

MINUTES OF DISCUSSIONS  
ON  
THE BASIC DESIGN STUDY  
OF  
THE PROJECT  
FOR  
REHABILITATION OF THE 4TH THERMAL POWER STATION  
IN ULAANBAATAR (PHASE II )  
IN  
MONGOLIA

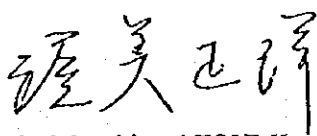
(Explanation of the Draft Report)

In May 96, the Japan International Cooperation Agency (hereinafter referred to as "JICA") dispatched a Basic Design Study Team for the Project for Rehabilitation of the 4th thermal Power Station in ULAANBAATAR (hereinafter referred as "the Project") to Mongolia, and through discussions, field survey, and technical examination of the results in Japan, has prepared the Draft Report of the study.

In order to explain and consult with the Mongolian side on the components of the Draft Report, JICA sent to Mongolia the Draft Report Explanation Team, which is headed by Mr. Masahiro ATSUMI, Grant Aid Division, Economic Cooperation Bureau Ministry of Foreign Affairs. The Team is scheduled to stay in the country from September 2 to September 10, 1996.

As a result of discussions, both parties confirmed the main items described on the attached sheets.

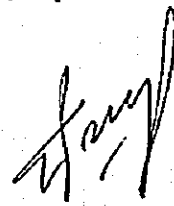
ULAANBAATAR, September 9, 1996



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## ATTACHMENT

### 1 Components of the Draft Report

The Mongolian side has agreed and accepted in principle the components of the Draft Report proposed by the team. Both parties have finally agreed on the items covered by the Project as listed in Annex I.

### 2 Japan's Grant Aid System

- (1) The Mongolian side has understood the system of Japan's Grant Aid explained by the team, as described in Annex II
- (2) The Mongolian side will take the necessary measures as described in Annex III herewith, to facilitate the smooth implementation of the Project, on condition that Grant Aid Assistance by the Government of Japan is extended to the Project.

### 3 Further Schedule

The study team will formulate the Final Report, and send it to the Mongolian side by the end of October, 1996.

### 4 Other Relevant Issues

#### 4.1 Responsible and Executing Organization

It is confirmed as per last Minutes of Discussions dated 28 May, 1996, Attachment 3, that:

- (1) The overall responsible organization for the Project has been changed from the Ministry of Trade and Industry, to Ministry of External Relation as a result of the reorganization of the Mongolian Government. The responsible organization is to act as the coordinating authority for the Japan's Grant Aid Cooperation to consult with each other in respect of any general matter that may arise from or in connection with the Project.
- (2) The executing organization for the Project has been also changed from the Ministry of Energy - Geology and Mining, to the Ministry of Infrastructure Development as a result of the reorganization of the Mongolian Government, which is to substantially manage the Power Station. And the Director of the Power Station is responsible for implementing the Project through making technical and administrative arrangements with JICA and other Mongolian organizations and/or authorities as required.

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#### 4.2 The Progress of Privatization

As confirmed in the last Minutes, attachment 7.3 "The Progress of Privatization", the basic concept remains that the privatization of power generation facilities with a capacity of more than 100 MW will not be expected.

The Japanese side insisted again that the Mongolian Government should take any necessary measures in maintaining properly its ownership of the equipment and materials donated through Japan's Grant Aid even after the station becomes partly privatized.

The Mongolian side has accepted the proposed idea.

#### 4.3 Steam Motor Valve

The Mongolian side requested the JICA Explanation team to consider the improvement of the steam motor valve, which were not able to be close at the boiler tube trouble, tube additionally include in the scope of the Project.

Through discussions with Mongolian engineer staff, the team understood the problem The Mongolian side facing concerning those valves was as following ;

- Present arranging steam motor valve (gate valve )cannot close at boiler tube failure.
- Frequency of boiler tube failure ( /year/8 boiler)
- Frequency of unopened trouble ( /year/8 boiler)

Taking these situation above into consideration, the team indicate that the Japanese side would seek available measure to solve within the procedure of the Project.

