Metering Steering Group

PR13 (CP5) Review Consultation - Traction Electricity Charges

Draft Cross Industry Responses

Aug 11

Purpose

The purpose of this document is to identify those issues associated with future traction electricity charges that are currently being consulted by ORR which have cross industry support. Those issues which do not necessarily have cross industry support and are of particular concern to one, or more industry stakeholders are not included, as it is anticipated that these stakeholders will raise these concerns themselves in responding to ORR.

Introduction

ORR's detailed proposals for traction electricity charges under the first round PR13 (CP5) Review Consultation can be found in Annex F, sections F.28 – 33 (pages 94 – 96).

Consultation Responses

Metering Steering Group (MSG) is a recognised cross industry body, including representatives from train operators, Network Rail, RSSB, ORR, DfT, vehicle owners etc, which meets regularly to discuss and agree topics of relevance in the fields of on train electric metering and billing. Although ORR staff are members of and normally participate fully in MSG, and this cross industry response was discussed and agreed by MSG, ORR staff did not offer opinions or commentary on the various drafts of this response during its development.

Generally, Metering Steering Group (MSG) believe that the aspiration for CP5 should be for a traction electricity charging regime that is simple and easy to understand, drives cost effective value for money solutions, properly incentivizes all parties to reduce consumption and places risk with the party best placed to bear it.

Specifically, under section F.29 of the consultation document, MSG agree that:

- operators have strong incentives to reduce electricity consumption for those vehicles that are metered
- operators on routes where they account for 90% or more of the electricity consumed have a strong incentive to reduce electricity consumption whether they meter, or not
- un-metered operators on routes where they account for a relatively small proportion of the route total electricity consumption and where they are not "the last un-metered man standing" on the route currently have little or no incentive to reduce electricity consumption
- except in very specific cases, Network Rail currently find it problematic to construct general business cases to reduce electricity losses, although it is recognised that they have begun to engage in initiatives to understand and to quantify these

Under section F.30 of the document, MSG agree that:

- operators can reduce net electricity consumption, eg by changing driving techniques within existing timetable constraints, by controlling berthed hotel loads etc and that NR can reduce electricity transmission losses without performance impact, eg fitting lower loss composite conductor rail, by fitting polymeric insulators etc
- in order that economic justifications for interventions that NR would retain responsibility in CP5 can be constructed, MSG believe that the assumptions that NR should make in terms of future electricity price trends should form part of the PR13 determination process

Under section F.31 of the document, MSG agree that:

- During CP4, industry has undertaken extensive work to enable on-train metering within the framework set out by ORR. For PR13 there is a major opportunity to jointly build on this work and knowledge to strengthen incentives on both operators and NR to reduce electricity consumption and losses, where there is a whole industry economic benefit to do so

Under section F.32 of the document, MSG agree the following for PR13:

- that Network Rail either:
    - charges metered vehicles/infrastructure supplies on the basis of metered consumption and generation, plus mark-ups to reflect efficient system losses attributed to the normal operation of the relevant asset; or
    - shares the volume wash-up with unmetered operators according to their respective ability to manage transmission losses and according to its need to meet any distribution loss targets
- that there is a need to strengthen incentives on NR to attain and to improve on distribution loss targets
- MSG agree that protection for current franchised operators from regulatory changes that increase their cost base, or inject uncertainty into their cost base should continue to be protected from these until franchise renewal – this protection, like today, would not extend to normal external fuel/energy price variations.
- MSG would need to fully understand any proposals to impose a charging uplift under the CP5 determination to unmetered operators on the basis that it is not clear to whom these funds would then belong, to what purpose they would be put and on what authority they could be raised before concluding whether it could support them, or not

Under section F.33 of the document, MSG agree that:

- full fleet metering is a valid aspiration, but accept that there are valid, partial fleet metering steps that can be taken as a means to achieve this and that these should not be obstructed
- for particular parts of the network, a more economic approach may be to meter a sample of vehicles or infrastructure and to extrapolate the metered consumption across the whole of the relevant fleets or groups of infrastructure for each period. Further cross industry discussion and consultation would need to take place to determine whether all such relevant consumption would be treated as metered and thus excluded from the volume wash-up.

- means to determine whether fleets or infrastructure groups could be treated in this manner will need to be jointly agreed, but could include an analysis of fleet electrical homogeneity, fleet size, fleet metering proportion, route patterns etc.
- fleets, part fleets, or infrastructure not included in the extrapolated quasi metered billing arrangement would remain on modelled consumption rates and remain inside the volume washup arrangement in line with the proposals detailed above
- MSG recognise that work to address the technical and IT implications for billing systems would be necessary to implement such proposals
- MSG note that certain types of implementation of such an arrangement might reduce the benefits of metering if they were to lead to reduced accuracy of driver energy efficiency performance tracking and feedback, although it is recognised that appropriate application of statistical analysis methods should reduce the risk of this

Additionally, outside of particular clauses of the document, MSG agree:

- that a definition and target for an efficient level of electricity distribution losses should be determined for the start of CP5 and that the target efficiency levels should be improved over the timespan of the Control Period, recognising that further work still needs to be done to understand what "an efficient level of electricity distribution losses" means and that any efficiency level improvements required during CP5 should be underpinned by a reference in the CP5 determination to future electricity price trend assumptions and an understanding of the whole life costs and benefits accruing
- that NR should be required to install sufficient and appropriate metering equipment to measure fixed supplies derived from the electrification system, their own traction electricity consumption etc such that the above agreed levels of losses can be calculated to an agreed appropriate local accuracy level from the start of CP5.
- that ORR should benchmark current electricity distribution losses against comparable other national and international systems, or subsystems, as appropriate
- that business cases for improvements to the dc 3rd rail network associated with NR assuming responsibility for efficient losses in excess of those of the PR13 determination should be calculated on a whole life basis and that such business cases should not assume wholesale or partial conversion of the dc network to ac OHLE during CP5

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6.9.11