

Standard Microgrid

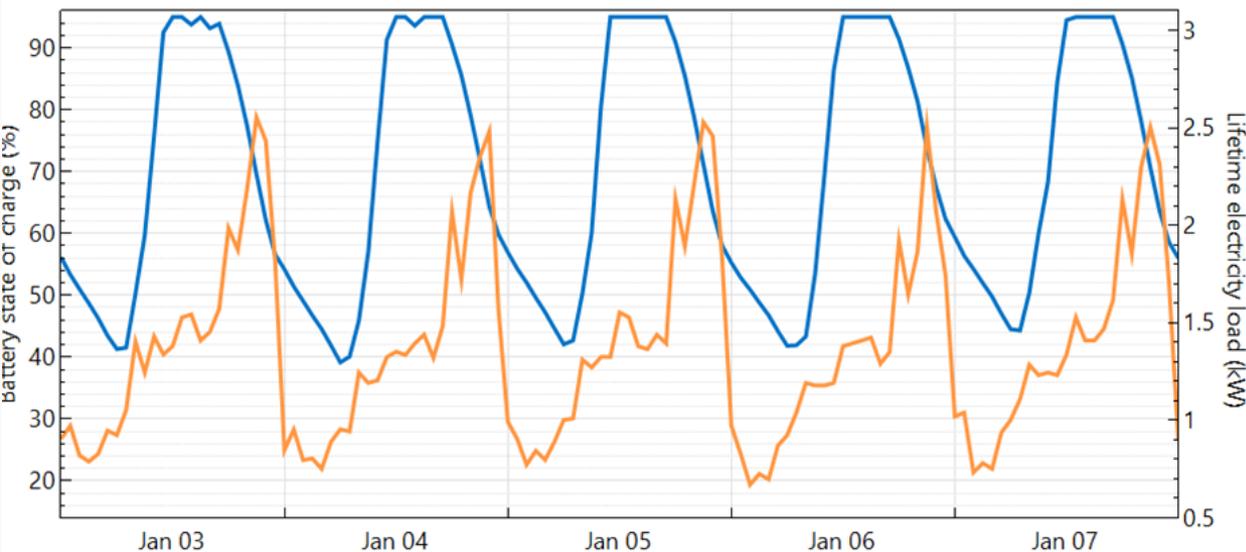
Integrating SAM for Rural Microgrid Load Modelling



A Distributed Energy Services Company

- Socially and economically sustainable model
- Selling prepaid, time of day, appliance level energy services
- Proprietary grid management hardware and software
- With the ability to monitor and control the systems remotely, we can manage demand, monitor usage and collect payments
- Mobile billing platform empowers local, unskilled women within the community to purchase and resell credit at a profit to community members
- Providing energy access at a price that is dramatically less than the least cost alternative

