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The Swedish energy policy agreement of 10 June 2016 – unofficial english translation

Provided by the <u>Swedish Nuclear Society</u> and <u>Analysgruppen</u>. Formulations in <u>the original text</u> have been preserved as far as possible in order not to change their meaning. Any errors in the translation are solely our responsibility.

Framework agreement between the Social Democratic Party, the Moderate Party, the Green Party, the Centre Party and the Christian Democrats

Basis

The Swedish energy policy should be based on the same three pillars used in the energy cooperation of the European Union. The policy thus seeks to reconcile:

- Ecological sustainability
- Competitiveness
- Security of supply

Sweden should have a robust electricity system with high reliability, low environmental impact and with access to electricity at competitive prices. It creates long-term perspectives and clarity for market participants and brings new jobs and investments to Sweden. The energy policy is based on the fact that Sweden is closely linked with its neighbouring countries in northern Europe, and aims to find common solutions to the challenges of the common electricity market.

Goal

At the latest in the year 2045, Sweden shall have no net emissions of greenhouse gases to the atmosphere, and will thereafter achieve negative emissions.

The goal in 2040 is 100% renewable electricity production. This is a goal, not an end date which prohibits nuclear power and it does not mean the closure of nuclear power through political decisions.

A goal for energy efficiency for the time period 2020-2030 will be developed and be approved no later than 2017.

Conditions on the Swedish electricity market

There is a need for better conditions for investments in renewable energy, energy technology and energy efficiency. The development of the energy system will be based on a variety of large-scale and small-scale renewable production that is adapted to local and industrial needs.

A major challenge is to change energy policies from being almost exclusively focused on the quantity of supplied energy (TWh) to also ensure that there is enough power (MW). An important step should be to review energy related regulations and modify them so that they are adapted to the challenge of ensuring enough power in the system. It is important to review the energy related regulations. This includes both the issues concerning market design and efforts on the production, transmission and demand sides.

Nuclear power

Swedish nuclear power is facing major investment needs to meet future safety requirements. The <u>Swedish Radiation</u> <u>Safety Authority has decided</u> that these new requirements¹ need to be met by 2020, otherwise the reactors may not continue operation. It has already been decided that four reactors will be decommissioned before 2020. Nuclear power must bear its own costs, and the principle that nuclear power should not be subsidised remains. The principles of Government Bill 2008/09:163, <u>An integrated climate and energy policy</u>, remains. This means, among other things, that:

- The <u>Phase-out Act</u> has been removed and will not be reinforced.
- The nuclear parenthesis is extended by allowing new constructions at existing nuclear sites, up to a maximum of ten reactors.
- Permission may be given to successively replace the current reactors as they reach the end of their economic life time.
- Permits for new reactors will be examined in accordance with legislative requirements on best available technology.
- Government support for nuclear energy, in the form of direct or indirect subsidies, can not be counted upon.

In addition, the following apply to nuclear power:

- The tax on installed thermal power is phased out over two years starting in 2017.
- The investment rules in the <u>Nuclear Waste Fund</u> will be changed so that investment possibilities are extended from the start of the next three year period starting from 2018.
- The <u>Swedish Radiation Safety Authority</u> shall, in consultation with the <u>Swedish National Debt Office</u> and based on the new conditions for nuclear power, examine the need of changes to the operating periods in the Nuclear Waste Fund. The principle shall still be that the cost of disposal of spent fuel and nuclear waste shall be covered by those who generated it, the state will not pay for neither decommissioning nor final disposal.
- The level of payments to the Nuclear Waste Fund is decided upon by the government following a proposal from the Swedish Radiation Safety Authority.
- An expansion of the liability to nuclear accidents to 1,200 million euros will be carried out in accordance with the parliamentary resolution in its report <u>2009/10:CU29</u>.

Hydro power

Today hydro power has a central role in Sweden's renewable electricity supply. A continued high production of hydro power is an important part of the efforts to achieve an increased share of electricity from renewable energy sources such as wind and solar power. The following applies to hydro power:

- Sweden shall live up to EU law and its requirements on water activities.
- Sweden shall have modern environmental requirements on Swedish hydro power, but the permit process should be designed in such a way to not cause unnecessary administrative and financial burden for the individual in relation to the desired environmental benefits.
- The rules for reassessment of water activities such as hydro power stations and dams should be simplified as far as possible with regard to the need of ensuring a sustainable development where our water resources is regarded as a resource of specific importance.
- The hydro power expansion will take place primarily through the power uprate of existing plants with modern environmental permits. New facilities shall have modern environmental permits.
- The Swedish National Rivers², and other rivers or part of rivers stipulated by law, shall continue to be protected from hydro power expansion.
- The property tax on hydro power should be reduced to the same level as most other power generation facilities, i.e. 0.5%. The tax will be reduced gradually over a four year period starting from 2017. Meanwhile, the hydro power industry shall fully finance the costs connected to, for example, the review of activities, aiming at fulfilment of European Union law and its requirements for water activities. The work shall build upon the of the parties discussed funding solution, as practised by the <u>Swedish Energy Agency</u> and the <u>Swedish Agency for Marine and Water Management</u>.

Support to renewable energy

The renewable energy will continue to be expanded. Sweden has a fantastic potential for renewable electricity production, and it is reasonable that Sweden is a net exporter of electricity also in the long term. By, for instance,

¹ Post-Fukushima requirements on independent core cooling systems.

