Corporate Background - Aris Energy, Aris Wind, DGC Capital

Aris Energy Solutions

- Lead Distributor role for SolidPower BlueGen Fuel Cell
- Management team combined experience includes 30+ years fuel cell experience.

Aris Wind

- Remote Power Unit (RPU) product for off-grid street lighting and “Smart Cities” telecom apps
- 100+ RPU’s in operation in NY-NJ-CT-IL

DGC Capital Contracting

- Established mid size construction firm serving big retailers for 30+ years
- Co-Founded Aris Renewable Energy in 2013
- Shares Mt. Vernon NY offices and warehouse, business support, with Aris

Aris Energy Solutions – Modular Fuel Cell Solutions

Introducing the BlueGen Fuel Cell for

- **Resiliency**
- **Decarbonization** — 50% Reduction on Natural Gas NOW
  Further Reduction via H2NG Blend
  Zero Carbon on Green H2 and RNG
- **User Economics** — Spark Gap, Demand Charges
  CHP
  Gov't/Utility Incentives
- **Modular and Scalable** — Across multiple market segments
  Initially targetting 1-10kW markets

"Resilient Carbon Cutter Today; Stepping Stone to Carbon Neutrality Tomorrow"

BlueGen History: Mature/Growing in Europe, Launching in US

BlueGen European History:

- ~2,500 mCHP BlueGen systems deployed
- 40+ Million operating hours
- 10 year stack durability and O/M contracts
- Ongoing growth in the European "PACE" program (100's of new units per year with substantial cost reduction over volume)

BlueGen United States Launch:

- Aris Energy is integrator/lead distributor of SolidPower fuel cells. Early US users include progressive utilities, commercial and research end users
- Electric and Gas Utility Partnerships in development, with *OPERATING* units in National Grid mCHP pilot
- $2.7 MM DoE Grant with NASA, NETL, WVU for resiliency demonstration
- Significant interest from electric and gas utilities motivated by either resiliency or grid demands
- End users motivated by spark gap, demand charge reductions, and resiliency

BlueGen BG-15
Improved Power Density and Platform for Cost Reduction

The BG-15 provides multiples of 1.5 kW of dependable, resilient power, plus by-product heat

Advantages

- High Efficiency - 57% electric, up to 90% total CHP efficiency
- Reduce carbon emissions today (~50%)
- “Hydrogen Ready” to step to zero emissions tomorrow
- RESILIENT – if grid goes down, fuel cell stays up
- Hi availability ~99% capacity factor
- Highly distributed, dispatchable behind the meter solution helps utility grid
- Can turn down production and load follow

6 kW "Quad" with Electrical Resiliency and CHP
In Commercial Duty at Brookhaven National Lab

- Continuous 24/7 production at 6 kW – generating 52,000+kWh/Year
- Optional Combined Heat and Power (CHP)
- BG-O's operating at 60%+ net electrical efficiency with minimal degradation
- 12 mT/year carbon reduction, offsets electricity-based carbon emissions of 2.5 average US residences
- Offsetting monthly Electricity Delivery & Demand & annual Installed Capacity Charges

1.5 kW Single Fuel Cell with Electrical Resiliency and CHP
In Commercial Duty at Merrick, LI Residence

