In Egypt, the desert lies beside the sea in many cases. The cogeneration nuclear power plants which produce both water and electricity, seem to be the proper solution of the arid zones problem. These power plants enable to populate the arid zones and to construct new communities [1].

The implementation of a medium size nuclear power plant in the north-west coast of Egypt is considered nowadays. The manpower quality is an important factor to achieve the work. Qualified personnel are needed for the following main areas:

1. Pre-project activities and planning
2. Nuclear Regulations, licensing and safeguards
3. Nuclear Power Project management
4. Plant construction and commissioning
5. Operation and maintenance

For the pre-project activities, about 25 well qualified professionals of different scientific areas have to provide the bases of the project.

The project management is the most important organization unit during the implementation of the power plant. Up to 100 persons, among them 80 professionals, 15 technicians and 5 accountants are needed. Their task cover all the stages of the project.

THE MANUFACTURING OF EQUIPMENT AND COMPONENTS SPREADS OVER A PERIOD OF 7 YEARS. THE PLANT CONSTRUCTION TAKES ABOUT 6 YEARS IN PARALLEL TO THE MANUFACTURING. THE DESALINATION PLANT CONSTRUCTION TAKES PLACE WITH THE NUCLEAR STEAM SUPPLY SYSTEM (NSSS). THE SUGGESTED METHOD OF DESALINATION IS THE MULTI-STAGE FLASH EVAPORATION METHOD (MSF)[2] IN THIS STAGE 2500 PERSONS ARE NEEDED COMPOSED OF 300 PROFESSIONAL ENGINEERS, 300 TECHNICIANS AND 1900 CRAFTSMEN.

The operation and maintenance staff is trained in parallel to the manufacturing, erection and commissioning of the plant. The team of operation consists of 50 professionals, 100 technicians and 100 craftsmen. [3].

It is not possible for a developing country to complete a nuclear program alone. The execution should be accompanied by training and technology transfer activities.
The introduction of nuclear power as a new technology implies adequate efforts for the preparation of manpower requirements. The training of personnel takes relatively long time.

This training begins just after signing the contracts and takes about 5 years. The time schedule needed for the training of each category of workers and the essential training required is shown on Fig (1). This training partially fulfilled in the supplier country.

![Diagram of Training Program for Plant Operation Personnel](image)

**FIG (1) Training Program for Plant Operation Personnel**

**REFERENCES**

