel notes, however, that in the context of the PDA, Management has advised EBY to co-ordinate resettlement in urban development plans.</i></p> <p><i>OD 4.01 calls for an EA to consider the environmental effects of "induced development." This includes effects on villages above the level of flooding associated with movements of population, including effects on their economies and livelihoods of their people. The Panel finds that environmental and social assessments should have anticipated the induced effects associated with the Yacyretá Project.</i></p>			<p>introduced (in 1991), and of how it should be applied in resettlement situations.</p> <p>With respect to population growth, the design of the Encarnación sewerage system and wastewater treatment plant (see Map 2) was based on a 25-year population forecast that took all urban growth factors into account, including the significant induced impacts of the international bridge from Posadas.</p> <p>In 1999, as part of the updating of the PMMA component of the EMP, EBY designed a Master Plan for Urban Environmental Management for Encarnación. This Master Plan was developed under Bank supervision and involved extensive public consultation. It includes programs to deal with water quality, urban watershed management, management of areas to be flooded, health and mosquito control in lateral bays, the impact of resettlement sites on host populations, and alternatives for transport issues in new resettlement sites like Arroyo Porá. The updated PMMA (which includes the Master Plan), has guided urban improvements in Encarnación since then.</p> <p>Action: The Bank will continue to supervise compliance with the implementation of the PMMA component of the EMP, in accordance with the provisions of the Legal Agreements. To supervise ongoing civil works in Encarnación, an architect/urban planner will be added to the Bank's supervision team.</p>
8.	<p>Roads and road networks</p> <p><i>The Panel finds that there are many examples of inappropriate road and drainage design in the proposed resettlement areas which could have been avoided through proper environmental assessments and stronger Bank supervision.</i></p>	4.01	148-152	<p>Comment: Management acknowledges these issues noted by the Panel. It also believes that design and quality issues in the resettlement sites are related less to environmental assessment than to construction supervision and maintenance. Design standards for streets and drainage are based on technically sound national practices, which include cobblestone street designs (i.e., streets with cobblestones placed in sand beds) and surface storm water drainage based on lateral drains and box culverts. The screening process described in the comment for Item 3 was used to assess the potential impacts of roads and drainage, including in Arroyo Porá and Carmen de Paraná.</p> <p>In order to better address quality issues arising from infrastructure design, construction, and/or maintenance, Bank supervision was strengthened and quality problems have been rectified and/or brought to EBY's attention for resolution.</p> <p>Action: As described for Item 3 above, particularly with regard to the quality assurance protocol.</p>
9.	<p>Water supply, sewerage and sanitation, urban drainage</p> <p><i>[T]he Panel finds that there was</i></p>	4.01	156, 157	<p>Comment: Management acknowledges these points. As with Item 8, the design standards for water supply, sanitation, and urban drainage are based on technically sound national and international</p>

No.	Panel Findings and Observations	OD or OP/ BP	Para	Comments and Actions
	<p><i>no evaluation of the consequences of the provision of reticulated water and sewerage facilities to resettlement sites in Encarnación, nor was there provision for either drainage to accommodate the discharge or adequate storm water drainage.</i></p> <p><i>The Panel finds that the safeguards to assess the implications for water supply, sewers, and urban drainage, which ought to have been in place via OD 4.01, were by-passed. Management is not in compliance with the requirement of OD 4.01.</i></p>			<p>practice. After 1995, the screening process described in the comment for Item 3 was used. Under Bank supervision, EBY developed and implemented improved design and construction standards, as well as environmental specifications, to handle the identified impacts. To design the wastewater treatment plant, a consulting engineering firm applied international practice, and a full EA and analysis of alternatives were carried out. In addition, the Bank contracted a separate international consultant to review the designs and the adequacy of the wastewater treatment site.</p> <p>Action: As described for Item 3, particularly with regard to the quality assurance protocol.</p>
10.	<p>Urban creeks flooding <i>Although it is clear that the urban creeks of Encarnación are flooding and causing severe hardship, the Panel finds that the Requesters contention that this flooding is a consequence of the Yacyretá reservoir itself cannot be sustained.</i></p> <p><i>The urban creek flood conditions are mainly due to local conditions, such as upstream urbanization, lack of urban storm water drainage, and waste accumulation impeding water flow in the creeks, in that order. The contribution of specific resettlement areas to flood peak downstream is estimated as low. But the sum of all urbanization done upstream during the last years has increased the frequency and the peak level of the floods.</i></p>	4.01	166, 182-190	<p>Comment: Management acknowledges the finding of the Panel.</p> <p>Action: No action required.</p>
11.	<p><i>The Panel finds that the construction of the Yacyretá dam has a negligible effect on the water level of the Paraná river at Encarnación, especially in times of flood.</i></p> <p><i>The Panel also finds that the Yacyretá reservoir is frequently operated under conditions that produce a water level in excess of 76 masl at Encarnación and that this is not consistent with both the loan agreement and the Third Owners Agreement, as amended.</i></p> <p><i>The Panel found that Management has accepted an error in the calculation of water</i></p>	4.01	167-181	<p>Comment: Management acknowledges these points. During supervision, the Bank monitored information regarding operation of the reservoir. The Bank also contracted a consultant in 2002 to assess the reservoir's operational levels. While water levels in excess of 76 masl are to be expected regardless of dam operations when river flows are high (i.e., above 13,000 m³/s), new information provided to the Panel, and analysis undertaken by a consultant contracted by the Bank in 2004, demonstrate that mean water levels have frequently been somewhat higher than 76 masl at Encarnación during the last three years, even during flow periods below 13,000 m³/s. Management agrees, therefore, that the power plant has not always been operated in compliance with the water elevation levels set forth in the Legal Agreements, particularly after 2001.</p> <p>Management also concurs with the Panel's observation that management of the water level "has not yet had any serious direct consequences for the Project." The resettlement activities that were completed in 2000 include the provision for water fluctuation</p>

No.	Panel Findings and Observations	OD or OP/ BP	Para	Comments and Actions
	<p>level at Encarnación. From its analysis the Panel finds that the contention of affected persons that the Yacyretá reservoir is frequently operated under conditions that produce a water level in excess of 76 masl at Encarnación is correct. The excess, however, is limited to one meter or less.</p>			<p>up to 78 masl.</p> <p>Action: Management will urge the Governments of Argentina and Paraguay and EBY to establish a means for independent verification of the reservoir level. During supervision, Bank staff will monitor this and confirm that the reservoir is operated at 76 masl, in accordance with the Legal Agreements. Management will also request EBY to validate the height-flowrate curves every year.</p>
12.	<p>Water quality <i>The Panel confirms the Requesters contention that flooding of the urban creeks makes the drinking water wells on the flood plain unsuitable for use. However, the Panel finds that the alleged causal relationship between the level of the Yacyretá reservoir and pollution of wells and flooding of latrines is not correct.</i></p> <p><i>With respect to the claim that the Yacyretá reservoir has caused environmental pollution, the Panel finds that Bank Management has ensured that proper monitoring of water quality has been conducted in the reservoir. Water quality monitoring has been an ongoing activity since before the filling of the Yacyretá reservoir. The Panel verified the existence of the water quality monitoring data and the reasonableness of Management's claim that "the reservoir's water quality is constantly monitored, [and] falls within satisfactory parameters."</i></p>	4.01	194, 196	<p>Comment: Management acknowledges the finding of the Panel.</p> <p>Action: No action required.</p>
13.	<p>Health problems <i>The Panel confirmed that the Ministry of Health and Social Welfare of Paraguay adequately monitors the incidence of both disease and disease vectors. The bimonthly reports provided by this Ministry indicate no per capita increase in the diseases that have been monitored since filling of the reservoir. The Panel verified the existence of the monitoring program, reviewed its findings, and found no evidence contradicting the findings.</i></p> <p><i>The Panel notes that the Yacyretá reservoir is not the cause of the polluted water used by the complainants for washing clothes</i></p>	4.01	202-205	<p>Comment: Management acknowledges the finding of the Panel.</p> <p>Action: No action required.</p>

