IEEE Smart Village

Technical Guidelines Document

DRAFT

Table of Contents

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_4nXdg4sPdhd9n29ronVZij3rC9OKMYHRrUUqW0vAGpLGTxV3zBrKK5TF893OBH62spJ9tA7g4clOxBd_eI0Q1bpQle2ZN541wECJ16PHL5QsEedXhE0osgLss9JJ8X9enWB9xPDbeYAZbvhnThIEhRWugl-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/1Ixgd5mXAfL3tatUhbCe1EypTibqUYIve?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 us 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.