² The four Swedish rivers that <u>by law are protected</u> from hydro power expansion.

efficient use of existing hydro power and bio energy the power output can be increased. A competitive district heating sector and reduced use of electricity-based heating are conditions to meet the supply of renewable electricity and heat during cold winter days.

The power issue is important to consider when it comes to the expansion of renewable electricity production. Considerations must be taken to the needs throughout the year and situations with low electricity prices. This issue should be analyzed by relevant authorities.

The connection fees to the national grid for off-shore wind power should be abolished.

The following applies to the certificate system for renewable electricity sources:

- The <u>electricity certificate system</u> shall be extended and expanded by 18 TWh of new certificates until 2030.
- No additional increase of the level of ambition shall be made before 2020.
- Technical adjustments to improve the functioning of the market, without increasing the level of ambition shall, however, be possible to do in order to increase the confidence in the system.
- The Energy Agency will be tasked with developing proposals for the design of the quota curve for electricity certificates after 2020, and will optimize the system to produce the most cost-effective electricity production.

Small-scale production

Technology and technology development play important roles in the electricity and energy markets. Existing regulations should be adapted to new products and services in energy efficiency, energy storage and sale of electricity. It will be easier to be a small-scale producer of electricity. The possibilities for energy storage will be utilized and developed.

• It should be investigated how the simplifications and adjustments can be made of the existing regulatory and fiscal legislation to promote new products and services in energy efficiency, energy storage and small-scale sales of electricity to various purposes as well as the electrification of the transport sector.

Use of energy and energy efficiency

It is favourable for both households and businesses as well as for the Swedish electrical system with an efficient use of electricity and other energy. To reduce electricity consumption over time makes sense for the individual household and it contributes to the competitiveness of companies. Streamlining, particularly in terms of power, is especially important to meet the future challenges for the Swedish electricity system. In the work with energy efficiency factors such as population growth, increased industrial production and a growing economy should be taken into account.

- The measures needed to get to a working demand flexibility, meaning that customers are enabled to fully participate in the electricity market, should be implemented.
- A specific energy efficiency program for the Swedish electricity intensive industry, corresponding to the existing <u>PFE</u>, should be introduced given that one can find the responsible financing.
- An investigation should be appointed to widely identify the potential barriers that may exist to enable service development in terms of active customers and efficiency. The investigation should examine which financial and other instruments, such as <u>white certificates</u>, that are most effective in order to increase the efficiency in view of both energy and power perspectives.

Transmission

The electricity market is international. The interconnection between countries has increased in importance. The transmission capacity within Sweden is of great importance given the high production in northern Sweden while at the same time the main demand is in the south. The regulations regarding electricity networks should constantly evolve to ensure that networks are built in a cost-effective way, that electricity enables new products and services and that there are socio-economically efficient investments in new electricity generation.

The development of the transmission system should be viewed from a perspective that extends beyond the borders of Sweden and should be done in close cooperation with the neighbouring Nordic countries. Bottlenecks in the Nordic grid and between the Nordic countries and continental Europe shall be removed through new constructions. Better interconnection of the electricity networks between the countries around the Baltic Sea will also create better conditions for economically effective development of offshore wind farms.

- The transmission capacity within Sweden will increase
- The transmission capacity between Sweden and neighbouring countries will increase
- Sweden will push the EU for greater interconnection between and within countries

Market design

The function and structure of the market sets the framework for the energy market and all its stakeholders. Sweden will work actively to strengthen Nordic cooperation on network investments, develop the cooperation on <u>NordPool</u> and help to fulfil the development towards an efficient Nordic end-user market.

In Europe and in Sweden there is a broad discussion going on regarding which future market model to use. There is no reason in the short term to change the existing market model used in Sweden and the Nordic region. However, it is reasonable to conduct, over time, a broad discussion on the future market design.

• The <u>Energy Commission</u> shall produce a special background report in which different future market designs are described with facts and consequences.

Research

The focus of energy research should will be in the areas:

- that contribute to achieve the climate and energy policy objectives.
- that has potential for growth and export.

The achievements in the field of energy research shall continue to focus on technology development, demonstration and pilot projects in all areas of energy research. Energy research has a crucial role in ensuring that new, innovative technical solutions will come forth for all renewable energy sources.

Financing

Financing of the abolished tax on the thermal effect³ and the reduction of the property tax on hydro power will be achieved through an increase in the energy tax. Electricity intensive industries should be exempted.

All other financing shall be made within the framework of responsible public finances.

An implementation group for energy policy and control stations

The above agreement should be managed and updated. In the autumn of 2016, work continues in the Energy Commission, mandated to develop a range of background information and proposals for future policy. For our political parties this agreement is the starting point of that work. After the Energy Commission has submitted its report, there should be an implementation group composed of representatives of the parties that made this agreement. The implementation group shall continuously follow up the agreement.

The relevant authorities should continuously monitor developments in the Swedish electricity market. It involves analyzing the status of the power supply, including the need for the power reserve, the need for additional system services, grid stability and other critical factors for achieving the goal that Sweden should have a robust electrical system with a high reliability, a good transmission capacity, low environmental impact and electricity at competitive prices. Every four years there should be a special compilation of conclusions and proposals on the development of the electricity market and monitoring of the energy policy objectives. The compilation will then form the basis for a control station that is carried out every four years, planned to start in the autumn 2018.

³ On nuclear power.