

Republika ng Pilipinas  
**Pambansang Pangasiwaan ng Patubig**  
(NATIONAL IRRIGATION ADMINISTRATION)  
Lungsod ng Quezon

OFFICE ADDRESS: NATIONAL GOVERNMENT CENTER  
F. DE LOS SANTOS AVENUE  
QUEZON CITY, PHILIPPINES

TELEPHONE NOS.: 97-60-71 to 78  
CABLE: NIAPHIL  
TELEX: 42802 NIA PM

OUR REFERENCE:

MC No. 46 s. 1991


MEMORANDUM CIRCULAR

T O : THE DEPUTY ADMINISTRATOR, ASSISTANT ADMINISTRATORS,  
DEPARTMENT MANAGERS, STAFF HEADS, REGIONAL  
IRRIGATION MANAGERS, OPERATIONS MANAGERS, PROJECT  
MANAGERS, IRRIGATION SUPERINTENDENTS, PROVINCIAL  
IRRIGATION ENGINEERS AND ALL OTHERS CONCERNED

SUBJECT : IMPLEMENTING RULES AND REGULATIONS FOR R.A. NO 6957,  
"AN ACT AUTHORIZING THE FINANCING, CONSTRUCTION,  
OPERATION AND MAINTENANCE OF INFRASTRUCTURE PROJECTS  
BY THE PRIVATE SECTOR AND FOR OTHER PURPOSES"  
(BUILD-OPERATE-AND-TRANSFER AND BUILD-AND-TRANSFER  
SCHEMES)

Attached is a copy of the implementing rules and regulations for Republic Act (R.A.) No. 6957. Included for your reference is the list of projects for the Build-Operate-and-Transfer and Build-and-Transfer Schemes which was submitted to the Secretary of Public Works and Highways. Most of these projects are in the Medium Term Public Investment Program (1990-1994) while the others are for later consideration. The mini-hydro projects have been indorsed for implementation by the Executive Secretary to Congress.

For your information and guidance.

  
JOSE B. DEL ROSARIO, JR.  
Administrator

June 25, 1991

Subject  
IMPLEMENTING RULES AND REGULATIONS FOR R.A. NO. 6957, "AN ACT AUTHORIZING THE FINANCING, CONSTRUCTION, OPERATION AND MAINTENANCE OF INFRASTRUCTURE PROJECTS BY THE PRIVATE SECTOR AND FOR OTHER PURPOSES" (BUILD-OPERATE-AND-TRANSFER AND BUILD-AND-TRANSFER SCHEMES)

Pursuant to Section 10 of Republic Act (R.A.) No. 6957, which was approved on 9 July 1990, the following Implementing Rules and Regulations (IRR) are hereby prescribed to carry out the provisions of the said Act.\*

1. DEFINITION OF BOT AND BT SCHEMES

1.1 Build-operate-and transfer (BOT) scheme: This is "a contractual arrangement whereby the contractor undertakes the construction, including financing, of a given infrastructure facility, and the operation and maintenance thereof. The contractor operates the facility over a fixed term during which it is allowed to charge facility users appropriate tolls, fees, rentals, and charges sufficient to enable the contractor to recover its operating and maintenance expenses and its investment in the project plus a reasonable rate of return thereon. The contractor transfers the facility to the government agency or local government unit (LGU) concerned at the end of the fixed term which shall not exceed fifty (50) years."

"For the construction stage, the contractor may obtain financing from foreign and/or domestic sources and/or engage the services of a foreign and/or Filipino constructor."

"The ownership structure of the contractor of an infrastructure whose operation requires a public utility franchise must be in accordance with the Constitution."

"In the case of corporate investors in the build-operate-and-transfer corporation, the citizenship of each stockholder in the corporate investors shall be the basis for the computation of Filipino equity in the said corporation."

"In the case of foreign contractors, Filipino labor shall be employed or hired in the different phases of the construction where Filipino skills are available." The use of Filipino labor shall also apply to Filipino contractors.

"The financing of a foreign or foreign-controlled contractor from Philippine government institutions shall not exceed twenty percent (20%) of the total cost of the infrastructure facility or project."

"Financing from foreign sources shall not require a guarantee by the Government or government-owned or controlled corporations."

\* Note: Quoted provisions are lifted verbatim from R. A. No. 6957

"The build-operate-and-transfer scheme shall include a supply-and-operate situation which is a contractual arrangement whereby the supplier of equipment and machinery for a given infrastructure facility, if the interest of the Government so requires, operates the facility, providing in the process technology transfer and training to Filipino nationals."

1.2 Build-and-transfer (BT) scheme: This is "a contractual arrangement whereby the contractor undertakes the construction, including financing, of a given infrastructure facility, and its turnover after completion to the government agency or LGU concerned which shall pay the contractor its total investment expended on the project, plus a reasonable rate of return thereon." The BT scheme shall be adopted for financially viable infrastructure projects, i.e., the project cost should be recovered from tolls, fees, rentals and other charges on the facility users, as well as other related income of the Agency/LGU concerned. The agency/LGU shall pay the contractor based on an agreed amortization schedule.

"This arrangement may be employed in the construction of any infrastructure project, including critical facilities which, for security or strategic reasons, must be operated directly by the Government."

## 2. AUTHORIZED CONTRACTING GOVERNMENT AGENCIES/UNITS

The following Government entities are authorized to enter into contract for BOT or BT projects under the provisions of R.A. No. 6957:

2.1 Government Infrastructure agencies, including government-owned and controlled corporations (hereinafter referred to as Agency/ies): These include the Department of Public Works and Highways (DPWH), Department of Transportation and Communications, National Irrigation Administration, Metropolitan Waterworks and Sewerage System, Local Water Utilities Administration, Philippine National Railways, Light Rail Transit Authority, Philippine Ports Authority, Manila International Airport Authority, National Power Corporation, National Electrification Administration, Philippine National Oil Company, Export Processing Zone Authority, and Public Estates Authority, among others.

## 2.2 Local Government Units (LGUs)

## 3. ELIGIBLE INFRASTRUCTURE PROJECTS

Infrastructure projects which are financially viable and meet the other provisions of these IRR may be undertaken through BOT or BT schemes under R.A. No. 6957, including but not limited to the construction, which includes engineering, rehabilitation, improvement, expansion, and modernization, supply of equipment

and machineries, operation and maintenance of the following:

- 3.1 Highways, including expressways, roads, bridges, interchanges, tunnels, and related facilities
- 3.2 Rail-based projects packaged with commercial development opportunities, e.g. use of government facilities
- 3.3 Non-rail based mass transit facilities, navigable inland waterways and related facilities
- 3.4 Port infrastructure like piers, wharves, quays, storage, handling, ferry services, and related facilities
- 3.5 Airports, air navigation, and related facilities
- 3.6 Power generation, distribution electrification, and related facilities
- 3.7 Telecommunications, backbone network, terrestrial and satellite facilities and related service facilities
- 3.8 Irrigation and related facilities
- 3.9 Water supply, sewerage, drainage, and related facilities
- 3.10 Educational and health infrastructure
- 3.11 Land reclamation, dredging and other related development facilities.
- 3.12 Industrial estates, including infrastructure facilities and utilities
- 3.13 Markets, slaughterhouses, and related facilities
- 3.14 Warehouses and post-harvest facilities
- 3.15 Public fishports and fishponds, including storage and processing facilities.
- 3.16 Environmental and solid waste management related facilities such as collection equipment, composting plants, incinerators, landfill and tidal barriers, among others.

