# No.34/10/2009-EO(F) Government of India Ministry of Personnel, P.G. and Pensions Department of Personnel & Training

North Block, New Delhi-1 Dated the 20<sup>th</sup> February 2009

# TRAINING CIRCULAR

Subject: A Group Training Course in Hydro-Electric Power Engineering to be held in Japan from 31/05/2009 to 09/07/2009 (Core Phase).

The undersigned is directed to state that the Japan International Cooperation Agency (JICA), under the Technical Cooperation Programme of the Government of Japan has invited applications for a Group Training Course in Hydro-Electric Power Engineering. The total duration of the programme is from March 2009 to July 2009, out of this, the Core Phase, from 31/5/2009 to 9/7/2009, will be held in Japan. The Preliminary Phase and the Finalization Phase will be held in the candidate's home country. The details of the programme and the application form may be drawn from Ministry of Personnel, Public Grievances and Pensions website (persmin.nic.in).

- 2. The course is designed to promote development, operation and maintenance of effective and environment-friendly hydro-electric power facilities. The course is meant for an electric power utilities or government agency which is in charge of the development of hydro-power generation.
- 3. The candidate should be Electric/Mechanical Engineers in charge of planning, construction, operation and maintenance of hydro-power sector in electric power utilities or governmental agencies or those currently in or expected to be, in the near future, posted to the managerial position; have a minimum of 5 years of practical experience in the field of hydro-power engineering, and expected to play a leading role for improving the hydro-power sector upon returning to the duties in home countries; be between 30-50 years of age; be proficient in both written and spoken English; be in good health, both physically and mentally to undergo the training; not be serving in the military.
- 4. The JICA covers the cost of a round-trip ticket between an international airport designated by JICA and Japan; travel insurance from arrival to departure in Japan; and includes allowances for accommodation, living expenses, outfit and shipping; expenses for study tours; free medical care for participants who may field ill after arriving in Japan (costs related to pre-existing illness, pregnancy, or dental treatment are not included). The participants are not allowed to take any family member during the training course.
- 5. It is requested that the nomination of the suitable candidates may please be forwarded to this Department in accordance with the eligibility criteria and the terms and conditions of the JICA Circular dated 13<sup>th</sup> February 2009. The Ministry/ State Governments may sponsor the names of only Government/Public Sector Undertaking functionaries.
- 6. The nomination details should be submitted in the JICA's prescribed proformas (A2A3 Forms), duly authenticated by the Department concerned alongwith the country report.

7. The applications should reach this Department through proper channel not later than 3<sup>rd</sup> April 2009. Nominations received after the prescribed date will not be considered. The circular inviting applications for training courses is available on this Department's website persmin.nic.in

(Trishaljit Sethi) Director

- 1. Ministry of Power, Shram Shakti Bhavan, New Delhi.
- 2. Ministry of Water Resource, Shram Shakti Bhavan, New Delhi.
- 3. All State Governments/ Union Territories.

[With the request to circulate it amongst the related organizations under them]

4. Director (Technical), NIC with the request to post the circular along with the JICA's circular on the Department's website.



No. 10/GT-CP/2009

13<sup>th</sup> February, 2009

Dear Mr. R.K. Kharb,

A Group Training Course in Hydro-Electric Power Engineering will be held in Japan from 31st May, 2009 to 9th July, 2009, under the Technical Cooperation Programme of the Government of Japan.

We are forwarding herewith two copies of the General Information Booklet on the above offer. It is requested that the following documents of the selected candidate may please be submitted to this office by 10th April, 2009.

- The Nomination Form A2A3 together with the medical history questionnaire,
- The filled in Questionnaire.

Further details are available in the General Information Booklet. It may be noted that the completed Questionnaire is essential for screening of applications.

It is further informed that 12 slots are available globally for the said course and it would be much appreciated if you could take further necessary action and submit the nomination(s) of suitable candidate(s) to this office by the designated date.

With regards,

Yours sincerely,

Senior Representative

Encl: As stated above.

Mr. R.K. Kharb

Desk Officer

Department of Personnel and Training

Ministry of Personnel, Public Grievances and Pensions

North Block

New Delhi.

Copy to

Ms. Arun Prabha, Under Secretary (PMU and Trg.), Department of Economic Affairs, Ministry of Finance, North Block, New Delhi.

June 127



# TRAINING AND DIALOGUE PROGRAMS

GENERAL INFORMATION ON

Hydro-Electric Power Engineering for Stable and Sustainable Supply

(for Electric / Mechanical Engineers)

集団研修:安定供給型水力発電 JFY 2009

<Type: Leaders Training / 類型:中核人材育成型> NO. J0900648 / ID. 0980939 From March 2009 to July 2009

Phases in Japan: From May 31, 2009 to July 9, 2009

This information pertains to one of the Training and Dialogue Programs of the Japan International Cooperation Agency (JICA), which shall be implemented as part of the Official Development Assistance of the Government of Japan based on bilateral agreement between both Governments.

# I. Concept

#### **Background**

Hydropower plants are operable for a long time if properly planned and constructed, and rightly operated and maintained since there has been little change in fundamental power generation system and equipment. Hydropower generation also draws much attention from the general public as the source of "clean", environmentally friendly and renewable energy.

It is conceivable also in developing countries that a steady development will be implemented in the field of hydropower generation from the viewpoint of effective use of domestic resources.

In developing countries, however, the developed amounts are low at present compared with economically developable potential water power and that hydraulic engineers' level is insufficient. The development of hydropower generation and fostering of engineers are important and also indispensable issues for implementing the development of hydropower resources.

What is expected of hydropower generation is advanced and diversified such as not only the conventional role of the base power source to meet the increasing power demands but also the readiness, system stability function using load adjustment function, and effective operation. Not only the knowledge of hydropower generation itself but also that of power supply including systems are necessary to flexibly cope with the advancement and diversification. Recently emphasized are electric power development to meet the future increase in power demand due to economic growth in developing countries and infrastructure development eyeing regional electrification, but the present situation in developing countries is the progress of the operation of increase in already-constructed facilities, complication of maintenance, and aging facilities. The knowledge of advanced operation and maintenance is required because operation and maintenance involves difficulty as hydropower stations are consequently built in remote areas and because improper operation may cause a long-term power cut.

