



Climate change, energy security, and risk—debating nuclear new build in Finland, France and the UK

Tuula Teräväinen^{a,*}, Markku Lehtonen^b, Mari Martiskainen^b

^a Department of Social Research, Helsinki Institute of Science and Technology Studies (HIST), P.O. Box 18 (Unioninkatu 35), FI-00014 University of Helsinki, Finland

^b Sussex Energy Group, Science and Technology Policy Research (SPRU), The Freeman Centre, University of Sussex, Falmer, Brighton BN1 9QE, UK

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ABSTRACT

Concerns about climate change and energy security have been major arguments used to justify the recent return of nuclear power as a serious electricity generation option in various parts of the world. This article examines the recent public discussion in Finland, France, and the UK – three countries currently in the process of constructing or planning new nuclear power stations. To place the public discussion on nuclear power within the relationship between policy discourses and contexts, the article addresses three interrelated themes: the justifications and discursive strategies employed by nuclear advocates and critics, the similarities and differences in debates between the three countries, and the interaction between the country-specific state orientations and the argumentation concerning nuclear power. Drawing from documentary analysis and semi-structured interviews, the article identifies and analyses key discursive strategies and their use in the context of the respective state orientations: ‘technology-and-industry-know-best’ in Finland, ‘government-knows-best’ in France, and ‘markets-know-best’ in the UK. The nuclear debates illustrate subtle ongoing transformations in these orientations, notably in the ways in which the relations between markets, the state, and civil society are portrayed in the nuclear debates.

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1. Introduction

Whilst the importance of language in policy-making has, since the ‘ideational turn’ in the late 1980s, been increasingly recognised (see Bevir and Rhodes, 2003; Gofas and Hay, 2009), sociologists and political scientists have often focused almost exclusively on either the discursive or the contextual dimensions of politics. Although discourses are typically conceived of as being contextually embedded, the influence of discursive strategies on policy processes has received less attention (Hansen and Sørensen, 2005; Kettell, 2010). Recognising the interconnectedness of policy discourses and contexts, this article analyses recent nuclear power discussions (2008–2010) in three European countries, Finland, France, and the UK. France is one of the world’s largest nuclear power producers, sourcing around 78% of its total electricity supply from nuclear power, while Finland (29%) and the UK (16%) rely less on nuclear power (OECD, 2009). Nevertheless, all three are in the process of expanding their nuclear capacity. Finland and France were the first in Western Europe to relaunch nuclear new build, with new-generation European

Pressurised Reactors (EPR) under construction in *Olkiluoto* (2005–) and *Flamanville* (2007–). Since 2006, the UK government has also adopted an increasingly favourable position towards nuclear power. In all three countries, nuclear power is portrayed as a solution to the problems of climate change and energy security, while the traditional concerns for accident and radiation risks – and, to a certain extent, nuclear waste management – have been pushed to the background. In this new context, a key question is how nuclear advocates and adversaries seek to exploit these concerns in support of their arguments.

Building on ideas of discourse theories applied in governance research (Hansen and Sørensen, 2005) and argumentative discourse analysis (Hajer, 1995), this article emphasises the reciprocal relationship between policy discourses and their respective contexts. The focus is on discursive strategies that stakeholders mobilise to enhance the credibility of their claims. Following Kettell (2010; pp. 1–2) we define discursive strategy as ‘the way in which agents frame and present particular themes, issues, and arguments...’ to provide common interpretations of main problems, justify and legitimise certain political action, solicit support for suggested claims, and challenge opposing arguments. Policy context is defined here as entailing specific politico-institutional and historic-cultural structures and conditions that shape policy discourses but are also shaped by them (Hansen and Sørensen, 2005). In terms of the policy context, we pay particular

* Corresponding author. Tel.: +358 9 19123778; fax +358 9 1912 3967.

E-mail addresses: tuula.teravainen@helsinki.fi (T. Teräväinen), m.lehtonen@sussex.ac.uk (M. Lehtonen), m.martiskainen@sussex.ac.uk (M. Martiskainen).

attention to the ways in which states orientate themselves to social interests, given that such an orientation affects the possibilities for varying political claims to become articulated and recognised, while being, itself, subject to political negotiations. States can be classified into four ideal types developed by Dryzek et al. (2002): actively or passively inclusive and actively or passively exclusive. Actively inclusive states aim to integrate various interests into the institutionalised decision-making processes and expand traditional tripartite corporatism (negotiations among the state, industry, and labour market organisations) towards a broad range of actors and groups, while passively inclusive states are open to non-governmental organisations but do not incorporate social interests into the state structure. Passively exclusive states offer fewer points of access to social movements and interests but otherwise 'leave them alone'. Finally, actively exclusive states seek to constrain the organisation and influence of critical social forces (Dryzek et al., 2002; Dryzek and Tucker, 2008.)