In the case of highway projects, the concerned Agencies/LGUs shall, prior to the call for bids for their implementation, secure from the DPWH, its clearance, on a no-objection basis, of their plans for BOT and BT projects in order to avoid undue proliferation and unwieldy operation of the same (e.g., a series of toll road stations along a given route separately managed by

numerous private operators which would greatly hamper the flow of traffic and inconvenience the public).

#### 4. INCLUSION OF PROPOSED BOT AND BT PROJECTS IN AGENCY/LGU INFRASTRUCTURE PROGRAMS

4.1 In accordance with Section 4 of RA No. 6957, the concerned Agencies/LGUs "shall include in their infrastructure programs those priority projects that may be financed, constructed, operated and maintained by the private sector" through the BOT or BT schemes "under the provisions of this Act."

4.2 The Agency/LGU shall "give wide publicity to all such projects. In the case of a national agency, once every six (6) months; it shall publish the list of such projects in at least two (2) newspapers of general national circulation. In the case of an LGU, the publication must be made in at least one (1) newspaper of local/national general circulation." The Agency/LGU must also give written "official notification to the contractors registered with them," including the concerned chapters of the Philippine Constructors Association, the National Confederation of Constructors Associations of the Philippines and the Philippine Chamber of Commerce and Industry, of the list of such projects at least once every six (6) months.

#### 5. APPROVAL OF PROPOSED BOT AND BT PROJECTS

5.1 The head of the concerned Agency shall, in accordance with Section 4 of RA No. 6957, see to it that "the lists of all such national projects (proposed for BOT or BT schemes) must be part of the medium-term infrastructure programs of the agencies concerned and must be duly approved by Congress" prior to the call for bids for their implementation. For this purpose, the Agency shall submit such list to Congress as the need for a BOT or BT project arises, but preferably once every six (6) months.

5.2 "Local projects (traditionally) funded and implemented by the local government units concerned," are to be "submitted to the local development councils for approval or confirmation." This means that the concerned Municipal Mayor shall submit municipal-level projects (e.g., market) to the Municipal Development Council, the City Mayor shall submit city-level projects (e.g., waterworks) to the City Development Council, and the Provincial Governor shall submit province-level projects (e.g., provincial expressways) to the Provincial Development Council for appropriate action. Then the projects are transmitted to the respective local sanggunians for approval prior to the call for bids for their implementation. For this purpose, the LGU shall submit the list to the Local Development Council concerned as the need for BOT or BT arises, but preferably once every six (6) months.

## 6. MINIMUM STANDARDS AND BASIC PARAMETERS

The Agency/LGU shall lay down the minimum design and performance standards and specifications, as well as economic parameters, which shall be observed by the bidder/contractor in preparing its bid and, if successful, in building and operating the facility. These shall also be used by the Agency/LGU in comparatively evaluating the bids and in supervising and monitoring the project construction and operation.

### 6.1 Minimum Output Standards and Specifications

The contractor shall build and operate the subject infrastructure facility which shall comply with the minimum design and performance standards and specifications prescribed by the Agency/LGU. These standards and specifications shall refer more to the desired quantity and quality of the outputs of the facility, i.e., goods and services to be produced, than to the inputs of funds and resources to produce the outputs.

(Example - Toll Expressway Project: Provide a fully access-controlled expressway between points A and B, with a design speed of 100 kph and at least Service Level "B" within 20 years, per AASHTO specifications; entries/exits at points C, D, and E; drainage for 100-year frequency floods; etc.)

### 6.2 Economic Parameters

To provide a uniform basis for the preparation by the contractors of their bids and the comparison by the tendering Agency/LGU of the bids on a "present value" basis, the Agency/LGU shall prescribe the following economic parameters:

- a. Inflation and discounting rates
- b. Foreign exchange rates
- c. Maximum period of project construction
- d. Fixed term for project operation and collection of tolls/fees/rentals/charges, in the case of BOT projects
- e. Formulae and price indices to be used in adjustment of tolls/fees/rentals/charges, in the case of BOT projects
- f. Minimum period of repayment, in the case of BT projects

### 6.3 Facilities to be Provided by the Government

The Agency/LGU shall indicate the facilities associated with the subject project which are to be provided by the government. The cost of the same may be partly or wholly be financed and/or shouldered by the contractor as part of its bid and cost-recovery

scheme. These facilities may include, but not be limited to the following:

- a. Right-of-way
- b. Part of the structure, e.g., carriageway and stations for a rail transit project

#### 7. PREQUALIFICATION, BIDS, AND AWARDS COMMITTEE

The head of the concerned Agency/LGU shall create a Prequalification, Bids, and Awards Committee (PBAC) for the BOT or BT projects to be bid. The PBAC shall have the following minimum composition:

- a. At least a second ranking officer of the Agency/LGU ----- Chairman
- b. A legal officer ----- Member-Secretary
- c. A technical officer knowledgeable on the project ----- Member
- d. A financial/management officer ----- Member
- e. Two representatives to be nominated by facility users and/or contracting sector ----- Observers

#### 8. ADVERTISEMENT

In accordance with the provisions of Section 5 of R.A. No. 6957, the concerned Agency/LGU shall, upon approval by the Congress/Local Sanggunian of a proposed BOT or BT project, "cause to be published, once every week for three (3) consecutive weeks, in at least two (2) newspapers of general circulation and in at least one (1) local newspaper which is circulated in the region, province, city or municipality in which the project is to be constructed, a notice inviting all duly prequalified infrastructure contractors to participate in the bidding for the projects so approved."

#### 9. BIDDING DOCUMENTS

The Agency/LGU shall prepare the Bidding Documents for the project to guide the prospective bidder in preparing and submitting its prequalification application and bid proposal.

These documents shall consist of the following:

- 9.1 Project Objective and Description
- 9.2 Minimum Design and Performance Standards and

Specifications, and Economic Parameters (Section 6 above)

9.3 Draft Contract, including Terms and Conditions

9.4 Prequalification Criteria and Procedures (Section 10)

9.5 Instructions to Bidders, including Bid form

9.6 Bid Evaluation Criteria (Section 13)

## 10. PREQUALIFICATION OF CONTRACTORS

The criteria for prequalification of contractors shall include the following;

10.1 Legal Requirements: The BOT/BT contractor-applicant must meet the following requirements:

a. For BOT Projects Where Operation Requires a Public Utility Franchise:

i. "The ownership structure of a contractor of an infrastructure facility whose operation requires a public utility franchise must be in accordance with the Constitution." Thus, at least sixty percent (60%) of the capital of the contractor-applicant must be owned by Filipino citizens, provided that "in the case of corporate investors in the build-operate-and-transfer corporation, the citizenship of each stockholder in the corporate investors shall be the basis for the computation of Filipino equity in the said corporation." The (Filipino) contractor must be duly registered with the Securities and Exchange Commission (SEC) for purposes of undertaking component activities of BOT projects.

ii. The projects falling under this category whose contractor must meet the 60 percent minimum Filipino ownership requirement are those defined as public utilities under the Public Service Act including but not limited to the following:

- a) Railways and urban rail mass transit
- b) Distribution of electricity and gas
- c) City and municipal water distribution and sewerage systems
- d) Telephone systems serving the general public

iii. For the construction phase, however, the (Filipino) contractor-applicant "may obtain financing from foreign



and/or domestic sources and/or engage the services of a foreign and/or Filipino contractor." If the constructor to be engaged is Filipino, it must be duly licensed and accredited by the Philippine Constructor Accreditation Board (PCAB).

