

EXERON

THE WORLD'S BEST OFF-GRID TECHNOLOGY

EXERON from 2 kW up to 65 MW

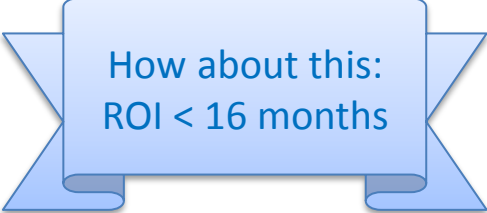
26 years of R&D = great technology and proven results



DO YOU NEED IT

YOU WILL LOVE TO HAVE EXERON IF YOU DO:

- operate diesel generator powered sites
- pay high fuel costs
- pay high fuel supply costs
- want to reduce diesel generator running hours
- operate off-grid and remote objects
- run diesel generator powered facilities
- pay high generator maintenance costs
- not have access to reliable electricity or electricity at all
- want to reduce OPEX
- want to be independent
- want to have a reliable power system
- want to have maintenance-free power system
- want to become green
- want to be different
- want to be power independent



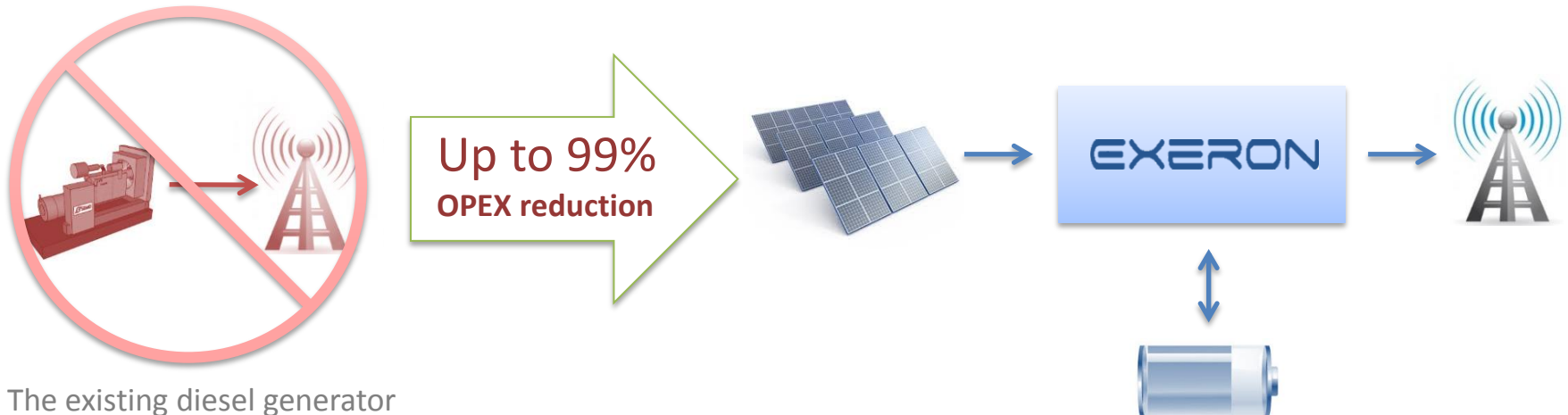
How about this:
ROI < 16 months

THE OPEX KILLER

IPS presents the telecom OPEX killer: **EXERON**



The world's first and most innovative modular system for off-grid power supply with energy storage.

