

A note on the pre-analysis plans for this project

Date: 2 July 2014

Since there are two distinct stages in this project, the investigators will submit two separate pre-analysis plans. The first document will cover the main analyses related to the first stage of the project, with a focus on estimating the demand for electricity connections. The second plan will cover the second stage of the project, with a focus on measuring the social and economic impacts of the grid connections.

In the first stage of the project (*May to October 2014*), the researchers will utilize the randomized intervention to: (1) trace out the demand curve for electricity connections in order to better understand the price at which the majority of Kenyans would connect to the grid, and (2) trace out the economies of scale in costs resulting from coordinated (grouped) connections.

In the second stage of the project (*2015 - 2016*), the intervention will allow researchers to measure the social and economic impacts of electrification.

Stage 1 pre-analysis plan

“Evaluation of the demand for electricity connections in Kenya”

As described, each of the 75 treatment communities will be randomly assigned to one of three treatment arms (i.e. subsidy groups). Within each treatment community, all enrolled households will receive the same subsidy offer. After receiving the subsidy offer, treatment households will be given 8 weeks to accept the offer and deliver the required payment to REA. At the end of this 8-week period, field enumerators will visit each household to verify that the required payment has been made to REA. Electricity connections will be delivered once these verifications are complete. The verification process will therefore comprise the main data set for first stage of this project. Specifically, we will use the results on take-up

at different prices to estimate the demand curve for electricity.

The first set of randomized offers were delivered in early-May and will expire in early-July. Our field enumerators will begin collecting take-up data on 4 July 2014. This round of data collection will continue through the end of September 2014. As a result, the final version of the data set that will be used in the analysis will be available to researchers in October 2014.

As of 2 July 2014, the investigators have not filed a pre-analysis plan for the first stage of this project. Since data collection is scheduled to begin on 4 July 2014, the investigators will be prohibited from accessing any take-up results until a pre-analysis plan has been filed.

Stage 2 pre-analysis plan

“The social and economic impacts of grid connections in Kenya”

Analysis on the impacts of the intervention will be carried out in 2015 and 2016, upon completion of the midline and endline survey rounds. The pre-analysis plan for the second stage of this project will therefore be registered at a later date, in either 2015 or 2016.