<u>Data Explanation – Meter Value and Allocation Data</u>

Meter value data has been provided as a large csv file (not suitable for opening in Excel due to the volume of data). This note explains each of the fields provided and the sections of the Final Customer Trial Report (available from: https://www.westernpower.co.uk/downloads/64378) which contain more detailed information.

CrowdCharge

CrowdCharge supplied one file type in relation to meter values. Initially (prior to a controller software update) a value was sent for every minute when a car was connected to the charger. Following the software update values were sent every minute when the Status field = 2 (i.e. car connected and charging) and every half hour when Status = 1 (car connected, not charging).

The fields supplied in the extract are:

- ChargerID: ID of the charger to which the meter value relates
- GroupID: the group which the charger was part of at the time. NULL if the charger was not part of a group.
- Timestamp: timestamp for the meter value, supplied in UTC
- MaxAmpsUsed: current being drawn by the vehicle, in Amps.
- AmpsAllocated: the current limit as interpreted by the charger (i.e. what was available to the car).
- CC_Amps_Allocated: the current limit which should apply as calculated by the CrowdCharge back office. See section 6.5.2 of the Final Customer Trial Report for more details on variations between the two current allocated values.
- Status: 1 or 2. Status 1 shows a car which was connected and not charging (either because it was on a timer which had not yet elapsed, or because the charge cycle was complete). Status 2 shows a car which is connected and charging.
- TransactionID: the transaction which the meter value belongs to. These transaction IDs match those given in the CrowdCharge transactions table also provided at the end of the project.
- AdjustedTimeStamp: the timestamp in local time.

GreenFlux

GreenFlux provided meter values in two different files. '3 minute' data, with a meter value supplied every three minutes for every active charger when a car was connected, and '15 minute' data, issued for each charger for each 15 minute block (regardless of whether a charger was in use or not). The two files are described in more detail in Sections 6.5.2 and 6.6.2 of the Final Customer Trial Report.

The fields supplied in the 3 minute data are as follows:

- ChargerID: ID of the charger to which the meter value relates
- GroupID: the group which the charger was part of at the time. 'Does not exist' if the charger was not part of a group.
- TimeStamp: date/time which the meter value refers to, in UTC
- AdjustedTimeStamp: date/time adjusted to local time (accounting for GMT/BST)
- MaxAmpsUsed: current drawn by the vehicle during the three minute period, in Amps.

- AmpsAllocated: current made available as reported by the chargepoint. This is inaccurate in some circumstances. All analysis using the allocated current for GreenFlux chargers is based on the 15 minute data (see below)
- TransactionID: the transaction which the meter value belongs to. These transaction IDs match those given in the GreenFlux transactions table also provided at the end of the project.

The fields supplied in the 15 minute data are as follows:

- ChargerID: ID of the charger to which the meter value relates
- GroupID: the group which the charger was part of at the time. 'Does not exist' if the charger was not part of a group.
- TransactionID: the transaction which was active (if there was an active transaction) for the charger ID in this 15 minute period. 0 if it does not match a transaction ID. These transaction IDs match those given in the GreenFlux transactions table also provided at the end of the project.
- StartTime: date/time at the start of the 15 minute block to which the value relates, in UTC.
- UTC_AdjustedStartTime: as above, adjusted into local time (accounting for GMT/BST)
- EndTime: date/time at the end of the 15 minute block to which the value relates, in UTC.
- UTC_AdjustedEndTime: as above, adjusted into local time (accounting for GMT/BST)
- Allocated: the current allocated to the charger by the GreenFlux back office for this 15 minute block of time, in Amps.
- Avg_Amps_Drawn: a calculated field which averages the MaxAmpsUsed values from the 3 minute data (if available) over the 15 minute period (e.g. if the block is 15:00 15:14:59 then it contains the average of the meter values sent at 15:01, 15:04, 15:07, 15:10 and 15:13.)