

# Tungsten Inert Gas (TIG) Welding Technology Training Program



## Third Country Training Program

National Electric Power Company  
(NEPCO)

In Cooperation With  
Japan International Cooperation Agency  
(JICA)

2004/2005

### **Per-Diem**

Each participant will be paid daily subsistence equivalent to US\$ (10), as per diem upon arrival to Amman.

### **Transportation**

ETC management will arrange a proper transportation from ETC to Zarqa city (12 km) far from ETC, vice versa, from ETC to Amman , vice versa.

A proper transportation will be arranged during the site visits.

### **Phone Calls**

The participants may make their private local & long distance phone calls, from the dormitory of ETC, the rates will be charged according to special tariff laid down by Jordanian Telecommunication Co. (JTC).

## **APPLICATION PROCEDURES**

The application should be made on the special form that is attached to this pamphlet.

The duly completed application form should be in two copies, and should be sent to the Jordanian Ministry of Planning through the diplomatic channels, with copies to NEPCO and JICA.

## **SELECTION OF PARTICIPANTS**

NEPCO and JICA will select (40) officially nominated candidates among those who apply before the closing date, NEPCO will notify the selected participants through the Jordanian Ministry of Planning and JICA office.

## **CERTIFICATES**

All participants who complete the program's requirements and pass the program exams, will have a certificate accredited by JICA and NEPCO, and they will obtain certification by the Royal Scientific Society, Jordan (in accordance with international standards).

## TRAINING PROGRAM

The participants will have theoretical lectures and practical applications covering the following topics:

### 1- Lectures :

- Safety rules in welding
- TIG welding process technology include:
  - o Introduction of welding process.
  - o Welding equipment and its auxiliaries (torches, electrodes, etc.)
  - o Electrode and filler rod characteristics.
  - o Joint preparation
  - o Handling of TIG welding equipment.
- Welding techniques.
- Pipes joint preparation.
- Processes & technology of shield metal arc welding
- Welding faults & causes.
- Method of non destructive examination for welding joint.

### 2- Practical:

All the above items will be executed in parallel with practical training on welding (Carbon Steel, Aluminum, Stainless Steel) plates joints at different positions (F,H,V,O) & carbon steel pipes at (1g, 2g, 5g) positions through Arc and TIG welding .

## DATE & PLACE OF THE PROGRAM

The participants will be divided in to three batches & the program will be held for a period of (3) weeks for each batch, from November 20<sup>th</sup> to March 7<sup>th</sup>, 2004, at the workshops of ETC near Zarqa city (30 km) far from Amman.

## ACCOMMODATION

### Dormitory

At the ETC dormitory , each participant will share in double or triple air conditioned bedrooms. Three daily meals at the ETC restaurant and during the site visits the meals will be provided.

### Site Visits

ETC management will arrange study tours to some of utilities, related to the program.

### Health Care & Life Insurance

JICA Jordan office will provide health care and life insurance for all participants covering them from their departure from Baghdad and during the course duration in Jordan, until their departure to Baghdad.

## PROGRAM OBJECTIVES

The purpose of this program is to provide the participants with the necessary theoretical information and practical skills in the field of (TIG) Welding Technology.

At the end of this program, the participant is expected to be able to:

- 1- Implement the safety rules regarding the (TIG) Welding Technology.
- 2- Update and upgrade their welding skills and knowledge.
- 3- Understand non-destructive testing technology.
- 4- Obtain certification by the Royal Scientific Society (in accordance with international standards).

## PARTICIPANTS

(40) candidates officially nominated by the Ministry of Electricity of Iraq (MOEI) will be accepted according the following terms:

- Being on the staff of (MOEI)
- Having at least five (5) years experience in welding,
- Being under (45) years old of age,
- Being in good health, both physically and mentally in order to complete the course.

All participants should comply fully with the rules and regulations of the training program as laid down by ETC.

## PROGRAM MANAGEMENT AND TRAINING STAFF

The training program is carried out under the supervision and financed by JICA, and under direct management of NEPCO.

All instructors and lecturers from NEPCO who have considerable professional experience will implement this program in the better possible level.

## INVITATION

National Electric Power Co. (NEPCO) and Japan International Cooperation Agency (JICA) both are considering the technical training of the manpower for the Iraqi technical staff from the Ministry of Electricity of Iraq (MOEI) due to the importance of this type of training in developing and upgrading the manpower in consistence with the scientific and technical development.

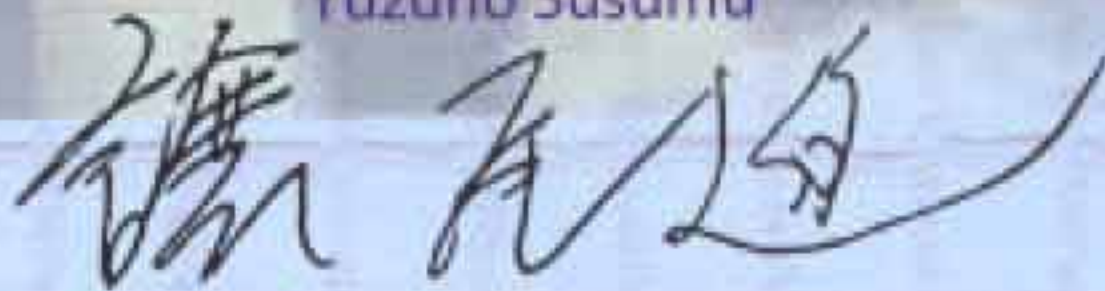
NEPCO and JICA agreed to implement a training program in the field of (TIG) Welding Technology, which is scheduled to be held at NEPCO Electric Training Center (ETC) starting from November 20<sup>th</sup>, 2004.

Since the field of (TIG) Welding Technology is one of the fields that always need developing the individual and collective skills among the staff who are working in this field, in order to cope with the quick development in electric power industry. Therefore, we invite you to participate in this course (TIG) Welding Technology). It is designed for those who are working or expected to be working in this field.

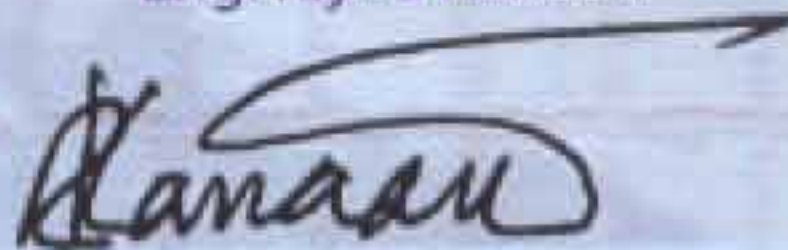
The Jordanian experience which stands for the qualified technical and managerial staff of NEPCO, and the Japanese Technology which stands for the modern equipment in order to ensure achieving the objectives of this program.

We trust this program will be of interest to the Ministry of Electricity in Iraq and hereby invite the Ministry to nominate their candidates.

Assistant Representative  
Iraq Unit  
JICA Jordan office  
Yuzurio Susumu



Manager, NEPCO International  
Eng. Riyadh Kanaan



Manager, Electric Training Center  
Eng. Riyadh Al-Rousan





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