

Rise and fall of civil use of nuclear energy in Germany

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About us

- Founded in 1970
- Offices in Berlin, Brussels, Cologne, Munich, Stuttgart, Vienna
- More than 200 lawyers, auditors, tax accountants and engineers
- Leading provider of consulting services in the areas of energy and infrastructure law with an interdisciplinary approach
- Specializing particularly in:
 - energy industry, water/waste water and waste industry, public transport and telecommunication
 - regulation law
 - company law, tax and labour law
 - competition and cartel law
 - environmental law, municipal law and public procurement law
 - financing
 - business consulting / auditing
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- Successful representation of our clients in numerous fundamental legal issues
- Clients: municipalities and regional authorities, about 400 municipal utilities (“Stadtwerke“) and municipal transport enterprises, internationally operating supply and trading companies, operators of renewable and conventional generation plants, project developers, banks and industrial enterprises

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- Born in Berlin in 1941
- Married, three daughters
- Studies in Marburg, Munich and at the International Faculty of Comparative Law
- Research associate at the University of Mainz with a focus on corporate and commercial law
- Lawyer since 1971 in Marburg
- 1972 - 1981 city councilor and member of the operating committee of the Stadtwerke Marburg
- 1986 notary and lawyer specialized in administrative law
- 1987 PhD
- Represented in numerous successful party and policy disputes before the Federal Constitutional Court (numerous clauses, testing law, Census, representing 146 municipalities in the eastern German power dispute) and before the European Court of Human Rights (constitutional integrity in public service)
- Lecturer at the Humboldt University in Berlin for Energy Law (since WAS 2003/04)
- Managing editor of the Journal of New Energy Law (ZNER)
- Chairman of the Board of Representatives of the Hessian attorney supply, public corporation (1988 - 2010)
- Member of the Board of the Bar Association of Kassel (1985 - 2010)
- Company founder and partner of counsel at Becker Büttner Held

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I. The rise of civil use of nuclear energy

On 6th and 9th August 1945 the USA dropped the atomic bombs „Little Boy“ and „Fat Man“ on the Japanese cities Hiroshima and Nagasaki. They led to a cultural shock in the western hemisphere because the war against Japan was yet decided.

“It was not necessary to drop this terrible things on them”, commented President Eisenhower the decision to throw atomic bombs on Japanese cities.

The “peaceful use” of nuclear power ought to be the civil answer to the nuclear threat.

In December 1953 President Eisenhower spoke before the General Assembly of the United Nations and presented his program “Nuclear Power for Peace”.

In the following years the American government forced the power plant owners to develop and buy nuclear power plants.

The biggest enterprises General Electric, Westinghouse and others built nuclear power plants.

If they wouldn't have agreed with the government it would have cancelled their licenses.

So the complete nuclear community was forced to work in a sector where it had technical improvement but unknown risks at the same time.

Japan was a good scholar.

The industry copied not only the American industrial organization and philosophy.

It ordered the nuclear power plants from the leading American electricity enterprises - and ordered not only the technical standards but meanwhile the risk philosophy.

When Tepco ordered the Fukushima power plants (1967), the American nuclear industrial sector had a relation from 3,5 existing to 100 ordered nuclear power plants.

The normal relation from existing power plants to order was three to two.

So it was a voyage into the unknown - with inevitable residual risk.

In 1975 the Rasmussen-report was edited.

It said that the probability of the greatest possible accident was only 1 to 1 million.

But the scientists only analyzed processes for accidents concerning one technical device.

They didn't analyze the accidents in their complexity - meanwhile alone in the western hemisphere existed several grave accidents:

- in the Canadian reactor Chalk River (1952), with melting core
- Idaho Falls (USA 1955)

- Windscale (GB 1957)
- Semi Valley (USA 1959)
- Fermi near Detroit (USA 1966)
- Lucens in Switzerland (1969)

All accidents with melting cores and all before the edition of the Rasmussen-Report.

So the Japanese imported high risk systems with a trivializing philosophy.

All this can only be explained with the psychological displacement effect.

A main influence in the US came from the nuclear laboratories Los Alamos and Oak Ridge where the military use of nuclear technology was the leading purpose.

So the development was influenced by military necessities - as it is in every other country.

II. The first German nuclear legislation

The first “Atomgesetz” (atomic energy act on civil use of nuclear energy and the protection against its dangers) was edited in 1959.

This law decided in its § 1 No. 1 the obligation of the state to promote civil use of nuclear energy.

Only in No. 2 it stated the obligation of the state to protect human kind before the dangers of nuclear energy.