No.	Panel Findings and Observations	OD or OP/ BP	Para	Comments and Actions
	<p><i>and that there are potentially many different reasons why [...] skin irritations might occur.</i></p> <p><i>The Panel notes that the Yacyretá reservoir is not the cause of the polluted water used by the complainants for washing clothes and that there are potentially many different reasons why such skin irritations might occur.</i></p> <p><i>The Ministry of Health and Social Welfare of Paraguay has a long-term ongoing study that shows no increase in abundance or species composition of disease vectors.</i></p> <p><i>The Panel verified the existence and findings of this study and found no evidence to the contrary.</i></p>			
14.	<p>Wastewater treatment plant – EA for plant location and plant design</p> <p><i>The Panel finds that the site selected for the sewage treatment plant is not inappropriate for the purpose and that the associated environmental assessment is not defective either procedurally or substantively.</i></p> <p><i>The Panel finds that the design and environmental assessment of the sewage and wastewater treatment plant is in compliance with OD 4.01.</i></p>	4.01	211, 216	<p>Comment: Management acknowledges the finding of compliance by the Panel.</p> <p>Action: No action required.</p>
15.	<p>Wastewater treatment plant – sewerage system</p> <p><i>The Panel notes its great concern [...] that although the sewerage system has been designed to cover the city of Encarnación, the works described in current bidding documents seem to cover only the southern part of the city (zona sur).</i></p> <p><i>[...] The Panel finds that it is planned that the resettlement areas in question will be linked to the reticulated sewerage system.</i></p> <p><i>The Panel notes, however, that confusion may have arisen over the coverage of the wastewater treatment because the detailed drawings of the planned sewerage reticulation system for Encarnación were not publicly available in the EBY information office.</i></p>	4.01	215, 216	<p>Comment: Management wishes to note that the designs for the reticulated sewerage system include both the southern and northern zones (see Map 2). Priority has been given to preparing bidding documents for the more densely populated southern zone. Both the northern and southern zones, i.e., the sewerage system and treatment plant, must be completed before raising the reservoir level to 78 masl (see part C.4 (a) of Schedule 2 to the Project Agreement). All dwellings in resettlement sites have sewerage connections and those neighborhoods will be connected to the sewerage network.</p> <p>Management agrees that improved communication by EBY with the public regarding what areas were covered would have been appropriate.</p> <p>Action: Management will request EBY to make all relevant drawings of sewerage systems, pumping stations, and the wastewater treatment plant, as well as any other non-dam-related civil works, available to the community. In addition, the Bank will monitor inclusion of activities to clarify the areas being covered and the proposed time frame for the coverage in EBY's social communication program.</p>
16.	<p>Wastewater treatment plant –</p>	4.01	218	<p>Comment: The IDB has agreed to consider the financing of</p>

No.	Panel Findings and Observations	OD or OP/ BP	Para	Comments and Actions
	<p>sewerage connections to houses. <i>[T]he Panel finds that responsibility for the cost of connection to the sewer system may become a significant source of conflict in the not too distant future. If the matter is not resolved in a way that will enable the vast majority of households to be connected to the sewer lines, the entire exercise of providing a sewer network will be largely negated. The Panel finds that this issue needs the urgent attention of Bank Management and that an effective means for financing the connection of houses to the sewer network is required, especially for poor communities.</i></p>			<p>household connections, building on its financing of all other major components of sewerage infrastructure, including the wastewater treatment plant, collectors, pumping stations and interceptors. Construction of secondary and tertiary networks, house connections and operation and maintenance are under the responsibility of the respective municipality and ESSAP (formerly CORPOSANA, Paraguay's state-owned water and sewerage company).</p> <p>Action: Management will confirm that the sewerage system has been completed prior to the raising of the reservoir level to 78 masl, in accordance with the pertinent provisions of the Legal Agreements, and will urge EBY and the Paraguayan authorities to pursue IDB or other financing for the household connections.</p>
17.	<p>Wastewater treatment plant – transfer and supervision. <i>The Panel finds that Management must give urgent attention to the practicalities of transferring operation and maintenance of the sewage treatment system away from EBY and to ensuring that the new operators are provided with adequate staff, budget and training to be able to run the sewage system efficiently and effectively. This is especially urgent, because the sewage system includes a bypass at each pumping station that will dump raw sewage into neighboring urban creeks in cases of pump malfunction or overflow.</i></p>	4.01	221	<p>Comment: Management shares the Panel's concerns regarding the need for an efficient operator for the sewerage system.</p> <p>The municipality and ESSAP are the parties responsible for operation and maintenance of the sewerage system in Encarnación. EBY is financing and constructing the sewerage system at the request of the Government of Paraguay, but does not currently operate or maintain the sewerage system and is not responsible for its transfer.</p> <p>Action: It is expected that actions pertinent to this issue will be undertaken by IDB prior to the raising of the reservoir level to 78 masl.</p>
Social				
18.	<p>Identification of affected people <i>The Panel finds persuasive evidence that a number of people who were present at the time of the 1990 census were erroneously omitted and that they fear they will be ineligible for the Project's compensation and resettlement benefits.</i></p> <p><i>[T]he Panel finds that there would be much to gain from clarifying the procedure that is to be used and developing a standard application form that would allow claimants to provide documents or testimonial evidence and to request a correction to information</i></p>	4.30	236, 239	<p>Comment: EBY has confirmed that anyone included in the 1980, 1990 and/or 2000 census but who has not yet been resettled, is still an eligible beneficiary of the Resettlement and Rehabilitation Plan (see Figure 2 in the main text).</p> <p>The 1990 census recorded 4,888 families remaining to be resettled in Paraguay. Since then, EBY has received 133 claims from families who stated they had been omitted from the census. EBY accepted all 133 families as beneficiaries of the PARR. Likewise, the 1,023 families who were included in the 1980 and/or 1990 census, but were not residing in the Project affected area at the time of the 2000 census, will also be included as beneficiaries of the PARR.</p> <p>It is foreseen that claims for inclusion in the 2000 census could appear in the future. For this reason, Management acknowledges that there is much to be gained from improved communication and publication of the criteria and procedures to be followed by</p>

