No.12040/11/2013-FTC (Trg.) Government of India Ministry of Personnel, Public Grievances & Pensions Department of Personnel and Training (Training Division)

Block-4, Old JNU Campus New Mehrauli Road, New Delhi-67 Dated 27th February, 2013

TRAINING CIRCULAR

Subject: A Group Training Course on `Improvement of Electric Power Distribution Grid' to be held in Japan from 15th May, 2013 to 22nd June, 2013.

The undersigned is directed to state that the Japan International Cooperation Agency (JICA) under the Technical Cooperation of the Government of Japan has invited applications for the above programme to be held from 15th May, 2013 to 22nd June, *2013*.

- The programme is designed primarily for engineers working for competent government agencies for electric power sector or electric power companies those currently or expected to be posted in the core position to encourage such developments of distribution systems as decrease of distribution loss, improvement of electric power quality or electrification.
- The course aims for the candidates to acquire a comprehensive knowledge for efficient development of distribution systems.
- 4. This programme is offered to Electrical Power Engineers in Electric Power Distribution Sector/Department of the Government power utilities or those equivalent to government in the field of electric power distribution; be technical college graduates having more than 5 years of practical experience; should be between the ages of thirty (30) and forty (40); must not be serving in any form of military service; have competent command of spoken and written English which is equal to TOFEL; be in good health, both physically and mentally, to participate in the program in Japan.
- 5. In addition to the above, the following information in respect of the nominated officers may please be furnished while forwarding the nomination:
- 1) Whether attended any foreign training programme in the past? If so, the duration/detail thereof;
- 2) Whether clear from vigilance angle?
- 3) Age;
- 4) Whether working in North East State/J&K;
- 5) A brief in 50-100 words justifying the nomination.
- 6. The course covers the cost of a round- trip air ticket between an international airport designated by JICA; travel insurance from the time of arrival in Japan to departure from Japan; allowances for (accommodation, living expenses, outfit and shipping); expenses for JICA study tours and free medical care for participants who may fall ill after reaching Japan (costs relating 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.

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- 7. It is requested that the nomination of the suitable candidates may please be forwarded to this Department in accordance with the eligibility criteria.
- 8. The nomination details should be submitted (**in duplicate**) in the JICA's prescribed proformas duly authenticated by the Department concerned along with the Job Report.
- 9. The applications should reach this Department through the Administrative Ministry/State Government not later than 14th March, 2013. Nominations received after the prescribed date will not be considered. The details of the programme and the application form may be drawn from Ministry of Personnel, Public Grievances and Pensions website (persmin.nic.in), which is available in "What is New" under the Department of Personnel and Training.

(N.K. Wadhwa)
Under Secretary to the Government of India
Tele.No.011-26165682
E-mail-ID naresh.wadhwa@nic.in

Copy to:

- The Secretary, Ministry of Power Shram Shakti Bhawan, Rafi Marg, New Delhi-1.
- 2. All State Governments/Union Territories (with the request to circulate it amongst the related organizations).
- 3. NIC with the request to post the circular along with the JICA's circular and the enclosed application Proforma on the Department's website.



No. 10/GT-CP/2013



Japan International Cooperation Agency (Government of Japan)

February 18, 2013

Dear Mr. N.K. Wadhwa,

A Group Training Course on The Improvement for Electric Power Distribution Grid will be held in Japan from May 15, 2013 to June 22, 2013 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 <u>March 22, 2013</u>:-

(1) The Application Form together with the medical history questionnaire

Further details are available in the General Information Booklet. It may be noted that the completed Application form together with the medical history questionnaire is essential for screening of applications.

It is further informed that 11 slots are available globally for the above 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,

(Hiroshi Suzuk) Senior Representative

Encl: As stated above.

Mr. N.K. Wadhwa

Under Secretary (Training)

Department of Personnel and Training

Training Division

Block No. 4

Old JNU Campus

New Mehrauli Road

New Delhi.

