Annex 5c - Why GB ECM-05 was raised, what constitutes as a 'manifest error' and materiality of threshold

Background

- As part of BETTA, the DC loadflow investment cost related pricing (ICRP) based transport model used for calculated locational TNUoS charges in E&W was extended to incorporate Scottish network data.
- Following the 05/06 TNUoS tariffs, it was highlighted that erroneous network data had been used for two circuits between Dalmally and Cruachan (*SPT's area*).
  - It wrongly assumed 8.1km of 275kV cable and 0.4km of 275kV OHL per circuit. Later being revised to 8.1km of 275kV OHL per circuit and 0.4km of cable per circuit.
- The error underestimated of the length of circuit comprising overhead line (OHL) and the over estimation of the length of the circuit comprising cable.
- As cable is more expensive than OHL, the impact of the error was to apply significantly higher marginal km figure.
- As a result, Cruachan power station was allocated to a TNUoS charging zone of its own and it's £/kW TNUoS generation tariff overstated.
- Existing methodology at the time did not have a mechanism to reconcile such an error.
- NGET submitted the conclusions report to the Authority on 22/09/06 & recommended that the mod proposal be approved.
- Ofgem decided not to veto the proposed GB ECM-05 and therefore implemented 20/10/06.

What constitutes an 'manifest error'?

- CUSC Section 14.17.33
  - Manifest errors defined as one of the following:
    a) An error in the transfer of relevant data between the transmission licensees or distribution network operators
    b) An error in the population of the transport model with relevant data
    c) An error in the function of the transport model
    d) An error in the population of the inputs, or function of the tariff model.
- CUSC Section 14.17.34
  - A manifest error shall be considered material in the event that such an error or, the net effect of multiple errors, has an impact of the lesser of either:
    a) an error in a User's TNUoS tariff of at least +/-£0.50/kW; or
    b) an error in a User's TNUoS tariff which results in an error in the annual TNUoS charge of a User in excess of +/-£250,000.

Materiality of threshold

- NG originally put forward £1/kW, in line with existing criteria used to determine generation charging zones.
- NG later felt defining materiality might be that of determining an acceptable tolerance in the measurement of circuit data which is used in the DCLF transport model.
  - By using 1km as an acceptable tolerance, the largest discrepancy which could occur in the calculation of a user tariffs would be that which includes an error in the measurement of a 132kV cable, in a Scottish Region. (*For 06/07, 132kV cables in these regions have the highest EC of 27.85.*)
  - An error in the measurement of this type of circuit of 1km, would result in a discrepancy in the locational element of the annual TNUoS charge of a user of approx. £0.5/kW.

- NG recognised limitations of using a single criteria for determining materiality, particularly when considering larger generators.
    - For example a 2GW powerstation subject to an increase in tariff of 0.49/kW, would be liable for an additional £980k in charges with no reconciliation mechanism.
- NG proposed to use additional criterion of a de minimus value of +/- £250k which represents a discrepancy of £0.5/kW for a typical power station of 500MW.
- Ofgem's picked up respondents' comments w.r.t determining materiality of an error. One party argued for smaller absolute threshold of +/-£0.25/kW and a de minimum value of +/- £100k as being more appropriate. As £0.5/kW level would represent an error of £1m for a 2GW generator.
    - Ofgem recognised that this was based on a misunderstanding and that any error above 250k would be eligible for reconciliation.
- NGET consulted on the materiality issue and in Ofgem's view presented a 'robust justification' for the criteria based on an acceptable tolerance for a discrepancy in the measurement of current circuit data.
    - Two reasons that were cited:
        a) No classes of users were discriminated against and
        b) The proposal is proportionate to the nature of errors likely to occur.