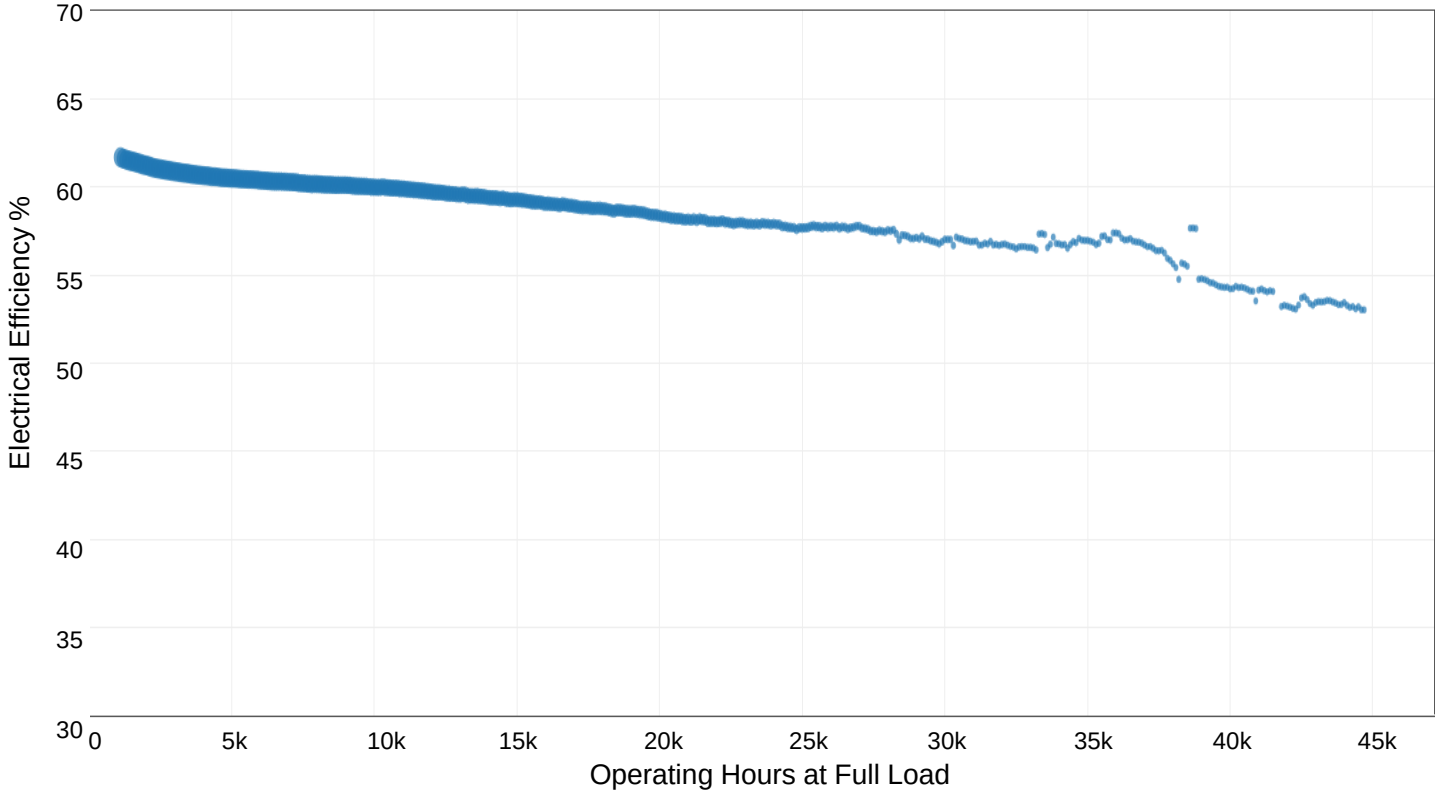
- Continuous 24/7 production at 1.5 kW
- Projected 13,140 kw-hr annual energy production
- Operating at 60%+ net electrical efficiency with minimal degradation
- 3 mT/year carbon reduction, offsets electricity-based carbon emissions of 0.6 average US residences

1.5 kW Single Fuel Cell with H2/Natural Gas Blending Successfully Demonstrated

- 1.5kW fuel cell with CHP
- Has operated at increments of 5%, 10%, 15%, 20% Hydrogen blend in natural gas
- Electrical production, electrical efficiency, thermal production, and emissions data collected

BlueGen Fuel Cell Technology
Minimal Stack Degradation

High efficiency , constant kW output, minimal degradation over time sets the foundation for performance and economics



Data is composite of commercial operating BG-0 units at Full Power output over 5 years.

Data illustrates the fuel cell's consistency and resiliency, one of its key advantages.