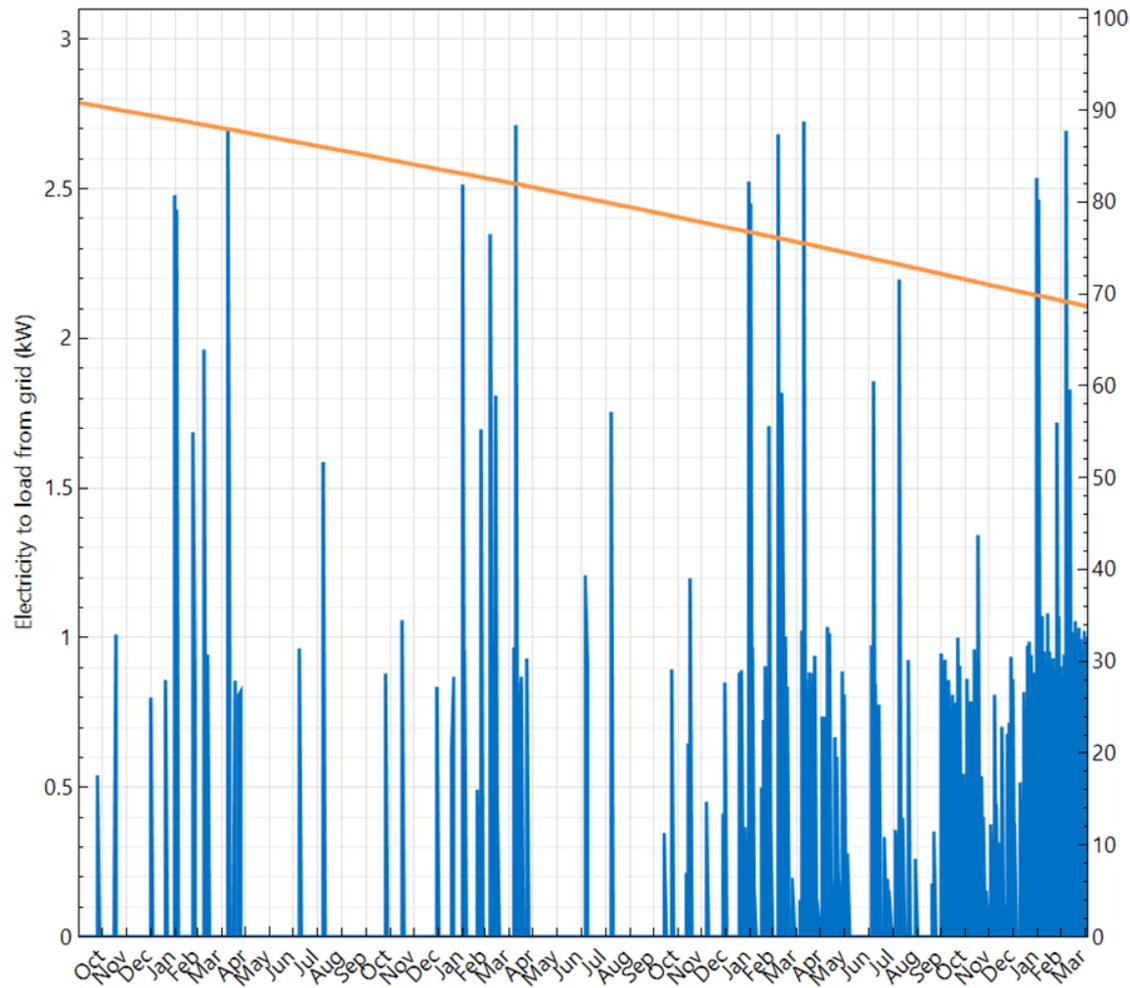




- Weather file albedo
- Weather file ambient temperature (C)
- Weather file snow depth (cm)
- Weather file wind speed (m/s)

☾ Lifetime Hourly Data

- Array DC power (kW)
- Battery capacity percent for lifetime (%)
- Battery current (A)
- Battery cycle depth of discharge (%)
- Battery number of cycles
- Battery state of charge (%)
- Battery total charge (Ah)
- Battery voltage (V)
- Electricity battery power target for automated dispatch (kW)
- Electricity grid power target for automated dispatch (kW)
- Electricity loss from battery ancillary equipment (kW)
- Electricity loss in battery power electronics (kW)
- Electricity to battery from PV (kW)
- Electricity to battery from grid (kW)
- Electricity to load from PV (kW)
- Electricity to load from battery (kW)
- Electricity to load from grid (kW)
- Electricity to/from battery (kW)
- Electricity to/from grid (kW)
- Inverter MPPT 1 Nominal DC voltage (V)
- Lifetime electricity load (kW)
- System power generated (kW)



Search

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Andrea Jacob Mwinuka
Customer ID: 371
Switch: 1008