#### For what?

(1) To be able to point out problems of the participant's country/organization through the understanding of the hydropower generation technology in Japan and the comparison. (2) To be able to draw up a feasible action plan for the issues of the participant's country/office clarified through the country reports and training (at the end of the Core Phase)

#### For whom?

This program is offered to electric / mechanical engineers in charge of planning, construction, operation and maintenance of hydro-power sector in electric power utilities or government agencies responsible for the hydro-power development.

#### How?

Participants shall have opportunities in Japan to gain deeper insights into efficient use of hydro power resources as well as to formulate improvement plans for their hydro power stations among others. It is also envisioned that the program would serve the cause of mutual collaboration among participating countries and Japan in the area of knowledge sharing.

# II. Description

# 1. Title (J-No.): Hydro-Electric Power Engineering for Stable and Sustainable Supply (J09)

2. Period of Program:

**Duration of whole program:** March 2009 to July 2009 **Preliminary Phase:** March 2009 to May 2009

(in a participant's home country)

Core Phase in Japan: May 31 to July 9, 2009

# 3. Target Regions or Countries:

Angola, Ethiopia, Ghana, India, Iraq, Laos, Mongolia, Nepal, Samoa, Tanzania, Uganda, Zimbabwe,

#### 4. Eligible / Target Organization:

An electric power utilities or government agencies which are in charged of the development of hydro-power generation.

- 5. Total Number of Participants: 10 participants
- 6. Language to be used in this program: English

#### 7. Program Objective:

- 1. To be able to point out problems of the participant's country/organization through the understanding of the hydropower generation technology in Japan and the comparison.
- 2. To be able to draw up a feasible action plan for the issues of the participant's country/office clarified through the country reports and training (at the end of the Core Phase)

#### 8. Overall Goal

To promote development, operation and maintenance of effective and environment - friendly hydro-electric power facilities.

# 9. Expected Module Output and Contents:

This program consists of the following components. Details on each component are given below:

# (1) Preliminary Phase in a participant's home country

(March 2009 to May 2009)

Participating organizations make required preparation for the Program in the respective country.

The outputs of this program are an Action Plan (refer to ANNEX4), and the theme of the Action Plan should be previously discussed with a supervisor to make it feasible plan.

Expected Module Output	Activities
To formulate country report	Formulation and Submission of Country Report

(2) Core Phase in Japan		
(May 31 to July 9, 2009)  Participants dispatched by the organizations attend the Program implemented in Japan.		
Expected Module Output	Subjects/Agendas	Methodology
, ,	To be able to point out problems of the pa	•
	rough the understanding of the hydropow	er generation
technology in Japan an		
	Design of Electrical and Mechanical Equipment of Hydroelectric Power Plant	Lecture
To acquire electrical /	Design Process of Hydraulic Turbine and Generator	Lecture
mechanical	Small-Scale Hydropower Generation	Lecture
engineering	Pumped-Storage Power Station	Lecture
technology related to hydropower development.	Tour of Okukiyotsu Pumped-Storage Power Plant	Site tour
	Tour of Okutadami and Otori Hydropower Plants	Site tour
	Tour of Nukabira Hydropower Plant	Site tour
	Hydroelectric Power	
	Generation/Transmission Simulator	Lecture
To acquire the	Training	
knowledge on the	Tour of Load Dispatch Center	Site tour
operation and maintenance of	Tour of Eastern Regional Control Center	Site tour
hydropower facilities	Tour of Minami Kawagoe Substation	Site tour
(electrical equipment)	Guidance for the Introduction of the SCADA System	Lecture
	Tour of HITACHI Omika Works	Site tour

	Environmental Impact Assessment of Hydropower Projects in Japan	Lecture
	Typical Environmental Issues Brought by Hydropower Development (Experiences in Japan)	Lecture
To acquire the knowledge on the life	Equipment Diagnosis Systems (Tour of Chigasaki Research Institute)	Site tour
extension, redevelopment, and environmental	Operation & Maintenance of Hydroelectric Power Generation Plant	Lecture
countermeasure of hydropower facilities	Recent Trend of Technology for Prolonging Lifetime of Electrical and Mechanical Equipment of Hydropower Plant	Lecture
	Redevelopment of Hydropower Plant	Lecture
	Tour of Katsurazawa Hydropower Plant	Site tour
	Basic Study of Economic Evaluation and Financial Analysis of Hydropower Project	Lecture
To acquire the derivative technology	Introduction of Demand Forecast in Japan	Lecture
of hydropower development (rural	Least Cost Power Development Analysis (ESPRIT)	Lecture
electrification, development of	Rural Electrification (RE) Development	Lecture
unutilized hydropower potential, financial planning)	Introduction of "Nam Mong Micro Hydropower Project in Laos"	Lecture
	Hydropower Development Utilizing Unused Potential	Lecture
	Benefit of Hydropower Plant in System Operation	Lecture
To understand the	To understand the outline of electric power industry in Japan	Lecture/Observation
outline of electric power industry in	Energy efficiency & conservation in Japan	Lecture
Japan	Observation of factory for hydropower equipment	Lecture
Program objective (2): To be able to draw up a feasible action plan for the issues of the participant's country/office clarified through the country reports and training (at the end of the Core Phase)		
Summary of training contents (Interim)	Advice on the contents and direction of the action plans prepared by the participants	Lecture/Discussion
Summary of training contents (Final)	Advice on the contents of the action plans prepared by the participants	Lecture/Discussion
Action-plan presentation (Final)	Action plan presentation by the participants	Lecture/Presentation

# III. Conditions and Procedures for Application

# 1. Expectations for the Participating Organizations:

- (1) This project is designed primarily for organizations that intend to address specific issues or problems identified in their operations. Applying organizations are expected to use the Program for those specific purposes.
- (2) In this connection, applying organizations are expected to nominate the most qualified candidates to address the said issues or problems, carefully referring to the qualifications described in section **II**-2 below.
- (3) Applying organizations are also expected to be prepared to make use of knowledge acquired by the nominees for the said purpose.

