

Energy law in Sweden

Implementing the Third Energy Package and the Climate Change Package in Sweden

**By Fredrik Wilkens, partner, and Christian Johansson, associate,
Advokatfirman Vinge, Stockholm**

Third Energy Package

On 16 April 2009, the Swedish Government charged a commission with the task of inquiring further into the need for amendments of the applicable laws and regulations governing the Swedish electricity and gas markets (the "Amendment Commission"). The Amendment Commission's terms of reference include proposing the amendments required in order to implement the New Electricity Directive and the New Gas Directive and, if necessary, to propose adjustments to the laws and regulations necessary in order to comply with the New Electricity Regulation, the New Gas Regulation, and the ACER Regulation. Furthermore, the Amendment Commission has been instructed to investigate whether there is a need to unbundle the Swedish national gas market in functional terms and propose suitable amendments if required.

The Swedish Government has instructed the Amendment Commission to submit its report no later than 1 March 2010.

Unbundling

There is some doubt as to whether Sweden has correctly given effect to the unbundling requirements contained in the Second Gas and Electricity Directives at transmission level. The Swedish Government believes it to be appropriate to deal with the unbundling issue in connection with the adjustments of the Swedish National Gas Act necessary to transpose the Third Energy Package into Swedish law.

By way of background, the work involved in restructuring the Swedish electricity market commenced in 1992 when the generation and supply of electricity was separated from the network operation on a national level. Svenska Kraftnät, the Swedish TSO, was established and made responsible for the national grid. Whilst the

TSO was unbundled in ownership terms in 1992, the DSOs were unbundled in legal terms in 1996, when legal entities conducting generation and/or supply of electricity were prevented from also conducting activities within the field of distribution. This legal unbundling requirement was expressly set out in the Swedish Electricity Act in 1998.

The Electricity Act stipulates that a legal entity operating electricity transmission networks may not also carry on supply and production/generation activities within the same field. Furthermore, a member of the board of directors, the managing director, or an authorised signatory in a DSO that is part of a vertically integrated undertaking whose network serves more than 100,000 connected customers may not be a member of the board of directors, the managing director, or an authorised signatory in another group company carrying on production or supply of electricity.

The Second Electricity Directive was transposed into Swedish law in July 2005. In 2008 the Commission brought an action against Sweden claiming that by failing to adopt, inter alia, appropriate measures to ensure that the requirement for a functional division between distribution and production interests in a vertically integrated undertaking in accordance with Article 15(2) (b) and (c) of the Second Electricity Directive, Sweden had failed to fulfill its obligations under that directive (Case C-274/08).

In light of this action, the Swedish Government passed a bill in May 2009 targeting a further implementation of the Second Electricity Directive. Several amendments were proposed, including clearer requirements for unbundling of vertically integrated undertakings operating electricity transmission networks and carrying on supply or production/generation activities respectively.

Under the proposals, vertically integrated undertakings operating electricity transmission networks serving at least 100,000 connected customers will, as regards its internal organisation and decision making, be separated from undertakings responsible for the operation of the generation or supply of electricity. Such DSOs will not be permitted to grant salaries or other benefits to senior officers that depend on the profitability of vertically integrated undertakings carrying on supply or production/generation activities. Furthermore, they must have effective decision making rights independent from the affiliated undertakings with respect to assets necessary to operate, maintain or develop the network. It is proposed that it is made explicitly clear in the Electricity Act that this should not prevent appropriate co-ordination mechanisms to ensure that the economic and management supervision rights of the parent company in a subsidiary are protected. The parent company will not be allowed to give instructions regarding day-to-day operations, nor with respect to individual decisions concerning the construction or upgrading of distribution lines unless such decisions exceed the terms of the approved financial plan, or any equivalent instrument of the relevant DSO.

In practice, only six out of the 164 Swedish network operating undertakings fall within the scope of the relevant provisions of the Electricity Act as the others have less than 100,000 connected customers. Accordingly, all Swedish DSOs are legally unbundled but only six of them are also unbundled in functional terms. Although limited in numbers, the six undertakings in question are part of energy groups which serve approximately 60 per cent of the Swedish customers.

The Third Energy Package allows the member states to choose between the full ownership unbundling approach and the ISO approach. In our view, the Amendment Commission will most likely propose that Sweden should opt to go down the ISO path as this to a large extent would allow it to maintain the arrangements already in force.

