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Title: Local perceptions of opportunities for engagement and procedural justice in electricity transmission grid projects in Norway and the UK

Article Type: Regular Paper

Keywords: Sustainable grid development, involvement, public engagement, communication, consultation, participation, procedural justice

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Abstract: Transmission lines are critical infrastructures, but frequently contested especially at the local level, by local communities. The role of public engagement in processes pertaining to specific transmission line projects is an under-researched, yet important topic that this paper seeks to discuss by investigating how inhabitants perceive these processes and to what extent they find the processes just and fair. This paper addresses the participatory aspects of the planning process, as perceived by the local inhabitants in four Norway and UK cases, by using a qualitative comparative case study design. We further analyse this issue through frameworks of public engagement and procedural justice. In both countries public engagement is largely characterized by perceptions of insufficient information, and insufficient influence on the process. In sum, the findings indicate that the informants generally perceive the opportunities for involvement as insufficient and unjust. The findings are quite similar across all cases and both countries. Local inhabitants represent diverse groups who often have different levels of knowledge, time and engagement to bring to the planning process. Their requests for improved processes thus underline the serious public engagement challenges that applicants and decision-makers face.

Land Use Policy

Jørgen K. Knudsen

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10 March 2015,

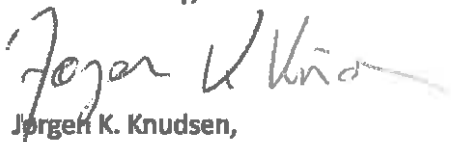
**Concerning revision of the manuscript entitled 'Local perceptions of opportunities for engagement and procedural justice in electricity transmission line projects in Norway and the UK'**

We thank you for the opportunity to revise our submitted manuscript with the above title – c.f. our submission of 19 December 2014.

We hereby submit a revised manuscript, according to the minor revisions indicated by the reviewers.

Please see the attached documents providing the details on the revision, as well as the revised manuscript, a figure containing an illustrative map, and a declaration concerning changes in the authorship – with related confirmations from the authors.

Yours sincerely,



Jørgen K. Knudsen,

corresponding author

**Concerning changes in authorship for the submitted manuscript entitled 'Local perceptions of opportunities for engagement and procedural justice in electricity transmission lines in Norway and the UK'**

When the first draft of the manuscript was submitted for review, in December 2014, the authorship was arranged in the following way:

Jørgen K. Knudsen, Øystein Aas, Susana Batel, Patrick Devine-Wright, Jens Jacob Kielland Haug, Gerd B. Jacobsen, Marte Qvenild and Line Camilla Wold.


The authorship was then arranged according to an alphabetical order. However, the research team has in the aftermath found that an arrangement according to contribution and work load would be more appropriate.

We have therefore suggested the following authorship for the submission of the revised manuscript:

Jørgen K. Knudsen, Line Camilla Wold, Øystein Aas, Jens Jacob Kielland Haug, Susana Batel, Patrick Devine-Wright, Marte Qvenild, Gerd B. Jacobsen

Please see the enclosed e-mails from all authors concerned, confirming this re-arrangement.

Yours sincerely,

  
Jørgen K. Knudsen  
Corresponding author

Author confirm\_Ø Aas  
Subject: Fw: Concerning arr. of authorship SUSGRID-article 'Local perceptions of opportunities for engagement..'

From: Aas, Øystein [mailto:oystein.aas@nina.no]  
Sent: 5. mars 2015 12:31  
To: Jørgen K. Knudsen  
Subject: RE: Concerning arr. of authorship SUSGRID-article 'Local perceptions of opportunities for engagement..'

I hereby confirm that I agree with the re-arrangement of authorship for the submitted article manuscript entitled 'Local perceptions of opportunities for engagement and procedural justice to electricity transmission grid projects in Norway and the UK'.

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Øystein Aas  
Senior Research Scientist, PhD

Check out: EIFAAC International Symposium on Recreational Fisheries 15 - 17 June 2015:  
<http://miljodirektoratet.no/no/Nyheter/Arrangementer/EIFAAC-Symposium-on-Recreational-fisheries/>

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From: Marte Qvenild  
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Subject: RE: Concerning arr. of authorship SUSGRID-article 'Local perceptions of opportunities for engagement..'

