

*Defense of a Master's Thesis*

*Managing Off-Grid Power Use for Solar-Fueled Residences with Smart Appliances,  
Prices-to-Devices, and IoT*

by  
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Availability of electricity has significant impact on improving the quality of life. In developing countries, remote villages are often not connected to the utility grid. Solar power can be used for local generation of electricity. In this thesis, the matching of supply and demand of locally generated electricity for a typical residence in a remote village is studied. A new method is developed and evaluated whereby