Delivery management

A microgrid is a complex project to manage as it is effectively integrating multiple projects ranging from infrastructure deployment to data analytics and financial modelling to deliver services to Microgrid Users.

Key contracts will need to be put in place at this stage to ensure that the desired services can be delivered and the commercial, social and flexibility objectives achieved.

Delivery management could either be done internally or external resources could be appointed.

When appointing suppliers and partners direct appointments can be made, or a competitive tender could be undertaken to ensure that value for money is achieved. Consultants can run this process for you, or you may have an internal procurement process to follow.

Supplier contracts

These will include contracts for the following:

- Deployment of the microgrid control system.
- Deployment of distributed energy resources (DER) such as solar, EV charging devices, batteries.
- Microgrid operations.

These contracts could be with one supplier or multiple providers across a range of services depending on the model of microgrid you have selected.

Whether these contracts are entered into by a MEMO set up by the precinct, a third party, or one Microgrid User will depend on the model of microgrid you have selected and which ownership structures you have decided on.

External services contracts

Again, whether these contracts are entered into by MEMO set up by the precinct, or by Microgrid Users directly will depend on the model of microgrid you have selected. The type of contracts will also depend on which services the microgrid will offer.

These will include contracts to enable the microgrid to access value from services such as:

- peak demand management (reducing the main meter point peak demand charges);
- participation in various demand response arrangements — either market based or emergency reserve;
- provision of FCAS to AEMO (or a third party)
- optimising for wholesale electricity prices; and
- assisting in the matching of loads with off site renewables generation (PPA firming)
- resilience or ensuring greater reliability of supply (e.g. via islanding).

User contracts

Contracts will need to be entered into between Microgrid Users and the MEMO, or between the Microgrid Users and partners delivering the various services to ensure that value can be shared. These contracts will depend on the microgrid model deployed.

How revenue is shared between Microgrid Users will depend on the model selected, the services on offer and the governance arrangements.

An example would be a bill credit is attributed according to which Microgrid User provided a flex action that resulted in a payment or reduction in cost from the external agreement (e.g. Market Demand Response, or a Network Charge reduction).

There are various ways that revenue sharing can be approached from a bill credit or payment to Microgrid Users providing flexibility, to a subscription model for Microgrid Users or even for Microgrid Users to own part of a MEMO as set out in Step 4.