I hereby confirm that I agree with the re-arrangement of authorship for the submitted article manuscript entitled 'Local perceptions of opportunities for engagement and procedural justice to electricity transmission grid projects in Norway and the UK'.

Best regards,  
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From: Gerd Blindheim Jacobsen  
Sent: 5. mars 2015 12:37  
To: Jørgen K. Knudsen  
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I hereby confirm that I agree with the re-arrangement of authorship for the submitted article manuscript entitled 'Local perceptions of opportunities for engagement and procedural justice to electricity transmission grid projects in Norway and the UK'.

Best regards,  
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Subject: FW: Concerning arr. of authorship SUSGRID-article 'Local  
perceptions of  
opportunities for engagement..'

From: Jens Jacob Kielland Haug  
Sent: 5. mars 2015 12:44  
To: Jørgen K. Knudsen  
Subject: RE: Concerning arr. of authorship SUSGRID-article 'Local perceptions of  
opportunities for  
engagement..'

I hereby confirm that I agree with the re-arrangement of authorship for the  
submitted article manuscript  
entitled 'Local perceptions of opportunities for engagement and procedural  
justice to electricity  
transmission grid projects in Norway and the UK'

Best regards,

Mvh Jens Jacob Kielland Haug  
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**From:** [Patrick Devine-Wright](#)  
**To:** [Jørgen K. Knudsen](#)  
**Subject:** Re: Concerning arr. of authorship SUSGRID-article "Local perceptions of opportunities for engagement."  
**Date:** 5. mars 2015 16:13:00

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*I hereby confirm that I agree with the re-arrangement of authorship for the submitted article manuscript entitled 'Local perceptions of opportunities for engagement and procedural justice to electricity transmission grid projects in Norway and the UK'.*

On 5 Mar 2015, at 11:28, Jørgen K. Knudsen wrote:

*I hereby confirm that I agree with the re-arrangement of authorship for the submitted article manuscript entitled 'Local perceptions of opportunities for engagement and procedural justice to electricity transmission grid projects in Norway and the UK'.*

\*\*\*\*\*

**Professor Patrick Devine-Wright**

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New Book: Place Attachment: Advances Theory, Method and Applications,  
<http://www.routledge.com/books/details/9780415538213/>



**From:** [Batel, Susana](#)  
**To:** [Jørgen K. Knudsen](#)  
**Subject:** paper authorship  
**Date:** 6. mars 2015 10:20:43

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Hi Jorgen,

Here it goes below.

All the best,

Susana

*I hereby confirm that I agree with the re-arrangement of authorship for the submitted article manuscript entitled 'Local perceptions of opportunities for engagement and procedural justice to electricity transmission grid projects in Norway and the UK'.*

Susana Batel, PhD

Post-doc research fellow at Cis-IUL, Lisbon University Institute, Portugal

Visiting fellow @ Geography School, University of Exeter and @ Institute of Social Psychology, London School of Economics and Political Science

**From:** [Wold, Line Camilla](#)  
**To:** [Jørgen K. Knudsen](#)  
**Cc:** [Aas, Øvstein](#)  
**Date:** 10. mars 2015 15:11:08

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I hereby confirm that I agree with the re-arrangement of authorship for the submitted article manuscript entitled 'Local perceptions of opportunities for engagement and procedural justice to electricity transmission grid projects in Norway and the UK'.

Mvh Line C. Wold

**'Local perceptions of opportunities for engagement and procedural justice in electricity transmission grid projects in Norway and the UK'**

**Report on the editing accord. to reviewers' comments:**

Reviewer #1: Thanks a lot for the opportunity for reviewing this well written drafted article on a topic that has not previously been very well covered in academic journals. Work on public engagement and acceptance is available, but very few has done such an excellent work through the lenses of procedural justice. I find it very valid to apply the key aspects chosen and then to apply these on the empirical findings from Norway and the UK. Well done. This article should be published A.S.A.P. The only minor comment is the final reference to the National Public Debate Commission (NPDC) employed in a French-Spanish transmission line. It could have been interesting to learn whether such a NPDC could influence the assessment of the key aspects chosen to assess procedural justics, but I guess that this is beyond the scope of the article...

