ARTICLES IN THE GUARDIAN NEWS PAPER(INTRODUCTION & CONCLUSION ONLY)

Demand Side Management(DSM) - An Energy Management/Energy Efficiency/Energy Conservation/Energy Security Technique

By

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Introduction

The Presidential Task Force on Power(PTFP) inaugurated a National Steering Committee on Demand Side Management(DSM) - "the Nigerian Energy Efficiency Programme" on Saturday March 12, 2011. The aim is to devise strategies for reducing cases of wasteful and inefficient consumption of electricity in the country. Also, the committee is to educate consumers on the use of energy saving bulbs and encourages a behavioural change in the way consumers use electricity presently(leaving lamps on when they are not needed).The committee was inaugurated by Prof. Barth Nnaji, Chairman PTFP and Special Adviser to the president on Power. The initiative is to encourage efficient use of available energy now(during the period of scarcity)and in the future(when demand and supply targets are met).

The purpose of this article is to consider the composition of the committee and make contributions that may enhance this laudable initiative to satisfy power demand, expand supply capacity vide conservation ,derive alternative funding, promote efficiency and environmental protection by a reduction in the emission of GHGs. But what is DSM program all about?How can it be implemented? What benefits are actually derivable from such a program? Is it inline with Mr. President's NEW ROADMAP for energy availability, sufficiency, affordability and sustenability? What team should drive this DSM program?

Demand-Side Management (DSM) program is an electric utilities'(PHCN) planning, implementing and monitoring of activities designed to encourage customers to modify their levels and patterns of electricity consumption. These activities are aimed at reduction of future demand or demand growth through the use of energy efficiency techniques or and load management programs. DSM program is either developed by the supply side or other regulatory unit associated to the supply side but the actions are mostly implemented on the demand side. The DSM program comprises a number of programs depending on the focused sector such as industrial, commercial or residential(Domestic).

This article presents the concept of DSM, its effectiveness and role to electrical energy management. The process needed for the development and effectiveness of operation is also highlighted. It also assesses the potentials for electricity load management techniques and analyse possible barriers behind the development of DSM in Nigeria. In this article also a tool for assessing DSM options is proposed.

Conclusion

This article presents DSM programs performance and measure for energy management. The overall concept of DSM was derived in response to the prospective problems of energy security, global warming and the need for sustainable development. Due to its abilities to link its activities between the utilities and customers, there can be an increase in the efficiency of energy generation and utilization.

The important steps for DSM programs process were presented in this article, the study on electricity load profile was explained as an important step to this process as it gives an understanding of end-user electricity consumption and helps identify end-use options that can offer maximum DSM potentials. The method for screening DSM options was detailed by the use of the survey information and response of technical personnel on energy matters.

DSM programs have been used in many countries to manage the escalating energy consumption by end users. The benefits which the utility industry and demand side can obtain by using DSM programs have been explained. By developing and implementing DSM programs strategies, there is a potential monetary savings achievable. Experience of DSM implementation with other countries reveals the benefit of implementation of this program. This article also highlighted some barriers that may hinder the development of DSM in Nigeria. DSM program can be used in the country to defer the construction of new generation and at the same time minimize the GHG emission. This initiative is key to the power sector reform roadmap and the drivers should include all stakeholders to guarantee its success: task force members, phcn, discos, end users (industrial, commercial, domestic), the academia, and other relevant professionals. Since the initial thrust is conservation using energy saving bulbs and behavioural changes, policy issues must be considered including funding of pilot schemes, bulk purchase of bulbs, supply subsidies, ban of the use of incandescent lamps within a prescribed time frame, mass education in churches, mosques, various sectors, institutions, policy makers, and the development of flyers, jingle, banners in major languages. Also a manual detailing all types and technical information on energy saving bulbs should be produced and all derivable benefits listed. In our next issue after DSM, we shall deal elaborately with other energy efficiency schemes. There is need to build energy efficient homes, offices, factories, industries, eatries, banks, gas stations, stadia, markets, abattoirs, gyms etc. Initial immediate interventions shall be appropriate retrofits.