

IEEE Smart Village

Technical Guidelines Document

DRAFT

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System Design

****Electrical Safety****

Hazard Mitigation

****Lightning Protection (Arrestors/Air terminals/Earthing)****

Alain may have document to link in here (in the future)

Battery Management

Technologies to be Deployed

****Generation****

Solar PhotoVoltaic

****Hydro****

Wind

Hybrid ((solar plus generators , saving on expensive batteries)

Transmission

Distribution

****Telecom****

Communications for System

****Intranet****

Communications for Customers

****Starlink****

<https://www.starlink.com/map>

**AD_4nXdg4sPdhd9n29ronVZij3rC9OKMYHRrUUqW0vAGpLGTxV3zBrKK5TF893OBH62spJ9tA
7g4clOxBd_eI0Q1bpQle2ZN541wECJ16PHL5QsEedXhE0osgLss9JJ8X9enWB9xPDbeYAZbvhnT
hIEhRWugl-NB**

Grid-Connections

Construction/Commissioning

Monitoring

****Past Examples****

Grafana

KW4H Dashboard: <http://kw4h.org/?orgId=2>

Vendor Options

****NewSunRoad****

Tech Comm Meeting Notes from when they joined:

https://drive.google.com/drive/folders/1lxgd5mXAfL3tatUhbCe1EypTibqUYIve?usp=drive_link

SparkMeter

****SteamaCo****

Schneider

Schneider devices can be monitored through the Wiser Energy API:

<https://exchange.se.com/devportal/api/wiser-energy-api/section/Documentation>

Victron

Victron offers an API that organizes devices by site:

<https://vrm-api-docs.victronenergy.com/#/>

Spiral Tech

****Jinco****

GroWatts

****Studer ****

Maintenance

Power Consumers

****PBK****

Service Kiosk

Are those kiosks in ISV mission (access to energy) or in entrepreneurs mission (profitable use of energy)? Who is serving tourists, ISV or ISV entrepreneurs?

Information Kiosk

Solar Powered, connected via Starlink and local Intranet. Local businesses are key beneficiaries. Tourists can find opportunities while in town, and give reviews on quality of experiences. This is a need for 4 islands, and needs to be met locally.

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