BlueGen BG-15
Improved Power Density and Platform for Cost Reduction

TECHNICAL DATA

Application	**Electrical power generator with heat recovery for commercial businesses, public buildings and private homes**
Use	**Large residential and commercial buildings**
Operation Mode	**Year-round (approx. 8,700 hours)**
Fuel Type	**Natural gas (biogas methane)**
Fuel cell technology	**Solid oxide fuel cell (SOFC)**
Fuel consumption[1)]	**Approx. 2.7 kW (9.2 MBH)**
Power output	**Max. 1.5kW, min. 0.5 kW**
Electrical efficiency[2)]	**Up to 57%**
Thermal output[2)]	**Up to 0.85 kW**
Heat recovery	**Exhaust gas heat exchanger**
Overall efficiency[2)]	**Up to 90%**
Electrical energy generated/year	**Up to 13,000 kWh**
Thermal energy generated/year	**Up to 7,395 kWh**
Operation	**Fully automated start/stop**
Carbon emissions	**0.5 pounds/kw-hr, 0.75 pounds per hour per unit**
Control	**24Hr remote monitoring by manufacturer, Internet/smartphone app control**
Weight	**551 lb**
Height x width x length	**47.25” x 21.75” x 31.5”**
Decibels	**< 47 db (A)**
Service interval[3)]	**12 months**
Full maintenance service	**Yes (120 months)**

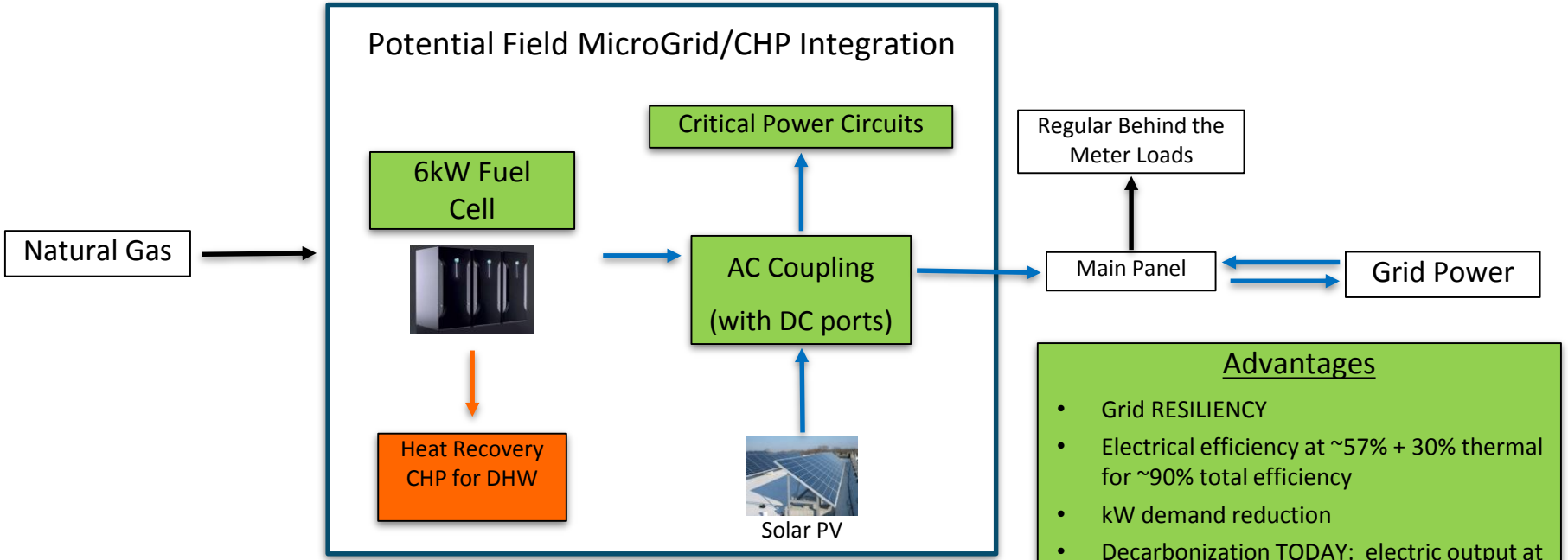
BlueGen BG-15
Improved Power Density and Platform for Cost Reduction

Applications

- Single Family Residential
- Multi-Family Residential
- Small/Med Commercial
- Municipal/Institutional
- Data Centers/Critical Power

