



Integrated Resource Planning (IRP)
Part 1: Recent practice for the power sector

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Abstract:

Integrated resource planning (IRP) is a planning method in which the requirement of a resource is met through combinations of supply increases and conservation of demand, while minimising the costs to the firm and to society. Countries around the world have programmes devoted to promoting renewable sources of electricity and/or improving the efficiency with which it is used. But, there are relatively few cases where the comparison of both supply- and demand-side options, and their externalities, is an integral part of the evaluation process.

This document briefly describes the concept of IRP and then focuses on how IRP is being carried out for the power sector in various parts of the world. Cases included are those where IRP has actually been carried out, or at least where the IRP-approach can be discerned in some form – through portfolio optimisation or with an inclusion of demand side measures for meeting requirements, or where IRP has recently been recommended. Finally, pertinent questions on integrated planning for the power sector are considered.

Keywords: integrated resource planning (IRP), power/electricity planning, alternative energy sources, efficiency measures, regional planning

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