

## by Reiner Gatermann

For almost 30 years, Sweden has been struggling with its position on nuclear power. Although around half the electricity generated in the country has been supplied by up to twelve nuclear reactors in the past, the general approach pursued to date, based on a referendum held in 1980, has been for no new nuclear power plants to be built and old ones to be shut down where energy from alternative sources is available. As of February 5 however, everything looks very different. The coalition government looks set to approve the replacement of old reactors with new ones, provided it wins the parliamentary elections in September 2010. If the current opposition were to take over the helm, all of this would be redundant, as the Social Democrats, the Greens and the Left Party intend to stick to the current strategy of phasing out nuclear power. All the same, the industry believes that the old spell has been broken, with the possibility of new nuclear reactors being connected to Sweden's national grid from around 2020 onwards

Some commentators have described the new policy as 'historic' and 'a turning point' with echoes of 'about time', with others levelling accusations of 'treachery', 'sabotage' and 'soul-selling' at those involved. These comments came in response to the decision taken by Sweden's non-socialist four-party coalition on a topic that, according to one newspaper, 'has poisoned political life in Sweden like no other issue'. On February 5, the leaders of the four parties announced in a joint press conference that the law phasing out the ten reactors that remain in service, is to be repealed, and permission is to be granted for up to ten new reactors to be built. In addition, a range of measures promoting alternative, renewable energy sources was announced. The aim of the government's programme is to establish a long-term, durable energy and climate policy and to provide assurances to energy-intensive industries, that their future survival will not only be reliant on the expansion of wind power, solar energy and the supply of biogas. It is not surprising that nothing but positive reactions have come from industry. They had been waiting for this day. By their own account, they had been left in the Barsebäck reactors were to be taken out of service, which happened in 1999 and 2005. With these two closures, Sweden still had ten reactors.

In the autumn of 2006, another change of direction became apparent. During negotiations on a non-socialist

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limbo of uncertainty for too long, which had a negative impact on their ability to plan for the future.

## Dubious referendum

The conflict surrounding the role that nuclear power should play in Sweden's energy policy began in the 1970s and since then has caused the downfall of one government, has divided parties and - above all - has made rational energy policy impossible. In 1978, Thorbjörn Fälldin, leader of the Centre Party, left the first non-socialist government since World War II. Reason: disagreement about nuclear power. Two years later, a dubious referendum took place to determine the future of nuclear power. The Swedish people were offered three alternatives, which had one common goal: the phasing out of nuclear power. This resulted in the decision to shut down all the reactors by 2010, including five that were still to be brought into service before 1985. In addition, the topic of nuclear power was officially declared 'out of bounds'.

In 1996, the Centre Party, the Social Democrats and the Left Party entered into a pact. The deadline of 2010 was done away with – nuclear power was to be used as long as its replacement with alternative and renewable energy remained unviable. But the two

alternative to the Social Democrats, who were in power with the support of the Greens and the Left party, the Conservatives, the Liberals, the Christian Democrats and the Centre Party agreed to a 'time-out' on the vexed issue of nuclear power. If the alliance should win the election, no new reactors would be built nor those already in operation shut down. More significant, however, was the fact that the Centre Party ended its anti-nuclear stance. The alliance won the election in September 2006 and the subject of nuclear power remained out of bounds until one year ago. It was dragged out of the deep freeze by the Liberals, but their call for active consideration of a future with nuclear power found few attentive ears. However, the alliance could no longer afford to ignore the issue completely. They found themselves increasingly exposed to the criticism, primarily from industry, that Sweden had no energy policy.

The fact that something had been set in motion became apparent in January of this year. In a wide-ranging newspaper article, Göran Hägglund, the leader of the Christian Democrats – originally opposed to nuclear power – proposed by way of 'compromise' that the replacement of the ten reactors by new plants be approved. When Maud Olofsson, leader of the Centre Party and Minister for Enterprise

and Energy, stood before the media on February 5 with her government colleagues, there is no doubt that she took a very big political risk. Despite the fact that she had already been able to convince her parliamentary fraction, the public had not been duly initiated. The reaction to the announcement was part disappointment, part incomprehension. of transition' to biogas, natural gas could be important for industry and the production of district heat. With regard to wind power, the government has set the target of producing 30 TWh by 2020, one-third offshore.

