**SAIEE National Conference - 2019** 

## H2Village: Solar PV - Hydrogen hybrid energy system for off-grid rural communities in Africa

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This is a Qualitative Concept Presentation A detailed paper will be presented at Beyond 2020 – World Sustainable Built Environment Conference, Gothenburg, Sweden, 9-11 June, 2020

## **Present-day Electrical Power System**



✤ As a rule of thumb total technical losses are in the order of 20-25%

There may be additional non-technical losses that may be in the order of 5-10%

## **Present-day Electrical Power System**



- Cost of system components: Transformers, cables, towers, controlling mechanisms, protective and safety devices, earthing systems etc.
- Operational and maintenance cost: Staff, training, security, damage and interruption recovery etc.









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