No.	Panel Findings and Observations	OD or OP/ BP	Para	Comments and Actions
	<i>contained in census documents.</i>			<p>claimants with regard to the census.</p> <p>Action: The Bank will monitor EBY's provision and dissemination of information on the criteria and procedures to be used in order to confirm beneficiary status, as part of its implementation of the social communication program to comply with Plan B.,</p>
19.	<p>Updated census and surveys <i>The Panel finds that before the water level is raised further, the Bank must confirm that existing census and survey data will be updated and verified in a manner consistent with OD 4.30. The survey needs to pay special attention to the accuracy of existing geographical and topographic boundaries of the affected areas to allow proper identification of the affected people.</i></p>	4.30	242	<p>Comment: Management shares the Panel's concern. Since August 1997 and during various supervision missions, Management has requested that EBY gather more information concerning the socioeconomic conditions of affected people, and that it use GIS for the census.</p> <p>According to the Legal Agreements, prior to raising the reservoir beyond 78 masl, the EMP must be revised. As such, the PARR, including the census and survey data, will need to be updated. This will be done when EBY secures adequate financing to continue with the Project. Given that all the families living between 76 and 78 masl were resettled by 2000, a census for raising the water from 76 to 78 masl is not required, but is desirable to create an adequate buffer zone as the water approaches 78 masl.</p> <p>Action: Management will confirm that the updated PARR component of the Revised EMP, when completed, is in full compliance with the requirements of OD 4.30 and the Legal Agreements, before the reservoir level is raised beyond 78 masl. Management will also urge EBY to make the census and relevant topographical data public, and will advise EBY on ways to improve its procedures for public review.</p>
20.	<p>Criteria for inclusion in specific classes of affected people <i>The Panel finds that the restoration of income-earning capacity under OD 4.30 may not be achieved when compensation for income losses is based solely on the "principal occupation" of the affected persons, because a person could have several occupations that contribute substantially to their overall personal income. The Panel is aware, however, of the practical problems of restoring income for more than one principal occupation.</i></p>	4.30	245-246	<p>Comment: The PARR contemplates integrated socioeconomic rehabilitation programs that are oriented toward restoring resettled people's income-earning capacity, rather than compensating income losses based on "principal occupation."</p> <p>Management acknowledges, however, that the specific case of compensation granted to fishermen was based on the concept of "principal occupation." In 1999, five years after filling the reservoir to 76 masl, EBY received 1,618 claims from fishermen for loss of income and awarded compensation to 259 of these claims. EBY based its decision regarding the eligibility of the claim on whether fishing was the "principal occupation" of the claimant.</p> <p>At the time, the Bank advised against the payment of this and other cash compensations for loss of income and had requested EBY to define clearly the eligibility criteria and procedures for assessing claims. Likewise, the Bank recommended that EBY identify alternatives to cash compensation since it does not ensure long-term restoration of income and may also motivate the presentation of new claims.</p> <p>In the case of brick makers, in 1993, EBY conducted a specific survey of all brick and roof-tile making operations that were located within the Project affected area. As for all the resettled population, the 1992 PAAR contemplated full resettlement and socioeconomic rehabilitation for the brick makers identified in the survey. Some brick makers rejected the resettlement and rehabilitation package and chose to receive cash compensation. In accordance with OD 4.30, the cash compensation was calculated on the basis of the replacement cost of lost assets and access to resources. Thus, for brick makers, the eligibility was determined on the basis of the presence of the productive unit within the</p>

No.	Panel Findings and Observations	OD or OP/ BP	Para	Comments and Actions
				<p>Project affected area and not on the occupation listed in the census. Those whose productive assets were impacted by the Project were compensated regardless of what occupation was listed in the census.</p> <p>Action: During supervision, the Bank will continue to advise EBY and monitor compliance with implementation of the PARR component of the Revised EMP, in accordance with the pertinent provisions of the Legal Agreements (section 3.08 (a) of the Loan Agreement and section 2.12 (a) of the Project Agreement). Also, the Bank will continue to advise EBY that cash compensation is not a satisfactory means, nor is principal occupation the sole criterion for income restoration.</p>
<p>21.</p>	<p>Grievance procedures – census and other resettlement related claims <i>The Panel [...] finds that the procedures for correcting the census and other resettlement related omissions and errors are inadequate and notes that a standard and transparent appeals procedure is not available to affected people. This does not comply with OD 4.30.</i></p>	<p>4.30</p>	<p>248-249</p>	<p>Comment: Management acknowledges that the grievance procedures were not designed to take into account long delays in Project implementation.</p> <p>EBY has procedures in place to receive and respond to resettlement-related claims, but they can be improved. Such claims can be filed at any of EBY’s field offices, located in affected neighborhoods and resettlement sites. The social team assigned to each field office addresses the grievances brought to its office directly, and when necessary, the local office forwards the grievance to the appropriate department within EBY (e.g., Department of Complementary Works, Legal Department). The relevant department then evaluates the concern and determines the appropriate action. EBY has improved its practice of providing the claimant with a written response concerning the decision made. Another important group of claims, which began to arise in 1998, are those requesting cash compensation for economic losses. These initial compensation awards led to a significant increase in the number of claims filed by different groups and individuals. When the new cases were denied, this generated a high degree of dissatisfaction.</p> <p>Since 1998, in supervision missions and High Level Meetings with the Governments, EBY and the IDB, the Bank has recommended that EBY develop an independent process for resolution of disputes. To date, however, EBY’s efforts to create such a process have not been successful.</p> <p>As one of the efforts to improve the situation, in 2001, the Paraguayan Congress created a “Productive Fund,” with USD 6 million, to support productive projects proposed by claimants. Both EBY and the Government of Paraguay are involved in determining eligibility, and the Bank has advised on transparent and standard procedures for selecting the Productive Fund beneficiaries. After two years of relative inaction, the selection process of several thousand beneficiaries (including 132 informal brick workers) is nearing completion. The draft list of beneficiaries is scheduled to be finalized by both EBY and the Government of Paraguay by April 2004, and the flow of funds for local productive activities is expected later this year. The Bank’s March 2004 supervision mission found that claimant dissatisfaction in the Project area has lessened as a result of progress in Productive Fund implementation.</p> <p>Action: The Bank will oversee a review during the second quarter of 2004 of existing claims against EBY in order to address issues of dissatisfaction, and propose a renewed effort (together with the</p>

