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The Decay of the Nuclear Industrial Complex -

The Political Economy of Nuclear Waste Disposal in Germany

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Outline



- Emergence of the nuclear industrial complex in Germany
- Monopolistic supply structures
- Painful end of a long liaison
- Law suits of the utilities
- Accruals, provisions and uncertainties
- Winners and losers of the final disposal
- Summary: State vs. market?





Emergence of the NIC in Germany

- Geopolitical interests, secret plans and strategies for the construction and ownership
 of nuclear weapons are part of nuclear policy in all countries, who went the nuclear
 way. In nuclear technology, military, economic, scientific and political interests are
 interwoven in a complex mode.
- Know-how, technology and strategic knowledge resulted in a tremendous concentration of power
- Military-industrial complex (Mills 1956, Eisenhower 1961)
- In the FRG military rearmament and debates over construction of nuclear weapons also played a role





Emergence 2

- Atoms for peace
- Initiatives since 1952
 1954 Physikalische Studiengesellschaft mbH
- May 1955 Paris contracts
- October 1955 Federal Ministry for Nuclear Affairs January 1956 Deutsche Atomkommission (DAtK) 1957 "Eltviller Programm"
- 1960 Program for advanced reactors
- Positions of the big utilities
- VAK Kahl, Gundremmingen A, Lingen, Obrigheim, Würgassen, Stade





Emergence 3

- Dependence on licenses of Westinghouse and General Electric
- Kraftwerk Union -> Biblis A
- Economic conditions and promotion of the nuclear industry by the state (190 bn. EUR)
- State-industrial complex of the FRG
- Nuclear conflict and anti-nuclear resistance





Monopolistic supply structures

- Energiewirtschaftsgesetz 1935-1998
- concession contracts & demarcation contracts
- Area monopolies and concentration of the utilities
- Dominant role of E.ON, Vattenfall, RWE and EnBW
- GNS, DBE





Painful end of a long liason

- Nuclear complex (co-venturing, subsidies and financial support of big research centers)
- Responsibilities: Polluter pays principle
- Accruals for decommissioning and nuclear waste disposal
- AKEnd 2002
- Final storage delayed time for time





Law suits of the utilities

- Nuclear phase-out after Fukushima 13th amendment of AtG
- Industry-State relation becomes questioned
- Nine complaints for unconstitutionality
- ICSID suit
- Seven suits on Länder level (claim for damages, nuclear fuel tax etc.)
- Administrative court cases
- The state-industry compromise is legally dissolved





Accruals, provisions and uncertainties

- Operators accruals for nuclear decommissioning and final storage
- Cost scenarios 50, 60 or 75 bn. EUR
- Funding gap EU 120 bn. EUR
- Insolvency and inability to pay of the nuclear industry
- KFK suggestion 2016





Winners and losers of the final disposal

- Energiewende and big utilities
- "Riesen im freien Fall" (Der Spiegel 39/2015)
- Rating by Moody's (RWE in May 2016 rated Baa3)
- "Winners": GNS, DBE, Bilfinger SE, Brenk Systemplanung
- New constellation







- State vs. Market?
- Mid 2013 Endlagersuchgesetz (final storage searching law) in force
- Mid 2014 Kommission zur Lagerung HLW (HLW storage commission)
- End 2015 KFK (Commission Financing Nuclear Phase-out)
- Nachhaftungsgesetz (Additional liability law)
- Spin-off future business restructuring of utilities
- Private goods and public bads
- Nuclear state (Atomstaat)
- Decay of the atomic industry complex but not of the energy policy complex in total





Thank you for your attention!

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