Europe's broad deployment program ("PACE") installing 1000's of units in residential and small commercial sites, enabling volume based cost reduction

Resilient 6kW Fuel Cell System with CHP



Advantages

- Grid RESILIENCY
- Electrical efficiency at ~57% + 30% thermal for ~90% total efficiency
- kW demand reduction
- Decarbonization TODAY: electric output at ~1/2 carbon/kw-hr + gas reduction for heating loads
- Integrates with solar for resilient, low-carbon microgrids
- Minimizes battery needs

Carbon Neutral 6kW Fuel Cell System

Start with 20% H2/NG Blend Demo's,
Finish with 100% Green Hydrogen and Renewable Natural Gas Field Demo's

~~Natural Gas~~

20% H2/Nat Gas Blend

100% Green H2

Renewable Natural Gas

6kW Fuel Cell

Regular Behind the Meter Loads

Main Panel

Grid Power

Advantages

- Advance from 50% decarbonization today to proven carbon neutral systems Distributed power at high electrical efficiency and optional heat recovery for greater overall efficiency
- kW demand reduction
- Optional Resiliency feature (Proposal 1 work)

Summary of Core BlueGen Attributes (1)

- **High electrical efficiency** (55-60% efficient net AC power)
- **Opportunity for CHP** at up to 25-30% thermal efficiency, providing up to 85% total efficiency
- **Resiliency** - When the grid goes down, the fuel cell stays up
- **Clean "Low carbon solution"** - ~50% reduction in GHG's TODAY vs typical grid's central plant with T&D losses
- **"Hydrogen Ready"** successfully tested with 20%+ H2/natural gas blend to further reduce GHG's/kw-hr (-64%)
- **A ZERO CARBON FUTURE** - Operation on either "green hydrogen" (when available) or "renewable natural gas" (RNG) planned

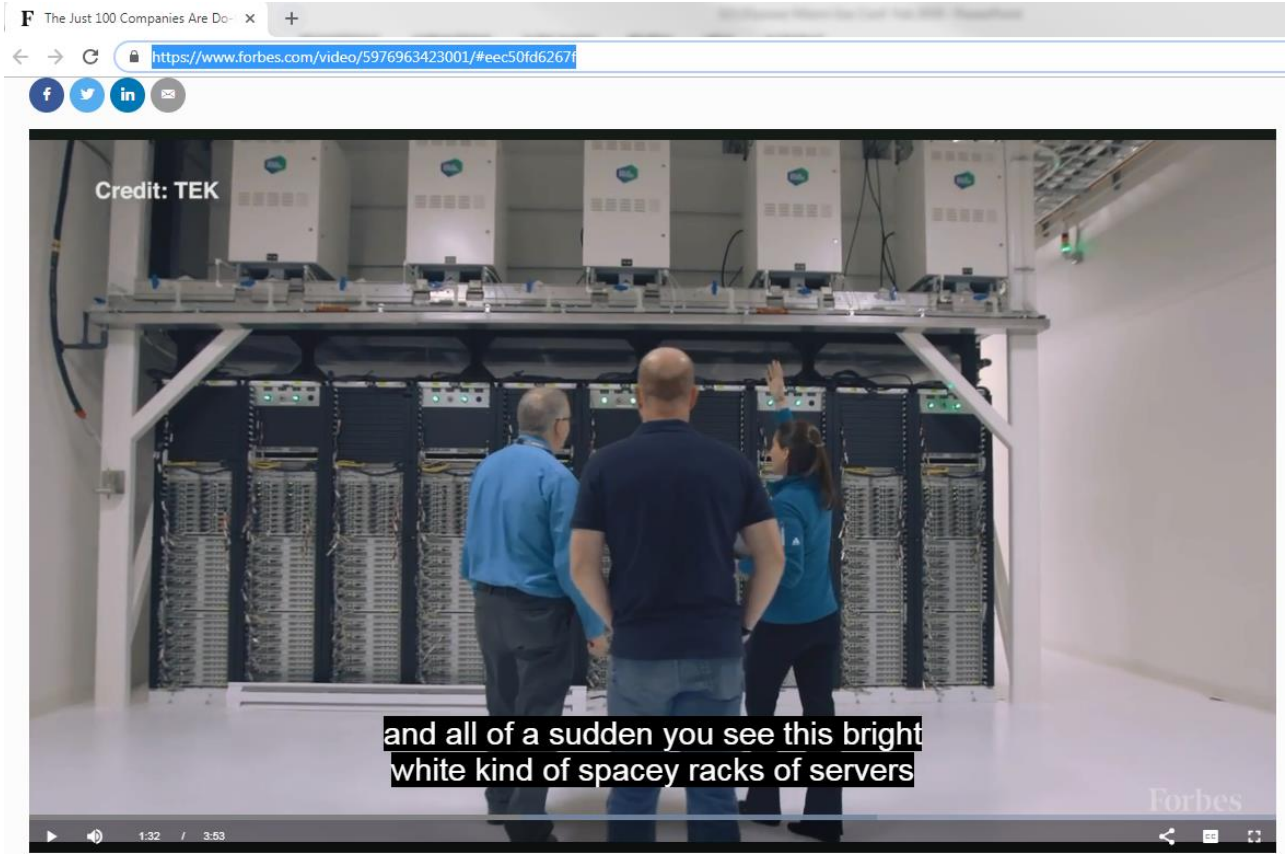
Summary of Core BlueGen Attributes (2)

