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Private and confidential

Stuart Cook
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Your reference 119/10

Dear Stuart,

Response to Project TransmiT: Call for Evidence

Rio Tinto Alcan welcomes the opportunity to respond to Ofgem's 'call for evidence' letter in relation to Project TransmiT.

Rio Tinto Alcan undertakes aluminium smelting activities at industrial sites connected to the Northern Electric Distribution Ltd (NEDL) and Scottish Hydro-Electric Distribution Ltd (SHEDL) networks. We have only a tiny and passive role in the electricity market and we are not signatories to the main industry commercial codes, and although we have certain derogations, we abide by the Distribution and Grid Codes in technical matters and with respect to data submissions as required.

Aluminium smelting is an electricity intensive process and our primary concern is the security of electricity supply to our smelters. In order to ensure security of electricity supplies, Rio Tinto Alcan produces its own electricity from on-site coal and hydro assets, whilst also having third party electricity supplies. On-site output is largely absorbed by the smelters, with the remainder exported onto the local distribution system.

The sites have a long history. For example, the Lynemouth site dates from 1972, whilst Kinlochleven has been operational for 100 years. Investment in the on-site assets and supporting infrastructure was made under a different regulatory and charging environment from that which exists today. Over time, however, the regulatory arrangements and Rio Tinto Alcan's exposure to them have changed. In this context, the potential coverage and impact of Project TransmiT are a key issue for Rio Tinto Alcan.

Project TransmiT comes at a time of considerable and ongoing regulatory uncertainty regarding the future network charging arrangements for our sites. First, until just before Project TransmiT was announced, National Grid was leading work to seeking to apply TNUoS charges to distributed generators. Second, Ofgem is seeking to apply GDUoS charges to pre-2005 distributed generators. Third, Ofgem is seeking to implement a common distribution charging methodology for EHV customers.

As a result, the charging arrangements for our sites are in a period of upheaval. This leaves us in a position where our potential exposure to network charges could change beyond recognition in the near-term. This comes at a time when we are seeking to make informed business decisions regarding future low carbon investments at our sites. These investments potentially include biomass conversion and / or IGCC with CCS for our Lynemouth site and potential investment in new hydro capacity in Fort William. We are also midway through a project to invest £45 million in our existing assets in Fort William.

The ongoing uncertainty regarding the overall charging framework severely compromises our ability to make informed business decisions regarding these low carbon investments, presenting an unmanageable risk for us.

While TransmiT is transmission focused, it brings into focus the range of charging related issues that we are currently facing, which span both transmission and distribution charging. We flag the most pertinent of our live issues below:

- **Distribution charging:**

The introduction of a common distribution charging methodology for EHV customers continues to be dogged by problems. After several years in the making, the industry remains in a position of great uncertainty given the absence of future charge forecasts and acknowledged frailties of the charge calculation methodologies. The upshot is that the implementation has been further extended.

While the implementation extension in itself lengthens the period of transition and uncertainty, it also means that location specific distribution charging arrangements are being introduced at a time when equivalent arrangements for transmission are being reviewed and may be revised. This appears inconsistent from a principles perspective and potentially contrary to best regulatory practice. Assuming that changes are made to the transmission charging arrangements, are we to expect the distribution charging arrangements to be re-opened once again in the near-term (with associated uncertainty for the affected distribution connected parties)?

We have two additional fundamental concerns in relation to GDUoS charges:

- As flagged above, our sites are able to import and export power via the same network infrastructure. We already face exposure to demand DUoS charges, which are calculated to recover the costs associated with use of these network assets. If we are to additionally face exposure to generator DUoS charges, we risk being charged twice for use of the same network assets, which is clearly inappropriate. The ability of the both the LRIC and FCP methodologies to properly model this combined use of the assets has been recognised by the DNOs as a model weakness, where different and separate treatment is undertaken when considering generation and demand sites. It is important that individual demand and generation charges levied on a site are calculated such that an appropriate cost is recovered in aggregate. It is essential, therefore, that the charging methodologies are able to reflect industrial sites such as our own. We have raised the issue of double charging in previous consultation exercises. The issue remains of critical importance to Rio Tinto Alcan, given the potential for GDUoS charges to be applied to our sites.
- Our sites were all connected pre-2005. The sites effectively paid deep connection charges for secure connection to and use of the distribution network. This typically involved incurring a large, up-front capital cost to finance the required network investment, and annualised O&M. In our case it also incorporated payments into a sinking fund for replacement of the assets, (although to date this has not been deemed to be required by the DNO), and provision for potential site expansion by anticipating line re-conductoring and transformer re-siting. The application of GDUoS charges to pre-2005 sites is to be accompanied by compensation. The payment of compensation is non-negotiable in our view. Compensation must also reflect, inter alia:
 - costs incurred as part of the connection process;
 - any contributions made under bilateral agreements to fund ongoing upkeep and future replacement of assets; and

- the value of future system usage that would be foregone as a result of any transfer, determined to reflect the potential for changes to the charging methodology in the future.

However, we are greatly concerned that compensation will not adequately reflect costs already sunk. It is critical that an appropriate value is determined and paid. Furthermore, on the assumption that a satisfactory outcome is reached, an individual site should only incur GDUoS charges once compensation payments due to it have been fully paid this out.

- **Exposure to Transmission Charging**

As licence exempt embedded sites, we are not currently exposed to generator TNUoS charges. However, Ofgem, with National Grid, have been seeking to revise transmission charging arrangements for embedded sites for some time (e.g. the Transmission Access for Distributed Generation (TADG) process from 2006-07 and more recently charging modification GB-ECM-23). This is based on a perceived lack of cost-reflectivity within the current arrangements – a view that we do not support. Two broad models have been discussed. First, a gross model which effectively treats all generation equally for transmission charging purposes (whether it be distribution or transmission connected). Second, a net model under which embedded generation is treated as negative demand for charging purposes.

We were members of the TADG group that discussed these issues in 2006-07. From these discussions, it is our recollection that the majority of the TADG members were supportive of 'no change'. If some form of change was to be progressed, a net model was preferred relative to a gross model. However, maintenance of the status quo was the preferred option. It is important that this balance of views is accurately reflected in future consideration of this area as part of Project TransmiT.

The importance of distributed generation as a source of renewable generation must also be remembered. Many renewable projects are connected at distribution level. Cumulatively, these sites have the potential to make a significant contribution to renewable and low carbon targets. The policy environment has changed since the initiation of the TADG process – environmental and low carbon targets are much more prominent now than they were even five years ago. The contribution of distributed generation towards these targets should not be compromised by regulatory objectives that are, in our view, inappropriate and out of kilter with the prevailing policy environment.

- **Remit of TransmiT**

While the scope is still to be finalised, it seems apparent that TransmiT will focus heavily upon generator TNUoS charges. Consideration of uniform generation charges (either zero or non-zero) has been mooted. While we do not face exposure to generator TNUoS charges as things stand and have no view at this stage in relation to the merit of this option, this seems an appropriate area to evaluate.

Much less attention has, as yet, been given to demand TNUoS charges. As an industrial site capable of exporting power or importing power from the grid as a consumer, we are exposed to demand TNUoS charges as they affect potential embedded benefits and the tariffs that we must pay for grid supplies respectively. The appropriateness of demand TNUoS charges must not be forgotten within TransmiT.

We are keen to work with Ofgem and the energy industry in developing appropriate arrangements for transmission charging.

Yours faithfully

A handwritten signature in black ink, appearing to read 'Jonathan Scott', written over a horizontal line.

Jonathan Scott
Power Commercial Director