If the constructor is foreign, it must be duly accredited by its government to undertake construction work and certified as such by its embassy in the Philippines, or by the Philippine Consular Office located in the constructor's domicile/head office location.

iv. In the case of a joint venture, in addition to complying with the requirements under items a-i and a-ii above, the joint venture participants shall submit a written commitment that, if awarded the contract, they shall immediately formalize their joint venture agreement which shall jointly and severally make them responsible for the obligations of contractor/constructor under the contract.

b. For BOT Projects other than item (a) above and for BT Projects:

i. The contractor-applicant may be Filipino and/or foreign-owned. If Filipino, the contractor must be duly registered by the SEC for purposes of undertaking component activities of BOT projects. If foreign-owned, the contractor must be duly accredited by its government to undertake component activities of BOT projects and certified as such by its embassy in the Philippines, or by the Philippine Consular Office located in the constructor's domicile/head office location.

ii. For the construction phase, the same provision as in item a-ii above shall apply.

iii. In the case of a joint venture, in addition to complying with items b-i and/or b-ii above, the joint venture participants shall submit a written commitment that, if awarded the contract, they shall immediately formalize their joint venture agreement which shall jointly and severally make them responsible for the obligations of the contractor/constructor under the contract.

10.2 Experience or Track Record: The contractor-applicant must possess adequate experience in terms of the following:

a. Firm Experience: By itself or through the member-firms in case of a joint venture, the contractor must

have successfully undertaken a project(s) similar or related to the subject infrastructure to be bid and whose the aggregate capital (construction) cost of which is, in present value, at least equal to fifty percent (50%) of the estimated cost of the subject project. In the case of major national projects (costing at least P300 million) this experience must include all phases of a BOT/BT scheme, including financing, engineering, construction, operation and maintenance.

The member firms of a joint venture may individually specialize on any or several phases of a BOT/BT scheme. A joint venture contractor firm shall be evaluated based on the individual or collective experience of the corresponding member firms or of the joint venture itself.

b. **Key Personnel Experience:** The key personnel of the contractor (e.g., managers, chief engineers, et al) must have sufficient experience in the relevant aspects of schemes similar or related to the subject project, as specified by the Agency/LGU.

**10.3 Capability:** The contractor must meet the following requirements:

a. **Organizational Capability:** The contractor must possess sufficient capability to implement and operate the subject project in terms of having adequate types, numbers, and capacities of:

- i. Engineering, construction, operation, and support units and departments,
- ii. Personnel, especially key personnel with sufficient background and experience per item 10.2 b above,
- iii. Construction equipment, owned/leased, which satisfy the minimum specified by the Agency/LGU, and
- iv. Operation and maintenance equipment, owned/leased, which satisfy the minimum specified by the Agency/LGU.

b. **Financing Capability:** The contractor must have adequate capability to sustain the financing requirements for the engineering, construction and operation phases of the project. This shall be measured in terms of the following:

- i. Its net worth must at least be equal to ten percent (10%) of the estimated construction cost of the subject project.

- ii. It must submit a statement from a reputable financial institution committing to extend a credit line to it, in an amount at least equal to that required by the tendering Agency/LGU.
- iii. It must commit other sources of funds to sustain the initial operating expenses of the completed facility.

The concerned Agency/LGU shall adopt a quantitative rating system for the above technical and managerial and financial criteria, taking into account the nature and scale of the project.

#### 10.4 Period of Preparation of Prequalification Documents

The Agency/LGU concerned shall allow prospective contractors at least thirty (30) days from the last date of advertisement of the Invitation to Prequalify to prepare their respective prequalification documents.

For major projects costing at least P300 million, the period of preparation shall at least be forty-five (45) days from the last date of advertisement of the Invitation To Prequalify.

The deadline, last day for submission of prequalification documents must be clearly stated in the Invitation To Prequalify.

#### 11. CONTENT OF THE BID

The bid of each prequalified contractor for a BOT project shall usually include (a) the feasibility study, including preliminary engineering design, of the project, (b) the proposed schedule of tolls, fees, rentals, and other charges to be imposed, (c) the bid bond, and (d) other supporting documents.

For a BT project, the bid shall usually include (a) the feasibility study, including preliminary engineering design, (b) the proposed schedule of payments and attendant terms and conditions (c) the bid bond, and (d) other supporting documents.

As an alternative, the Agency/LGU may conduct the feasibility study and, in some cases, even the detailed engineering design, and call for proposals based on such feasibility study/detailed engineering design. In this case, the bid of each prequalified contractor shall cover only items (b), (c), and (d) above.

However, the bidder is solely responsible for the validity and soundness, including the assumptions, projections, analyses, and outputs, as well as the input data used. Acceptance by the Agency/LGU concerned of the proposal does not diminish this responsibility; neither does it transfer any part of this

responsibility to the Agency/LGU.

#### 11.1 Feasibility Study, including Preliminary Engineering Design

The bidder shall prepare and submit a feasibility study, including preliminary engineering design, for the subject project, which shall conform to the minimum design and performance standards and specifications and economic parameters set by the Agency/LGU (Section 6 of these IRR).

The feasibility study of the bidder must be undertaken according to accepted standards and must conclusively demonstrate the feasibility/viability of the project in the following terms before it is approved for implementation:

a. **Marketability:** The need for the project outputs (goods/services) must be clearly defined and justified. This should be done through evaluation and projection of the market conditions, including the magnitudes of supply and demand (e.g., traffic volumes for expressways) and pricing (e.g., tolls) over the project operational life.

b. **Technical soundness (preliminary engineering design):** The basic engineering design of the project should conform to the minimum design and performance standards and specifications (outputs) set by the Agency/LGU (Section 6). The engineering surveys, plans, and estimates should be undertaken within at least  $\pm 20\%$  of the final quantities. The construction methods and schedules should also be presented and shown to be doable. Should the contractor be awarded the contract, its submitted preliminary engineering design shall be the basis of the detailed engineering to be done as part of the contract.

c. **Economic feasibility:** The benefits to the national economy of the project must be properly defined and quantified to the fullest extent possible (e.g., savings in transport costs and travel time). The project should yield an economic internal rate of return which is at least equal to the social discount rate, currently 15%. It should conform with established and accepted criteria set by the Investment Coordination Committee of the NEDA Board.