## ANNEX I

## Project Items

No.	Name of equipment	General specifications	Unit	Qty	Use
1	Steam motor valves	Dia. 500A, pressure 20 kg/cm <sup>2</sup> , temp. 500°C (flange type) (with motor control unit)	pc.	8	Warm water heater inlet valve for use in winter
2	Steam motor valves	Dia. 300A, pressure 140 kg/cm <sup>2</sup> , temp. 560°C (welded type) (with motor control unit)	pc.	18	For unit section
	By-pass valve	20A 140 kg/cm <sup>2</sup> , temp. 560°C	pc.	36	
3	Steam motor valves	Dia. 300A, pressure 140 kg/cm <sup>2</sup> , temp. 560°C (welded type) (with motor control unit)	pc.	8	For boiler outlet
	By-pass valve	20A 140 kg/cm <sup>2</sup> , temp. 560°C	pc.	16	
4	Steam motor valves	Dia. 175A, pressure 140 kg/cm <sup>2</sup> , temp. 560°C (welded type) (with motor control unit)	pc.	10	For startup
	By-pass valve	20A 140 kg/cm <sup>2</sup> , temp. 560°C	pc.	20	
5	Water supply motor valve	250A, 200 kg/cm <sup>2</sup> , 230°C (welded type) (with motor control unit)	pc.	20	For primary water supply connection
	By-pass valve	20A 200 kg/cm <sup>2</sup> , temp. 230°C	pc.	40	
6	Water supply motor valve	65A, 200 kg/cm <sup>2</sup> , 230°C (welded type) (with motor control unit)	pc.	8	Minimum flow valve
7	Manual water supply valve	400A, 25 kg/cm <sup>2</sup> , 230°C (flange type)	pc.	8	For water supply pump inlet
8	Manual water supply valve	250A, 25 kg/cm <sup>2</sup> , 230°C (flange type)	pc.	5	For section
9	Manual water supply valve	200A, 25 kg/cm <sup>2</sup> , 230°C (flange type)	pc.	16	
10	Manual water supply valve	150A, 25 kg/cm <sup>2</sup> , 230°C (flange type)	pc.	12	
11	Manual water supply valve	300A, 25 kg/cm <sup>2</sup> , 230°C (flange type)	pc.	16	
12	Motor Control Valves (for Water Level of Heat Exchanger C)	100A, 45 kg/cm <sup>2</sup> , 420°C with motor control unit	pc.	18	
	(Indicator for above)	With Control Cable	pc.	18	
1	Broadcasting amplifier	Main amplifier - Output 240W x 6 units	set	1	For calling
2	Telephone equipment for communication	Telephone exchange switchboard - 400 lines	set	1	For connection

1	Water level gauge	Length 457 mm, pressure 170 kg/cm <sup>2</sup> For drums, two-colored water level gauge	set	8	For water level measurement
2	Water level Indicator for deaerator	Direct Reading 1,720L/1,500L (Length) 25 dia. x 3t x 10 kg/cm <sup>2</sup> (Rating)	set	6	
3	Water Level for Heaters	Direct Reading 18 dia. x 4t x 1250L, 14 kg/cm <sup>2</sup> , 400°C (Vertical) 18 dia. x 4t x 720L, 14 kg/cm <sup>2</sup> , 400°C (horizontal) 34w x 220L, 13 kg/cm <sup>2</sup> , 265°C 34w x 220L, 16 kg/cm <sup>2</sup> , 300°C 34w x 220L, 26 kg/cm <sup>2</sup> , 345°C 35wx 220L, 45 kg/cm <sup>2</sup> , 420°C	set  set  set set set set	8  12  18 18 18 18	
1	Heat treatment unit	Nickel-chrome heating High-frequency induction heating	unit unit	1 1	For welding For welding
2	Motor coil winding machine	coil length 2000mm, coil press	set	1	For maintenance
3	Electric grinder	100φ 180φ	unit unit	40 20	For maintenance For maintenance
4	Dryer	3 kW, 380 V	pc	5	
5	Lighting	1000W, 400W, 250W	set	200	
6	Hoist	10 ton (geared trolley type) 10 ton (hook type) 3 ton 1 ton	pc pc pc pc	4 2 6 6	
7	Chain Block	3 ton 1 ton	pc pc	6 6	
8	Rubber Wheel	for folk lift	pc	8	
9	Drill		set	4	
10	Air grinder		set	3	
11	Electric Scissors		pc	3	
12	Vise		pc	8	
13	Vernier Calipers	200 mm 280 mm	pc pc	25 20	
14	Vernier Calipers with dial gauge	200 mm	pc	20	