#### 2. Nominee Qualifications:

Applying Organizations are expected to select nominees who meet the following qualifications.

#### **Essential Qualifications**

- a. Present position, assignment:
- electric / mechanical engineers in charge of planning, construction, operation and maintenance of hydro-power sector in electric power utilities or governmental agencies (the former is highly recommended because the program is mainly relevant to electrical / mechanical engineering required for electric power utilities) responsible for hydro-power development, and
- those currently in or expected to be, in the near future, posted to the managerial position,
- b.Occupational Background:
- have a minimum of 5 years of practical experience in the field of hydro power engineering, and
- expected to play a leading role for improving the hydro-power sector upon returning to the duties in home countries,
- c. Age: 30-50 years of age,
- d. Language: be proficient in spoken and written English
- e. Health:

be in good health, both physically and mentally, to participate in the core phase of training in Japan,

- \*\*Pregnancy: Pregnant participants are strictly requested to complete the required procedures before departure in order to minimize the risk for their health. The procedures include ①letter of the participant's consent to bear economic and physical risks ② letter of consent from the participant's supervisor ③ letter of consent from your Embassy in Japan, ④ medical certificate. Please ask National Staffs in JICA office for the details.
- f. Not be serving in any form of military services,

# 3. Required Documents for Application

- (1) Application Form: The Application Form is available at the respective country's JICA office or the Embassy of Japan.
- (2) Questionnaire: Questionnaire should be sent together with Application Form, it will be used as a reference for contents of this program and screening of applicants. (Detailed information is provided in the ANNEX2).
- (3) Country Report: Those who are nominated by the Government are required to make a Country Report in order to use as a training material which is to develop mutual discussions scheduled for the Country Report Presentation Session. (Detailed information is provided in the ANNEX3).

# 4. Procedure for Application and Selection:

# (1) Submitting the Application Documents:

Closing date for application to the JICA Center in JAPAN: <u>April 10, 2009</u>

Note: Please confirm the closing date set by the respective country's JICA office or Embassy of Japan of your country to meet the final date in Japan.

# (2) Selection:

After receiving the document(s) through due administrative procedures in the respective government, the respective country's JICA office (or Japanese Embassy) shall conduct screenings, and send the documents to the JICA Center in charge in Japan, which organizes this project. Selection shall be made by the JICA Center in consultation with the organizations concerned in Japan based on submitted documents according to qualifications.

The organization with intention to utilize the opportunity of this program will be highly valued in the selection.

#### (3) Notice of Acceptance:

Notification of results shall be made by the respective country's JICA office (or Embassy of Japan) to the respective Government by **not later than <u>May 1</u>**, **2009**.

#### 5. Conditions for Attendance:

- (1) to observe the schedule of the program,
- (2) not to change the program subjects or extend the period of stay in Japan,
- (3) not to bring any members of their family,
- (4) to return to their home countries at the end of the program in Japan according to the travel schedule designated by JICA,
- (5) to refrain from engaging in political activities, or any form of employment for profit or gain,

- (6) to observe the rules and regulations of their place of accommodation and not to change the accommodation designated by JICA, and
- (7) to participate the whole program including a preparatory phase prior to the program in Japan. Applying organizations, after receiving notice of acceptance for their nominees, are expected to carry out the actions described in section II -9 and section III -3.

# IV. Administrative Arrangements

# 1. Implementing Organization:

(1) Name: Tokyo International Center (JICA Tokyo)

Address: 2-49-5 Nishihara, Shibuya-ku, Tokyo 151-0061, Japan

TEL: 81-3-3485-7051 FAX:81-3-3485-7904

URL: <a href="http://www.jica.go.jp/english/contact/domestic/pdf/welcome.pdf">http://www.jica.go.jp/english/contact/domestic/pdf/welcome.pdf</a>

Contact : Mr. MATSUDA Hiroyuki (Matsuda.Hiroyuki@jica.go.jp)

# 2. Partner Organizations:

(1) Name : Japan Electric Power Information Center (JEPIC)

Address: 4-15-33 Shibaura, Minato-ku, Tokyo, Japan

TEL: 81-3-6361-8320 FAX:81-3-3455-0994

URL: http://www.jepic.or.jp/en/index.html

(2) Name : Electric Power Development Co., Ltd. (J-POWER)

Address: 6-15-1, Ginza, Chuo-ku, Tokyo, Japan 104-8165

TEL: 81-3-3546-9412 FAX:81-3-3546-9533

URL: http://www.jpower.co.jp/english/index.html

#### 3. Travel to Japan:

- (1) Air Ticket: The cost of a round-trip ticket between an international airport designated by JICA and Japan will be borne by JICA.
- **(2) Travel Insurance**: Term of Insurance: From arrival to departure in Japan. The traveling time outside Japan shall not be covered.

# 4. Accommodation in Japan:

JICA will arrange the following accommodations for the participants in Japan:

JICA Tokyo International Center (JICA TOKYO)

Address: 2-49-5 Nishihara, Shibuya-ku, Tokyo 151-0066, Japan

TEL: 81-3-3485-7051 FAX: 81-3-3485-7904

(where "81" is the country code for Japan, and "3" is the local area code)

If there is no vacancy at <u>JICA TOKYO</u>, JICA will arrange alternative accommodations for the participants. Please refer to facility guide of TIC at its URL, <a href="http://www.jica.go.jp/english/contact/domestic/pdf/welcome.pdf">http://www.jica.go.jp/english/contact/domestic/pdf/welcome.pdf</a>

# 5. Expenses:

The following expenses will be provided for the participants by JICA:

- (1) Allowances for accommodation, living expenses, outfit, and shipping
- (2) Expenses for study tours (basically in the form of train tickets).
- (3) Free medical care for participants who become ill after arriving in Japan (costs related to pre-existing illness, pregnancy, or dental treatment are <u>not</u> included)
- (4) Expenses for program implementation, including materials
  For more details, please see p. 9-16 of the brochure for participants titled
  "KENSHU-IN GUIDE BOOK," which will be given to the selected participants
  before (or at the time of) the pre-departure orientation.