d. **Financial viability:** The sources of financing of the contractor for the construction and operation phases of the project should be defined. Letters of commitment from the financing institutions to the effect that they shall extend the specified financing to the contractor if and when awarded the contract shall be submitted. The project should give a financial internal rate of return which is at least equal to the effective cost of capital

corresponding to the financing packages proposed. The proposed user tolls/fees/rentals/charges and the period of cost recovery must be realistic and affordable.

e. **Operational feasibility:** The proposed organization, methods, and procedures for operating and maintaining the completed facility must be well defined, conform to the minimum performance standards, and be shown to be workable, and where feasible provide for transfer of technology used in every phase of the project.

f. **Environmental Standards:** The proposed project design and the technology to be used in the project must be in accordance with the environmental standards set forth by the Agency/LGU concerned and acceptable to the Department of Environment and Natural Resources (DENR). Any negative or adverse effects on the environment as a consequence of the projects as proposed by the private contractor must be properly identified and corrective measures be indicated by the contractor. Appropriate clearances from the DENR, while not required during the bidding, shall henceforth be required of the winning contractor for each stage of the project, from design and engineering, to construction and the pre-operating stage, whenever applicable. The contractor assumes full responsibility for the assessment of the environmental impact of the project as proposed.

Alternatively as mentioned earlier, the Agency/LGU may conduct the feasibility study, and the bidder may use the study as its own, subject to its validation of its contents, including the data, assumptions, analyses, and outputs thereof, and/or modifying the same to its satisfaction. In this case, the responsibility for the validation and integrity of the feasibility study shall still be lodged with the bidder.

**11.2 For BOT Project - Proposed Tolls/Fees/Rentals/Charges:** The bid shall indicate the amounts in present values, schedules, and fixed terms of the tolls/fees/rentals/charges to be imposed on the users of the facility over the specified fixed term for project operation.

**11.3 For BT Project - Proposed Payments:** The bid shall indicate the amounts in present values, schedules and attendant terms and conditions of the payments to be made by the Agency/LGU to the contractor.

**11.4 Bid Bond:** The bidder shall submit a bid bond in an amount not less than two percent (2.0%), one-and-one-half percent (1.5%), and one percent (1%) of the estimated present value of the construction cost, i.e., less than P5 Billion, P5 to 10 Billion and greater than P10 Billion, respectively. The bond shall be in the form of cash, or certified check, manager's check, letter of credit, or bank draft/guarantee issued by a

reputable bank, or surety bond issued by an entity duly registered and recognized by the Office of the Insurance Commissioner and acceptable to the Agency/LGU, or any combination thereof. The purpose of the bid bond is to guarantee that the bidder, if awarded the contract, shall within the period specified in the Instructions to Bidders, enter into a contract with the Agency/LGU for the project. Bid bonds shall be valid for a reasonable period as specified in the Instructions to Bidders, but in no case later than one hundred twenty (120) days from the opening of bids.

**11.5 Other Supporting Documents:** The bidder shall submit such other relevant documents as may be required by the Agency/LGU to support its bid.

**11.6 PERIOD OF PREPARATION OF BIDS** The prequalified bidder shall be allowed sufficient time to prepare their bids depending upon the nature and scale of the project. However, preparation period should not be less than sixty (60) days nor more than one hundred-eighty (180) days from the date of first day of issuance of bid documents to duly prequalified bidders up to the deadline for submission of bids.

The Invitation To Bid must clearly indicate the date of the last day of the submission of bids including the time and place of submission.

## **12. BIDDING PROCEDURE**

**12.1 Prebid Conference.** A prebid conference shall be conducted by the concerned Agency/LGU at least thirty (30) days before the deadline for submission of bids. This will clarify the scope of work, bidding documents, bid evaluation procedures, contract terms and conditions, and any other matter that the agency or prospective bidder may raise. The salient results of the prebid conference shall be embodied in bid bulletins to be issued to the bidders. For major national projects (P300 million and above) the Prebid Conference maybe conducted ninety (90) to one hundred-twenty (120) days before the submission of bids.

**12.2 Receipt and Opening of Bids.** The PBAC shall receive and open the bids publicly at the designated time and place.

**12.3 Evaluation of Bids.** The PBAC shall evaluate the bids received as to compliance with the requirements and as to their prices, using the preset evaluation criteria stated in Section 13 below.

**12.4 Award.** The PBAC shall recommend to the agency head, for approval, the award of the contract to the lowest evaluated complying bid, based on the said evaluation criteria.

## 12.5 DECLARATION OF FAILURE OF BIDDING

When no complying bids are received, the bidding shall be declared a failure.

## 13. BID EVALUATION CRITERIA

### 13.1 Two Stage Evaluation

The evaluation of the bids will be in two stages. the first is the evaluation of the Feasibility Study, including Preliminary Engineering Design, following the criteria under Section 13.2 below.

The second stage is the evaluation of the bid amounts, following the criteria under Sections 13.3 and 13.4 below.

Only those which hurdle the first stage of evaluation (Feasibility Study) will qualify for the second stage evaluation. The second envelope containing the bid amounts shall be returned unopened to each bidder which does not hurdle the first stage.

### 13.2 Evaluation of Feasibility Study

The Agency/LGU shall evaluate the submitted feasibility study, including preliminary engineering design, of each bidder to determine if it meets the following hurdle requirements:

a. The submitted feasibility study must conform to the minimum design and performance standards and specifications and economic parameters specified in Section 6.

b. The feasibility study must conclusively show the feasibility/viability of the project in terms of marketability, technical soundness (preliminary engineering design), economic feasibility, financial viability, operational feasibility, and environmental impact, in accordance with the guidelines in Section 11 above.

### 13.3 Evaluation of Bid Amounts for BOT Project

"In the case of a build-operate-and-transfer arrangement, the contract shall be awarded to the lowest complying bidder based on the present value of its proposed tolls, fees, rentals, and other charges over a fixed term for the facility to be constructed, operated, and maintained according to the prescribed minimum design and performance standards, plans, and specifications." To arrive at the present value, the discounting rates and foreign exchange rates prescribed under the economic parameters (Section 4.2 of this IRR) which are part of the Instructions to Bidders shall be used.

"The government infrastructure agency or local government unit shall approve the fairness and equity of the tolls, fees, rentals and charges, except in the case of tolls for national highways, roads, bridges and public thoroughfares which shall be approved by the Toll Regulatory Board." In determining the fairness and equity of the tolls/fees/rentals/charges, the Agency/LGU shall see to it that these shall not exceed the amounts needed to recover (a) the capital cost, with a reasonable rate of return, and (b) the operation and maintenance costs, over the project construction and operation life.

To consider peculiarities of specific projects, the Agency/LGU may include in the bid documents additional evaluation criteria whose aggregate weight shall not exceed that of the basic criteria (present value of proposed tolls, fees, rentals and other charges) specified in R. A. 6957, as mentioned in the preceding paragraph.

