



Commission for Energy Regulation

An Coimisiún um Rialáil Fuinnimh

**NETWORK USE OF SYSTEM CHARGES FOR CHP
GENERATORS AND AUTOPRODUCERS**

**PROPOSED DIRECTION BY
COMMISSION FOR ENERGY REGULATION**

**CER/03/167
July 2003**

Background: Autoproducers Direction

1. On 17 April 2002 the Commission issued a direction to the Transmission System Operator (“TSO”) and to the Distribution System Operator (“DSO”) on the treatment of autoproducers for the purpose of setting connection and use of system charges¹. The direction followed an extensive process of public consultation and had been preceded by the circulation of a consultation paper and an earlier draft of the final direction. The direction was accompanied by a separate Explanatory Memorandum and a Summary of Comments received on the earlier Consultation Paper (CER/02/38), both published on the Commission’s website.
2. The Direction dealt mainly with the network use of system charges which should be applied to autoproducers and, in particular, the extent to which autoproducers should be regarded for charging purposes as generators, final customers or both. The Direction distinguished between two categories of autoproducers:
 - (a) those with a Maximum Import Capacity (MIC) greater than or equal to their Maximum Export Capacity (MEC)
 - (b) those with an MEC greater than their MIC.
3. In essence the Direction provided that the autoproducers in category (a) would in future be treated as demand users of the system only. They would be liable for the prevailing fixed monthly capacity based use of system charges and connection charges applicable to final customers irrespective of whether they were importing or exporting electricity to the system in that month. By contrast, autoproducers in category (b) would be liable for the prevailing fixed monthly capacity based charges applicable to generators.
4. The rationale for the April 2002 Direction was dealt with in detail in the preceding documentation and summarised in the accompanying Explanatory Memorandum. The Commission recognised the special position of autoproducers who both import from and export to the system on a consistent basis and on a scale different to other generators. The Commission was satisfied that the prevailing network charging regime, which was derived historically on “generator only” and a “final customer only” basis, should take account of the special position of autoproducers and should be adapted to incorporate “the principle of predominant use being made of the network” by the autoproducer.

Autoproducers and CHP Generators

5. The term “autoproducer” is defined in Directive 96/92/EC as follows:

“autoproducer” shall mean a natural or legal person generating electricity essentially for his own use”.

¹ See CER/02/33 “The Treatment of Autoproducers in the Distribution and Transmission Charging Regime”

This definition focuses exclusively on the *purpose* for which electricity is being generated by the person and ignores the *process* (e.g. CHP, CCGT etc) by which the person is generating the electricity.

6. The Directive does not, in fact, deal in any detail with “autoproducers” as a distinct category. It confines itself in this regard to providing that “autoproducers and independent producers” should have access to authorisations, to national electricity network systems and to dispute settlement regimes on objective, transparent and non-discriminatory terms. The recitals to the Directive shed little or no further light on the concept of autoproducers or any perceived special treatment they might warrant. Interestingly, the term “autoproducer” has been dropped from the new Council/Parliament Directive which has replaced Directive 96/92/EC.
7. The term “autoproducer” does not feature in the Electricity Regulation, 1999 or in subsequent secondary legislation.
8. By contrast, there is considerable statutory guidance on the concept of “combined heat and power” (CHP) generation. This concept is sometimes seen as something of a proxy for an “autoproducer”. The concept of CHP focuses on the *process* rather than the *purpose* of the generating activity. The 1999 Act defines “combined heat and power” in the following terms:

“combined heat and power” means the simultaneous production of utilisable heat and electricity from an integrated thermo-dynamic process where the overall process operating efficiency, based on the gross calorific value of the fuel used and defined as the ratio of energy output usefully employed to the energy input, is greater than 70 per cent. And where the integrated thermo-dynamic process satisfies such technical, operational, economic and environmental criteria as may be specified by the Minister from time to time, following consultation with the Commission”.

The Act provides for a special licensing regime for CHP generators and suppliers. Since 2001 CHP suppliers are free to supply all customers, not just eligible customers.

9. At EU level, the concept of CHP generation or “cogeneration” and the case for its active promotion has been dealt with in some detail in various energy policy documents and environmental Directives². More recently, Council and Parliament are examining a draft Directive on the Promotion of Cogeneration in the Internal Energy Market³. The

² See, for example, Commission Communication “A Community Strategy to Promote Combined Heat and Power (CHP) and to Dismantle Barriers to its Development” (COM (97)514); European Council Conclusions of 30 May 2002 (8835/00) and of 5 December 2000 (1400/--); Directives 96/61/EC, 2001/80/EC and 2000/96/EC on pollution control.

³ See 2002/0185(COD)

purpose of the draft Directive is to create a framework for the promotion of cogeneration to be followed by the Member States. It defines “cogeneration” in the following terms:

“cogeneration” shall mean the generation in one process of thermal energy and electrical and/or mechanical energy. For practical reasons and based on the fact, that the use of the heat output for different purposes requires different temperature levels of the heat, and that these differences influence efficiencies of the cogeneration, cogeneration shall be divided into three classes: “industrial cogeneration”, heating cogeneration” and “agricultural cogeneration”.

