

# New Power

## REPORT

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**'Ofgem has a real opportunity to unpick the implications of future changes in gas network use'**

*Bridget Woodman and Richard Lowe  
University of Exeter*



## NUCLEAR NEW-BUILD

What's in the picture now?



## OFFSHORE WIND

The global market takes off



**'Our kind of companies are lean, they're not holding the huge overheads of incumbents'**

*Louise Manfredi, managing director, Leep Utilities*

## FIT

**Will the  
loss of  
certainty be  
batteries'  
gain?**



## HEALTHY MARKET

**AMP's Richard Burrell on seeking out  
new energy opportunities**

Expert information for all those invested in the UK's energy future

RICHARD BURRELL

# To be flexible on revenue – consider location

Aggregated Micro Power has been evolving its business model. Alongside growing a renewable heat business, it has started using its development experience to build ‘urban peaking’ plant

**M**ost of Aggregated Micro Power's (AMP's) business has in the past specialised in biomass boilers, and acquisitions in recent years enabled it to take charge of the supply chain for fuel, and to staff operation and maintenance for those plants. But with the end of the Renewable Heat Incentive (RHI) in sight and no visibility about what might replace it, the company added to its portfolio. Chief executive Richard Burrell told *New Power*: “What we have is a good project development team. That’s when we started to look at the electricity sector and the standby power generation sector.”

At first, the company settled on gas engine arrays. “The first thing we did was find a site in Ashford, Kent. It’s a 21MW site that was completed on time and on budget,” says Burrell. The plant (Kingsnorth) is owned by a separate funding vehicle and after developing it, AMP now earns an asset management fee and carried interest, and provides operation and maintenance services. AMP has partnered with Orsted, which trades the power.

AMP initially expected to do a lot of sites sized at 20-50MW, and it took several through to planning. But that strategy changed after last year’s Capacity Market (CM) auction, when the auction cleared at £8.40. “I think that was primarily because the interconnectors were allowed into the CM and for them it was marginal income. They could bid zero and didn’t really care what it settled at,” Burrell says.

AMP was not in that position. Its current investors are looking for long-term, low-risk returns similar to those that come from the company’s RHI installations, not merchant risk in the power markets. So, he says: “We took the view that economically, with the capital we have access to, we couldn’t make the numbers work for the 21MW sites and above.” Instead, AMP switched to selling “shovel-ready” sites and decided to let someone else take them on to funding and realisation.

Those shovel-ready sites still attract interest from companies, Burrell says. In fact, “there is a very healthy market of companies that want to buy projects”. The company went into the CM with up to 90MW of capacity, and its pipeline of development projects is double that. “We haven’t given up, if we see a site that makes sense we will develop it,” says Burrell.

He explains: “It all comes down to where you think the electricity curve will be... You can go to any project financier and three or four independent consultants will give you a view on the curve.” But he says that, at the moment, “no-one really knows where the CM will settle or where the curve will be”. “That’s why it is a good market at the moment for sites, because there are people taking more bullish views than others. We have decided that at 20MW and above

we can take the risk of developing the sites, but not running them...We are selling three shovel-ready sites and the reason we are in exclusivity [on those] is that other people want to buy them.”

Burrell says that after the Capacity Market auction the company “went back to its roots”, and its



“There is a very healthy market of companies that want to buy projects”

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“aggregated micro power” mission. The team looked at the Kingsnorth array and asked: “What happens if instead of having 14 engines on a site you have just one or two?” They decided there were benefits: small plants can connect at lower voltage (11kV); they need less space; they can use standardised, container-sized equipment; and planning permission may be easier to get. What is more, the level of merchant risk is lower, the CM is less important in terms of revenue, and the company has project experience from putting biomass on similar sites.

### FILLING THE URBAN POWER NEED

So the company retargeted its team to look at urban areas – London, Manchester and Liverpool – and refashioned the business to provide what it describes as “urban reserve”, with engines sized at just 2-4MW.

“We have a huge site-finding operation going on at the moment,” Burrell says. It is looking for a willing landlord, a brownfield site where planning permission is likely to be granted, and one where there are easy connections to the gas and electricity networks. “We will look at a scruffy industrial site owned by a landlord who has a spare bit of land they can’t use,” says Burrell.

