

Panel

**Siting nuclear installations at the border: transnational political implications and societal responses**

Organised by Arne Kaijser (KTH Stockholm), Astrid Kirchhof (Deutsches Museum Munich), Jan-Henrik Meyer (University of Copenhagen) and Markku Lehtonen (University of Sussex)

**Panel abstract**

When looking at a map of nuclear installations (both planned and actually realised), we can find a curious feature. A large number of nuclear reactors, waste dumps and reprocessing plants are situated near national borders. Some of this can be explained by technical requirements, such as the need for cooling water from rivers or the sea. Economic concerns often played a role, too, such as the ambition to sell electricity to neighbouring countries. However, as decisions about the siting of nuclear facilities were often controversial, having fewer of one's own citizens near a nuclear site seemed advantageous to policy makers. Moreover, marginal communities in border areas seemed less likely to reject promises of progress and jobs.

Such siting decisions did not go unnoticed at the other side and usually caused reactions and unintended consequences at different levels. Firstly, at the local level: when a decision was made for a nuclear site close to a border, policy makers suddenly found themselves confronted with opponents from two different countries. Critics of nuclear power often started to cooperate transnationally. Secondly, at the nation-state level: border sites occasionally led to diplomatic difficulties, even across the Iron Curtain. Thirdly, at the international level: international organizations, including the European Communities, (unsuccessfully) attempted to set rules for such cross-border issues.

This panel analyses the implications of siting nuclear facilities at national borders in a comparative and transnational perspective. Drawing research from the *HoNESt – History of Nuclear Energy and Society* project, we will compare societal and political responses and trace transnational cooperation, interaction, and perceptions on a Swedish reactor (viewed from Denmark and Sweden), a French fast breeder, and a West German nuclear reprocessing and waste dump in the Cold War. Hence we will be able to draw some more general conclusions with a view to the implications of “siting at the border”.

Per Högselius (KTH Stockholm) will be commentator at the session

## Short bios:

*Arne Kaijser* is professor of History of Technology at KTH Royal Institute of Technology (KTH), Stockholm. His main research interests concern the historical development of infrastructural systems from a transnational perspective. He has been engaged in the Tensions of Europe-network since 1999, and is at present participating in the History of Nuclear Energy and Society-project, funded by Euratom. His latest books are (with Per Högselius and Erik van der Vleuten) *Europe's Infrastructure Transition. Economy, War, Nature* (Palgrave, 2016), and (as editor together with Högselius, Hommels and van der Vleuten) *The Making of Europe's Critical Infrastructure. Common Connections and Shared Vulnerabilities* (Palgrave, 2013).

*Jan-Henrik Meyer, Dr. phil.* is an Associate Professor at the Saxo Institute of the University of Copenhagen, and currently a visiting fellow at the Center for Contemporary History (ZZF), Potsdam. He is a principal investigator and work package manager within the Horizon 2020 project *HoNESt – History of Nuclear and Energy and Society*. Before that, he was an associate professor at NTNU Trondheim, Norway, an assistant professor and senior researcher at Aarhus University, a Rachel Carson Fellow at the University of Munich, a Fellow of the KFG - The Transformative Power of Europe at FU Berlin and a Marie Curie Fellow at the University of Portsmouth. Recent publications include: Who Should Pay for Pollution? The OECD, the European Communities and the Emergence of Environmental Policy in the early 1970s, *European Review of History* 2017; (with W. Kaiser) *International Organizations and Environmental Protection. Conservation and Globalization in the Twentieth Century*. Berghahn 2017; (with A. M. Kirchhof) Global Protest Against Nuclear Power: Transfer and Transnational Exchange in the 1970s and 1980s, *Historical Social Research* 39, 1, 2014, and (with W. Kaiser) *Societal Actors in European Integration: Polity-Building and Policy-Making 1958-1992* (Palgrave Macmillan, 2013).

*Markku Lehtonen* is researcher at the Groupe de Sociologie Pragmatique et Réflexive (GSPR), l'École des Hautes Etudes en Sciences Sociales (EHESS) in Paris, and Associate Faculty at SPRU (Science Policy Research Unit) of the University of Sussex. He worked as a Research Fellow at SPRU in 2005-2015, and at the IFRIS (Université Paris-Est) in 2012-2014. Markku holds a PhD in environmental economics (Université de Versailles Saint-Quentin-en-Yvelines, 2005) and M.Sc. in environmental studies (University of Helsinki 1994). His research focuses on the role of expertise (esp. indicators and evaluations) in energy and environmental policy, evaluation of megaprojects, deliberative democracy, and public controversies over questions of energy and the environment (with a special attention to biofuels, nuclear power, and radioactive waste management). His recent publications include: Lehtonen, M., Joly, P.-B. & Aparicio, L. (eds.). 2017. *Socioeconomic evaluation of megaprojects: Dealing with uncertainties*. Abingdon and New York: Routledge.