No.	Panel Findings and Observations	OD or OP/ BP	Para	Comments and Actions
				IDB) to develop a credible and transparent dispute resolution process. The Bank will continue to work closely with EBY to establish this process as soon as possible.
22.	<p>Host populations at resettlement sites: other categories of affected people <i>Host populations near resettlement sites are adversely affected by design and construction of resettlement sites or by added burden on local infrastructure due to resettled population.</i></p>	4.30	256	<p>Comment: In accordance with the PARR, each resettlement site is equipped with its own schools, kindergartens, churches, police offices, health posts, community centers, and sports facilities. This has been confirmed for all resettlement sites constructed in Paraguay, both urban and rural. Furthermore, it was an objective of the PARR that host populations also benefit from such new facilities, and they have been able to do so. Another important benefit in the cases of Arroyo Porá and Itá Paso has been provision of subsidized public transport.</p> <p>Management acknowledges that a drainage problem occurred in Barrio Tacuary during construction in Arroyo Porá. Upon the Bank's recommendation in February 2003, EBY remedied the problem by the end of that month. On the basis of new recommendations made during the October 2003 mission, EBY has undertaken additional actions to improve the drainage system in Arroyo Porá. During the March 2004 mission, the Bank confirmed that this was done.</p> <p>With regard to the issue of school crowding in San Cosme y Damián (population approximately 7,000), during construction of the dam, EBY built a new school to accommodate the children of the worker population. That school is now being used by the district. EBY expanded an existing school when 85 families were resettled at San Cosme y Damián and provided financial support for it through 2000. At present, EBY is helping to fund the construction of a third school.</p> <p>Action: Management will confirm that the updated PARR component of the Revised EMP include specific programs to promote the better integration of resettled and host populations (discussions are underway). Management will urge EBY (and provide guidance as necessary) to include in the grievance procedures a means for the reception and solution of claims that could emerge from host communities during the resettlement process.</p>
23.	<p>Host populations at resettlement sites: information and consultation requirements <i>Inadequate effort on the part of Bank to ensure that host population was informed and consulted with in planning and carrying out construction in resettlement sites, as required by OD 4.30.</i></p>	4.30	257	<p>Comment: During preparation of the PARR, all stakeholders were widely consulted. However, during implementation of the PARR, there were some cases of inadequate consultation, particularly in communities located near the Arroyo Porá resettlement site.</p> <p>Action: The Bank will monitor inclusion in EBY's social communication program of specific programs of information and consultation with host populations for planning and carrying out construction in resettlement sites.</p>
24.	<p>Compensation: procedures for valuation of homes and properties <i>Use of provisional appraisals is not inconsistent with OD 4.30. Inadequate information to affected people has resulted in confusion about the appraisals.</i></p> <p><i>OD 4.30 calls for the Bank to</i></p>	4.30	268	<p>Comment: Management acknowledges the Panel's finding concerning the use of provisional appraisals and shares the Panel's concerns regarding the provision of adequate information to affected people.</p> <p>Action: The Bank will monitor inclusion in EBY's social communication program of provisions for strengthening the dissemination of information to affected people on the procedures that EBY employs for property appraisals. Moreover, during supervision, the Bank will assess the adequacy of valuation</p>

No.	Panel Findings and Observations	OD or OP/ BP	Para	Comments and Actions
	<i>monitor the actual appraisal values that will be paid when these properties are involuntarily expropriated if the water level is raised.</i>			procedures for the properties that will be expropriated prior to raising the water level further.
25.	Compensation: usufruct or customary rights to land <i>1992 Resettlement Plan provides for compensation to all displaced persons regardless of whether they have title. This complies with OD 4.30.</i>	4.30	269	Comment: Management acknowledges the finding of compliance by the Panel. Action: No action required.
26.	Compensation: loss of access to other resources <i>The Bank is in compliance with OD 4.30 to the extent that the resettlement plan provides for compensation for loss of access to natural resources. However, implementing procedures may have resulted in denying compensation to some affected people.</i>	4.30	270	Comment: Management acknowledges the finding of compliance by the Panel. Action: See Items 30-31 below.
27.	Compensation prior to displacement <i>The Panel regards Management assistance to EBY to develop Plan A as remedy for violating OD 4.30, since not all persons flooded out of their property in 1994 had been compensated beforehand.</i> <i>The grievance procedures in effect during and since the time when the reservoir was raised to the 76 masl level were not in compliance with OD 4.30's requirement for fair compensation.</i> <i>Provision of new expropriation law giving affected people access to funds during judicial appeal is consistent with OD 4.30.</i> <i>However, this provision, because it refers to judicial proceedings, does not provide an accessible, simple and effective grievance procedure available to affected people to settle disputes about these matters.</i>	4.30	271-274	Comment: All affected people were compensated in accordance with the PARR before the reservoir was raised to 76 masl in 1994. In Paraguay, by the time the reservoir was filled, EBY had resettled and compensated all 446 families affected at 76 masl and below, as well as 218 families residing above 76 masl. Plan A (see Footnote 4 in the main text) included activities that did not need to be completed prior to displacement, such as completion of legal titles, some infrastructure works that were already underway in some resettlements or that had been delayed, and socioeconomic rehabilitation programs. The most important of these for individual claimants—land titling—is being addressed by EBY and the Government of Paraguay. EBY has grievance procedures in place. However, in spite of past technical assistance efforts to strengthen these procedures and the Productive Fund (see Item 21), Management acknowledges that dissatisfaction on the part of some claimants on the Paraguay side still exists. Regarding the new expropriation law (Law no. 1681 as amended), Management acknowledges the Panel's finding of compliance with OD 4.30 and notes that judicial proceedings are not the only mechanism to resolve grievances. The new expropriation law states that persons can request reconsideration of the appraisal value prior to continuing with a judicial procedure. The need to resort to judicial proceedings emerges only after all other channels for reaching agreement have been exhausted. Action: The Bank will monitor inclusion of improved plans for dissemination of procedures for property valuation and appeals in EBY's social communication program. (See also Item 21.)
28.	Sequencing of places/families selected for compensation <i>OD 4.30 presumes resettlement will happen relatively quickly.</i>	4.30	281	Comment: In 1992, in order for EBY to start generating electricity, the Bank and the Governments agreed on a strategy to fill the reservoir in three phases, raising the reservoir to 76 masl in 1994, to 78 masl in 1995, and to 83 masl (the final design level) in 1998.

No.	Panel Findings and Observations	OD or OP/ BP	Para	Comments and Actions
	<p><i>When the presumption fails, as in this Project, the Bank must ensure that, consistent with of OD 4.30, there is a rationale for the sequencing of resettlement and that the sequencing process is transparent and fair.</i></p>			<p>In this way it was expected that EBY would begin operating in 1994 and obtain the financial resources necessary for Project completion. The resettlement sequencing was designed accordingly and public consultation took place.</p> <p>The resettlement of families affected at 76 masl and below was carried out as planned in 1994, but the next stage was delayed due to EBY's administrative impediments, implementation delays, and budgetary constraints. In order to allow prolonged operation of the reservoir at 76 masl, all population up to 78 masl were to be resettled. The transfer of all affected population between 76 and 78 masl was carried out from 1995 to 2000.</p> <p>The Urban Creeks Program was developed in 1998 to provide advanced resettlement to people affected by non-dam related flooding of urban creeks in areas between 78 and 84 masl (see Map 3). These parties and others with special vulnerabilities, e.g., old age or sickness, have been given priority for resettlement in advance of raising the reservoir level.</p> <p>Management agrees that EBY should improve and publish all procedures in order to ensure transparency.</p> <p>Action: Management will confirm that the social communication program includes information on the resettlement sequence to be incorporated in the PARR component of the Revised EMP.</p>
29.	<p>Resettlement alternatives <i>The Panel finds that the failure to consider acceptable resettlement alternatives is not consistent with OD 4.30.</i></p>	4.30	286	<p>Comment: Management acknowledges this finding, with the clarification that alternative resettlement sites were considered in rural areas and for brick makers, and consultations were held with families to be resettled to these sites.</p> <p>Action: Management will confirm that the updated PARR component of the Revised EMP (as required under the Legal Agreements prior to raising the reservoir beyond 78 masl) considers alternative sites and different resettlement strategies, and that both be subject to consultation.</p>
30.	<p>Restoration of income earning capacity <i>While there have been commendable efforts to develop productive projects, inadequacies exist in the efforts to restore income earning capacity. Panel recognizes severe economic crisis has occurred in area but this does not negate importance of restoring pre-resettlement income earning capacity through long-term measures rather than by temporary fixes. Thus the Panel finds that to the extent the measures are inadequate the Bank is not in compliance with OD 4.30.</i></p>	4.30	294	<p>Comment: One to two years after relocating families to the new resettlement sites, EBY carried out independent evaluations that included an assessment of the income-earning capacity of the resettled population. Given lack of baseline data, control groups have been used to assess the situation of the resettled population. The evaluations conducted of rural resettlements show that resettled families have significantly improved their living conditions and there is evidence that their assets have greatly increased. As regards the urban resettlements of Buena Vista and San Pedro, the evaluations show that most of the families continue to earn their former levels of income. For Arroyo Porá and Itá Paso, where the timeframe of the evaluation coincided with the economic crisis in Argentina and Paraguay, the results show a decrease in employment and income in the first year and a slight recovery in the second. Some families have attributed the decrease to the greater distance of the resettlement sites from Encarnación. In order to address this issue, EBY provides a transportation subsidy and supports several productive activities. Additionally, EBY has recently begun implementation, through an NGO, of a Social Investment Fund (distinct from the Productive Fund noted above in Item 21) to support community driven projects.</p> <p>Management acknowledges that one of the key constraints in the design of the programs to restore income earning capacity is the</p>

