

Electricity Network Innovation Competition Full Submission

Supplementary Answer Form

Project: REVISE

Tick if this answer has been provided verbally: ☐

Project code	WPD/EN/NIC/05	Question Number	36
Question date	18 September 2018	Answer date	20 September 2018
Submission section question relates to			
Topic	a) Low carbon/environment and net financial benefits;		
Question	Please confirm that the answer to question 13 is consistent with the description of the carbon benefit calculation given on page 74.		
Notes on question	None		
Answer	<p>We can confirm that our answer to question 13 is consistent with the description of the carbon benefit calculation given on page 74 of our FSP.</p> <p>We have produced a worked example using a simplified network diagram to provide a visual representation of how we have calculated the ACS carbon benefits.</p> <p>Figure 1 shows a windfarm connected to the network with the Base Case. When there is a circuit outage the windfarm is disconnected and the energy that the windfarm was supplying to local demand (i.e. domestic properties in this example) now has to be supplied from national central power stations (e.g. Drax coal-fired power station).</p> <p>Figure 2 shows the windfarm connected with the ACS Method. The circuit outage no longer impacts the windfarm and it can continue to supply renewable power to the local demand.</p>		

The carbon benefit is therefore the difference between the carbon emissions of the Base Case (using national generation mix during the outage) and the ACS Method (using the available renewable generation during the outage).

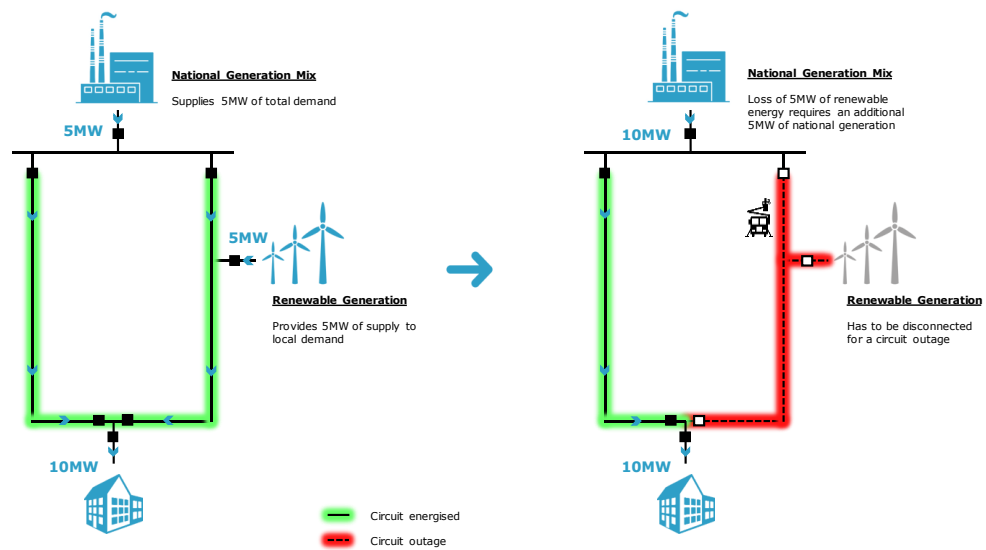


Figure 1 - Base Case

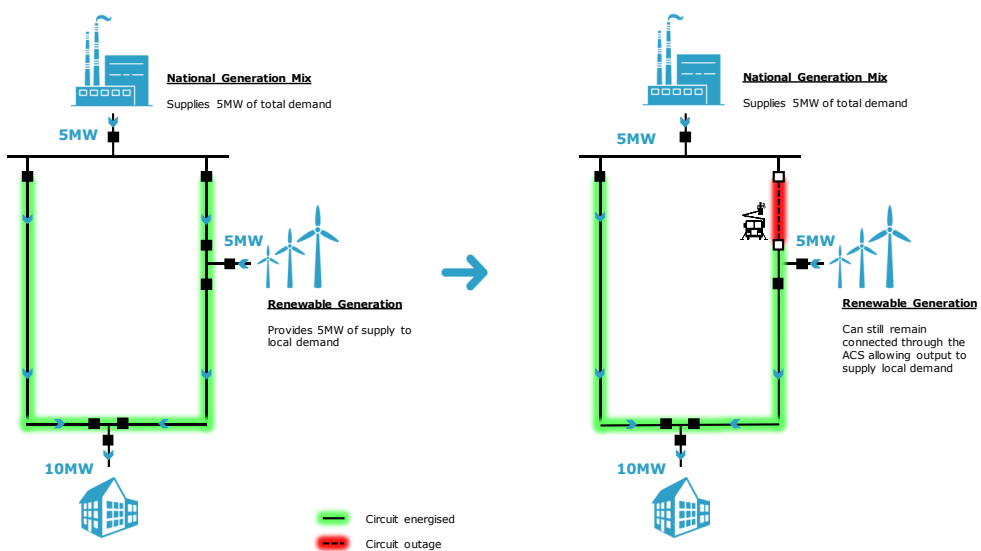


Figure 2 - ACS Method

Attachments