Green energy with distributed generation networks support to realize liberalization on power utilities in Taiwan 黃明豪,謝玲芬 Transportation Technology and Logistics Management Management lfhsieh@chu.edu.tw

Abstract

There is an old gold saying "Electric power is the mother of all industries." In the traditional power generations are based thermal power supply. Meanwhile it takes too much oil and coal for burning and wasting energy, and creates much more CO2 to the environment where we are living. Other power supply generating solution is not easy to effort the power demand for industry.

On electric engineering field, the new trend solution on power supply distribution is small area power distribution with distributed generation networking. It can merge small area power plants as a centralized generation solution. And it provides more stable power quality and less power loss during the transmission. Meanwhile, that also can support to develop the green energy by small scale generators.

Power utilities are almost monopoly business in world wide. That also means there is much inefficiency during the operation because of monopoly ex-profit. To gain lower cost energy, "Green energy" needs a stage to realize. In this paper we discuss how to build such plant and engaged area power supply distribution by technology management.

By MCDM methodology, we hope to find the determine factors to build available power plants and realize liberalization on power utilities.

Keyword: Green energy, power utilities