No.	Panel Findings and Observations	OD or OP/ BP	Para	Comments and Actions
				<p>absence of adequate baseline information. Since 2000, the Bank has urged EBY to gather adequate socioeconomic information in order to have a baseline that can be used to fully assess the impacts caused by displacement, to design appropriate rehabilitation programs and evaluate the impact of such programs.</p> <p>Action: Management will continue to urge EBY to collect the necessary baseline data, and it will monitor how the current PARR responds to the impacts caused by displacement. In the updated PARR component of the Revised EMP, the Bank will confirm that the required socioeconomic data has been included. The Bank will also facilitate a workshop, planned for the third or fourth quarter of 2004, to train EBY staff and to discuss additional measures to improve the rehabilitation programs.</p>
31.	<p>Compensation to brick makers and ceramists: the case of small brick makers <i>In San Pedro resettlement site, while some families had reestablished their brick-making activity, many complained about losses in their income level and about lack of continued access to raw materials at a reasonable cost because the five-year clay supply option has ended.</i></p>	4.30	310	<p>Comment: The lack of adequate baseline information regarding small brick makers impedes a full evaluation of the changes in income level after resettlement.</p> <p>Of 365 small brick makers located below 84 masl on the Paraguay side, 97 accepted relocation, of which 92 relocated to the San Pedro resettlement site. The others received compensation for their business and opted for a change in economic activity. The 92 brick makers relocated to San Pedro were offered equipment to be used in clay excavation and transportation to the Cooperative of Brick Makers of San Pedro. However, they opted instead to receive clay supplies for a five-year period, which EBY provided (including transportation of the clay to their workplaces). Although the five-year term has ended, brick makers still have access to clay deposits since they are and will remain available until the reservoir is raised to 83 masl. Clay deposits located on EBY-owned property are available to brick makers free of charge. Since 1998, EBY has been one of the main customers of the brick makers of Encarnación, due to the large demand for bricks for houses being constructed in Arroyo Porá and Itá Paso.</p> <p>Action: Management will request that EBY continue to provide small brick makers with access to clay deposits. Management also will monitor inclusion in EBY's social communication program (to comply with Plan B) of activities to ensure brick makers are aware of the location of clay deposits on EBY-owned property.</p>
32.	<p>Compensation to brick makers and ceramists: medium and large sized industries <i>The Panel finds that the industry owners could be expected to make an informed decision as to the value and prospects of their clay deposits and to be able to choose freely whether to accept the compensation package offered. However, the Panel expresses concerns about the adequacy of providing only a five-year supply of clay, as this appears to be a temporary mitigation measure rather than a solution that would allow the activity to continue in the long-term.</i></p>	4.30	317	<p>Comment: Medium and large sized tile making industry owners located below 84 masl were compensated either for self-relocating their industries or for the value of their property. Data updated since Management's Response in 2002 shows that of 53 medium and large sized brick makers and tile makers who chose the self-relocation option, 19 still remain in their original location. Medium and large sized tile making industry owners located above 84 masl were remunerated for the cost of a ten-year (not five-year) supply of clay.</p> <p>Action: In light of the clarifications above (e.g., ten years rather than five years), no further action appears to be required. Medium and large sized industries were considered compensated and will continue to have access to clay deposits on the land that EBY owns until the reservoir level is raised.</p>

No.	Panel Findings and Observations	OD or OP/ BP	Para	Comments and Actions
33.	<p>Compensation to workers of brick and tile making industries <i>The Panel's visits to the project area, the review of the documents, and the interviews with Bank staff all revealed that a large number of workers who lost their source of income as a consequence of the Yacyretá Project belong to the category of informal workers, for whom employers did not keep official employment records or pay social security taxes. The Panel finds that the Bank should have taken this fact into account when it reviewed and approved the Project's resettlement programs.</i></p> <p><i>The Panel finds that the large number of informal workers who worked in large, mechanized industries as well as in small-scale brick-making facilities were in practice excluded from the compensation system that the Bank approved, even though they suffered the adverse impacts of the project.</i></p> <p><i>[...]he Panel finds that the compensation program approved by the Bank was not consistent with OD 4.30 because it excluded in practice compensation for a specific category of economic losses that affected one of the poorest segments of the area population – that is, the informal workers of the brick and roof-tile industries.</i></p>	4.30	328, 330, 332, 334, 340	<p>Comment: EBY has made efforts to examine this issue, but has been constrained due to the lack of baseline data and lack of evidence regarding the status of workers. Management acknowledges the issue. Without any census of workers, and given the fluctuations in the local brick-making industry, targeting non-cash rehabilitation activities for this set of informal workers is difficult.</p> <p>Two factors have helped to mitigate the lack of compensation provided by factory owners to some informal employees. First, employment in the sector is still available. In addition to the 97 factories that have relocated, 335 new ceramic businesses have opened in Encarnación alone. Second, the Productive Fund described in Item 21 has specifically targeted the needs of informal brick workers, and is considering support to 132 of them.</p> <p>Action: Management will request EBY and the Paraguayan authorities to meet the 2004 timetable for disbursing benefits under the Productive Fund to the informal workers already identified. Management will also request that EBY make every effort to identify former workers of brick and tile-making industries who did not previously receive compensation for loss of employment due to their informal status and utilize the Productive Fund to provide them with appropriate compensation. Finally, Management will confirm with EBY that the updated PARR component of the Revised EMP (which is required to be revised prior to raising the reservoir beyond 78 masl, in accordance with the Legal Agreements) includes provisions for employment alternatives for both informal and formal workers who lose their employment due to industry closure or relocation.</p>
34.	<p>Compensation to brick makers and ceramists: access to clay deposits <i>The Bank-approved provision of five years' access to clay has not fully met OD 4.30's requirement that project affected people have their pre-resettlement income earning capacity improved or at least restored. While there have been efforts to retrain the brick-makers for other vocations, income earning capacity for many people has not been restored.</i></p>	4.30	345	<p>Comment: See Item 31 above.</p> <p>Action: See Item 31 above.</p>
35.	<p>Adequacy of resettlement plan <i>Bank in compliance with OD 4.30 because it had approved a resettlement plan, timetable, and budget for this Project. However,</i></p>	4.30	348	<p>Comment: Management acknowledges the Panel's finding of compliance.</p> <p>Management also shares the Panel's concern for the delay in the implementation of the PARR component of the EMP.</p>