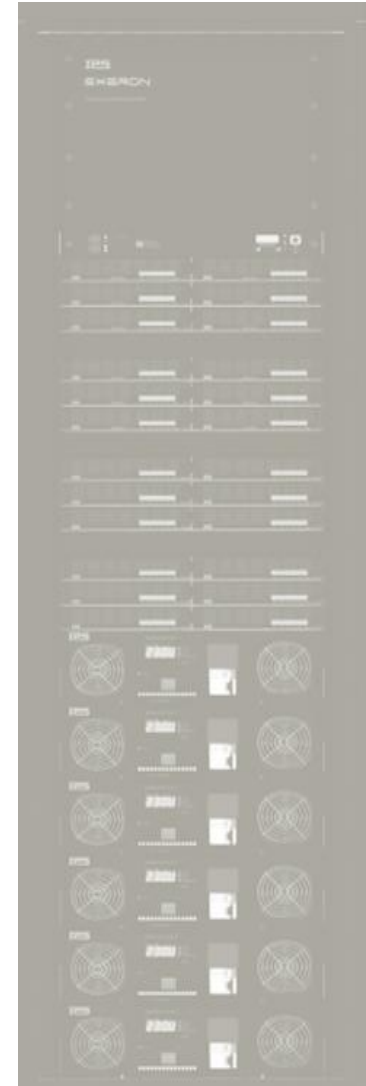
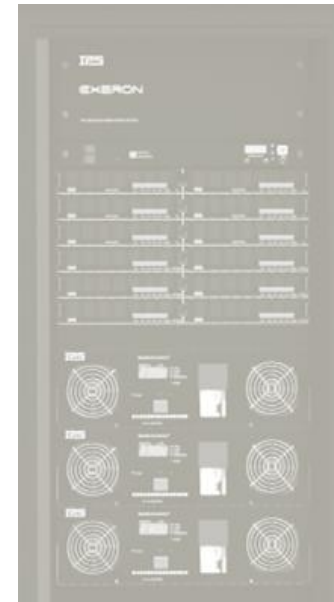
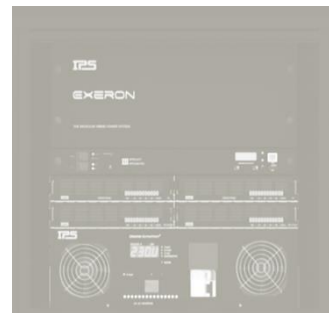


The existing diesel generator remains only as an emergency back-up. Intelligently controlled from EXERON.

UNIQUE

- ✓ Proven results
- ✓ Fantastic OPEX reduction
- ✓ Unique IPS fuel save mechanism
- ✓ Extreme PV MPPT controller efficiency
- ✓ Extraordinary battery management system
- ✓ Advanced modularity and redundant structure

EXERON



COMPLETE

- ✓ Project design
- ✓ Turn-key system
- ✓ Unlimited power
- ✓ Military approved

- ✓ IPS rectifiers
- ✓ IPS inverters
- ✓ IPS solar controllers
- ✓ IPS outdoor cabinets



EXAMPLE 1.5 kW TELECOM LOAD

TELECOM SITE EXAMPLE

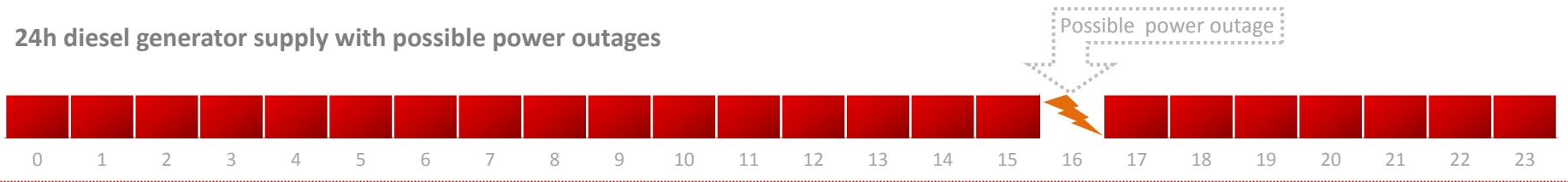
■ Solar Hybrid System
 ■ Battery
 ■ Diesel generator
 ⚡ Power outage

AC source	Average load	Energy consumption per 24h in kWh	PV power	Battery capacity	Usable battery capacity	Hybrid mode duration PV + Battery	Pure battery back-up time
DG	1.5 kW	36 kWh	6 kWp	760 Ah	29.2 kWh	24 h	~20h