*Astrid Mignon Kirchhof* is a research associate at the Deutsches Museum, Munich, within the collaborative research project History of Nuclear Energy and Society (HoNESt). Previously she was the Volkswagen Foundation Postdoctoral Fellow in the Humanities at Georgetown University and the German Historical Institute, Washington, DC. From 2010 to 2014, she was a research associate and lecturer at the Chair of Modern and Contemporary History at Humboldt

University, Berlin, and the principal investigator of the DFG-research project *From nature conservation to environmental protection. Civic involvement and the transformation of the nature conservation movement in East and West Berlin between 1945 and 1990*. She earned her PhD in History from Technical University Berlin. Publications include: *Transcontinental and Transnational Links in Social Movements and Environmental Policies in the 20th century* (with C. McConville), in: *Australian Journal of Politics and History*, Vol. 61 (2015) 3; *Protest in the City: Democracy and Dissent in 1980s Europe* (with C. MacDougall and P. Weiß), in: *Journal of Urban History*, 41(2015) 4.; *Global Protest against Nuclear Power. Transfer and Transnational Exchange in the 1970s and 1980s* (with J.-H. Meyer), in: *Historical Social Research*, Vol. 39 (2014), 4. Forthcoming with UPittPress: *Nature Protection and the Iron Curtain. Environmental Policy and Social Movements in Communist and Capitalist Countries 1945-1990*, ed. with John McNeill.

Per Högselius is an Associate Professor in History of Technology and International Relations at KTH Royal Institute of Technology (KTH), Stockholm. He has been engaged in the Tensions of Europe-network since the early 2000s, and is at present leading the research project Colonial Natural Resources and Swedish Foreign Policy. His recent publications include P. Högselius, *Die deutsch-deutsche Geschichte des Kernkraftwerkes Greifswald: Atomenergie zwischen Ost und West*. Berlin : Berliner Wissenschafts-Verlag, 2015; P. Högselius, *Red Gas. Russian and the Originso f European Energy Depedence*. Basingstoke and New York : Palgrave Macmillan, 2013; (with Arne Kaijser and Erik van der Vleuten) *Europe's Infrastructure Transition. Economy, War, Nature* (Palgrave, 2016), and (as editor together with Hommels, Kaijser and van der Vleuten) *The Making of Europe's Critical Infrastructure. Common Connections and Shared Vulnerabilities* (Palgrave, 2013).

Individual contributions

### **“Vad ska väck? Barsebäck!”: The Barsebäck power plant in Swedish energy politics**

Arne Kaijser

The Barsebäck power plant is located 20 km from Copenhagen and the Swedish cities Malmö, Lund and Landskrona are also within a 30 km radius. When the power plant was planned in the mid-1960s the location seemed ideal with short distances to many consumers in both Sweden and Denmark.

In 1972 a critical debate on nuclear power began in both Sweden and Denmark and Barsebäck became a symbol for the risks of nuclear energy, attracting large-scale protest-marches from 1977 with participants from both Sweden and Denmark. From the mid-1980s, the Danish government demanded its close down. Barsebäck has thus had a special significance in Swedish energy politics, and was also chosen as the first plant to be closed.

The paper will analyze how the anti-nuclear movement, the power industry and the local and national politicians in Sweden argued and acted about Barsebäck, but also how they interacted with their colleagues on the Danish side.

### **“20 km from Copenhagen market square”: Danish perspectives on the Swedish nuclear power plant Barsebäck**

Jan-Henrik Meyer

In Denmark, the decision to go nuclear was deferred in the 1970s in the face of a rising anti-nuclear movement. In the mid-1980s, Denmark forewent nuclear power altogether. However, “20 km from Copenhagen market square”, as the anti-nuclear activists continued to stress, the Swedish nuclear power plant at Barsebäck became the main symbol and target of anti-nuclear activism in Denmark.

In conjunction with Arne Kaijser’s paper on the Swedish debate on Barsebäck, this paper will enquire into the Danish perspective on Barsebäck, based on the records of the Danish anti-nuclear movement. It will enquire into the political debate, the activism, and the cross-border cooperation in the annual marches, including the difficulties and advantages of transnational cooperation. Furthermore, it will trace the changing official position and Danish diplomatic activities against the reactors so close to their capital.

### **Breeding transnational responses: The Superphénix fast breeder reactor: cross-border collaboration, protest and consequences**

Markku Lehtonen

This paper examines the development of and mobilisation against the first-of-its kind industrial prototype fast breeder reactor, Superphénix, constructed between 1976 and 1985 in Creys-Malville, near the Swiss and Italian borders. The decision to approve the construction of

Superphénix in 1976 led to massive demonstrations, which entailed violent confrontations between the police and the demonstrators, and left deep marks in the French anti-nuclear movement and in the French public consciousness. The paper focuses on the tensions stemming from the strong European cross-border dimension of Superphénix, explores the implications for both anti-nuclear movements and for European nuclear-sector collaboration. It specifically analyses the two European cross-border dimensions of Superphénix: 1) transnational collaboration in the mobilisation against the reactor, and 2) the set-up of the project itself as a French-German-Italian joint endeavour, entailing also the plan to build a “sister” reactor (SNR2) in Germany.

### **Crossing Permeable Borders at the Gorleben Nuclear Facility**

Astrid Mignon Kirchhof

Gorleben, a West German municipality in Lower Saxony, just a stone-throw from the East German border, was selected as the site for a nuclear reprocessing plant and waste storage facility in 1977. According to some, the decision was made in retaliation for the construction of East Germany’s final repository at Morsleben, directly on the border to West Germany at Lower Saxony. The Gorleben decision provoked West Germany’s biggest protest ever until that time. Demonstrations continued in the 1980s, with activists at times freely crossing the border into East German territory. They sat on the East German shore of the Elbe River, which formed the border, playing guitar and mockingly singing the parole they themselves had so often heard „go to the other side if you don’t like it here!“. This presentation will examine the cross-border interaction and political response, demonstrating the permeability of the Iron Curtain and borders in general.

The goal is to integrate all papers into a common, fully transnational account on nuclear sites at borders.