Response: We have strengthened the reference to the mentioned study. See last sentence in the concluding part, under section 6 Discussion:

*This knowledge will contribute to a broader understanding of procedural justice as an important dimension of the wider energy justice research field, which is of crucial importance for the further de-carbonization of the European energy system.*

Reviewer #2: This is a very good article—it addresses an important topic, uses a sound methodology, and is well written. It is almost ready to publishing, meaning my recommendation is to accept the piece with a few minor revisions.

First, I like how the piece situates itself at the nexus of electricity, transmission lines, and justice. I also appreciate how it employs the notion of due process and distribute justice. However, most recently a few other books and articles have been published expanding upon these notions, and bringing in other justice elements such as welfare, equity, corrective justice, futurity/posterity, responsibility, etc. These can be just as impactful at making the case that transmission siting is a justice issue. I would suggest that the author(s) lengthen (by one or two paragraphs only) their discussion of the energy justice subsection and engage with some of these broader notions of energy justice. The best single source is the just-published book by Cambridge University Press on Global Energy Justice (Sovacool and Dworkin) but these others are relevant as well:

Sovacool, BK, R Sidortsov, and B Jones. Energy Security, Equality, and Justice (London: Routledge, 2014).

Energy Justice in a Changing Climate: Social Equity and Low-Carbon Energy, K. Bickerstaff, G. Walker, H. Bulkeley (Eds.). ZedBooks, New York (2013)

Hall, M, S., Hards, S. and Bulkeley, H. (2013) 'New approaches to energy: equity, justice and vulnerability: An introduction to the special issue'. Local Environment: The International Journal of Justice and Sustainability 18(4): 413-421

McCauley, D., Heffron, J. R., Stephan, H. and Jenkins, K. (2013) 'Advancing energy justice: the triumvirate of tenets'. International Energy Law Review 1-5.

Heffron, R & McCauley, D 2014, ' Sustainable supply chains and energy justice ' Applied energy , vol 123, pp. 435-437.

**Response:** We have integrated a major part the above suggested references in a new paragraph on 'energy justice' and related notions, more broadly capturing the emergent literature related to this field. Please see page 6 (in the submitted version), under section 2:

*In addition to the discussion of these key aspects, an emerging concept has been the broader notion of 'energy justice' (Sovacool & Dworkin 2014). 'Energy justice' can be understood as equitable distribution of benefits and burdens of energy production and consumption, as well as fair treatment of and communication with people in energy decision-making (ibid: 5). Related to this, the research literature has engaged with broader notions like 'equity' and 'vulnerability' (Hall et al. 2013: 415), building further on the notions of 'social' and 'environmental justice', with a major anchoring within the environmental justice literature (ibid.). McCauley et al. (2013: 107) point to the broad scope of energy justice, given a normative philosophical basis, aiming at providing all individuals, across all areas, with safe, affordable and sustainable energy. Heffron and McCauley (2014) emphasize further that there are three major tenets of 'energy justice'; distributional, procedural and recognition justice (ibid.). Although the notion of 'recognition justice' has not been treated in an explicit manner in our data, there are findings related to perceptions of being treated fairly during the process that can be associated with this concept.*

Second, the literature from the authors on the specific topic of justice/engagement and transmission is spot-on and well done, though the authors appear to have missed a few articles that may deserve an addition to that section of the paper:

Øystein Aas, Patrick Devine-Wright, Torvald Tangeland, Susana Batel, Audun Ruud, Public beliefs about high-voltage powerlines in Norway, Sweden and the United Kingdom: A comparative survey, Energy Research & Social Science, Volume 2, June 2014, Pages 30-37

<http://kennedyinstitute.nuim.ie/content/contribution-distributional-justice-siting-transmission-lines>

'Energized' Negotiations: Mediating Disputes over the Siting of Interstate Electric Transmission Lines, 2011, Ohio State Journal on Dispute Resolution, 26 Ohio St. J. on Disp. Resol. 217

Otherwise, a strong paper that deserves to be published in Land Use Policy.

