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# Risk-Seeker Information Gap Decision Theory Based Smart Grid Operation Encompassing Demand Response

[Tanuj Rawat](#) , [K. R. Niazi](#), [Sachin Sharma](#) & [Jyotsna Singh](#)

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## Abstract

This paper address optimal operational problem of smart distribution systems (SDS) encompassing uncertainties and demand response (DR).

Information gap decision theory (IGDT) is adpoted in this work to model the uncertainties in grid prices and power from renewables. The SDS operation is analyzed for opportunity (risk-seeker) framework of IGDT. The proposed risk-seeker IGDT based SDS