

## Abstract

The lack of electricity supply is a major impediment of poverty alleviation in developing countries. Pakistan is currently suffering from the worst energy crisis in its history, leading to massive daily power outages. This study determines the economic and social costs of these outages in Gilgit, Pakistan through survey data collected through face-to-face interviews with 149 residents. Winter heating, cooking during Ramadan and the inability to use fans in summer represent the main obstacles while expensive back-up facilities such as gas light or fuel generators are mainstays of households and businesses. Via contingent valuation technique our study provides evidence that Gilgit residents are willing to pay Rs.340 extra, in addition to their monthly electricity bill, to ensure service reliability. Further, interval and ordered logit regressions were applied to identify the various socio-economic and demographic characteristics which determine the willingness to pay (WTP) to avoid outages. Our results show that the ownership of a generator, high electricity bill and the number of outages have a positive effect on the stated WTP while students and those whose perceived price of electricity is high are not willing to pay extra.

**JEL classification:** C24, C93, D12, H40, L94, Q41, R11, R21

**Key words:** Pakistan; Gilgit Baltistan; Contingent Valuation; Willingness to Pay; Power outages; Costs; Interval Regression