

question

111 views

Use of Smart Meters

It may be more cost effective to install smart meters to check on the electricity usage and remotely turn off or restrict power usage on non-paying customers. Smart meters provide two-way communication with the customer and utility company.

hw8

Updated 1 day ago by Sandip

the students' answer, where students collectively construct a single answer

I think this would be a great long term solution. Basically each house should get a smart meter installed eventually. But the upfront capital cost of purchasing these smart meters and installing them might be too large for the company to handle at this point.

Updated 1 day ago by Paul Lim

followup discussions for lingering questions and comments☒ Resolved ☐ Unresolved**Mangesh Telrandhe** 1 day ago

I concur with Paul. I have been involved with smart metering infrastructure projects for the past 10-years. Although we all like the concept, in almost all cases, the operational savings from installing Advanced Metering Infrastructure (AMI) for just electric meters seldom meet the financial criteria.

Although, if we are looking at a water authority with older inaccurate meters, the revenue increase from the new high accuracy meters coupled with the operational savings from AMI system could provide enough benefits to satisfy financial criteria.



Garon Chu 1 day ago What if we do a cluster analysis to identify spatially which neighborhood is more likely that installing smart meter can help change behavior of non-paying customer, and then look at it from a cost perspective to decide whether/and when to install the meters.



Paul Lim 1 day ago That would be an interesting approach to take, but I think the difficulty comes in gathering data that would help you determine a change in the behavior of non-paying customers. You would have to have a dataset that contained data on houses before and after a smart meter install. However, if you have such a dataset that means that the smart meter is already installed which defeats the purpose of trying to model the behavior of non-paying customers. You could maybe use a dataset that gathered this data on a different neighborhood, but then the data might not be representative of the neighborhood you're interested in.

☒ Resolved ☐ Unresolved**Sandip** 16 hours ago

With a smart meter new options will be available- that is beyond a simple switch on and off of the power. The utility company can tune the usage and risk. For example, the power to the defaulting customers can be supplied only when it is cheap that is when it is low demand, and power can also be supplied a few hours a day instead of all the time as a warning shot.