# 6. Pre-departure Orientation:

A pre-departure orientation will be held at the respective country's JICA office (or Japanese Embassy), to provide participants with details on travel to Japan, conditions of the workshop, and other matters.

# V. Other Information

- The participants are kindly requested to bring own laptop computer for making presentation materials during the course, if you have. (If the participants do not have it, it will be arranged by JICA after arrival to Japan.)
- 2. If you have a check on medical history of your Application Form, please write on detail about your condition or submit a certificate from your own doctor.

# VI. ANNEX:

ANNEX 1: Schedule (Tentative)

**ANNEX 2: Questionnaire** 

ANNEX 3: Country Report Format ANNEX 4: Action Plan (Sample)

# **ANNEX 1**

# **Schedule (Tentative)**

Date	Day	Place	Title
5/31	Sun		Arrival in Japan
6/1	Mon	JICA	Briefing
			Orientation (JICA)
6/2	Tue	e JEPIC Orientation (JEPIC)	
			Outline of Electric Power Industry in Japan
6/3	Wed	JEPIC	Promotion of Energy Efficiency & Conservation in Japan
			Visit Toshiba Keihin Works
6/4	Thu	Gunma	Visit Gunma Prefectural Enterprise Bureau
6/5	Fri	J-Power HQ	Orientation (J-Power)
			Observation of Load Dispatch Center
6/6	Sat		Holiday
6/7	Sun		Holiday
6/8	Mon	J-Power HQ	Presentation of Country Report
6/9	Tue	J-Power HQ	Basic Study of Economic Evaluation and Financial Analysis of
			Hydropower Project
6/10	Wed	J-Power HQ	Environmental Impact Assessment of Hydropower Projects in Japan
			Typical Environmental Issues Brought by Hydropower Development
			(Experiences in Japan)
6/11	Thu	J-Power HQ	Introduction of Demand Forecast in Japan
			Least Cost Power Development Analysis (ESPRIT)
6/12	Fri	J-Power	Equipment Diagnosis Systems
		Chigasaki	Observation of Chigasaki Research Institute
6/13	Sat		Holiday
6/14	Sun		Holiday
6/15	Mon	J-Power HQ	Operation & Maintenance of Hydroelectric Power Generation Plant
6/16	Tue	J-Power	Hydroelectric Power Generation/Transmission Simulator Training
		Kawagoe	
6/17	Wed	J-Power	Observation of Eastern Regional Control Center
		Kawagoe	
6/18	Thu	J-Power	Observation of Minami Kawagoe Substation
		Kawagoe	
6/19	Fri	J-Power HQ	Benefit of Hydropower Plant in System Operation

# **Schedule (Tentative)**

Date	Day	Place	Title
6/20	Sat		Holiday
6/21	Sun		Holiday
6/22	Mon	J-Power	Observation of Okukiyotsu Pumped-Storage Power Plant
		Okukiyotsu	
6/23	Tue	J-Power	Observation of Okutadami and Otori Hydropower Plants
		Okutadami	
6/24	Wed	НІТАСНІ	Guidance for the Introduction of the SCADA System
		Omika	
			Observation of Hitachi Omika Works
6/25	Thu	J-Power HQ	Hydropower Development Utilizing Unused Potential
6/26	Fri	J-Power HQ	Recent Trend of Technology for Prolonging Lifetime of Electrical
			and Mechanical Equipment of Hydropower Plant
			Redevelopment of Hydropower Plant
6/27	Sat		Holiday
6/28	Sun		Trip from Tokyo to Hokkaido (Obihiro)
6/29	Mon	J-Power	Observation of Nukabira Hydropower Plant
		Nukabira	
6/30	Tue	J-Power	Observation of Katsurazawa Hydropower Plant
		Katsurazawa	
7/1	Wed	J-Power HQ	Design of Electrical and Mechanical Equipment of Hydroelectric
			Power Plant
			Design Process of Hydraulic Turbine and Generator
7/2	Thu	J-Power HQ	Small-Scale Hydropower Generation
			Pumped-Storage Power Station
7/3	Fri	J-Power HQ	Rural Electrification (RE) Development
			Introduction of Nam Mong Micro Hydropower Project in Laos
7/4	Sat		Holiday
7/5	Sun		Holiday
7/6	Mon	J-Power HQ	Preparation of Action Plan Presentation
7/7	Tue	J-Power HQ	Presentation of Action Plan
7/8	Wed	JICA	Evaluation Meeting/ Closing Ceremony
7/9	Thu		Departure for Home Country

# **ANNEX 2**

Name of Applicants:

# Questionnaire

1. Current Issues of Hydropower Plant in Your Country  Describe current conditions and issues related to planning, construction, operation and maintenance of hydropower plants in your country, and measures taken so far or to be taken in order to solve them.			
	Stage (planning, construction, or O&M)	Current Condition and Issues.	Measures taken or to be taken to solve issues.
1.			
2.			
3.			
4.			
5.			

# 2. Participant's Request

Describe interesting subjects you would like to study in the program of JICA in order of priory.

Priority	Interesting Subject	Knowledge which you want to acquire	Reasons
1.			
2.			
3.			
4.			
5.			

# **ANNEX 3**

# Country Report

A participant is obligated to make a presentation of the country reports for about 20 minuets at the start of the program in Japan. It is desirable that the participant will make a presentation in Power Points using presentation materials to be prepared in its home country. The country Report should be sent to JICA Tokyo (<a href="mailto:saito.masafumi@jice.org">saito.masafumi@jice.org</a>) no later than May 22, 2009. If you have any annual reports or statistics papers, it is expected to attach them with the country report.

# 1. Governmental Organization related to Electric Industry

When you attach documents showing the relevant chart with the country report, you don't need describe it.
Instead, describe titles of the reference documents and pages clearly in the box.

Describe responsibilities of each ministry / department / division showing above.

	Name of ministry / department / division	Main responsibilities
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
:	To add columns when necessary.	

# 2. Organization of Electric Power Utilities / Governmental Agency where you belong

Draw an organization chart of electric power utilities / governmental agency where you belong.

