3rd INTERNATIONAL CONFERENCE ON COMPUTATIONAL AND EXPERIMENTAL SCIENCE AND ENGINEERING (ICCESEN-2016)

19-24 October 2016, ANTALYA-TURKEY

SAFE RELATION BETWEEN NUCLEAR POWER PLANT AND POWER TRANSMISSION SYSTEM

Kamil Musa ORDU[1]✉, Kübra AYDIN[2]

[1] Istanbul Technical University, Workplace Health and Safety Unit, 34469 Istanbul-TURKEY
[2] Electricity Generation Company, Nuclear Power Plants Department, Ankara

Abstract

Located in the category of developing countries demand of electricity in parallel to developments economic and industry in Turkey has also increased rapidly over the past years. The continue growth in the coming years is forced Turkey to diversification of energy sources inevitably. Currently, from the past to the present energy system is commonly used in the oil, natural gas and coal reserves of fossil fuels, such as living in achieving political/economic difficulties due to the decrease of reserves and in our country, increase the use of renewable energy sources and to some extent the need for electrical energy from the NGS are working to meet has become a choice, not necessity. In our country there are two NPP project is planned to be built in Sinop and Akkuyu.

From site selection, and up to the decommissioning phase in nuclear safety a top priority in all operating nuclear power plants whether the circuit starting with the work situation brought the techniques during the process of connecting to the power transmission line and the establishment of the administrative infrastructure for the provision of safety is obvious that it is very important.

In this context; appropriate infrastructure to connect power transmission lines to the electricity produced by NPP must be ensured the safely and efficiently. The measures taken in this regard of great importance in terms of both safe and economic.

In this study; identification of problems that might occur during the connection of NPP to the power transmission lines; be addressed in terms of NPP safety problems and the result of examining the national measures were assessed in accordance with international regulations.

Keywords: *Nuclear safety culture, power transmission system, risk assessment*

✉*Corresponding Author Email : orduk@itu.edu.tr*