AMP now aims to bring 50MW of such 2-4MW projects to financial close by March. “Those are financeable on the current revenue stack,” says Burrell. That revenue stack still includes the Capacity Market, but it adds in merchant income from day-ahead, intra-day and balancing market volatility, or “system price chasing”, as the company describes it, along with Triad and red band (4-7pm) avoidance. The company is talking with several parties – it already works with Orsted and Gazprom – to offer them the ability to trade the plants’ flexibility and power supply.

Importantly, the size and location of the plants mean they may also be able to respond to DNO tenders to provide flexibility, and also help manage local constraints.

How do these small projects look as Triad changes and as Ofgem undertakes other charging reviews? That’s where the importance of location becomes clear. Burrell says: “We’ve come out of that quite well, because with these schemes it’s all about showing that they are sited where they are needed the most in non generation-dominated areas.” The many projects sized at 20MW are at risk, because they are standalone and may not have been sited at the best possible place in the grid. The urban schemes, in contrast, will be on sites where there is almost certain to be high demand and they are unlikely to need to export on to the network – so they may benefit from some aspects of the charging review, which is intended to give more locational signals. Burrell believes that those plants might also be viable to fire using green gas.

“We have a huge site-finding operation going on

## RENEWABLE HEAT: DON’T THROW THE RHI AWAY, SAYS BURRELL

AMP operates more than 100 biomass boilers. They are owned by associated fund AMPIL, while the company provides fuel and operation and maintenance services.

AMPIL is “probably the biggest owner of biomass boilers in the UK” on hospital, school and business sites, says Burrell. “The money we have raised for this infrastructure fund is 20-year long-term money. It made sense for a school, for example, to put one in, they didn’t have the capital, and we offered to put it in for nothing, provide [sell] the heat” and take RHI payments. But Burrell wants to maintain momentum in a new industry. “Everyone knows that the RHI is coming to an end in 2021, and it’s creating nervousness,” he says.

Burrell admits that the RHI is flawed. “The market grew very fast and the government structured the RHI wrong, because they targeted it at very small boilers and then realised that to make their low-carbon heat targets they should have focused on larger boilers,” he says.

Overall, he says of the RHI: “I think it’s a really good policy that has stimulated the industry.” Ofgem’s administration structure

works – and ensures the measure is not “gamed”. But the looming end of the measure has raised concerns about tariff depression. A “tariff guarantee” designed to give developers some certainty. But Burrell says developers are in vicious circle: with planning permission, gas and electricity connections, projects will get the tariff guarantee – but developers need a guarantee to make that investment in planning and connections.

It is big industrial heat users that should be brought into the scheme now, he says, and, “if [government] really wants to meet decarbonisation targets, it’s only now that the big users are getting their heads round it”. “Large corporates take time, and with all the work that has to be done in BEIS and Ofgem, why come up with a completely different scheme?”

He agrees there have been problems – and the GB scheme has been tarred by a separate scheme in Northern Ireland where abuse is the subject of a government investigation. But he says: “I’m a fairly lone voice asking why they aren’t looking at ways to continue the RHI. It makes sense because the government is so far behind on its targets.”

### BEARING THE REGULATION BURDEN

Small, innovative companies are needed in the energy industry but as such a company, AMP struggles to have a voice in policymaking. Burrell says: “We are a relatively small business and the weight of consultation, from the government and Ofgem, is enormous.”

Small businesses can't justify having regulatory departments, and although AMP is a member of the RHA and the Wood Heat Association, Burrell fears individual voices are lost.

It seems likely the company can also benefit from the fact that such small plant is subject to less onerous carbon emissions charges than larger generating plant.

In the long term, Burrell sees potential changes in the role of the urban engines. “At the moment we are pushing the power on to the grid,” says Burrell, and they are in front of the meter. But a key benefit of the small engines is that they can be “flipped”, to provide power within the site instead. That can respond to changing needs on site in an increasingly constrained grid – perhaps to charge electric vehicles.

A key theme in the industry in recent years has been the need for flexibility and the ability to extract value from it. AMP considers location to be just as important when it comes to future-

proofing projects. With such small installations, AMP says it can choose the most beneficial locations now, and repurpose them in future – by going behind the meter, charging electric vehicles, helping manage constraints – if it sees a financial case. The value is in both flexibility and location. “We have optionality,” Burrell says. [NP](#)