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TRAINING AND DIALOGUE PROGRAMS

GENERAL INFORMATION ON

THE IMPROVEMENT FOR ELECTRIC POWER DISTRIBUTION GRID 集団研修「配電網整備」

JFY 2013

<Type: Trainers Training / 類型:人材育成普及型> NO. J13-00857 / ID. 1380797 From Apr. 2013 to Sep. 2013 Phases in Japan: From May 15., 2013 to June 22., 2013

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

Recently, the rural electrification and rehabilitation of distribution facilities at urban regions are considering at developing countries. These countries have many problems about power distribution, especially technical loss and non-technical loss. The unstable distribution facilities cause the technical loss and overload. Moreover, unstable inspections of meter system and tariff collection cause the aggravation of the management.

Therefore, it is important for developing countries to bring up to engineer, who can make planning and maintenance of distribution facilities.

For what?

This program is designed for engineers working for competent government agencies for electric power sector or electric power companies those currently in or expected to be posted in the core position to encourage such developments of distribution systems as decrease of distribution loss, improvement of electric power quality or electrification.

For whom?

This program is offered to electrical power engineers in electric power distribution sector / department of the governmental power utilities. For spread of the knowledge that participant got in core phase in Japan, the desirable participant is belong to training section in your organization or is in charge of training for your colleagues.

How?

The contents of this training course have lectures and practices by the distribution engineer of electric power utility, and the site viewing of distribution facility. Therefore, you may learn knowledge widely.



II. Description

1. Title (J-No.): The Improvement for Electric Power Distribution Grid (J13-00857)

2. Period of program

Duration of whole program:

Preliminary Phase:

(in a participant's home country)

Core Phase in Japan: Finalization Phase:

(in a participant's home country)

April 2013 to September 2013 April 2013 to May 2013

May 15 to June 22, 2013 June 2013 to September 2013

3. Target Regions or Countries

Bhutan, India, Iraq, Jamaica, Malawi, Myanmar, Nigeria, Philippines, Rwanda, Sierra Leone, Tanzania, Zambia,

4. Eligible / Target Organization

This program is offered to Electrical power engineers in electric power distribution sector / department of the governmental power utilities.

5. Total Number of Participants

eleven (11) participants at maximum.

6. Language to be used in this program: English

7. Program Objective:

Comprehensive knowledge for efficient development of distribution systems which is created through this program will be shared and the adoption and adaptation of the acquired knowledge is promoted among his/her organization.

8. Overall Goal

With the knowledge and skill concerning the improvement for electric power distribution grid, effective and stable electricity supply can be maintained and distribution losses will be reduced.

Eventually, CO2 emission will decrease and each country's economic growth will be enhanced by the stable electric power supply.

9. Expected Module Output and Contents:

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

(April 2013 to May 2013) Participating organizations and participants make required preparation for the Program in the respective country. Modules Activities Inception Report is Formulation and submission of the Inception Report, which



formulated	consists of the updated Country Report (ANNEX-3) and the		
	Issue Analysis Sheet (ANNEX-4) and preparation for		
	presentation material(using Microsoft Power Point)		
	* Deadline: Before/On arriving Japan		

(2) Core Phase in Japan (May 15,2013 to June 22, 2013) Participants dispatched by the organizations attend the Program implemented in Japan.		
Expected Module Outputs	Subjects/Agendas	Methodology
To find issues and causes concerning the distribution grid in respective countries	Inception Report Presentation (using Microsoft Power Point) and discussion (Based on Issue Analysis Sheet (ANNEX4(1)) and Country Report(ANNEX(3))	Exercise
and to share with others.	The outline of electric power industry in Japan	Lecture and Observation
	The outline of transmission/distribution systems	Lecture and Observation
To understand the planning/design techniques to effectively	The planning/designing of distribution systems	Lecture and Observation
establish low-loss electric power distribution grid in Japan and to explain the	The electrification and the correspondence to isolated island	Lecture and Observation
difference from respective countries	The distribution equipment factories	Observation
To understand the operation/maintenance techniques to maintain	The outline of quality management in Japan	Lecture and Observation
reliable electric power distribution grid in Japan and to explain the difference from respective countries	The operation/ maintenance of distribution systems	Lecture and Observation
Dissemination plan (Interim Report) on efficient stable electric supply is formulated.	Drawing up a Dissemination plan to achieve the efficient and stable electric supply with the use of the acquired knowledge. Guidance for Dissemination Plan Preparation for the presentation	Exercise
	Presentation of the Dissemination plan and discussion with all the participants for further improvement	Exercise



(3) Finalization Phase in a participant's home country

Participating organizations produce final outputs by making use of results brought back by participants. This phase marks the end of the Program.