#### 13.4 Evaluation of Bid Amounts for BT Project

"In the case of a build-and-transfer arrangement, the contract shall be awarded to the lowest complying bidder based on the present value of its proposed schedule of amortization payments for the facility to be constructed according to the minimum design and performance standards, plans and specifications." For this purpose, the discounting rates and foreign exchange rates prescribed under the economic parameters (Section 6.2 of these IRR) which are part of the Instructions to Bidders shall be used. In case a Filipino contractor and a foreign contractor submit bids whose present values are the same, the former "shall be given preference," i.e., shall be recommended for award.

To consider peculiarities of specific projects, the Agency/LGU may include in the bid documents additional evaluation criteria whose aggregate weight shall not exceed that of the basic criteria (present value of the proposed schedule of amortization) specified in R. A. 6957 as mentioned in the preceding paragraph.

#### 13.5 REJECTION OF BIDS

The Agency/LGU reserves the right to reject any or all bids, waive any defect therein and accept the offer most advantageous to the government.

#### 13.6 PERIOD OF EVALUATION

The Agency/LGU concerned shall complete its evaluation of all bid proposals/tenders within a reasonable period depending upon the nature and scale of the project and on the number of proposals/tenders submitted.



For major projects costing at least P300 million, the period of evaluation should not exceed one hundred-twenty (120) days from the date of submission of bids. For projects costing below P300 million, the evaluation period should not exceed sixty (60) days. Within these indicative period the Agency/LGU concerned shall decide on the award or rejection of bids.

#### 14. NEGOTIATED CONTRACT

The Agency/LGU concerned may resort to direct negotiation with the lone complying bidder if any of the following circumstances arise from steps to conduct public bidding for the BOT or BT project:

a. If, after advertisement pursuant to Section 8 of these IRR, only one contractor applies for prequalification and it meets the prequalification requirements pursuant to Section 10 of these IRR, after which it is required to submit a bid/proposal which is subsequently found by the Agency/LGU to be complying.

b. If after advertisement, more than one contractor applied for prequalification but only one meets the prequalification requirements, after which it submits a bid/proposal which is found by the Agency/LGU to be complying.

c. If after prequalification of more than one contractor, only one submits a bid which is found by the Agency/LGU to be complying.

d. If, after prequalification, more than one contractor submit bids but only one is found by the Agency/LGU to be complying.

#### 15. PERFORMANCE BONDS AND CONTRACT APPROVAL

The concerned agency/LGU shall require such performance bonds and/or other guarantees as may be needed to ensure compliance with stipulated performance milestones.

The contract shall be subject to the approval of the head of the Agency/LGU or higher authorities, depending upon the contract cost, within two (2) weeks upon receipt thereof.

#### 16. REPAYMENT SCHEME

In accordance with Section 6 of R.A. No. 6957, "the contractor shall be entitled to a reasonable return on its investment and operating and maintenance costs in accordance with its bid proposal as accepted by the concerned infrastructure agency or local government unit and incorporated in the contract's terms and conditions."

The right of foreign BOT contractor/investor to convert its peso earnings into foreign currency and to remit the same to its foreign country is governed by existing monetary rules and regulations. The agency/LGU concerned shall therefore include as part of the bid documents pertinent monetary rules and regulations that may be applicable to said right of foreign BOT contractor/investor. This will serve as a guide to prospective contractors. However, the prospective contractor on its own is encouraged to confer with the Philippine monetary authorities as to the financial implications of said rules and regulations.

#### 16.1 For BOT Project

"In the case of a build-operate-and-transfer arrangement, this repayment scheme is to be effected by authorizing the contractor to charge and collect reasonable tolls, fees, rentals, and charges for the use of the project facility not exceeding those proposed in the bid and incorporated in the contract."

"The government agency or local government unit concerned shall approve the fairness and equity of the tolls, fees, rentals and charges except in the case of tolls for national highways, roads, bridges and public thoroughfares which shall be approved by the Toll Regulator Board."

However, fees and charges mandated by law to be remitted to the National Treasury, shall be collected by the agency/LGU in accordance with the provisions of the said law.

#### 16.2 For BT Project

"In the case of a build-and-transfer arrangement, the repayment is to be effected through amortization payments by the government infrastructure agency or local government unit concerned to the contractor according to the scheme proposed in the bid and incorporated in the contract."

#### 16.3 For Land Reclamation or Industrial Estate

"In the case of a land reclamation or the building of industrial estates, the repayment scheme may consist of a portion or percentage of the reclaimed land or industrial estate built, subject to the constitutional requirement with respect to the ownership of lands."

### 17. CONTRACT TERMS AND CONDITIONS

#### 17.1 Obligations and Authorities of BOT Contractor

a. Franchise: "The winning contractor shall be automatically granted by the infrastructure agency or local government unit the franchise to operate and maintain the

facility, including the collection of tolls, fees, rentals, and charges in accordance with Section 6 hereof (i.e., R.A. No. 6957).."

b. **Financing:** The contractor shall provide the funds needed for the construction of the infrastructure facility "from foreign and/or domestic sources," provided that the financing of a foreign or foreign-controlled contractor from Philippine government financing institutions shall not exceed twenty percent (20%) of the total cost of the infrastructure facility or project," which is the total estimated capital expenditure of the contractor on the project; and "that financing from foreign sources shall not require a guarantee by the Government or by government-owned or controlled corporations," while financing from domestic sources shall not require a guarantee by the National Government. Financing for operating costs may be sourced from local financing institutions provided that such shall not require a guarantee by the national government.

c. **Detailed Engineering Design** The contractor shall prepare the detailed engineering designs and plans based on the preliminary engineering design submitted as part of its bid and in conformance with the minimum design and performance standards and specifications (Section 6 of these IRR) set by the Agency/LGU. The contractor shall submit the detailed engineering designs and plans to the Agency/LGU for approval prior to actual construction. This notwithstanding, the contractor shall be solely responsible for the integrity of its detailed engineering designs and plans. The approval thereof by the Agency/LGU does not diminish this responsibility, nor does it transfer any part of such responsibility to the Agency/LGU.

d. **Construction:** The contractor shall build the facility in accordance with the minimum design and performance standards and specifications (Section 6 of these IRR) prescribed by the Agency/LGU and with the detailed plans prepared by the contractor and approved by the Agency/LGU. For this construction stage, the contractor may "engage the services of a foreign and/or Filipino constructor," which shall be duly prequalified per Section 10 of these IRR.

e. **Operation:** The contractor shall operate the facility in order to provide the desired outputs (goods/services) in accordance with the prescribed minimum design and performance standards and specifications (Section 6 of these IRR) and the approved detailed engineering designs and plans.

f. **Maintenance:** "During the lifetime of the franchise, the contractor shall undertake the necessary

maintenance and repair of the facility in accordance with the (minimum design and performance) standards (Section 6 of these IRR) prescribed in the bidding documents and in the contract," in order to ensure that the facility operates at the desired level of service.

g. **Tolls/Fees/Rentals/Charges:** The contractor shall be entitled to collect tolls/fees/rentals/charges on the users of the facility, following the amounts, schedules, and fixed term as proposed in its bid, subject to the approval of the Agency/LGU/Toll Regulatory Board, as the case may be. Fees and charges mandated by law to be collected by the Agency/LGU, however, shall be remitted in accordance with the provision of the said law.

h. **Revenue Sharing:** The Agency/LGU may share in the revenue from the operation of the contractor in the form of either a fixed fee or a certain percentage of the gross revenue, provided that the same is indicated in the bidding documents and included in the contract.

