Airports today are using both S4GA solar and hard-wired runway lighting systems. Both systems are ICAO compliant - however level of redundancy represented by those two systems is different.

Why? Each system consists of critical elements such as power supply system, control system and lighting fixtures. Airfield lighting is designed to have highest possible redundancy available within particular technology.

This comparison represents impact of failure of key elements of each system to airport night operations.
5-LEVEL PROTECTION AGAINST SYSTEM FAILURE

**LEVEL 1**
DISTRIBUTED POWER SOURCE
Each light is powered independently

**LEVEL 2**
BACKUP POWER SOURCE
Each light has dual power bank

**LEVEL 3**
POWER INDEPENDENT FROM CONTROL
Radio network is used to control. Battery is used as power source

**LEVEL 4**
INDIVIDUAL LIGHT MONITORING
User is notified about potential system malfunction

**LEVEL 5**
CONTROL SYSTEM BACKUP
It is almost impossible to lose control over S4GA lights

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