When you attach documents showing the relevant chart with the country report, you don't need describe it.	
Instead, describe titles of the reference documents and pages clearly in the box.	

Describe responsibilities of each department / division showing above.

	Name of ministry / department / division	Main responsibilities
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
:	To add columns when necessary.	

# 3. Outline of Electric Power Sector in your country

Fill out blanks in the table below.

			2005	2006	2007	2008	2010 (planning)	2015 (prospect)	2020 (prospect)
1. Genera	al								
Population	(Millions)								
GDP (US 1	Billion \$)								
2. Utility									
Major elec	tric power util	ities							
3. Deman	d and Supp	ly							
	(a) Househo	old							
	(b) Agricult	ural							
Power	(c) Commercial								
demand (GWh)	(d) Industria	ıl							
(GWII)	(e) Others								
	Total $(a)+(b)+(c)+(d)+(e)$								
Interchang		(a) Import							
electricity	(GWh)	(b) Export							
		Balance (a)-(b)							
Maximum	load (MW)								
Load facto	r (%)								

			2005	2006	2007	2008	2010 (planning)	2015 (prospect)	2020 (prospect)
4. Genera	ting Facili	ties							
	(a)	IPP							
	Hydro power	Others							
		IPP (Coal)							
		(Gas)							
	(b) Thermal	(Oil)							
	power	Others (Coal)							
Power		(Gas)							
capacity (MW)		(Oil)							
(1111)	(c) Nuclear								
	(d) Photovoltaic								
	(e) Wind								
	(f) Geothe	rmal							
	(g) Others								
	Total $(a)+(b)+(c)+(d)+(e)+(f)+(g)$								
5. T & D	Facilities								
Transmissi		200kV or over							
route length (km)		Under 200kV							
	n line route	High Voltage							
length (km	.)	Low Voltage							
Transmissi	on/distribution	on loss (%)							

	2005	2006	2007	2008	2010	2015	2020
					(planning)	(prospect)	(prospect)
6. Others							
Electrification ratio (%)							
Gross generation cost (US cent / kWh)							

# 4. Existing Hydropower Stations

Fill out blanks in tables below.

Note: when you attach the relevant documents with the country report, you don't need full out them. Instead, describe <u>titles of the reference documents and pages</u> clearly.

	Name	Type of Hydropower Station	Location (Province)	Installed Power Output (MW)	Commencement Operation Date	Owner (Name of Electric Power Utility)
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						

	Name	Type of Hydropower Plant	Location (Province)	Installed Power Output (MW)	Commencement Operation Date	Owner (Name of Electric Power Utility)
10.						
11.						
12.						
13.						
14.						
15.						
16.						
17.						
18.						
19.						
20.						
21						
22.						
23.						
24.						
25.						
	To add columns when necessary.					

# 5. Scheduled Hydropower Plant

Fill out blanks in tables below.

Note: "Development Stage" in the tables below means (1) Planning (conceptual design) stage, (2) Detail design stage, or (3) Construction stage.

When you attach the relevant documents with the country report, you don't need full out them. Instead, describe titles of the reference documents and pages clearly.

					Scheduled		Davidonment	
	Name	Type of Hydropower Plant	Location (Province)	Commencement Operation Date	Power Output (MW)	Annual Power Energy (GWh)	- Development Stage	Developer / Engineer
1.								
2.								
3.								
4.								
5.								
6.								
7.								
8.								
9.								
10								
11.								
12.								
13.								

					Scheduled		Davidaniant	
	Name	Type of Hydropower Plant	Location (Province)	Commencement Operation Date	Power Output (MW)	Annual Power Energy (GWh)	- Development Stage	Developer / Engineer
14.								
15.								
16.								
17.								
18.								
19.								
20.								
21								
22.								
23.								
24.								
25.								
26.								
27.								
28.								
	To add columns when necessary.							

# 6. Electric Power System

Illustrate location maps of power plants and transmission lines in your country in boxes below.

Note: when you can attach the relevant documents with the country report, you don't need describe them. Instead, describe <u>titles of the reference documents and pages</u> clearly in the boxes.

# (1) Current Electric Power System in 2008

[Legend]
Thermal Power Plants (Existing):
Hydroelectric Plants (Existing):
Transmission Lines (Existing):
Substations (Existing):

# (2) Scheduled Electric Power System in ( )

[Legend]
Thermal Power Plants (Existing):
Hydroelectric Plants (Existing):
Transmission Lines (Existing):
Substations (Existing):
Thermal Power Plants (Scheduled):
Hydroelectric Plants (Scheduled):
Transmission Lines (Scheduled):
Substations (Scheduled):

# 7. Governmental Power Development Policy

When you attach the relevant documents with the country report, you don't necessarily need describe it on
detail. Instead, describe <u>titles of the reference documents and pages</u> clearly in the box.

# **ANNEX 4**

# Action Plan (Sample)

A participant is required to make an action plan and to make presentation of it at the final stage of the program in Japan. The action plan should be formulated based on organizational frameworks (personnel and budgets) required for its implementation, and based on a feasible program that can be implemented by the participant and his or her organization on basis. Please refer to the following example of the action plan.

Date: XX July, 2009 Name: XXX XXXX Country: XXXX

Agency / Organization:

				Agency / Organization.				
Name of the Action Plan	Eff	Efficiency improvement of ABCD hydropower station maintenance						
Problem to be	AB	CD hydropower station is constructe	ed step by step.	manner. As step 1, Unit1 - 3 were				
solved and its	cor	mmitted in 2005. and responsible de	epartment of po	wer plant was changed from hydro				
Background	dev	velopment department to system op	eration departm	nent. Equipment of power station is				
	nev	w, however, maintenance work is bot	thersome and o	utages continues long time because				
	of	insufficient skilled staff in maintenai	nce department	. The staff involved in construction				
	wo	rk knows the various trouble shootin	gs, however the	ey were shifted to construction work				
	of l	Unit 4 - 6 after the commissioning of	Unit 1 - 3.					
The End Goal of	Establish efficient maintenance strategy of hydro power plant utilizing the know-how of							
the Action Plan	construction staff							
Activities and		Activities	Deadline	Your Action / Role based on				
Schedule to				Knowledge and Experience				
achieve the End				obtained through the Program				
Goal	1	Discuss current problems with	July 2009	Organize the joint taskforce for				
		maintenance and construction		maintenance improvement				
		staff of ABCD hydropower station						
	2	Establish Maintenance data	September	Design maintenance data				
		management system using PC	2009	management system				
	3.	Collect the data during the	June 2009	Check the accumulated data				
		operation of Unit 1 - 3 and		periodically				
		construction of Unit 4 – 6						