#### 17.2 Obligations and Authorities of the Agency/LGU

a. **Grant of Franchise:** The Agency/LGU shall "automatically grant" the winning contractor "the franchise to operate and maintain the facility, including the collection of tolls, fees, rentals, and charges in accordance with Section 6 hereof (i.e., R.A. No. 6957)."

b. **Approval of Detailed Engineering Design:** The Agency/LGU shall review the detailed engineering designs and plans prepared by the contractor and, if satisfied with its compliance with the prescribed standards and specifications (Section 6 of these IRR), shall approve the same. Such approval does not reduce the responsibility of the contractor over the integrity of the designs and plans, nor does it shift to the Agency/LGU any part of that responsibility.

c. **Approval of Tolls/Fees/Rentals/Charges:** "The government infrastructure agency or local government unit concerned shall approve the fairness and equity of the tolls, fees, rentals and charges, except in the case of tolls for national highways, roads, bridges and public thoroughfares which shall be approved by the Toll Regulatory Board."

d. **Provision of Right-Of-Way and Other Facilities:** The Agency/LGU shall acquire and provide to the contractor the required right-of-way and other associated facilities for the project (per Section 6.3 of these IRR), free of any third-party rights which will prevent or hamper the implementation and operation of the project. These right-

of-way and associated facilities shall be provided according to the timetables and specifications stated in the Instructions to Bidders and in the contract. The Agency/LGU may require, in the said Instructions to Bidders and in the contract, that the cost of the right-of-way or associated facilities be part of the bid, i.e., of the project cost to be financed and recovered by the contractor.

e. **Project Supervision:** The Agency/LGU shall exercise "technical supervision" over the project activities of the contracts. The Agency/LGU shall inspect and check whether the project is "constructed, operated, and maintained in accordance with the plans, specifications, standards and costs approved by the concerned government infrastructure agency." Should the Agency/LGU find any deviation from or non-compliance with the approved plans, specifications and standards, it shall bring the same to the attention of the contractor for the necessary corrective actions. Such technical supervision by the Agency/LGU does not diminish the singular responsibility of the contractor for the proper construction, operation, and maintenance of the facility, nor does it transfer any part of that responsibility to the Agency/LGU.

f. **Audit of Collections:** The collection of tolls/fees/rentals/charges for the use of the infrastructure facility by the public for the recovery of its cost plus reasonable rate of return on investment is of public interest. To ascertain that such tolls/fees/rentals/charges are properly collected and recorded according to established rules and procedures, the Commission on Audit shall, after consultation with the implementing agency/LGU concerned, audit the pertinent books and records of the contractor-operator in accordance with the existing auditing rules and regulations.

## 18. CONTRACT TERMINATION

The Agency/LGU, by itself and through no fault of the contractor or by mutual agreement with the contractor, may revoke, cancel, or terminate the contract in case of force majeure such as war, rebellion, major calamities or extraordinary economic upheaval.

The Agency/LGU, through no fault of the contractor and by mutual agreement with the contractor, may also revoke, cancel, or terminate the contract in case of (a) failure of the Agency/LGU to provide the required right-of-way and other facilities which the government is obliged to provide under the contract, or (b) changes in government plans and policies that require stoppage of the project or major revisions therein which substantially affect the original design and feasibility of the project (e.g.,

cancellation of plans for a new international airport and, instead, mere expansion of the present airport).

In any of the stated cases under the two preceding paragraph, the Agency/LGU "shall compensate the said contractor for its actual expense in the project plus a reasonable rate or return therein not exceeding that stated in the bidding documents and in the contract as of the date of such revocation, cancellation or termination, provided that the interest of the Government in these instances shall be duly insured (by the Agency/LGU) with the Government Service Insurance System or any other insurance entity duly accredited by the Office of the Insurance Commission, provided finally that the cost of the insurance shall be included in the terms and conditions of the biddings" and incorporated in the bid and the contract.

#### 19. ASSURANCE OF COMPLIANCE BY CONTRACTOR

To assure compliance by the contractor with the performance targets or milestones - both physical and financial - set out in the contract, the said contract shall include any or all of the following provisions:

- a. Confiscation by the Agency/LGU of the performance bond of the contractor in case of contract rescission due to the fault of the contractor to meet its obligations.
- b. Liquidated damages on the contractor for failure to complete the project within the stipulated period, which will reflect the foregone economic and financial benefits to the country/facility users/Agency/LGU.
- c. Incentive bonus to the contractor for completing the project earlier than stipulated, which will reflect the additional/earlier economic and financial benefits to be realized by the country/facility users/Agency/LGU.
- d. Nullification of the franchise of the contractor for failure to build, operate and maintain the project facility and services according to the minimum design and performance standards prescribed in the contract.

#### 20. ADJUSTMENT OF TOLLS/FEES/RENTALS/CHARGES

"The tolls, fees, rentals and charges on the facilities are subject to adjustments according to a formula related to official government price indices which shall be defined before the bidding through the bidding documents and incorporated in the contract."

These official price indices shall mainly be those issued by the National Statistics Office and the Central Bank of the Philippines, among others.

The Agency/LGU shall also make appropriate adjustments in the tolls, fees, rentals, and charges, to compensate for opportunity costs to the contractor due to any undue delay and/or inadequacy in the right-of-way or other project facilities which are required to be provided by the Agency/LGU, provided that this provision is defined in the bidding documents and the contract.

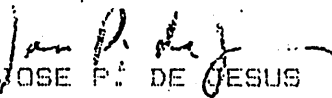
## 21. AGENCY/LGU IMPLEMENTING GUIDELINES

The Agency/LGU concerned may issue its own implementing guidelines provided the same are not inconsistent with the provisions of the law or these implementing rules and regulations.

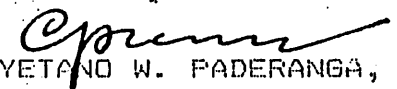
## 22. EFFECTIVITY

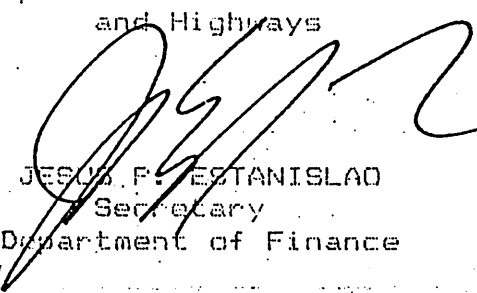
These Implementing Rules and Regulations shall take effect fifteen (15) days after the date of publication in a newspaper of general circulation.

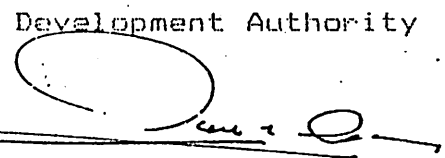
Done in the City of Manila, this 3rd day of April 1971.