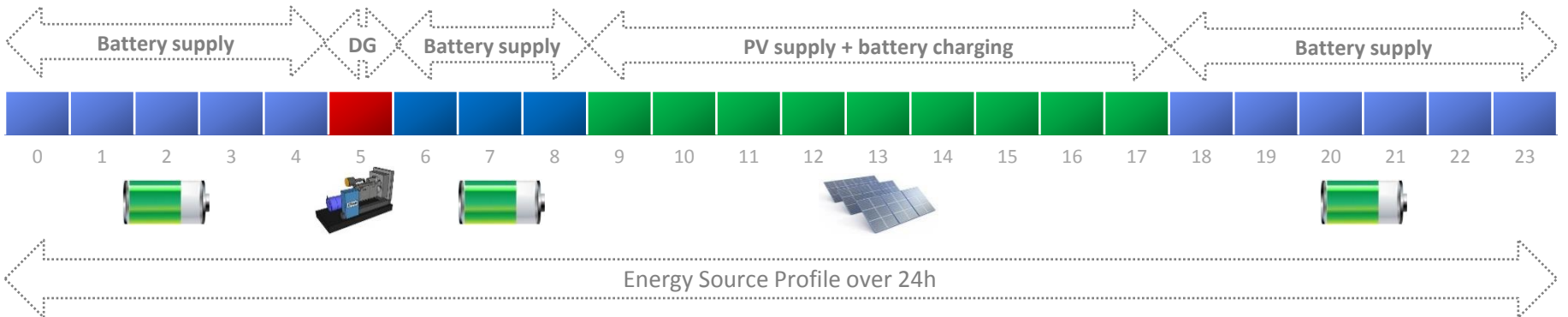
BEFORE IPS EXERON SITE UPGRADE:

24h diesel generator supply with possible power outages



EXPECTED PERFORMANCE AFTER IPS EXERON SITE UPGRADE:

IPS Hybrid EXERON + battery storage



RESULTS

Monthly performance report



Sunny day



Partly sunny day



Cloudy day



Rainy day

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Weekly average
							Mostly sunny
24.08.2015 DG :: 0h	25.08.2015 DG :: 0h	26.08.2015 DG :: 0h	27.08.2015 DG :: 0h	28.08.2015 DG :: 0h	29.08.2015 DG :: 0h	30.08.2015 DG :: 0h	DG :: 0h
							Partly cloudy
31.08.2015 DG :: 2.5h	01.09.2015 DG :: 0h	02.09.2015 DG :: 0h	03.09.2015 DG :: 0h	04.09.2015 DG :: 2.7h	05.09.2015 DG :: 0h	06.09.2015 DG :: 0h	DG :: 5.2h
							Mostly cloudy and rainy
07.09.2015 DG :: 2.1h	08.09.2015 DG :: 0h	09.09.2015 DG :: 2h	10.09.2015 DG :: 0h	11.09.2015 DG :: 2.2h	12.09.2015 DG :: 2h	13.09.2015 DG :: 2h	DG :: 10.3h
							Partly sunny
14.09.2015 DG :: 0h	15.09.2015 DG :: 0h	16.09.2015 DG :: 0h	17.09.2015 DG :: 0h	18.09.2015 DG :: 0h	19.09.2015 DG :: 2h	20.09.2015 DG :: 0h	DG :: 2h