	15	Micro Meter	175 mm	pc	2	
			150 mm	pc	2	
			100 mm	pc	2	
			75 mm	pc	3	
			50 mm	pc	3	
			25 mm	pc	3	
	16	Thickness gauge		pc	25	
	17	Ball bearing chuck		pc	30	
	18	Lever hoist		pc	3	
	19	Dial indicator		pc	10	
	20	Wrench		set	5	
	21	Box wrench		set	15	
	22	Driver set		set	10	

## ANNEX II Japan's Grant Aid System

### 1. Grant Aid procedure

(1) Japan's Grant Aid Program is executed through the following procedures.

Application	(Request made by a recipient country)
Study	(Basic Design Study conducted by JICA)
Appraisal & Approval	(Appraisal by the Government of Japan and approval by Cabinet)
Determination of implementation	(The Notes exchanged between the Government of Japan and the recipient country)

(2) Firstly, the application or request for a Grant Aid project submitted by a recipient country is examined by the Government of Japan (the Ministry of Foreign Affairs) to determine whether or not it is eligible for Grant Aid. If the request is deemed appropriate, the Government of Japan assigns JICA (Japan International Cooperation Agency) to conduct a study on the request.

Secondary, JICA conducts the study (Basic Design Study), using (a) Japanese consulting firm(s).

Thirdly, the Government of Japan appraises the project to see whether or not it is suitable for Japan's Grant Aid Program based on the Basic Design Study report prepared by JICA, and the results are then submitted to the Cabinet for approval.

Fourthly, the project, once approved by the Cabinet, becomes official with the Exchange of Notes signed by the Government of Japan and the recipient country.

Finally, for the implementation of the project, JICA assists the recipient country in such matters as preparing tenders, contracts and so on.

### 2. Basic Design Study

(1) The aim of the Basic Design Study (hereinafter referred to as "the Study"), conducted by JICA on a requested project (hereinafter referred to as "the Project") is to provide a basic document necessary for the appraisal of the Project by the Japanese Government. The contents of the Study are as follows:

- a) Confirmation of the background, objectives, and benefits of the requested Project and also institutional capacity of agencies concerned of the recipient country necessary for the Project's implementation.
- b) Evaluation of the appropriateness of the Project to be implemented under the Grant Aid Scheme from a technical, social and economic point of view.

- c) Confirmation of items agreed on by both parties concerning the basic concept of the Project.
- d) Preparation of a basic design of the Project
- e) Estimation of costs of the Project

The contents of the original request are not necessarily approved in their initial form as the contents of the Grant Aid Project. The Basic Design of the Project is confirmed considering the guideline of Japan's Grant Aid Scheme.

The Government of Japan requests the Government of the recipient country to take whatever measures are necessary to ensure its self-reliance in the implementation of the Project. Such measures must be guaranteed even though they may fall outside of the jurisdiction of the organization in the recipient country actually implementing the Project. Therefore, the implementation of the Project is confirmed by all relevant organizations of the recipient country through the Minutes of Discussions.

## (2) Selection of consultants

For smooth implementation of the Study, JICA uses (a) registered consultant(s). JICA select (a) firm(s) based on proposals submitted by interested firms. The firm(s) selected carry(ies) out a Basic Design Study and write(s) a report, based upon terms of reference set by JICA.

The consulting firm(s) used for the Study is(are) recommended by JICA to the recipient country to also work on the Project's implementation after the Exchange of Notes, in order to maintain technical consistency and also to avoid any undue delay in implementation should the selection process be repeated.

## 3. Japan's Grant Aid Scheme

### (1) What is Grant Aid ?

The Grant Aid program provides a recipient country with non-reimbursable funds to procure the facilities, equipment and services (engineering services and transportation of the products, etc.) for economic and social development of the country under principles in accordance with the relevant laws and regulation of Japan. Grant Aid is not supplied through the donation of materials as such.

### (2) Exchange of Notes(E/N)

Japan's Grant Aid is extended in accordance with the Notes exchanged by the two Governments concerned, in which the objectives of the Project, period of execution, conditions, and amount of the Grant Aid , etc., are confirmed.