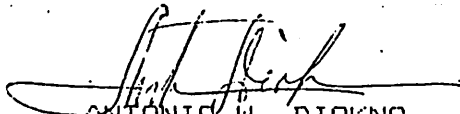
  
JOSE P. DE JESUS  
Secretary

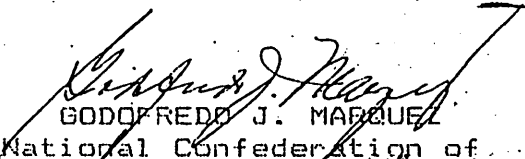
Department of Public Works  
and Highways

  
CAYETANO W. PADERANGA, JR.  
Director-General  
National Economic and  
Development Authority

  
JESUS F. ESTANISLAO  
Secretary  
Department of Finance

  
LUIS T. SANTOS  
Secretary  
Department of Interior  
and Local Government

  
ANTONIO W. DIOKNO  
Philippine Constructors  
Association

  
GODOFREDO J. MARQUEZ  
National Confederation of  
Constructors Association  
of the Philippines

NATIONAL IRRIGATION ADMINISTRATION  
LIST OF PROJECTS FOR BUILD-OPERATE-AND-TRANSFER / BUILD-AND-TRANSFER (BOT/BT) SCHEMES

PROJECT / MINI-HYDRO PLANT	L O C A T I O N						INSTALLED:	ESTI-	SCOPE	STATUS	
	PROVINCE	REGION	SYSTEM	CANAL	STATION	HEAD (m)	CAPACITY	MATED			IMPLEMEN-
							COST (P1,000)	TATION			PERICD
A. UNDER BUILD-OPERATE- AND-TRANSFER SCHEME (MINI-HYDRO-PLANTS)											
1. Baligatan Mini-Hydro Project	Isabela	II	-	-	-	-	3,600	80,000	1993-1994	Construction of a 27-meter high,130-meter long, 163,000-cubic meter volume embankment dam; 3 units @ 1,200 kilowatts hydro power plant; & other appurtenances.	FS Completed, DD On-going
2. Chico Mini-Hydro I	Apayao	II	Chico RIS	Tabuk Supply Canal No. 1	STA 8+615	21.1	700	71,288	-	Installation of a mini hydro plant across a canal.	Identified
3. Chico Mini-Hydro II	-do-	II	-do-	Chico Main Canal	STA 22+317	8.55	770	80,524	-	-do-	-do-
4. Chico Mini-Hydro III	-do-	II	-do-	Chico Gobgob Main Canal	STA 0+940 1+160	9.12	120	25,455	-	-do-	-do-
5. Chico Mini-Hydro IV	-do-	II	-do-	-do-	STA 0+940 1+160	9.12	120	25,455	-	-do-	-do-
6. Chico Mini-Hydro V	-do-	II	-do-	Quezon Main Canal	STA 0+80 0+240,0+460	8.25	760	107,123	-	-do-	-do-
7. Agno Mini-Hydro I	Pangasinan	I	Agno RIS	Agno Main Canal	STA 5+000	4.27	547	65,289	-	-do-	-do-
8. Agno Mini-Hydro II	-do-	I	-do-	-do-	STA 8+096 8+270	6.26	438	73,256	-	-do-	-do-
9. Dipalo Mini-Hydro I	-do-	I	Dipalo RIS	Dipalo Main Canal	STA 0+800 0+963	8.17	296	62,940	-	-do-	-do-



NATIONAL IRRIGATION ADMINISTRATION

LIST OF PROJECTS FOR BUILD-OPERATE-AND-TRANSFER / BUILD-AND-TRANSFER (BOT/BT) SCHEMES

PROJECT / MINI-HYDRO PLANT	L O C A T I O N				:INSTALLED: ESTI- : :CAPACITY : MATED :IMPLEMEN-: :HEAD : : COST : TATION : : PROVINCE :REGION:SYSTEM: CANAL : STATION : (m) : (kw) : (P1,000): PERIOD :				SCOPE	STATUS	
10.Dipalo Mini-Hydro II	Pangasinan	I	Dipalo	Dipalo	:STA 1+252	:8.17	: 296	: 62,940	: -	:Installation of a mini hydro plant across	:Identified
			RIS	:Main Canal	:STA 1+420	:	:	:	:	:a canal.	:
11.Tarlac RIS	Tarlac	III	Tarlac	Caniling	:STA 2+283	: 9.6	: 418	: 50,467	: -	: -do-	: -do-
Mini-Hydro			RIS	:Main Canal	:2+404	:	:	:	:	:	:
12.Magat RIS	Isabela	II	Magat	South High	:STA 10+372	: 3.8	: 474	: 71,891	: -	: -do-	: -do-
Mini-Hydro			RIS	:Canal	:	:	:	:	:	:	:
13.Angat Mini-Hydro I	Bulacan	III	Angat	San Rafael	:North	: 3.8	: 500	: 83,860	: -	: -do-	: -do-
			RIS	:Main Canal	:Constant	:	:	:	:	:	:
					:Gate	:	:	:	:	:	:
14.Angat Mini-Hydro II	-do-	III	-do-	Bustos	:South	:4.75	: 441	: 64,432	: -	: -do-	: -do-
				:Main Canal	:Constant	:	:	:	:	:	:
					:Gate	:	:	:	:	:	:
15.Angat Mini-Hydro III	-do-	III	-do-	-do-	:Talanpas	: 3.8	: 294	: 51,260	: -	: -do-	: -do-
					:Check Gate	:	:	:	:	:	:
16.T-RIS Mini-Hydro	N. Ecija	III	T-RIS	T-RIS	:STA 5+30	:14.79	: 252	: 39,326	: -	: -do-	: -do-
				:Main Canal	:	:	:	:	:	:	:
17.P-RIS Mini-Hydro	-do-	III	P-RIS	P-RIS	:STA 1+300	: 5.7	: 1,175	:115,565	: -	: -do-	: -do-
				:Main Canal	:	:	:	:	:	:	:
18.UPRIIS Mini-Hydro	-do-	III	UPRIIS	Penaranda	:STA 5+226	:6.43	: 507	: 71,989	: -	: -do-	: -do-
				:Main Canal	:	:	:	:	:	:	:

NATIONAL IRRIGATION ADMINISTRATION

LIST OF PROJECTS FOR BUILD-OPERATE-AND-TRANSFER / BUILD-AND-TRANSFER (BOT/BT) SCHEMES

PROJECT	PROVINCE	REGION	POTENTIAL AREA (has.)	INSTALLED CAPACITY (kw)	ESTIMATED COST (P1,000)	IMPLEMENTATION PERIOD	SCOPE	STATUS
B. UNDER BUILD-AND-TRANSFER SCHEME								
1. Balog-Balog Multipurpose Project	Tarlac	III	39,150	33,000	3,275,575	1988-1995	Construction of a 113.5 meter high, 243-meter-long, 11,800,000-cubic meter volume embankment dam; 334 kilometers of irrigation canals; 3 units @ 11,000 kilowatts hydro power plant; and other appurtenances.	Pre-Construction: On-going
2. Casecnan Transbasin Diversion Project	Quirino/N.E., Pangasinan, Tarlac	II, III	92,300	-	2,514,183	1993-2000	Construction of a 197-meter high, 868.6-meter-long, 27,680,000-cubic meter volume embankment dam; 25.7 km. transbasin tunnel, 237 km. of irrigation canals; 3 hydro power plants at 3 sites; and other appurtenances.	FS Completed
3. Aulo Dam & Reservoir Project	Nueva Ecija	III	550	190	100,000	1993-1995	Construction of a 29-meter high, 2,023,000-cubic meter volume embankment dam; 10 km. of irrigation canals; hydro power plant and other appurtenances.	FS & DD Completed
4. Lower Agusan Pump Irrigation Project	Agusan del Norte	X	7,920	-	606,950	1992-1996	Construction of 95 km. of irrigation canals; 2 pumping plants (6.54 cubic meters/second & 9.84 cubic meters/second capacity); & other related structures.	FS & DD Completed
5. Bubunawan-Tupalaong Rivers Irrigation Project	Bukidnon	X	2,940	-	144,366	1993-1996	Construction of 2 diversion dams (2.2 meters & 1.0 meter high, 35 meters & 20 meters long respectively); 167 km. of irrigation & drainage canals; & other related structures.	FS Completed

NATIONAL IRRIGATION ADMINISTRATION  
LIST OF PROJECTS FOR BUILD-OPERATE-AND-TRANSFER / BUILD-AND-TRANSFER (BOT/BT) SCHEMES

PROJECT	PROVINCE	REGION	POTENTIAL AREA (has.)	INSTALLED CAPACITY (kw)	ESTIMATED COST (P1,000)	IMPLEMENTATION PERIOD	SCOPE	STATUS
6. Malaig River Irrigation Project	Lanao del Sur	ARMM	2,000	-	129,681	1993-1996	Construction of a 1-meter high, 70-meter long diversion dam; 41 km. of irrigation and drainage canals; & other related structures.	FS Completed
7. Jalaur River Multipurpose Project II	Iloilo	VI	36,000	24,000	3,919,375	1994-2000	Construction of a 149-meter high, 300-meter long, 4,350,000-cubic meter volume dam; 79 km. of irrigation & drainage canals; 2 units @ 12,000 kilowatts hydro power plant; 30 km. transmission lines; 2 pumping plants; (28.4 cubic meters/second and 15.6 cubic meters/second capacity); & other appurtenances.	FS & DD Completed
8. Matuno Irrigation Project	Nueva Viscaya	II	12,680	180,000	2,470,206	1994-1999	Construction of a 147-meter high, 590-meter long, 10,000,000-cubic meter volume embankment dam; 3 diversion dams (1.6 meters, 1.8 meters & 2.5 meters high, 305 meters, 35 meters & 127 meters long respectively); 335 km. of irrigation and drainage canals; 2 units @ 92,700 kilowatts hydro power plant and other appurtenances.	FS Completed
9. Balintingon Multipurpose Project	Nueva Ecija	III	18,800	44,000	4,503,366	1997-2003	Construction of a 120-meter high, 460-meter long, 7,600,000-cubic meter volume embankment dam; 437 km. of irrigation and drainage canals; 2 units @ 22,000 kilowatts hydro power plant; and other appurtenances.	FS Completed

NATIONAL IRRIGATION ADMINISTRATION

LIST OF PROJECTS FOR BUILD-OPERATE-AND-TRANSFER / BUILD-AND-TRANSFER (BOT/ET) SCHEMES

PROJECT	PROVINCE	REGION	POTENTIAL AREA (has.)	INSTALLED CAPACITY (kw)	ESTIMATED COST (P1,000)	IMPLEMENTATION PERIOD	SCOPE	STATUS
10. Ilocos Sur Transbasin Project	Ilocos Sur	I	7,830	6,500	1,254,757	1996-2000	Construction of 2 diversion dams (10 meters & 6.7 meters high, 125 meters & 70 meters long respectively); 192 km. of irrigation & drainage canals; hydro power plant; 20 km. transmission lines and other appurtenances.	FS Completed:
11. Talakag Irrigation Project	Bukidnon	X	2,615	-	134,789	1994-1997	Construction of a 3-meter high, 52-meter long diversion dam; 40 km. of irrigation canals; and other related structures.	FS On-going
12. San Jose-Sibalon Reservoir Project	Antique	VI	4,485	3,100	199,400	1998-2002	Construction of a 50-meter high, 130-meter long, 761,000-cubic meter volume embankment dam; 5 km. of new irrigation canals; 2 units @ 1,550 kilowatts hydro power plant; & other appurtenances.	FS Completed:
13. Asue Integrated Agricultural Dev't. Project	Iloilo	VI	5,000	1,400	2,782,733	1998-2004	Construction of a 48.5-meter, 265-meter long, 796,000-cubic meter volume embankment dam; 139 km. of irrigation and drainage canals; hydro power plant; 10 km. transmission lines; and other appurtenances.	FS Completed:
14. Gumain Reservoir Project	Pampanga	III	16,750	-	4,949,753	1997-2003	Construction of a 109-meter high, 435-meter long, 5,580,000-cubic meter volume embankment dam; 4-meter high, 80-meter long diversion dam; 570 km. of irrigation & drainage canals; and other appurtenances.	FS Completed:

NATIONAL IRRIGATION ADMINISTRATION  
LIST OF PROJECTS FOR BUILD-OPERATE-AND-TRANSFER / BUILD-AND-TRANSFER (BOT/BT) SCHEMES

PROJECT	PROVINCE	REGION	POTENTIAL AREA (has.)	INSTALLED CAPACITY (kw)	ESTIMATED COST (P1,000)	IMPLEMENTATION PERIOD	SCOPE	STATUS
15. Small Reservoir Irrigation Project (SRIP)								
a. Banila SRIP	Pangasinan	I	1,685	520	108,690	-	Construction of a 30-meter high, 198-meter long, 289,000-cubic meter volume embankment dam; irrigation facilities; hydro power plant; and other appurtenant structures.	FS & DD Completed
b. Nasig-Id SRIP	Negros Oriental	VII	500	-	66,360	-	Construction of a 30-meter high, 110-meter long, 161,000-cubic meter volume embankment dam; irrigation facilities; and other appurtenances.	FS & DD Completed
c. Dumanjug-Ronda SRIP	Cebu	VII	550	200	103,780	-	Construction of a 22.2-meter high, 200-meter long, 149,000-cubic meter volume embankment dam; irrigation facilities; hydro power plant; and other appurtenances.	FS & DD Completed
d. Hibulangan SRIP	Southern Leyte	VIII	3,000	450	132,880	-	Construction of a 23.8-meter high, 120-meter long, 314,000-cubic meter volume embankment dam; irrigation facilities; hydro power plant; and other appurtenances.	FS & DD Completed

Estimated cost as of December 1990

FS - Feasibility Study

DD - Detailed Design

BOT.WK1

28-May-91