

Q&A

Microgrid solutions

How modular solutions accelerate worldwide microgrid and VPP opportunities

- Q) What percent reduction in overall Opex and Capex are modular solutions able to provide (including soft capex costs)?
 - A) Based on real conversations with system integrators, thanks to solution blocks, they estimate up to 10% of engineering time cost savings while reducing significantly possible mistakes

- Q) How much are customers willing to pay for resilience? How is that resilience benefit monetized?
 - A) Value of Resiliency (VOR) is not often considered during project payback analysis, even if this term starts to be more and more common. Based on real examples, when it is considered how much is the cost of power outage, then a project Pay Back Time (PBT) can become even half the one estimated without any VOR.

Q) When you are talking about a "modular approach", are you talking about hardware or software? IE. From a software perspective, how much of these systems

are truly plug & play, and how much software specific setup / configuration is needed?

needed?
A) The modular approach is referring to solution blocks where there is hard ware combined with software functions. Solution blocks can be configured based on parameter settings while standardized to avoid high engineering customizations.
Q) From a monitoring perspective, what have been your experiences with utilities
when developing MGs in their service territory? Do utilities typically request, and are provided monitoring capabilities?
A) Based on the experience, utilities require more and more the possibility to monitor remotely their own assets for electrical distribution. In many cases the utilities have their own systems which interfaces to the local control system to secure a full end to end integration into utilities control and supervision systems. This reflects the investment trend of utilities in digitalization which is increasing worldwide form actual \$1,8bn to \$2.8bn in 2025 as stated by Guidehouse.
Q) Does ABB provide a network operations center service as well for their microgrids modular solutions? If so, is that an annual fee as well?
A) ABB offers service contract agreement on the solution offered to its ow customers. If you want to know more, visit https://new.abb.com/low-volt_age/service .

- Q) How do you work with energy forecasting? And what weather data sources do you collect?
 - A) We have energy forecasting AI algorithms based on historical data, weather, and calendar information.

Q) What is the typical product offer (HW) ABB is providing for this kind of applications: inverters? breakers? storage?

A) ABB offers a widespread product offering for low voltage microgrids, from circuit breakers to power converters and automatic transfer switching. More details are available at this website https://new.abb.com/low-volt-age/solutions/smart-power-solutions-for-microgrids.