Finnish solution

In Sweden's nuclear power industry, new

## Whether Sweden gets any new nuclear reactors ultimately depends on the result of the elections'

A few days later, Olofsson used a speech to local centrist politicians to explain her new position: 'We are not saying "yes" to more nuclear power. Nuclear power is out-dated and a dangerous technology. The important aspect of this agreement is that we are opening up a golden opportunity for society with a sustainable energy supply. The best way to get rid of nuclear energy is to develop renewable energy sources.'

The most eye-catching part of the new energy and climate programme may well be the decision to allow new nuclear reactors to be built. But this does not mean that they will actually be built, particularly not ten new ones. First, there is the issue of economic viability. The government does not provide any financial support. And it is pointing to its other ambitions. By 2020, half of all energy consumed is to be generated from renewable sources. Ten per cent of the transport sector's energy needs are to be covered by renewables. By 2020, fossil fuels will no longer be used for heating buildings and the country's vehicle fleet is to be made independent from fossil fuels by 2030. In addition, there are to be no net emissions of greenhouse gases in Sweden by 2050. The government is also abandoning its opposition to imports of natural gas. During a 'period

ownership structures are emerging with the possibility to build new reactors. No one is happy with the fact all ten reactors are owned by the 'big three', Vattenfall, Eon and Fortum. The industrial consumers in the forestry and metal industries have been considering a "Finnish solution" for some time. The Finnish nuclear power producer Teollisuuden Voima Oy (TVO) is co-owned by several industrial firms, municipalities and power producer Fortum. TVO is a non-profit company. Magnus Hall, chairman of Sweden's third largest consumer of electricity, the forestry group Holmen, has already announced that he is aiming to build a new nuclear reactor. To this end, Holmen, SCA, Stora Enso, Boliden and Akzo Nobel have formed the nuclear power company Industrins Kraft. Just a few hours after the government's announcement, Eon and Vattenfall separately announced plans for new construction projects. 'It is extremely likely that we will be applying for the construction of new reactors," said Lars G. Josefsson, head of the state utility Vattenfall. Chief executive of Eon Sverige, Håkan Buskhe, expressed similar intentions.

Industrial users hope they can achieve lower prices by getting involved in power production. By their own admission, they made the mistake in the past of selling their power plants to the energy producers. It remains to be seen whether this will be possible in practice to any significant degree. Since the liberalisation of the electricity market, the European market has become more integrated. As a result, Swedish electricity prices have converged with continental price levels, which are considerably higher. This trend looks set to continue, particularly as the current government intends to make Sweden a major exporter of electricity.

At any rate, before Sweden can replace its existing reactors with new ones, one considerable political hurdle needs also to be crossed. The leftist opposition parties are sticking to their phasing-out strategy. 'New nuclear reactors would undermine our pursuit of renewable energy,' argues Peter Eriksson, leader of the Greens. 'The government is sabotaging new energy'.

Mona Sahlin, leader of the Social Democrats, also insists: 'No reactors'. With the initiative of the nonsocialist parties, she is, however, caught between a rock and a hard place. At the end of last year, the three opposition parties resolved to cooperate for election purposes. They have promised to form a coalition government if they win the elections. Sahlin will then be confronted with a potentially divisive issue. The powerful industrial trade unions and the municipalities which accommodate heavy industry welcome the government's plans.

The waters are now being tested to find a bridge between the governing parties and the Social Democrats. Both sides are making positive noises, but political observers are rather sceptical. It is doubtful whether any decisions will be made before the autumn of 2010. As things look at the moment, the question of whether Sweden gets any new nuclear reactors ultimately depends on the result of the elections which are scheduled to take place then.