aggreko

E-visa celebratory show with reliable power and complex cooling

CUSTOMER
Imagination, Event Service Providers

LOCATION
Riyadh, Saudi Arabia

SECTOR
Events

KEY FACTS

7000 kVA
Power capacity

5000 kW
Cooling capacity

N +1
Power setup

400 +
VIP visitors



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THE CHALLENGE

Power and specific cooling solutions for a once in a lifetime show in a remote location with no grid availability

As Saudi Arabia geared up to launch its new E-visa tourist scheme - allowing citizens from over 50 countries to travel to the Kingdom - it planned a spectacular show to celebrate the occasion.

The event would be held at the UNESCO World Heritage site, Ad Diriyah and would be attended by VIPs, journalists and influencers - broadcasted live on TV and online to millions of viewers.

The main exhibition would be installed with immersive 360˚ pods showcasing stunning sceneries from around the country using augmented reality along with live shows and acrobatics.

For this one-of-a-kind event, the customer needed an experienced and reliable partner who could take on the challenge. A global leader in power and cooling solutions - they turned to Aggreko for solution led expertise.

Located in a remote area with no grid supply, the site would need a complete microgrid to provide power to the entire area.

To provide a comfortable environment for visitors, temperatures inside the structures needed to be reduced to 23˚C during summertime in Riyadh with ambient temperatures soaring to 40˚C and above.

With the site containing multiple structures with different configurations a challenging task was to fit cooling units on the ceiling, 15m above ground level to provide cool air into the venue from above.

The final days before the event saw several LED screens being installed which added significant heat load inside the venue. Our engineering team would have to calculate exact sizes within the ducted solution to ensure enough cool air would enter the structure from the required height.

THE SOLUTION

Rapid deployment of a complete turnkey solution including power, temperature control and Aggreko expertise

Powering and cooling for a site of this scale, meant we needed to execute our best solutions and manpower. Our wide network of business structure enabled us to source all equipment from our regional depots in Saudi Arabia within a short timeframe.

In addition, a whole team of project managers, supervisors, engineers, and workers were dedicated to the event form Aggreko.

Our engineering and design team worked closely with the customer, providing several blueprints and installation layouts to make sure there were no errors in our technical calculations.

The complexity of the show and the venue layout meant the setup of temperature control had to be perfect. This was paramount for event specific requirements such as an acrobatic performance where cooling was needed 15m above ground.

We provided four units of 500 kVA generators for technical power, four units of 1250 kVA generators for powering cooling solutions, a ducted solution, and a jet diffuser solution.

For cooling, we provided four units of chillers, eight units of air handling units, 14 AC package units and 22 split AC units.

We also installed additional 100 kw cooling units to overcome the huge amount of excess heat from the LED screens.

The complete power solution followed a N+1 setup to ensure the show went on successfully without any power failures while keeping fuel cost low.









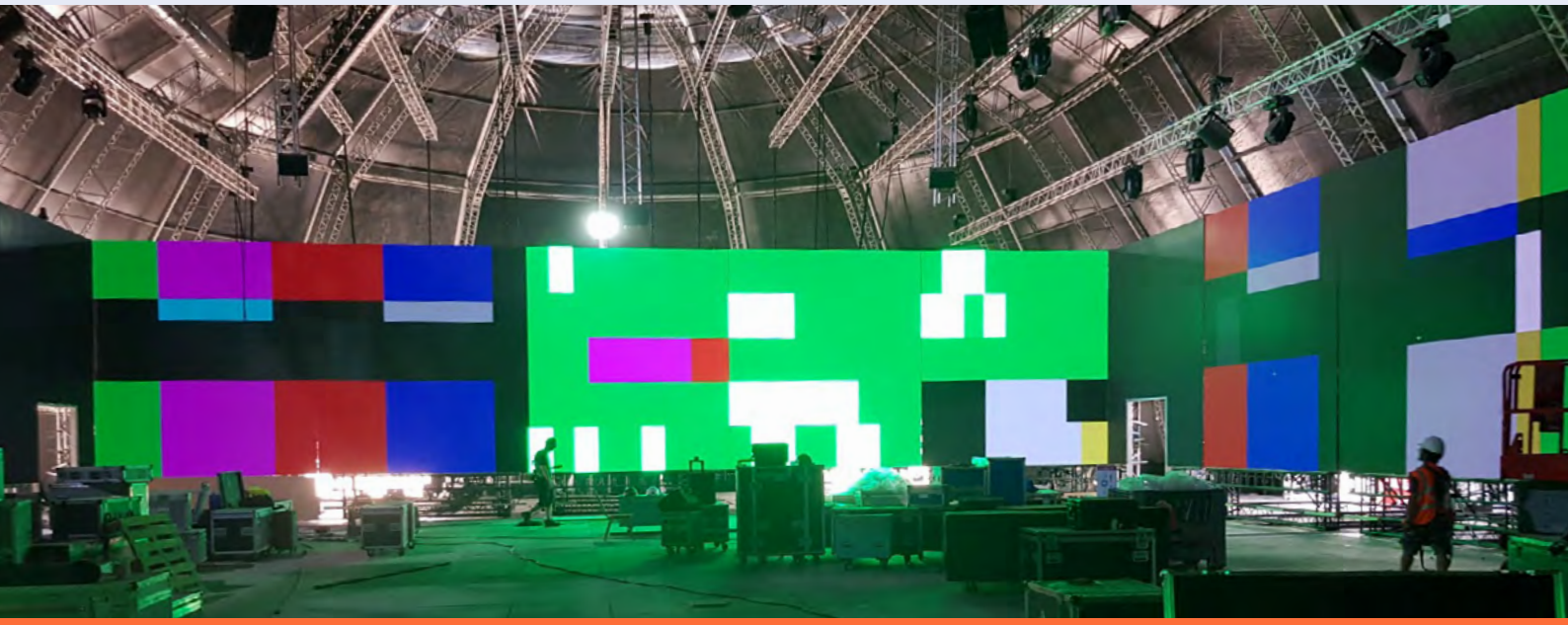
THE IMPACT

A show with specular effective power and cooling, helping transform a remote site into a spectacular show venue location

Aggreko provided a complete turnkey solution for power and cooling along with design, installation, and demobilisation.

This allowed the customer to turn an off-grid remote location to a spectacular show venue further boosting the client's confidence in Aggreko's expertise.

The show was highly successfully and marked a first of its kind in the region for its use of an immersive experience on such a large scale.



THE AGGREKO DIFFERENCE

The show always goes on – Aggreko power and cooling solutions - whatever your event



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