SELL ENERGY

HISTORY

PROGRAM

Current Program

Since 2019-08-21 13:51
Kr3/d Kr24/w
Kr100/m Kr293/3m
Kr580/6m

New Program

Kr2/d Kr14/w
Kr58/m Kr171/3m
Kr338/6m

2. Indoor Light 7W
On - 00:00 Off - 23:59

2. Indoor Light
On - 00:00 Off - 23:59

3. Security Light 5W
On - 20:00 Off - 23:59

3. Security Light
On - 20:00 Off - 23:59

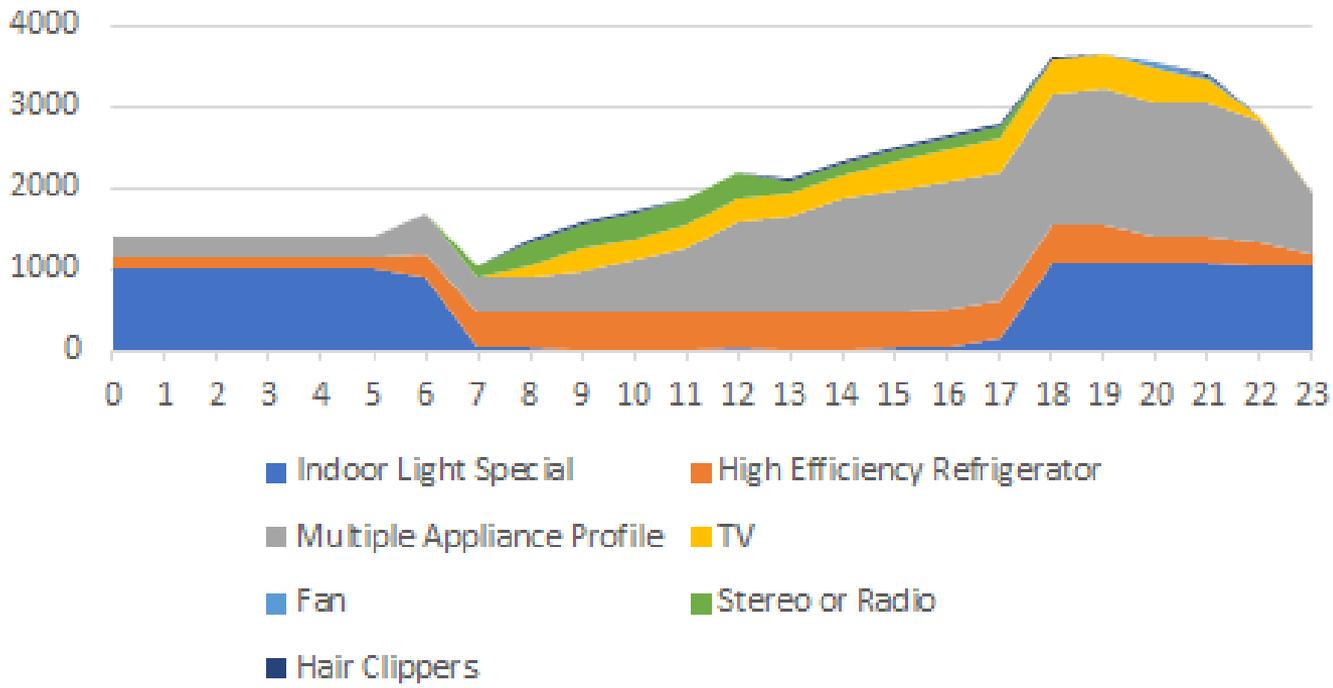
5. Stereo or Radio 25W
On - 15:00 Off - 21:59

5. Stereo or Radio
On - 15:00 Off - 22:00

CLEAR

SUBMIT

Load by Appliance



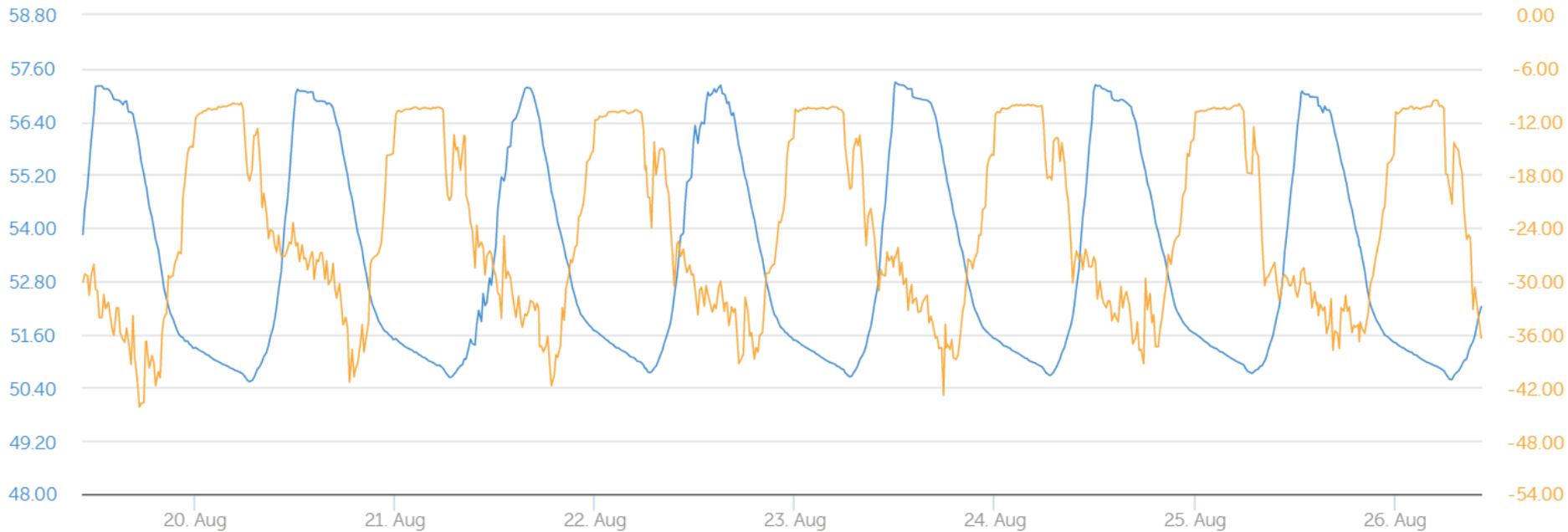
Analyse SAM results

- Thresholds set and compared for
 - Capacity shortfall over the year
 - Expected battery degradation
 - Grid, line and switch capacity
- Accept or reject new customer program accordingly



System - Battery Voltage And Current

~ Voltage (V) ~ Current (A)



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