No.	Panel Findings and Observations	OD or OP/ BP	Para	Comments and Actions
	<i>plan, budget and timetable have not worked as intended and this has created compliance issues with other aspects of OD 4.30.</i>			Action: Management will confirm with EBY that the PARR component of the Revised EMP (which is required to be revised prior to raising the reservoir beyond 78 masl in accordance with the Legal Agreements), includes a realistic plan, budget and timetable for completion of resettlement activities.
36.	<p>Influx of people into the Project area <i>Resettlement plan as designed could not prevent influx of ineligible population. Legal framework was inadequate. The Panel finds that the analysis of legal issues in resettlement, including an analysis of the power of eminent domain, either did not occur or was inadequate at the time the Bank approved the resettlement plan. This does not comply with OD 4.30, paragraph 12.</i></p>	4.30	353	<p>Comment: Management acknowledges the Panel's finding concerning the nature of the Paraguayan legal framework, which did not consider at the time expropriations for levels beyond 76 masl. Nevertheless, even a robust legal framework would probably have had difficulty ensuring an appropriate outcome in a case such as this where there have been: (i) long delays in raising the reservoir level; (ii) lack of physical controls preventing population movements; and (iii) lack of funding to carry out expropriations.</p> <p>Although a new expropriation law was enacted in 2001, the financial implications of acquiring land up to 84 masl—estimated at USD 150-200 million—are beyond EBY's current financial capacity. Since EBY has been unable to purchase the land, it has had no legal means to prevent people from settling in the Project area.</p> <p>Nevertheless, both EBY and the Paraguayan authorities have a strong interest in preventing further influx and construction in the area between 78 and 84 masl. Until it secures adequate financing to acquire land between 78 and 84 masl, there is little EBY can do. The Paraguayan authorities, however, may be able to exercise more aggressive controls against new development, such as withholding new business permits and/or environmental permits for new construction.</p> <p>Action: The Bank will urge the Paraguayan authorities to explore all available legal and administrative means, such as licensing, permitting or fiscal policies, to discourage new development or influx into the land between 78 and 84 masl until such time as EBY has adequate financial resources to acquire this land.</p>
37.	<p>Delays and uncertainties in the carrying out of the resettlement plan <i>Bank should have made adequate allowances in the 1992 plan and later modifications of it for hardships that occurred as a result of uncertainties and delays in implementing the plan. Where a person can document a loss directly attributable to the very long delay in resettlement, such loss should be recognized in accordance with OD 4.30, but the Panel recognizes that in practice this will be very difficult to implement.</i></p>	4.30	360	<p>Comment: The PARR component of the EMP, approved in 1992, included a feasible schedule for resettlement at that time. The delays that occurred were not foreseen at the time the Plan was approved.</p> <p>To help address problems caused by these delays, EBY has made adjustments to the resettlement plan, such as the inclusion of families who were not properly recorded in the censuses, and the development of the Urban Creeks Program that gives priority to the families who were being affected by urban creek flooding. The sequencing of resettlement for those above 78 masl has also addressed those most vulnerable, although Management acknowledges that more could have been done to accelerate the resettlement of those most affected.</p> <p>Action: Management will confirm that the PARR component of the Revised EMP has included provisions to continue giving priority in resettlement sequencing to the most vulnerable and most impacted groups, particularly those located in areas prone to periodic flooding as well as the sick and elderly.</p>
38.	<p>PDA (Programa Desborde de Arroyos) – Urban Creeks Program: alternative</p>	4.30	372	<p>Comment: In accordance with the design of the Urban Creeks Program, EBY's local offices maintain direct communication with affected people in order to provide information and assistance</p>

No.	Panel Findings and Observations	OD or OP/ BP	Para	Comments and Actions
	<p>resettlement sites <i>Under OD 4.30, Management must ensure that affected people are systematically informed about the objectives of the PDA program and consulted with regard to their options and rights during the preparation and implementation of the program. This has not always occurred.</i></p>			<p>throughout the resettlement process and to consult with families concerning housing assignments, moving dates and special arrangements for school age children, among others. All those affected by the Urban Creeks Program—departmental authorities, municipal authorities, social organizations, neighborhood leaders, host communities and residents—have been informed concerning the sequencing of resettlement, eligibility criteria, quality of housing and neighborhood infrastructure. However, Management acknowledges that some people were dissatisfied with the alternatives presented during consultations and others may be confused about the objectives and criteria of the Urban Creeks Program.</p> <p>Action: Management will confirm that EBY implements a social communication program, to comply with Plan B, and will urge EBY to address communication issues under the Urban Creeks Program. See also Item 29.</p>
Supervision				
39.	<p>Supervision of environmental operations <i>Supervision of the environmental aspects of main civil works components of the Project in compliance with OD 13.05.</i></p>	13.05	379	<p>Comment: Management acknowledges the finding of compliance by the Panel.</p> <p>Action: No action required.</p>
40.	<p>Supervision of resettlement activities: technical quality assurance - standards of design, construction, and implementation <i>Ample evidence of poor quality construction within resettlement sites.</i></p> <p><i>Need for a greater level of supervision of technical design and construction in all facets of the Yacyretá resettlement scheme.</i></p> <p><i>Failure to ensure sound technical quality of work on the resettlement project and to encourage needed design changes as circumstances changed is not in compliance with OD 13.05 on Project Supervision, paragraph 29.</i></p>	13.05	152, 381-394, 396	<p>Comment: During supervision missions throughout the 1990s, the Bank routinely identified and/or was made aware of deficiencies in resettlement sites and housing units, through direct contact with resettled families. These deficiencies were in turn reported to EBY, which has a process to address them.</p> <p>All civil works contracts carried out by EBY include clauses and insurance provisions to ensure quality of works. Engineering firms are contracted by EBY to supervise compliance with technical specifications and control quality of works. Contractors are required to fix any deficiencies up to one year after construction ends, and their final payment is contingent upon this. Thereafter, EBY maintains the infrastructure of the resettlement site until the various civil works can be transferred to the responsible local or national agencies.</p> <p>Action: The Bank will continue to monitor the system EBY has in place to supervise civil works and request that contracts continue to include required clauses. The Bank will also continue to pay careful attention in future supervision missions to construction deficiencies. To strengthen Bank supervision, an architect/urban planner will join the task team to supervise the design and construction of infrastructure and housing for resettlement sites.</p>
41.	<p>Supervision of resettlement activities: wastewater treatment plant <i>The Panel finds that given the foreseeable delays in the construction of the wastewater treatment plant, Management should have anticipated the problem of delay and ensured that appropriate interim arrangements for discharge of the wastes were</i></p>	13.05	395	<p>Comment: Although the Bank acknowledges that interim measures would have been preferable, none were found to be economically feasible. The interim measures considered were: separate wastewater treatment plants at the resettlement sites and temporary latrines for all resettled families.</p> <p>The contract for the wastewater treatment plant was awarded and construction began in March 2004. This will be the first wastewater treatment plant in this part of Paraguay.</p> <p>Action: Management is urging EBY to accelerate efforts to</p>

