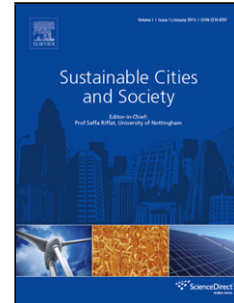


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Smart Grid Scenarios and their Impact on Strategic Plan – A Case Study of Omani Power Sector

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Highlights

- Different smart grid scenarios are developed
- Scenario costs and avoided cost benefit of smart grid is estimated
- Savings include avoided generation, T&D capacity and emissions
- Study concludes that benefit-cost ratio of DSM and minimum smart is above 1.0

Abstract

Electrical energy consumption if reduced during peak hours can result in the deferment of generation, transmission and distribution capacity addition. The postponement of capacity addition, or “avoided cost” is of promising value to electric utilities who can redirect financial resources for other purposes due to these offset costs. The reduction in energy consumption is achievable through smart grid implementation. Therefore, the utilities need to investigate whether upgrading their grid system to make it smarter is

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