	4. Utilize the accumulated data for June 2009  maintenance  maintenance  data management system in the office					
Implementing Agency	ABCD Hydro Energy Corporation					
Concerning Agency (if any)	ABCD Hydro Energy Corporation					
National Policy / Plan related to the Action Plan	Water Resource Utilization Plan ABCD River System Development Plan					
Human Source to implement the Action Plan.	To assemble a team by negotiation with department of XXXX in order to achieve the goal.  The team will consist of following engineers: XXXX, XXXX, XXXX, and XXXX.					
Financial Source to Implement the Action Plan.	Own fund of ABCD Hydro Energy Corporation					
Possible obstacles of the Action Plan (if any)	Conflict of interest between department and hydro development and system operation, insufficient budget to procure the maintenance data management system.					
Knowledge or experience acquired in Japan to achieve the objective	Experience of J-Power about the responsibility transfer from construction stage to maintenance stage  Maintenance data management system installed in Recent SCADA system  Equipment diagnostics					

# For Your Reference

# **JICA and Capacity Development**

The key concept underpinning JICA operations since its establishment in 1974 has been the conviction that "capacity development" is central to the socioeconomic development of any country, regardless of the specific operational scheme one may be undertaking, i.e. expert assignments, development projects, development study projects, training programs, JOCV programs, etc.

Within this wide range of programs, Training Programs have long occupied an important place in JICA operations. Conducted in Japan, they provide partner countries with opportunities to acquire practical knowledge accumulated in Japanese society. Participants dispatched by partner countries might find useful knowledge and re-create their own knowledge for enhancement of their own capacity or that of the organization and society to which they belong.

About 460 pre-organized programs cover a wide range of professional fields, ranging from education, health, infrastructure, energy, trade and finance, to agriculture, rural development, gender mainstreaming, and environmental protection. A variety of programs and are being customized to address the specific needs of different target organizations, such as policy-making organizations, service provision organizations, as well as research and academic institutions. Some programs are organized to target a certain group of countries with similar developmental challenges.

#### **Japanese Development Experience**

Japan was the first non-Western country to successfully modernize its society and industrialize its economy. At the core of this process, which started more than 140 years ago, was the "adopt and adapt" concept by which a wide range of appropriate skills and knowledge have been imported from developed countries; these skills and knowledge have been adapted and/or improved using local skills, knowledge and initiatives. They finally became internalized in Japanese society to suit its local needs and conditions.

From engineering technology to production management methods, most of the know-how that has enabled Japan to become what it is today has emanated from this "adoption and adaptation" process, which, of course, has been accompanied by countless failures and errors behind the success stories. We presume that such experiences, both successful and unsuccessful, will be useful to our partners who are trying to address the challenges currently faced by developing countries.

However, it is rather challenging to share with our partners this whole body of Japan's developmental experience. This difficulty has to do, in part, with the challenge of explaining a body of "tacit knowledge," a type of knowledge that cannot fully be expressed in words or numbers. Adding to this difficulty are the social and cultural systems of Japan that vastly differ from those of other Western industrialized countries, and hence still remain unfamiliar to many partner countries. Simply stated, coming to Japan might be one way of overcoming such a cultural gap.

JICA, therefore, would like to invite as many leaders of partner countries as possible to come and visit us, to mingle with the Japanese people, and witness the advantages as well as the disadvantages of Japanese systems, so that integration of their findings might help them reach their developmental objectives.



# **CORRESPONDENCE**

For enquiries and further information, please contact the JICA office or the Embassy of Japan. Further, address correspondence to:

JICA Tokyo International Center (JICA TOKYO) Address: 2-49-5 Nishihara, Shibuya-ku, Tokyo 151-0066, Japan

TEL: +81-3-3485-7051 FAX: +81-3-3485-7904



# **Guidelines of Application Form for the JICA Training and Dialogue Program**

The attached form is to be used to apply for the training and dialogue programs of the Japan International Cooperation Agency (JICA), which are implemented as part of the Official Development Assistance Program of the Government of Japan. Please complete the application form while referring to the following and consult with the respective country's JICA Office - or the Embassy of Japan if the former is not available - in your country for further information.

#### 1. Parts of Application Form to be completed

#### 1) Which part of the form should be submitted?

It depends on the type of training and dialogue program you are applying for.

# >Application for Group and Region Focused Training Program

Official application and Parts A and B must be submitted.

# >>Application for Country Focused Training Program including Counterpart Training Program

Part B will be submitted. Official application and Part A need not to be submitted

# 2) How many parts does the Application Form consist of?

The Application Form consists of three parts as follows;

#### Official Application

This part is to be confirmed and signed by the head of the relevant department/division of the organization which is applying.

# Part A. Information on the **Applying Organization**

This part is to be confirmed by the head of the relevant department/division of the organization which is applying.

# Part B. Information About the Nominee

This part is to be completed by the person who is nominated by the organization applying. The applicants for Group and Region Focused Training Program are required to fill in **every item**. As for the applications for Country Focused Training Program including Counterpart Training Program and some specified International Dialogue Programs, it is required to fill in the designated "**required**" items as is shown on the Form.

Please refer to the General Information to find out which type the training and dialogue program that your organization applies for belongs to.