RESULTS

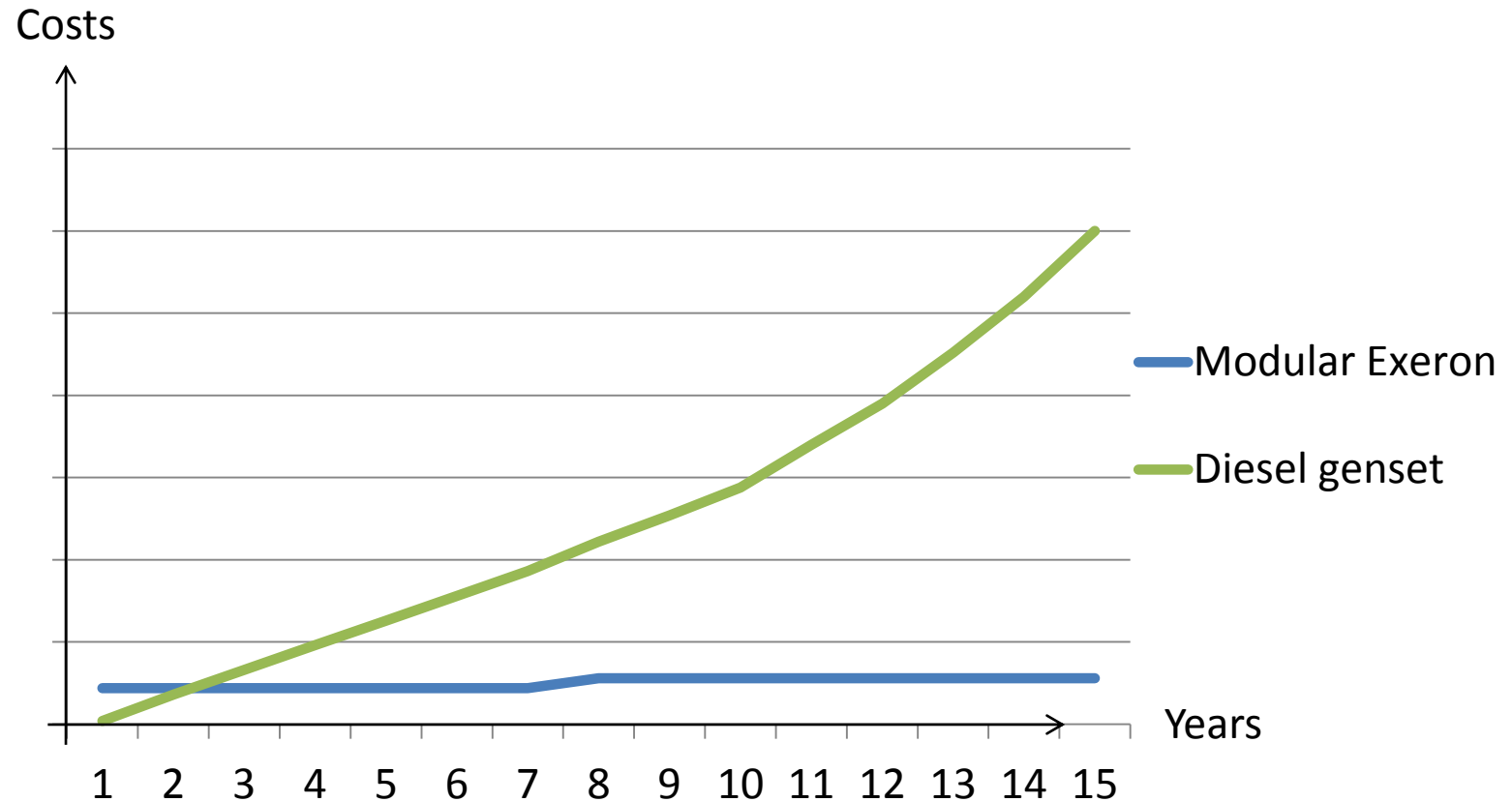
<u>MONTHLY STATISTICS</u>				
<u>Weather</u>			<u>Diesel Generator</u>	
Sunny days	Cloudy days	Rainy days	Running hours	Fuel consumption
15	11	2	17.5 h	66 l

<u>MONTHLY REPORT</u>		
	<u>EXERON, AFTER</u>	<u>DG, BEFORE</u>
Weather conditions	Mostly sunny	Mostly sunny
Hybrid mode operation (PV + Battery)	654.5	0
Diesel generator running hours	17.5 h	672 h
Battery cycles	29	0
Fuel consumption	66 l	1344 l

<u>MONTHLY SAVINGS</u>		
DG running hours saving	Fuel saving	Total OPEX saving
97.4 %	95.1 %	96.3 %



LONG TERM SAVINGS



IPS KEY CLIENT'S REFERENCES

TELECOMMUNICATIONS



Telecom Austria Group



Deutsche Telekom



Telenor



China Telecom



Bulgarian Telecommunication Company



Telecom Serbia



Max Telecom



Neterra Telecommunications



Emirates Integrated Telecommunications Company



Airspan Networks



Bynet Data Communications



Indra Systems



NATO



EADS



Ericsson



Nokia Siemens Networks

IPS INTERNATIONAL PRESENCE

Currently in 47 countries

