A Study on Integrated Operation Strategies Between New & Renewable Energy Policy and Demand Side Management Policy

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Reasonable usage methods of energy resources, which are limited for human beings to use, consists of new & renewable energy (NRE) and demand side management (DSM). All technologies and policies for energy resources are classified into two fields, methods for using new energy resources and methods for using conventional fuel energy resources. Various development activities for these fields have been implemented and various subsidy programs have been operated to penetrate into markets rapidly. These subsidy programs have various types of subsidy by energy resources and programs and the budget are funded by government, which is called Electric Power Industry Basis Fund and is managed considering technology level, economic analysis, global environment, etc. These subsidy programs are managed by Korea Energy Management Corporation (KEMCO) for NRE and by Korea Electric Power Corporation (KEPCO) for DSM, the management are different among two corporations because the purposes and features of establishment are different though these are all public organization. KEMCO is managing the NRE subsidy programs according to the government will, while the management of KEPCO subjects to power system operations though the government will for DSM is considered. NRE which is on the initial phase of diffusion would not affect on power system seriously but the affects could be grown when the diffusion and importance are expanded. Hence some integrated affection analyses considering NRE and DSM are required and this paper shows the concept of integrated operation strategies with ground source heat pump systems which are related with two fields simultaneously.

Key words : New & Renewable Energy, Demand Side Management, Ground Source Heat Pump, Subsidy, Integrated Operation

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