METERING COVERAGE STUDY / ILLUSTRATIVE CASE

Where would another meter help us make a decision?

The management decision

Find out how much of the main meter total you can already explain. An unexplained balance may include normal unmetered activity, so identify the decision a new measurement would support.

If one meter covers several production areas, a total can tell you that demand changed without showing which process explains it. Extra meters can be costly, so it helps to know what each new measurement would let managers decide. This study connects gaps in coverage to specific questions about consumption or equipment. It can also help you decide whether changing the reporting setup would answer the question before any hardware is specified.

Worked example

The main meter records 100 MWh while the smaller meters record 74 MWh. That leaves 26 MWh unexplained. It could include legitimate unmetered loads or readings taken at different times.

Example figure	What it represents
100 MWh	Main meter
74 MWh	Smaller meters
26 MWh	Unexplained difference

What changes the answer

If matching the periods explains 8 MWh, the unexplained amount falls to 18 MWh. Choose the next meter or site check according to the decision the remaining gap affects.

Metering coverage study

What to commission

Map one incoming supply and its available submeters to the loads managers need to distinguish.

We review where readings are taken, line up the times and units, and note where equipment shares a meter. We prioritise the areas where better measurements would make the biggest difference to the decision.

How to judge the result

The team can reconcile readings over a common period and name the next measurement that would resolve a material uncertainty.

Estimate the cost of the proposed measurement against the value of resolving the question. Recheck timing and units before commissioning any installation.

Decision worksheet

Project detail	Starting point for your team
Decision owner	Site energy manager. Name the person who will approve the next step.
Records to gather	A meter list, available site drawings and the areas or equipment you need to distinguish.
Agreed output	A meter coverage map and a brief for the measurements that would help most.
Decision date	Record the deadline, any unresolved assumption and who will confirm it.

Discuss this case

Tell us which load you need to separate and what you would do with the answer. Say whether you can identify the main meter and the areas already measured. We can use an overview of one site to discuss what coverage question to tackle first.

Email info@oxetc.co.uk and mention ENG-04. All figures in the worked example are illustrative.