No.	Panel Findings and Observations	OD or OP/ BP	Para	Comments and Actions
	<i>made until the plant was built and all house connections made.</i>			improve the outfall of effluent from the Itá Paso resettlement site even prior to the completion of the wastewater treatment plant.
42.	<p>Supervision of resettlement activities: consultation with affected people <i>Wide discrepancy between recollections of affected people in the Project area, who insist there have been no meaningful consultation or thorough on site visits, and Bank's statements about its supervision missions. Bank supervision missions need to indicate places visited and affected people met with. Management must ensure that it consults with and interacts meaningfully with affected people in settings where they feel able to convey effectively their concerns.</i></p>	13.05	399	<p>Comment: From 1997 to date, Bank missions held approximately 53 meetings with affected people, including 21 formal meetings and 32 visits to resettlement sites and affected neighborhoods. Aide Memoires provided a complete listing of the dates, places, and people met during these on site meetings, but did not contain minutes or other records. In addition, Bank supervision missions have regularly visited people in their homes and neighborhoods and held public meetings in various locations. Although the personal safety of Bank staff has been threatened on several occasions during these consultations, the Bank will continue to meet with affected people in settings where they feel able to convey effectively their concerns and the safety of staff is ensured.</p> <p>Management acknowledges a key problem common to all consultations, which is that the act of consultation both raises expectations and does not ensure favorable outcomes to those affected. Management is committed to strengthening the grievance procedures for those adversely affected (see Item #21). Since the time when these issues were first faced in this Project, over ten years ago, the Bank has invested heavily in improved social assessment and consultation procedures — improvements which have been reflected in many Bank projects.</p> <p>Action: In accordance with the Panel's findings, future Aide Memoires will be expanded to document the subject matter of Bank meetings with affected people, with summary findings and notes of follow-up actions needed.</p>
43.	<p>Supervision of resettlement activities: level of supervision <i>Under the conditions prevalent in the area and given the Project's protracted execution and its controversial nature, the Bank should have expected the need for a higher level of supervision and ensured that it was effective.</i></p> <p><i>The Bank needs to expect a higher than usual level of supervision in order to ensure that corruption does not occur and to assure affected people that this is so.</i></p>	13.05	400 402	<p>Comment: Supervision efforts have been greater than normal. From 1997 on, Management further intensified supervision efforts, by: (i) shifting task management to the field from 1998 to Project closure in 2002, when the size of Bank technical field staff was reduced overall; and (ii) increasing the number of Project visits and formal missions. Supervision missions have included communication specialists, a lead social specialist, a dam specialist, sanitary and civil engineers, environmental specialists, legal specialists and consultants for other issues. Half of the missions have been undertaken jointly with IDB, which also included social specialists on its team.</p> <p>In accordance with the Bank's new procedures to address corruption allegations, the Bank submits Project-related corruption complaints to the Department of Institutional Integrity.</p> <p>Action: The Bank will continue to build upon the October 2003 Aide Memoire recommendations, emphasizing to EBY that among the works required to complete the Project, the most urgent are those related to resettlement, and that local actors and organizations must be involved in overseeing resettlement activities. In addition, the Bank will continue to send any Project-related corruption complaints received to the Department of Institutional Integrity.</p> <p>The Bank has recently upgraded and expanded its Asunción office, and is recruiting a civil society specialist to join in April or May 2004. Among this person's duties will be local supervision of progress implementing the PARR and other Project-related requirements.</p>

No.	Panel Findings and Observations	OD or OP/ BP	Para	Comments and Actions
44.	<p>Supervision of resettlement activities: expertise <i>Supervision of resettlement activities did not adapt to expertise needed to identify and confront adequately problems of social nature (OD 13.05, paragraph 1(b)).</i></p> <p><i>Absence of a communication strategy has significantly damaged relations between those concerned with implementing the Project and the affected civilian population.</i></p>	13.05	404-410	<p>Comment: From 1997 to 2002, the two Bank task team leaders were a social specialist and an urban planner, respectively. Another social specialist was assigned to work in Encarnación from 1999 to 2001. Supervision missions have included communication specialists, a lead social specialist, legal specialists in social and environmental areas, and consultants for specific issues. Half of the missions have been undertaken jointly with IDB, which also included, on average, two social specialists on its team.</p> <p>During supervision, the Bank has involved high level consultants for specific issues as they arise. For example, the Bank contracted four consultants (a sociologist, civil engineer, architect with experience in housing, and financial analyst) to evaluate and recommend improvements to the Urban Creeks Program. The Bank has increased social expertise by including communications specialists in missions, and has stressed to EBY management the importance of an effective communication plan.</p> <p>An independent international ex-post evaluation of the PARR was carried out by a Brazilian team (a sociologist and an economist) from 1995 to 2000. The team conducted sixteen evaluations of the resettled population.</p> <p>Action: To strengthen Bank supervision, an architect/urban planner with experience in environmental and social assessments will join the task team to supervise issues related to infrastructure and housing for resettlement sites.</p> <p>In addition, EBY has informed the Bank that it will contract independent ex-post evaluations for the resettlement sites of Arroyo Porá and Itá Paso.</p> <p>During supervision, the Bank will monitor EBY's implementation of a social communication program, to improve the relations between people implementing the Project and those affected by it.</p>
45.	<p>Linkages between supervisions reports, progress reports to the Board, and Management Response to Request for Inspection <i>The Panel finds that Management has in some respects been too optimistic in informing the Board on the future of Project implementation. The Panel understands that it is difficult to accurately predict when certain aspects of the Project will be completed. It believes some of the reporting has understated serious difficulties in Project implementation. The Panel especially notes that only after it had conducted its own field research from January through December 2003 and conducted follow-up staff interviews, did Management produce an Aide Memoire (October 23-30, 2003)</i></p>	13.05	420	<p>Comment: Management acknowledges the Panel's understanding of the difficulties in accurately predicting when certain aspects of the Project will be completed. Most of the problems discussed in the October 2003 Aide Memoire (such as the need to update the PARR, delays in executing the Project's resettlement and rehabilitation programs, and the need to transfer responsibilities for the operation and administration of Project works from EBY to the municipality of Encarnación) have been identified and discussed with the implementing agency over the last few years, as documented in Aide Memoires since 2002.</p> <p>Management would like to highlight that the progress reports submitted to the Board have focused on the achievements of activities and actions under Plans A and B, where significant progress has been made. In some actions, such as titling, delays stem from Paraguay's legal system and have thus been beyond the control of the Bank or EBY. In the case of titling, Management agrees that it was too optimistic and acknowledges the Panel's finding.</p> <p>Action: Based on the results of the Panel's investigation and related data gathering, Management will take into account all available information and prior experience in order to improve the quality of future reporting.</p>

