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TAKE-OR-PAY CONTRACTS FOR RENEWABLES DEPLOYMENT

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The energy road map of the European Commission calls for a 20% contribution of renewable energy sources by 2020. Given the challenges in other sectors, this will imply a significantly higher contribution from renewable electricity generation.

It is unlikely that the electricity sector will be able to deliver this objective without supporting policies. It is generally agreed that such policies should aim for least cost development and efficient operation of the power system. Dependent on national policy preferences, the schemes should also: (i) allow for the development of a renewable energy technology portfolio; (ii) reduce rent transfers to infra-marginal technologies or better than marginal resource bases; and (iii) minimise regulatory risk and thus capital costs for new projects. The focus of the paper is a quantification of these three dimensions.

Various different support schemes for renewable technologies have been applied across Europe. They can be evaluated against these criteria. Feed-in schemes could evolve to allow efficient operation with higher penetrations of renewables: for example, by using wind efficiently for provision of spinning reserve and potentially allowing for spilling of wind. Green certificate schemes could evolve towards better addressing the objectives (i) to (iii) mentioned above.

We discuss long-term take-or-pay contracts for renewable technologies as a possible way forward. In our straw man scenario, we assume that the regulator defines on an annual basis the terms of the long-term contracts that are signed to cover projects during the following year. The contract duration would be about 20 years to facilitate project financing and the contract would guarantee a payment whenever the renewable energy provider (wind, marine, solar) is technically available and has the renewable resource available to produce electricity. We propose that the grid operator is the designated counter-party and offers to sign such contracts with any renewable energy project (with a potentially quantity-restricted auction for large-scale off-shore projects). The grid operator would pass on any extra costs (or, at times of high fuel prices, benefits) that these long-term contracts might offer to electricity consumers as part of the network usage charges.

The proposed long-term take-or-pay contracts insulate projects from the regulatory risk caused by future changes to renewable support levels and policies, balancing and congestion management market designs. These contracts also insulate renewable projects from uncertainty about future energy prices that could be induced by changing fuel or carbon prices. Consumers benefit from these long-term contracts – the removal of regulatory risk reduces overall costs and consumers benefit from the diversification benefits from renewables at times of high electricity spot prices.

The take-or-pay contract structure represents an evolution from freed-in-tariffs as it allows for an efficient dispatch of renewable energy sources at their marginal costs.

To satisfy the legal requirements implied by property rights protection, existing projects can choose to continue to produce under existing schemes – thus ensuring investors security during any transition between schemes and ongoing investment. They also have the option to sign long-term take-or-pay contracts for 20 years minus the number of years for which they have already been in operation.

We are also mindful of the relevant legal considerations that would have to be satisfied by any proposed new renewable electricity promotion scheme. In this paper, we also provide a preliminary analysis of the constraints imposed by the fundamental right to protect acquired property rights, alongside the issues raised by EC law rules on the free movement of goods (here, electricity). Both of these issues respond to a proportionality test, which will establish an acceptable range within which existing rights to exercise and generate ROC-style instruments should receive compensation during the transitional period. Further, there are legal issues relating to the possible State aid embodied in any transitional regime that compensates for such acquired property rights, but also with regard to the level of price support for the generation of electricity from renewable sources under the proposed take-or-pay contract scheme. It is suggested that the proposed scheme does not amount to State aid under EC law and, even if it is argued that State aid is involved, that it would clearly be justifiable State aid provided that it is notified as such.