quality requirements. Advanced construction methods, scheduling approaches and necessary guidelines on construction management of NPP have been developed. In case of a new NPP build, development of a suitable method for management of project activities to ensure achieving the construction milestones during preparatory phase and construction phase after concrete pouring is a critical issue. Bangladesh has recognized the importance of establishing project management approach for construction of the country's first NPP, the "Rooppur NPP" based on the existing levels of technical expertise and technological means available in the areas of project management, construction, engineering, installation of NPP and also realizing the short time frame planned to bring the plant on-line by 2021-22. It is recognized that a successful completion of the works at the preparatory phase of NPP construction is an essential prerequisite for the successful commencement of construction phase after concrete pouring. A two-stage construction and scheduling method for "Rooppur NPP" has been adopted build under a turnkey approach through an intergovernmental agreement. The main activities for the preparatory stage of Rooppur NPP construction focusing on major activities in determining the desired NPP technology and project specific construction conditions have been discussed. The basis of the development of the technical design documentations of Rooppur NPP has been analyzed and the project management and engineering activities of the preparatory stage of construction are identified and discussed.

NP-VII-A 01: Nuclear Power Plant Perspective of Bangladesh: A Theoretical Overview

A. Mondal, N. Jaman, P. R. Dip and M. M. Rahman
Department of Physics, Jahangirnagar University, Savar, Dhaka, Bangladesh
E-mail: niazphy@gmail.com

The present Government of Bangladesh has approved the proposal of building nuclear power station in Rooppur, selected in 1963, in the national parliament on 9 December, 2010. A Couple of Committees incorporating government officials and Bangladesh Atomic Energy Commission (BAEC) have been formed to take proper initiatives concerning human resources, technology requirements, necessary legal acts, fund management, safety & security regards, and more importantly project executions. The aim of nuclear power plant (NPP) in Bangladesh focused on long-term stable and economic electricity supply to mitigate the present overwhelming power crisis, supporting the goal of reducing global climate change in an energy hungry world. Besides, the NPP also deals with the limiting import of coal, nature-friendly infrastructure, stable electricity generation costs, possibility of fuel storage, radioactive waste management, stability of fuel supply in near future along with the development of new faculties at universities and knowledge based economy development. This paper presents an overview on the present scenario of NPP, bilateral conditions with the vendor organizations, and its upcoming stages, the criteria involved in each step, the tools to support decision making that can be used and the difficulties in applying a formal process of decision making. Also discussed are ways to fabricate the accurate safety culture strategy to avoid incidents like Fukushima or Chernobyl, increasing public involvement as a way to improve acceptance and reduce opposition from various sectors of society, trying to minimize the expense and time involved in the implementation, through which Bangladesh is going to experience a new era of nuclear generation.

NP-VII-A 02: Baseline Evaluation of Rooppur Nuclear Power Plant from Hydrological and Environmental perspectives