10. At National level, the benefits of CHP are clearly recognised. The Governments Green Paper on Sustainable Energy concludes, on this issue, that industry with a high year round heat demand can make energy efficiency gains from CHP. In the National Development Plan £4m has been allocated for the encouragement of high efficiency CHP. As part of the National Climate Change Strategy, the Government sets a target of a reduction of 0.25Mt of CO₂ by increasing the penetration of CHP.

The Issue: CHP Generation and the Direction on Autoproducers

11. Most, if not all, “autoproducers” as defined in the Commission’s April 2002 Direction are likely to be CHP generators. It does not follow, however, that all CHP generator will constitute “autoproducers”. This is because of the restrictions of the concept of “autoproducer” by virtue of the “essentially for its own use” condition in the Direction. It is true that the Direction acknowledged the possibility of an “autoproducer” having an MEC greater than its MIC. Nevertheless, the Commission considers that it would be straining definitions beyond reason, and beyond the Commission’s intentions at the time of the Direction, to argue that *all* CHP generators are “autoproducers”, regardless of how much of the electricity generated at the plant is intended for on site use and how much for export to the system. This would make the term “essentially for their own use” in the definitions of “Autoproducer” redundant or meaningless. It would also be very difficult to reconcile with the Commission’s accompanying Explanatory Memorandum which stated; “The direction maintains requirement for such generation to be consumed to a single premises.” Put simply, the Direction confined itself to those autoproducers who would use most if not all of the electricity they generated to meet demand on the same premises.

The Case for Extending the Direction to all CHP Generators

12. The Commission has been considering the question of whether it has a particular duty to promote CHP generation and, if so, the manner and scale such promotion might take. If it has such a duty, this would not mean, of course, that every Commission decision would have to be tilted, as it were, in favour of CHP generators but rather that, after a period of time, there would be an onus on the

Commission to show tangible evidence in some of its decisions of measures targeted at promoting CHP generation.

13. Two particular provisions in the 1999 Act are relevant here. These are the duties on the Commission in Section 9(5).

- to take account of the protection of the environment.
- to encourage the efficient use and production of electricity.

CHP generation in particular promotes both these objectives in the following manner.

The Act defines CHP as having efficiency of greater than 70%. This can be compared to other methods of generating electricity such as by Combined Cycle Gas Turbine technologies which have an efficiency in the region of 50% to 55% or single cycle technologies which generally have an efficiency less than 40%. Clearly, CHP has environmental benefits. This benefit is increased if the primary fuel for CHP is natural gas, as the carbon intensity and hence CO₂ emissions are considerably reduced when compared with other fossil fuels.

As referred to above the Government's National Climate Change Strategy requires a reduction by 0.25Mt per year of CO₂ by increasing the penetration of CHP by approximately 250MW by 2010. In the Irish Energy Centre report entitled "An Examination of the Future Potential of CHP in Ireland" published in December 2001 concludes by stating that,

"CHP is recognised as being one of the key technology responses to Ireland's achievement of its Kyoto protocol commitments and significant potential exists for its expansion."

In addition, the Commission believes that account must be taken of developments on this issue at European level where it is envisaged that a direction with the intension of promoting CHP is currently being considered on the basis of its environmental benefits.

Conclusion

14. The Commission is satisfied that there is a strong case for extending the principles underlying the Direction on Autoproducers to licensed CHP generators, regardless of how much of the electricity they generate is intended for their own use and how much for export to the system. Specifically, the Commission proposes the following,

For the purposes of the Commission's Direction entitled "The Treatment of Autoproducers in the Distribution and Transmission Charging Regime" (CER/02/37) a licensed CHP generator shall be deemed to be an Autoproducer.

Other issues with the Autoproducers Direction

15. In the course of applying the current Autoproducers direction both network operators have raised a number of practical implementation issues. The following is a list of these issues and the Commission's proposals to deal with them.

Definition of an Autoproducer

16. A number of autoproducers sub-contract the operation and maintenance of the generating unit to a third party. In fact, in certain cases the generating unit on the customer's premises is provided by the third party and it is the third party which holds the generating licence, the customer having a contract for the output or a portion of the output. The Commission had envisaged that this situation would be covered by the Direction. However, the definition of an Autoproducer currently included in the Direction could be interpreted as not covering this situation. Therefore, the Commission proposes to amend the definition of an Autoproducer to the following:

“Autoproducer” means a person who has entered into a connection agreement with the Distribution System Operator or Transmission System Operator and who generates and consumes electricity in a Single Premises or on whose behalf and under contract to whom another person generates electricity on or in that Single Premises, essentially for its own use.

Application of Direction

17. The Autoproducers direction does not specify when the direction will apply to a customer, i.e. once its connection agreement is modified, generating unit is installed etc. The Commission proposes the following,

The Autoproducers direction will apply to the autoproducer in the charging period following the period in which the generating unit was commissioned and has satisfactorily completed the applicable Grid Code or Distribution Code tests, which ever is relevant, and has complied with the relevant provisions of its connection agreement.

Where the generating unit is decommissioned the customer is required to notify the TSO or DSO immediately and the applicable charges will be reviewed and any changes to the charging regime will apply in the charging period following the decommissioning of the generating unit.

The Commission invites comments on the above proposals, preferably in electronic format. The Commission may publish the comments as received unless they are explicitly described as commercially sensitive. The closing date for the receipt of comments is **15th August 2003**, at **5.00pm**. All comments should be forwarded to:

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