The distributors in the Swedish gas market are not caught by the functional unbundling requirement as Sweden has opted to make use of the exemption rule in Article 13(2) of the Second Gas Directive which allows natural gas undertakings serving less than 100,000 connected customer to remain in a vertically integrated undertaking. To date, there are no distributors with more than 100,000 connected customers in the Swedish natural gas market (the entire Swedish market only comprises approximately 48,000 customers).

Climate Change Package

As energy production is a major source of greenhouse gas emissions, the replacement of fossil fuels with renewable energy has been deemed as an important measure in order to achieve the target set for the European Union. However, on a strict national level, this link is not as self-evident as more than 95 per cent of Swedish electricity production is based on technology that is free from carbon dioxide. Accordingly, national

greenhouse gas emissions would not decrease considerably by an increase of renewable energy production. Rather, in Sweden it is mainly the transport sector that has the greatest potential for reducing total greenhouse gas emissions.

The Government's climate policy target for 2020 has been set at a 40 per cent reduction of greenhouse gas emissions. This target is based on 1990 levels and refers to the non-trading sector, ie, those sectors not included in the EU Emissions Trading Scheme which includes transport, housing, waste disposal, agriculture and forestry, aquaculture and some parts of industry. For activities covered by the EU Emissions Trading Scheme, the level of ambition for reducing emissions is determined jointly at EU level within the framework of the trading scheme's rules.

Pending the preparation of the Amendment Commission's report, in March 2009 the Swedish Government passed two bills regarding a coherent climate and energy policy. As regards energy, the planning target for 2020 includes the following:

- 50 per cent renewable energy;
- 20 per cent more efficient energy use; and
- 10 per cent renewable energy within the transport sector.

In order for emissions to be 40 per cent less in 2020 compared to 1990, greenhouse gas emissions measured in carbon dioxide equivalents will have to decrease in Sweden by about 20 million tones. One fifth of this emissions reduction has already been achieved; four-fifths remains between now and 2020. To reach the target, the Government's proposals include using economic instruments in the area of taxation. Existing instruments, including the carbon dioxide tax, will continue to be used and is expected to lead to further emission reductions. The Government has also announced its intention to implement emission reductions in Sweden, in accordance with adopted measures within the EU, as quickly as possible. The use of fossil fuels for heating will be phased out by 2020. The Government's vision for Sweden is to have a sustainable and resource-efficient energy supply by 2050 with no net emissions of greenhouse gases into the atmosphere.

Renewable energy

In the Swedish Government's opinion, the stated ambition relating to the current Swedish electricity certificate system needs to be raised in order to be able to reach the target of 50 per cent renewable energy by 2020.

The electricity certificate system was introduced in 2003 with the objective of increasing the use of electricity from renewable sources by 17TWh between 2002 and 2016. The planning objective for wind power production includes a requirement that local authorities must have agreed plans for 10TWh of wind power production by 2015. The revised production target implies an increase of the use of electricity from renewable sources by 25TWh between 2002 and 2020.

The electricity certificate system is a market-based support system designed to assist expansion of the production of electricity from renewable sources and from peat in Sweden. Under the system, electricity certificates are issued to operators of approved plants producing and metering electricity from renewable energy sources or peat at the rate of one certificate unit per MWh. Demand for certificates is created by the fact that all electricity suppliers, and certain electricity users, are required to buy certificates corresponding to a certain proportion of their electricity sales or use. By selling their certificates, the producers of electricity from renewable energy sources can receive additional revenue which provides further support for their production of electricity. Accordingly, the system supports the expansion of electricity production from renewable sources and the introduction of new technologies.

Another focus area for the Swedish Government is the further simplification of the rules and regulations relating to the connection of electricity from renewable resources to the grid. It has been announced that the connection of offshore wind power production to the grid is of particular interest to the Swedish Government.

More efficient energy use

A target of 20 per cent more efficient energy use by 2020 has been set by the Swedish Government. The main reason why the Swedish Government is giving greater priority to this issue is due to the need for Sweden to comply with the requirements set out in Directive 2006/32/EC of the European Parliament and of the Council of 5 April 2006 on energy end-use efficiency and energy services and repealing Council Directive 93/76/EEC. The basic premise is for the public sector to take the lead in attaining the objectives and it has thus been proposed that the standards for the manner in which the authorities are required to purchase more energy efficient products and services are to be raised.