# 2. How to complete the Application Form

In completing the application form, please be advised to:

- (a) carefully read the General Information (GI) for which you intend to apply, and confirm if the objectives and contents are relevant to yours,
- (b) be sure to write in the title name of the course/seminar/workshop/project accurately according to the GI, which you intend to apply,
- (c) use a typewriter/personal computer in completing the form, of which the electronic

version is available on the web site: <a href="http://www.jica.go.jp/">http://www.jica.go.jp/</a>, or write in block letters,

- (d) fill in the form in English,
- (e) use or "x" to fill in the ( ) check boxes,
- (f) attach a picture of the Nominee,
- (g) attach additional page(s) if there is insufficient space on the form,
- (h) prepare the necessary document(s) described in the General Information (GI), and attach it (them) to the form,
- (i) confirm the application procedure stipulated by your government, and
- (j) submit the original application form with the necessary document(s) to the responsible organization of your government according to the application procedure.

Any information that is acquired through the activities of the Japan International Cooperation Agency (JICA), such as the nominee's name, educational record, and medical history, shall be properly handled in view of the importance of safeguarding personal information.

# 3. Privacy Policy

# 1) Scope of Use

Any information used for identifying individuals that is acquired by JICA will be stored, used, or analyzed only within the scope of JICA activities. JICA reserves the right to use such identifying information and other materials in accordance with the provisions of this privacy policy.

# 2) Limitations on Use and Provision

JICA shall never intentionally provide information that can be used to identify individuals to any third party, with the following three exceptions:

- (a) In cases of legally mandated disclosure requests;
- (b) In cases in which the provider of information grants permission for its disclosure to a third party;
- (c) In cases in which JICA commissions a party to process the information collected; the information provided will be within the scope of the commissioned tasks.

# 3) Security Notice

JICA takes measures required to prevent leakage, loss, or destruction of acquired information, and to otherwise properly manage such information.

Training Programs under Technical Cooperation with the Government of Japan

# **Application Form for the JICA Training and Dialogue Program**

# **OFFICIAL APPLICATION**

(to be confirmed and signed by the head of the relevant department / division of the applying organization)

•			J		,				•			, , ,
1. Ti	itle: (	Please	write c	down a	as sho	wn in	the G	enera	I Information)			
		•							•			
2. N	2. Number: (Please write down as shown in the General Information)											
J	0		_ [							,		
3												
3. C	ount	ry Nan	ne:									
4 11		- ( )				- 4.						
4. N	ame	of App	oiying	g Org	janiza	ation	<u>):</u>					
5. N	ame	of the	Nom	inee	(s):							
1)									3)			
2)									4)			
	-				•			_	_	. •		pan International in the programs.
Date	):								Signature:			
Nam	ie:											
Desi	gnati	on / Po	sition									
		ent / Div								Official Stamp		
		dress a			Address:							
Con	tact Ir	nformat	ion	Te	Telephone: Fax: E-m			E-mail	ail:			
									1			
Con	firma	ation b	v the	e ora	aniza	tion	in ch	arge	(if necessa	arv)		
			-	_				_	-		ngly I a	gree to nominate
		n(s) on										
Date	):								Signature:			
Nam	ie:											
Desi	gnati	on / Po	sition									Official Stamp
Department / Division												

# Part A: Information on the Applying Organization

(to be confirmed by the head of the department / division)

1. Profile of Organization
1) Name of Organization:
2) The mission of the Organization and the Department / Division:
2. Purpose of Application
Current Issues: Describe the reasons for your organization claiming the need to participate in the training and dialogue program, with reference to issues or problems to be addressed.
2) Objective: Describe what your organization intends to achieve by participating in the training and dialogue program.

3) Future Plan of Actions: Describe how your organization shall make use of the expected achievements, in addressing the said issues or problems.
·
A) Colortion of the Newiger Describe the research the remains has been colorted for the
4) Selection of the Nominee: Describe the reason(s) the nominee has been selected for the said purpose, referring to the following view points; 1) Course requirement, 2) Capacity /Position, 3) Plans for the candidate after the training and dialogue program, 4) Plan of organization and 5) Others.
said purpose, referring to the following view points; 1) Course requirement, 2) Capacity /Position, 3) Plans for the candidate after the training and dialogue program, 4) Plan of
said purpose, referring to the following view points; 1) Course requirement, 2) Capacity /Position, 3) Plans for the candidate after the training and dialogue program, 4) Plan of
said purpose, referring to the following view points; 1) Course requirement, 2) Capacity /Position, 3) Plans for the candidate after the training and dialogue program, 4) Plan of
said purpose, referring to the following view points; 1) Course requirement, 2) Capacity /Position, 3) Plans for the candidate after the training and dialogue program, 4) Plan of
said purpose, referring to the following view points; 1) Course requirement, 2) Capacity /Position, 3) Plans for the candidate after the training and dialogue program, 4) Plan of

# Part B: Information about the Nominee

(to be completed by the Nominee)

NOTE>>>The applicants for Group and Region Focused Training Program are required to fill in "Every Item". As for the applications for Country Focused Training Program including Counterpart Training Program and some specified International Dialogue Programs, it is required to fill in the designated "required" items as is shown below.

1. Ti	1. Title: (Please write down as shown in the General Information) (required)  Attach the																	
nominee's																		
2. Number: (Please write down as shown in the General Information) (required) within the last three																		
months) here																		
J	0		-													Size	: 4x6	
															•	ttach		
3. In	form	ation	abo	ut the	Non	ninee	(nos	. 1-9 a	ire a	all re	quir	ed)				ume subm		
1) N	ame (	of No	mine	e (as i	n the	pass	port)	)								ubiii	Itteu	-)
Fa	mily	Name	•	ı			<del> </del>	<del>, , , , , , , , , , , , , , , , , , , </del>		1			· ·				li .	1
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Mi	ddle	Name	•	1			1	<del> </del>		ı		1			1			
2) Na	ationa	lity									5)	Date	of Bir	th (pl	ease	writ	e ou	t the
(as s	hown	in the	e pass	port)							mo	month in English			as in "April")			
3) Se	ex					( ) Male ( ) Female			D	Date Mor		nth	nth Year		A	ge		
4) Re	eligior	1																
																		_
6) P	reser	t Pos	ition	and C	urre	nt Du	ties											
Orga	nizatio	on																
Depa	rtmen	nt / Div	ision															
Pres	ent Po	sition															•	
Date	of emp	loymer	nt by the	, D	ate	Mont	:h	Year	Da	Date of assignment to the			Date	е	Mont	h \	Year	
		anizatio	•							present position								
7) Ty	/pe o	f Org	aniza	tion														
	-		ernme			( ) Local Governmental ( ) Public E						lic Ente	erpris	se				
( ) F	rivate	(profi	t)			( ) NGO/Private (Non-profit)					:)	( ) University						
( ) Other ( )																		
8) O	utline	e of d	uties	Desc	ribe	your	curre	nt dut	ties									