In 1957 18 professors signed the “Göttinger Manifest”: They demonstrated against nuclear weapons for the “Bundeswehr”, the German army, but declared to promote the civil use.

The German power utilities on the other side didn’t like nuclear energy: The construction of reactors was too expensive.

The risks of peaceful use were unknown and the problem of storage of nuclear waste was not solved.

So the state decided to grant subventions to the whole scientific research and decided that storage should be an obligation of the state.

In 1968 the first commercial nuclear power plant - Obrigheim - was opened.

In the construction phase the investors - Energieversorgung Schwaben and communes - decided to build a power plant with a 20 % higher capacity as foreseen.

But they didn't want to delay the process of state approval.

So they built the plant with big technical changes but did not inform the state advisory about this.

When the state later became aware of this trick the authorities did not dare to edit a final operating license. So the first power plant became a blackburrow.

The same procedure was to be found in other power plants like Biblis A.

III. The step out contract and legislation 2000/2002

In 1985 the greens became part of the government of Hessen together with social democrats.

They claimed the ministry of Environment and the overview on nuclear plants.

For years they tried to change security requirements.

But the green authority in Hessen did not come to a success because legislation on the subject of nuclear energy and the survey on running of plants lies in the competence of the federal state.

In 1998 social democrats and greens won the election.

The green secretary of state from Hessen became secretary of state in the federal authority.

In Hessen he had developed an act for step out. He transferred this experience into the federal authority.

Scientific examination of the question of damages as result of closing nuclear plants found that was a constitutional risk.

So the greens decided to come to a contract with the runners of nuclear power plants.

The utilities agreed because several states - Hessen, Schleswig-Holstein - were very severe with their overview standards and they wanted to finalize this practices.

So in 2000 the first contract was signed.

In 2002 the first step out act was edited. It foresaw that every plant had 32 years of running time. Several plants had to close immediately.

The instrument to control this was the working hours of a plant.

In the amendment to the law for each power plant were stated the running hours. The runners became the competence to transfer hours from one nuclear plant to another.

IV. The step out from the step out

In 2009 the conservatives and the liberals won the elections.

One year later they negotiated a second treaty now foreseeing a prolongation of running nuclear plants:

- Plus 8 years for elder plants
- plus 14 years for the younger

But the government made a legal mistake: It decided not to participate the Bundesrat, the representation of the federal states on the level of the federation.

This was a mistake because the new tasks the states had to handle were highly risky: In this case the constitution foresees a participation of the federal states represented in the Bundesrat (council of federal states).

In September 2010 the Bundestag passed the new legislation without the participation of the Bundesrat.

Five federal states decided to go to the constitutional court.
My law firm received the authority to defend the interests of the five federal states before the Bundesverfassungsgericht (court of constitution).

V. Consequences of Fukushima: step out from step out from step out

At March 11th, a Friday, the first Fukushima-reactor exploded.

At the following Monday the government published a “Moratorium” for the eldest reactors: They had to be disconnected for the next three months.

But the legal base was highly doubtful: A rule in the law concerning civil use foresaw that in case of danger the authorities could decide to disconnect the plant.

But the danger had risen in Japan and not in Germany.

Nevertheless the authorities could argue that the risks of civil use had to be estimated on a new background of experience. Consequence: no utility launched a claim before the courts.

The chancellor installed an ethic commission for a new estimation of nuclear energy.

This commission decided after one month of reflection by recommending to come back to the first step out act.

Only three months later, on 30th June 2011, the Bundestag agreed to come back to the act from 2002:

The eight eldest nuclear plants had to be disconnected. The remaining nine plants became fixed final running dates, from 2015 for Grafenrheinfeld and 2022 for the last three.

The act passed with the consent of the parties of christian union, liberals, social democrats and greens: a great coalition.

The public, the journalists and the industrial sector came to the judgement this step out to be irreversible.

But there is a fact that rises some trouble: In several hours of the week the utilities import electricity from nuclear sources, from Temelin and Fessenheim and others.

VI. The insoluble problems of civil use: residual risk, costs, storage of waste

Civil use of nuclear energy produces a residual risk: The possibilities of severe accidents were at a roughly guess remaining from technical reasons and the human factor. So the running of nuclear plants is some sort of roulette.

The costs are increasing: The new nuclear plant at Olkiluoto/Finland costs more than five billion Euros.

The deputy chief of ROSATOM says that the costs of security devices have the double amount of the costs for the electric installation.

A modern gas plant with the average capacity of a modern nuclear plant costs less than 20 % of the costs of a nuclear plant.

Finally: Where to store the nuclear waste - for a time period of 200.000 years?

Result: hands off from civil use!

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Thank you for your attention!

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