

## **IEEE Smart Village**

### **Technical Guidelines Document**

#### **DRAFT**

# **Table of Contents**

**Table of Contents 2**

**System Design 3**

**Electrical Safety 3**

**Hazard Mitigation 3**

**Lightning Arrestors 3**

**Battery Management 3**

**Technologies to be Deployed 4**

**Generation 4**

**Solar PhotoVoltaic 4**

**Hydro 4**

**Wind 4**

**Transmission 4**

**Distribution 4**

**Telecom 4**

**Communications for System 4**

**Intranet 4**

**Communications for Customers 4**

**Starlink 4**

**Grid-Connections 5**

**Construction/Commissioning 6**

**Monitoring 7**

**Past Examples 7**

**Grafana 7**

**Vendor Options 7**

**NewSunRoad 7**

**SparkMeter 7**

**Steamaco 7**

**Schneider 7**

**Victron 7**

**Spiral Tech 7**

**Jinco 7**

**GroWatts 7**

**Studer 7**

**Maintenance 8**

**Power Consumers 9**

**PBK 9**

**Service Kiosk 9**

**Information Kiosk 9**

# **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](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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