No.	Panel Findings and Observations	OD or OP/ BP	Para	Comments and Actions
	<p><i>that identified many of the problems the Panel had found and the remedial actions which need to be taken.</i></p>			<p>In addition, Management will report to the Board annually on the implementation of the proposed Action Plan.</p>
<p>46.</p>	<p>Factors affecting Project completion. <i>The Panel notes that a number of essential social and environmental activities have yet to be completed in order to raise the water level beyond the current 76 masl.</i></p> <p><i>The Panel finds that the long delays that have already occurred in implementing the resettlement and environmental mitigation activities have brought substantial costs and serious hardships to the affected populations. The Panel further notes the urgent need for a decision to define the final operating level of the reservoir. The Panel wishes to highlight the economic and social costs associated with any decision regarding the level of the reservoir if it is not politically or otherwise feasible to implement the decision fully and in a timely manner. The governments' decisions as to whether, how much, and when to raise the operating level of the reservoir will directly affect the ability of the Bank to bring this Project into compliance with its operational policies and procedures.</i></p>		<p>ES</p>	<p>Comment: Management agrees that significant activities remain to be completed by the relevant authorities. The list of critical steps to be taken to complete the Project was agreed in substance with EBY in October 2003. The Governments of Argentina and Paraguay are taking steps to develop a Project completion plan, and their outline for this plan may be used as a basis to amend the Bi-National Treaty.</p> <p>Action: The Bank will continue to review and comment on proposals for raising the reservoir level and monitor compliance with the pertinent provisions in the Legal Agreements. In addition, the Bank intends to continue supervising the Project through the final repayment of the Second Yacretá Loan.</p>

6 Annex 2

Status of Recent Bank Loans Supporting the Project: Argentina – Second Yacyretá Hydroelectric Project; Paraguay – Reform Project for the Water and Telecommunications Sectors and Argentina – SEGBA V Power Distribution Project

1. **Loan No. 3520-AR for the Second Yacyretá Project.** This USD 300 million loan was approved by the Board on September 29, 1992 to help complete the physical works for the dam and closed on December 31, 2000. Loan No. 3520-AR was designed to: (a) help provide an efficient supply of energy by ensuring operation of Yacyretá's first units with an adequate transmission system; (b) bring about improved environmental management and appropriate handling of social aspects of Yacyretá; and (c) encourage private capital participation in EBY.

2. On the whole, the project met its objectives only partially and with considerable delays. All permanent structures were completed; however, because the reservoir has remained at the 76 masl first stage, the turbine generating units are delivering only two-thirds of their rated capacity. The consequent loss of earnings is estimated between USD 563 million and USD 1.629 billion per year. In addition, there is no clear roadmap for carrying the project forward to the stage where all units can operate at full capacity. The objective of bringing about improved environmental management and appropriate handling of social aspects of Yacyretá was partly achieved, though with significant delay. In the same way, the objective of encouraging private capital participation was partly achieved through the privatization of the 500kV lines linking Yacyretá with the national interconnected system, and the implementation of some studies assessing options for privatizing other aspects of the operation.

3. The Implementation Completion Report (ICR) for Loan No. 3520-AR has been completed, reviewed by the Operations Evaluations Department, and was distributed to the Board on June 28, 2001. The ICR arrived at important conclusions in terms of assessing past performance as well as the future of Yacyretá, including the following: (i) the Government of Argentina was unable to give the project the priority it deserved because of the financial crisis of 1995; (ii) frequent changes of Yacyretá's Executive Director adversely affected EBY's performance; (iii) poor oversight of the areas to be flooded resulted in invasion by families seeking resettlement compensation; (iv) EBY was slow in performing land acquisitions and housing construction, adding to pressures that slowed down project implementation; (v) the Government of Argentina was unable to reconcile its political interest in expediting the main civil works with existing concerns about the project's resettlement and environmental impacts; (vi) in making decisions, the Bank failed to take note of the lessons of previous loans made for the Yacyretá Project, where lack of counterpart funds was an important factor for poor performance; (vii) the Borrower was ineffective in obtaining political support to reach key project objectives; (viii) delay in passing an Expropriation Law in Paraguay slowed land acquisition and resettlement; and (ix) the Resettlement and Rehabilitation Action Plan (PARR) and the Environmental Management Plan (PMMA) were only partly implemented, with major issues remaining outstanding.

4. As of February 29, 2004, Loan No. 3520-AR had an outstanding balance of USD 160,593,198¹ due to be repaid by November 2009. During 2002 and 2003, the average yearly payment due (including amortization and interest) was USD 34,661,645.

5. **Loan No. 2854-AR for the SEGBA V Power Distribution Project (as amended in 1994 in support of Yacyretá).** Loan No. 2854-AR was originally approved by the Board on June 23, 1997 and signed on June 30, 1988, for USD 276 million. On August 19, 1994, it was restructured to allow USD 135 million, made surplus by the privatization of SEGBA (the public power utility for Greater Buenos Aires), to be used for the Yacyretá Project. The loan was amended again, effective December 11, 1997, to provide increased financial support to the resettlement and environmental operations in order to ensure the completion of Plan A (activities still pending for 76 masl level) and Plan B (activities needed to operate for a prolonged period at 76 masl). The closing date was extended selectively on December 31, 2000 until October 30, 2002, reallocating loan amounts among already existing categories within the project description. These reallocated resources supported additional development activities for the indigenous community of Pindó in Paraguay, extension of consulting services contracts for the resettlement and environmental plans, and the construction of new fish transfer facilities and baffle plates in the main spillway. Loan No. 2854-AR closed on September 14, 2002. The ICR for the loan is under preparation and will be distributed to the Board this fiscal year (by June 2004).

6. The proceeds disbursed under Loan No. 2854-AR, totaled USD 257,656,774.² This loan was fully repaid by March 2003.

7. **Loan No. 3842-PA for the Paraguay Reform Project for the Water and Telecommunications Sectors.** This project, originally named the Paraguay Asunción Sewerage Project, was approved on February 14, 1995 for USD 46.5 million. During preparation, the project had been developed with the general goal of improving national urban water and sewerage services through policy reform, and increasing sewerage coverage and treatment within Asunción. However, just after project appraisal and three months prior to project approval, the Government of Paraguay and the Bank agreed to include a new USD 1.2 million component to finance basic services, including water supply, sewerage and related infrastructure, for Encarnación's Itá Paso neighborhood. By June 1998 the project had successfully completed programmed activities in Itá Paso by, inter alia, supplying and installing 600 house water connections with corresponding meters and meter boxes; constructing a pumping station and a chlorinator shed; constructing 600 residential septic tanks; and installing a mid-voltage power transmission line. However, the project faced financial difficulties in other areas, ultimately leading to the partial suspension of disbursements in 1999. The Bank and the Government of Paraguay agreed to cancel USD 15,000,000 from the loan in November 1999 and to restructure the project to support the reform of the water and telecom sectors through an amendment to the Loan Agreement in March 2000. The loan closed on December 31, 2003 and the ICR for the loan is expected to be submitted to the Board by June 2004.

1 This figure reflects the current market value of the disbursed and outstanding amount of the loan.

2 The following amounts were cancelled from the loan: USD 10,464,000 on December 31, 2000 and USD 7,879,226 on September 13, 2002.

8. As of February 29, 2004, Loan No. 3842-PA had an outstanding balance of USD 14,548,887 due to be repaid by December 2011. During 2002 and 2003, the average yearly payment due (including amortization and interest) was USD 3,480,479.