Modules		Activities
То	implement	
Dissemination		Implementation of the dissemination activities based on the
plan(Interim report)		Dissemination plan by the Participants and the Organizations
		Submission its final report (Completion Report and Follow-up
		Activity Report) by September 2013 with formats to be
		provided through the respective country's JICA office.

<Structure of the program>

The flow of this course is shown in ANNEX-1

- 1. Preliminary phase (activities in your home country): Preparation of Country Report and Issue Analysis Sheet
- 2. Core Phase (activities in Japan):

SYLLABUS

(1	l) Japan's Ele	ectric Utilities	Days
C	Clarifying the differences in electric power operations in Japan and the participant's home		
C	country establishes a basis for understanding later training. In addition, comprehension of		
m	measures in Japan to reduce energy usage helps the participant understand the		
in	importance of energy conservation.		
C	Circumstances Regarding Electric Power		
	Outline of	An overview of Japan's electric utilities clarifies the differences in electric	0.5
	Electric	power operations in Japan and the participant's home country, providing a	
	Power basis for understanding subsequent training.		
	Industry in		
	Japan		
	Outline of	An introduction to Okinawa Electric Power Company's electric utility	0.5
	Okinawa	operations gives the participant a grasp of Okinawa EPCO's special	
	EPCO	characteristics and role in Japan's electric power industry, thus providing a	
		basis for understanding subsequent training.	

(2) Overview of Power Distribution Facilities		Days	
In understanding a general overview of electric power system distribution facilities in			
Japan, the particip	Japan, the participant learns about the technology used to reduce electricity loss and		
improve the reliab	improve the reliability of supply in the overall electric power system of under 7,000V.		
Outline of Systems			
Outline of	An introduction to the structure, frequency coordination, systems	0.5	
Electric Power	design, along with other aspects of the overall electric power system		
System	provides a reference for improving the reliability of supplies in the		
	overall electric power system.		

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	Load Dispatching Operation (Visit to Central Load Dispatching Office)	An introduction to load dispatching (power supply) operations, including the scope of operations, facilities and equipment, and other topics provides a reference in improving the reliability of supplies in the overall electric power system.	
	Outline of Protective Relay Systems	An introduction to protective devices and communication equipments, including application of various types of relays, protection system, and related laws and regulations provides a reference for improving the reliability of supplies in the overall electric power system.	1
	Outline of Transmission Lines	An introduction to power transmission lines, including equipment and facilities, environmental considerations, and other topics provides a reference for improving knowledge and understanding of overall electric power systems needed by those working in the field of electric power distribution.	0.5
	Outline of Distributing Substations	An introduction to distributing substations, including equipment and facilities, disaster prevention considerations, and other topics provides a reference for improving knowledge and understanding of overall electric power systems needed by those working in the field of electric power distribution.	1.0

(3) Power Distribution Facilities Planning and Design		Days	
c	By understanding the methods used in the planning and design of electric power distribution facilities, the participant learns the planning and design techniques that contribute to efficient maintenance of the power distribution network of under 7,000V.		
	Outline of Distribut	tion Department	
	Outline of Distribution Department	An introduction to the role of distribution departments, organizational structure, related laws and regulations, training and other topics provides a reference for efficient operations in distribution departments.	0.5
F	Planning for Power Distribution Facilities		
	Outline of Plans for Power Distribution Facilities	An introduction to planning of power distribution facilities, including classification of equipment and facilities as well as approaches to planning that incorporate economic evaluations, provides a reference for improving techniques in planning distribution facilities.	0.5
	Design of Power Distribution Facilities		
	Designing and Installment of Overhead	An introduction to overhead distribution lines, including design standards, construction methods and, provides a reference for improving techniques in designing distribution facilities.	0.5