Renewable energy within the transport sector

The Swedish Government's ambition is that by 2030 Sweden's vehicle fleet only consists of vehicles which are not dependent on fossil fuels. In order to achieve this objective, general means of control that fix the price of emissions of greenhouse gases are supplemented by favorable terms for cars with a relatively low environmental strain and alternative motor fuels. In practice, it is a question of introducing tax exemptions for the purchase of new, low pollution vehicles and it is proposed that the road tax be higher the more carbon dioxide the vehicle produces. Priority is also given to research into bio-fuel based motor fuels and electrical and hybrid vehicles.

Nuclear power

There are currently three nuclear power plants in Sweden – Forsmark, Oskarshamn and Ringhals – which contain a total of ten operative reactors. The construction, possession and operation of nuclear plants and dealings with nuclear material and nuclear waste are primarily governed by the Nuclear Activities Act which contains provisions relating to, eg, permit requirements, final

storage of nuclear waste, safe shutting down and demolition of plants in which activities are no longer to be conducted and on safety in general. The Nuclear Power Phase-Out Act allows the Government to decide that the right to operate a nuclear power reactor is to cease to apply at a point in time determined by the Government.

During 2008, a total of 146TWh of electricity was produced in Sweden of which the ten operative nuclear reactors accounted for 61.3TWh. The aforementioned Government bills state that nuclear power will remain an important part of Swedish electricity production in the foreseeable future. Due to the increased focus on climate change, nuclear power fulfils one of the most important demands on the energy sources available today, namely low emissions of greenhouse gases.

The Government has stated that it intends to produce a proposal to abolish the Nuclear Phase-Out Act. A commission will be charged with the task of developing proposals for new legislation which will govern the public scrutiny of new reactors. The legislation shall facilitate controlled generational change in Sweden's nuclear industry which will effectively revoke the ban on new construction in the Nuclear Activities Act. A condition governing the design of the new regulatory framework is that permission to build new reactors will only be given if they replace one of the existing ten reactors and provided they are built on existing sites. The Government has made it clear that support for nuclear power in the form of direct or indirect subsidies will not be forthcoming. Nuclear power generation in the future will be governed by important and stringent conditions relating to the continued improvement of safety standards and that the liability for accidents is further tightened in accordance with the scope provided by existing international treaties.

Solar heating

Grants for installation of solar cells for use by public buildings have been available since 2005. From 1 July 2009, it has also become possible for companies and private individuals to apply for such grants. The purpose of the grant is threefold: (i) to achieve an increase in the use of solar cell systems; (ii) to step up the number of operators within the solar cell field; and (iii) that the yearly production of energy from solar cells shall increase by at least 2.5 GWh during the support period. Grants will be available for all connected solar cell systems where the installation work commenced on or after 1 July 2009 and will be completed not later than 31 December 2011. The grant covers between 55 and 60 per cent of the maximum investment cost of SEK 2 million per solar cell system and SEK 75,000 per installed kilowatt peak power.

Conclusion

As described above, the Swedish Government has proposed the implementation of a number of measures in the climate area. The bill regarding a coherent climate policy that was passed in March 2009 shows that the EU has become a platform for Swedish climate policy and that Sweden is making an effort to make its contribution to achieving the ambitious climate targets set out in the

Climate Change Package. Furthermore, it seems that focus is being shifted from government investment grants to technology development, more efficient markets and greater global solidarity. All member states will be required to reduce emissions, increase the efficiency of energy use and increase the proportion of renewable energy but Sweden has declared that its ambition is to be a leading international role model, with a high rate of growth that is fully environmentally sound and based on sustainable resources.

footnotes

1. Sw. Naturgaslagen (2005:403).
2. Sw. Ellagen (1997:857).
3. Government Bill 2008/09:216.
4. The Energy Markets Inspectorate's report EI R2009:08.
5. Government Bills 2008/09:162 and 2008/09:163.
6. Electricity produced from the following energy sources qualifies for certificates: wind power, solar energy, geothermal energy, certain biofuels, and certain hydro power.
7. Sw. Lag (1984:3) om kärnteknisk verksamhet.
8. Sw. Lag (1997:1320) om kärnkraftens avveckling.