# 9) Contact Information

	Address:						
Office	TEL:	Mobile (Cell Phone):					
	FAX:	E-mail:					
	Address:						
Home	TEL:	Mobile (Cell Phone):					
	FAX:	E-mail:					
	Name:						
•	Relationship to you:						
Contact person in emergency	Address:						
in emergency	TEL:	Mobile (Cell Phone):					
	FAX:	E-mail:					

10) Others (if necessary)		

# 4. Career Record

# 1) Job Record (After graduation)

1) oob Rootia (Altor graduation)							
	City/	Pei	riod				
Organization	City/ Country	From	То	Position or Title	Brief Job Description		
	Country	Month/Year	Month/Year				
		l					

# 2) Educational Record (Higher Education)(required)

	City/	Pei	iod				
Institution	Country	From	То	Degree obtained	Major		
	Country	Month/Year	Month/Year				



3) Training or Study in Foreign Countries; please write your past visits to Japan specifically as much as possible, if any.

	City/ Country	Pei	riod		
Institution		From	То	Field of Study / Program Title	
	Country	Month/Year	Month/Year		

5. Language Proficiency (required)

1) Language to be used in the progr	am (as in GI)			
Listening	( ) Excellent	( ) Good	( ) Fair	( ) Poor
Speaking	( ) Excellent	( ) Good	( ) Fair	( ) Poor
Reading	( ) Excellent	( ) Good	( ) Fair	( ) Poor
Writing	( ) Excellent	( ) Good	( ) Fair	( ) Poor
Certificate (Examples: TOEFL, TOEIC)				
2) Mother Tongue				
3)Other languages ( )	( ) Excellent	( ) Good	( ) Fair	( ) Poor

<sup>&</sup>lt;sup>1</sup> Excellent: Refined fluency skills and topic-controlled discussions, debates & presentations. Formulates strategies to deal with various essay types, including narrative, comparison, cause-effect & argumentative essays.

<sup>&</sup>lt;sup>1</sup> Good: Conversational accuracy & fluency in a wide range of situations: discussions, short presentations & interviews.

Compound complex sentences. Extended essay formation.

Fair: Broader range of language related to expressing opinions, giving advice, making suggestions. Limited compound and complex sentences & expanded paragraph formation.

Poor: Simple conversation level, such as self-introduction, brief question & answer using the present and past tenses.

# 6. Expectation on the applied training and dialogue program

1) Personal Goal: Describe what you intend to achieve in the applied training and dialogue program						
in relation to the organization	onal purpose described in Part A-2.					
	scribe your previous vocational experiences which are highly relevant in raining and dialogue program. (required)					
3) Area of Interest: Describe	e your subject of particular interest with reference to the contents of the					
applied training and dialogu						
	ned by the Nominee) (required)					
I certify that the statements I in If accepted for the program, I	made in this form are true and correct to the best of my knowledge.					
	member of my family (except for the program whose period is one year or					
(b) to carry out such instru	uctions and abide by such conditions as may be stipulated by both the and the Japanese Government regarding the program,					
<b>5 5</b>	nd abide by the rules of the institution or establishment that implements the					
	in political activity or any form of employment for profit or gain,					
(e) to return to my home co arranged by JICA,	(e) to return to my home country at the end of the activities in Japan on the designated flight schedule					
	ram if JICA and the applying organization agree on any reason for such					
	ercise of my copyright holder's rights for documents or products that are are of the project, against duplication and/or translation by JICA, as long as poses of the program.					
Date:	Signature:					
	Print Name:					

( ) Yes

**Present Condition:** 

# **Version 071011**

#### MEDICAL HISTORY AND EXAMINATION 1. Present Status (a) Do you currently use any drugs for the treatment of a medical condition? (Give name & dosage.) ( ) Yes >> Name of Medication ( ), Quantity (b) Are you pregnant? ) No ) Yes ( months) (c) Are you allergic to any medication or food? ( ) No ( ) Yes >>> ( ) Food ( ) Other: Medication (d) Please indicate any needs arising from disabilities that might necessitate additional support or facilities. Note: Disability does not lead to exclusion of persons with disability from the program. However, upon the situation, you may be directly inquired by the JICA official in charge for a more detailed account of your condition. 2. Medical History (a) Have you had any significant or serious illness? (If hospitalized, give place & dates.) Past: ) Yes>>Name of illness ( ), Place & dates ( ) No Present: ) Yes>>Present Condition ( ) No (b) Have you ever been a patient in a mental hospital or been treated by a psychiatrist? Past: ( ) No ) Yes>>Name of illness ( ), Place & dates Present: ( ) No ) Yes>>Present Condition (c) High blood pressure Past: ) Yes ) No ) Yes>>Present Condition ( Present: ) mm/Hg to ( ) mm/Hg (d) Diabetes (sugar in the urine) Past: ) No ) Yes Condition Present: Yes>>Present ) ( ) No Are you taking any medicine or insulin? ) No ) Yes (e) Past History: What illness(es) have you had previously? ( ) Stomach and ( ) Liver Disease ( ) Kidney Disease ( ) Heart Disease Intestinal Disorder ) Thyroid Problem ) Tuberculosis ( ) Asthma ) Infectious Disease >>> Specify name of illness ) Other >>> Specify (e') Has this disease been cured? ( ) No (Specify name of illness)



3. Other: Any restrictions on food and behavior due to health or religious reasons?						
I certify that I have read the above instructions and answered all questions truthfully and completely to the best of my knowledge.  I understand and accept that medical conditions resulting from an undisclosed pre-existing condition may not be financially compensated by JICA and may result in termination of the program.						
Date:	Signature:  Print Name:					