- **Reliable** - 99%+ uptime as demonstrated in over 1600 installations, 30 million operating hours in Europe
- **Flexible** - Can toggle off grid and load follow, even for many IT/datacenter type applications
- **Modular/Scalable** - addresses many different customer applications, providing these advantages to thousands of users in the smaller 1-10kw range.
- **Well matched for Microgrids** - size and function make the BlueGen a good match to be integrated with other systems, particularly microgrids and nanogrids.
- **Grid friendly** - the BlueGen's ability to provide highly distributed generation with steady power (unlike solar/wind) provides significant advantages for the utility, particularly in congested networks such as the BQDM.

BlueGen – some history in critical power with Microsoft's "Stark Data Center" pilot

Microsoft fuel cell story

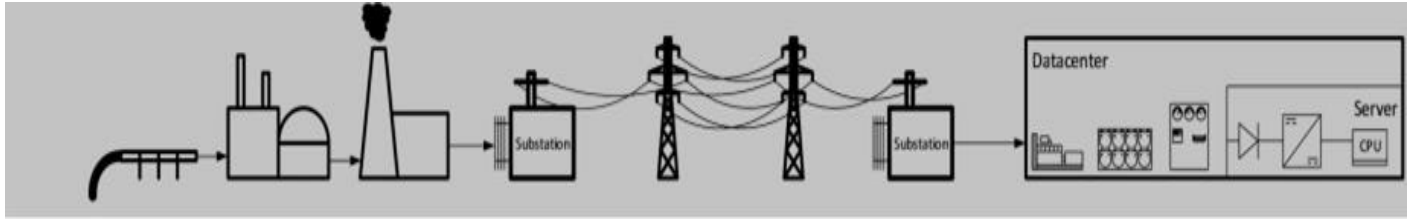
- Chose fuel cells as key data center energy solution
- After ~4 years vetting, Microsoft selected SOLIDpower fuel cell technology
- Commercial partner motivated by decreased cost from increased demand/volume from other sectors



- See profile on Forbes at https://www.linkedin.com/feed/update/urn:li:activity:6480882589212168192
- And Microsoft video at https://www.youtube.com/watch?v=8eLdL0CGeek

BlueGen – some history in critical power with Microsoft's "Stark Data Center" pilot

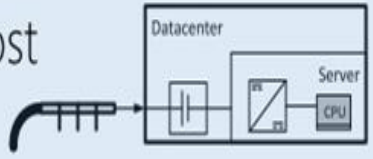
A new data centre architecture:
Distributed generation inside the Data Center



Input (100%) Generation ~~Transmission~~ ~~UPS~~ ~~Back-up generators~~ ~~Power distribution~~

Efficiency to data center (≈18%)

Less Infrastructure + Less Complexity = Reduced Cost & Risk



Efficiency to data center (≈60%)