Rather than a fixed national characteristic, we understand state orientation as being constituted in and through policy processes. More specifically, we pay attention to the dynamics and interconnectedness between discursive strategies and state orientations and the ways in which they shape the relationships between the state, civil society, and the market. This article addresses three key questions:

- What kinds of justifications and discursive strategies have different advocates and critics of new nuclear power employed?
- What similarities and differences can be identified between the recent nuclear power debates in Finland, France, and the UK?
- How are country-specific state orientations reflected in and constituted by arguments for and against nuclear power in national policy debates?

The analysis is based on broad documentary data complemented with interview data. The documentary data includes strategies and statements from governments, labour market organisations, non-governmental organisations (NGOs), and political parties (2001–2010), as well as newspaper articles from the main Finnish daily newspaper *Helsingin Sanomat* (HS) and the major British daily newspapers (2008–2010). For Finland, the data includes 73 policy and stakeholder documents and 713 nuclear-related articles published in *Helsingin Sanomat*. The UK data consists of 1605 newspaper articles and 45 texts produced by stakeholders (2001–2008). For France, the 860 most recent (January 2008–June 2010) texts were extracted from a larger corpus that was constituted over time, focusing mainly on major controversies concerning French nuclear power.

The interview data consists of eleven semi-structured interviews¹ conducted with representatives from Finnish political parties (3), the energy industry (2), environmental organisations (1), trade unions (3), employers' organisations (1), and the Ministry of Employment and the Economy (1) (2009), and eight interviews with French social scientists (2008–2009). The main function of the interviews was to help to focus the collection and analysis of the documentary data and, particularly for Finland, to complement the analyses. As the documentary and stakeholder data for the UK was substantially more extensive than for Finland and France, conducting additional interviews in the UK was considered unnecessary.

The data were analysed using qualitative content analysis complemented by insights from discourse theory (Hajer, 1995; Hansen and Sørensen, 2005; Hsieh and Shannon, 2005). The analysis entailed, on the one hand, the identification of the structures (notably the discursive categories) in the corpus as a whole and, on the other hand, close reading of selected texts. The primary aim was to identify particular discursive strategies employed by different actors to advocate specific political positions in the nuclear power debate (Kettell, 2010; Hajer, 1995).

Three themes – climate change, energy security, and risks – were first applied for organising the analysis of the material from the three countries to allow for cross-country comparisons. Through close reading, the data were coded using inductive category development (Hsieh and Shannon, 2005) and categorised into thematic groups and discursive categories. Instead of starting from a given, theory-led categorisation of the discourses, the adopted approach was inductive and data-oriented, seeking to identify the discursive categories and strategies as they appeared in the data.²

In the following sections, we first present a brief history of nuclear power in the three countries. The recent nuclear debates are then analysed, including the key discursive strategies employed by various protagonists. The concluding sections summarise the trends common to the three countries and discuss cross-country differences, particularly in relation to the specific state orientations.

2. Nuclear power in Finland, France, and the UK

2.1. Finland

Finland built its first NPPs in the 1970s. In the Cold War context, the government felt compelled to commission two Russian light-water pressurised reactors while allowing *Teollisuuden Voima* (TVO) – a consortium of 16 Finnish industrial companies with 25% state ownership – to order two reactors from Sweden (Sunell, 2004).

In 1993, Parliament, somewhat surprisingly, turned down TVO's application for a fifth NPP (votes 90–107). By the early 2000s, the political climate had become ripe for the acceptance of new nuclear power, and Parliament approved TVO's renewed application in 2002 (votes 107–92). Finland, thus, became the first Western country to start building a new NPP since the Chernobyl accident, as the construction of *Olkiluoto 3* started in 2005. The initially planned start-up date of 2009 was postponed several times, and the current estimated completion date of *Olkiluoto 3* is 2013. In 2008 and 2009, TVO, Fennovoima,³ and Fortum⁴ submitted three further applications. The subsequent debate was less controversial than the previous ones and seemed to concern the number of reactors needed rather than whether new nuclear plants should be built in the first place. In July 2010, the parliament issued construction licences for two further NPPs – for Fennovoima and TVO – and approved an extension of a final disposal facility for spent nuclear fuel in *Olkiluoto*.

² A software, *Prospéro* (Chateauraynaud, 2003) was employed for the analysis of the French and the British text corpora. The method draws on the French tradition of pragmatic sociology and seeks to combine both qualitative and quantitative elements. Rather than assuming a given theoretical starting point or fixed analytical framework, the method allows the analyst to move flexibly between close reading of an individual text and the treatment of the entire corpus and continuously to refine the analytic framework as the work progresses.

³ Fennovoima is owned by Voimaosakeyhtiö SF (66%) – a consortium of 15 Finnish retail and industrial companies – and E.ON Kärnkraft Finland (34%).

⁴ Fortum, formerly IVO, was originally a state-owned company. Today, it is listed in the Helsinki stock exchange but has the state still as the majority owner, with 51.5% of the shares.

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