- (3) "The period of the Grant Aid " means the one fiscal year which the Cabinet approves the Project for. Within the fiscal year, all procedures such as exchanging of the Notes , concluding contracts with (a) consultant firm(s) and (a) contractor(s) and final payment to them must be completed.



However in case of delays in delivery, installation or construction due to unforeseen factors such as weather, the period of the Grant Aid can be further extended for a maximum of one fiscal year at most by mutual agreement between the two Governments.

- (4) Under the Grant Aid, in principle, Japanese products and services including transport or those of the recipient country are to be purchased.

When the two Governments deem it necessary, the Grant Aid may be used for the purchase of the products or services of a third country.

However the prime contractors, namely, consulting constructing and procurement firms, are limited to "Japanese nationals". (The term "Japanese nationals" means persons of Japanese nationality or Japanese corporation controlled by persons of Japanese nationality).

- (5) Necessity of "Verification":

The Government of recipient country or its designated authority will conclude contracts denominated in Japanese yen with Japanese nationals. Those contracts shall be verified by the Government of Japan. This "Verification" is deemed necessary to secure accountability to Japanese taxpayers.

- (6) Undertakings required of the Government of the Recipient Country

In the implementation of the Grant Aid project, the recipient country is required to undertake such necessary measures as the following:

- a) To ensure land necessary for the sites of the Project and to clear, level and reclaim the land prior to commencement of the construction.
- b) To provide facilities for the distribution of electricity, water supply and drainage and other incidental facilities in and around the sites.
- c) To secure buildings prior to the procurement in case the installation of the equipment.
- d) To ensure prompt execution for unloading, customs clearance at the port of disembarkation and internal transportation of the products purchased under the Grant Aid.
- e) To exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which will be imposed in the recipient country with respect to the supply of the products and services under the Verified Contracts.
- f) To accord Japanese nationals whose services may be required in connection with the supply of the products and services under the Verified contracts, such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work.

- g) "Proper Use"

The recipient country is required to maintain and use the facilities constructed and equipment purchased under the Grant Aid properly and effectively and to assign staff necessary for this operation and maintenance as well as to bear all the expenses other than those covered by the Grant Aid.

h) "Re-export"

The products purchased under the Grant Aid should not be re-exported from the recipient country.

i) Banking Arrangements (B/A)

The Government of the recipient country or its designated authority should open an account in the name of the Government of the recipient country in an authorized foreign exchange bank in Japan (hereinafter referred to as "the Bank"). The Government of Japan will execute the Grant Aid by making payments in Japanese yen to cover the designated authority under the Verified Contracts.

The payments will be made when payment requests are presented by the Bank to the Government of Japan under an authorization to pay issued by the Government of the recipient country or its designated authority.

### Annex III

Necessary measures to be taken by the Government of Mongolia assuming Japanese Grant Aid is executed.

1. To undertake incidental outdoor works such as gardening, fencing, gates and exterior lighting in and around the sites.
2. To exempt taxes and to take necessary measures for customs clearance of the materials and equipment required for the project.
3. To exempt Japanese nationals from customs duties, internal taxes and other levies which may be imposed in Mongolia with respect to the supply of products and the services under the verified contractors.
4. To accord Japanese nationals whose services may be required in connection with the supply of products and services under the verified contracts, such facilities as may be necessary for their entry into Mongolia and stay therein for the performance of their work.
5. To use and maintain properly and effectively all the facilities rehabilitated and equipment purchased under the Grant.
6. To bear all the expenses other than those to be borne by the Grant, necessary for rehabilitation of the facilities as well as for the transportation and the installation of the equipment.
7. To assign the necessary staff and secure the necessary budget for operation and maintenance of the equipment purchased under the Grant.
8. To bear commissions to the Japanese foreign exchange bank to execute the banking services based upon the Banking Arrangement.
9. To provide a suitable and storage facilities in the 4th Power Station in accordance with the project implementation schedule to meet the requirement of the Japanese Grant Aid.
10. To ensure the necessary material to install the equipment and materials supplied by the Japan's Grant Aid are available, such as
  - steel material
  - heat insulation material
  - scaffolding material
11. To ensure the necessary vehicle and personnel for the installation are available
  - truck crane
  - truck
12. To organize the project team to manage and execute the over all project. The project team will organize mainly mechanical and electrical maintenance staff in 4th power station.







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