

Title: Comparison of Tools to Address Profound Uncertainty in Power Systems

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Abstract: Many tools have been developed to aid decision making under uncertainty. However, most power system analyses tend to use a single particular tool such as stochastic programming or robust optimization. Here, we critically review available tools including Robust Decision Making, which is widely used by the climate change adaptation community, and discuss their strengths and weaknesses. We investigate both theoretical properties of the tools and their practical performance through examples drawn from World Bank studies of climate and conflict risks.