**Response:** We have accommodated this comment by adding some sentences on justice and engagement, under section 2 (p. 4 – 5 in the submitted version):

*These methods will also vary according to different jurisdictions, and must also balance different principles like justice and expedience – which can also be the object of political debates (Diamond 2011). Hence, complex political and decision-making structures induce challenges for the actual design of engagement mechanisms. However, an important aspect to be more prominently stressed in this regard is the need for better understanding public beliefs and acceptance, and more actively use this knowledge to inform policy making and planning (Aas et al. 2014). More particularly, Keegan and Torres (2014) point to the need for more research on the design and management of community benefit arrangements among host communities for transmission lines.*



## **Local perceptions of opportunities for engagement and procedural justice in electricity transmission grid projects in Norway and the UK**

Authors: Jørgen K. Knudsen<sup>1</sup>, Line Camilla Wold<sup>2</sup>, Øystein Aas<sup>2</sup>, Jens Jacob Kielland Haug<sup>1</sup>, Susana Batel<sup>3</sup>, Patrick Devine-Wright<sup>3</sup>, Marte Qvenild<sup>1</sup>, Gerd B. Jacobsen<sup>1</sup>

<sup>1</sup>SINTEF Energy Research, Norway; <sup>2</sup>Norwegian Institute for Nature Research; <sup>3</sup>University of Exeter, College of Life and Environmental Sciences

**Highlights regarding the paper 'Local perceptions...', submission for Land Use Policy**

- Public engagement in transmission line projects is under-researched.
- This article investigate how inhabitants perceive these processes.
- The perceptions of local inhabitants in four Norway and UK cases are studied.
- The informants generally perceive involvement as insufficient and unjust.
- The findings are quite similar across all cases and both countries.

## Local perceptions of opportunities for engagement and procedural justice in electricity transmission grid projects in Norway and the UK

### Abstract

Transmission lines are critical infrastructures, but frequently contested especially at the local level, by local communities. The role of public engagement in processes pertaining to specific transmission line projects is an under-researched, yet important topic that this paper seeks to discuss by investigating how inhabitants perceive these processes and to what extent they find the processes just and fair. This paper addresses the participatory aspects of the planning process, as perceived by the local inhabitants in four Norway and UK cases, by using a qualitative comparative case study design. We further analyse this issue through frameworks of public engagement and procedural justice. In both countries public engagement is largely characterized by perceptions of insufficient information, and insufficient influence on the process. In sum, the findings indicate that the informants generally perceive the opportunities for involvement as insufficient and unjust. The findings are quite similar across all cases and both countries. Local inhabitants represent diverse groups who often have different levels of knowledge, time and engagement to bring to the planning process. Their requests for improved processes thus underline the serious public engagement challenges that applicants and decision-makers face.

**Key words:** *Sustainable grid development, involvement, public engagement, communication, consultation, participation, procedural justice*



## 1. Introduction

A politically induced strategy towards a low-carbon energy system has gained force during recent years in Europe, in which more renewable energy production is considered to be a key measure. A prominent example is the EU Directive on the promotion of renewable energy (European Union 2009). Studies of public acceptance suggest that the public in most countries accept and even support the move towards more renewable energy, such as wind, hydro and solar energy and associated grid connections (Aas et al. 2014; Bell et al. 2005, 2013). Simultaneously, concrete projects are often met with significant public opposition when proposed (Bell et al. 2013). This “gap” between the general support of renewables and strong opposition against specific projects has gained much attention from researchers as well as from decision-makers and the energy industry (ibid.). The gap can be understood as a dilemma. The general acceptance and support in the public is rooted in perceptions of renewable energy as a key to mitigate harmful and costly climate change. Local opposition arise when concrete proposals are presented due to concerns for biodiversity, landscape quality, health and quality of life, among others, in affected communities (Batel & Devine-Wright, 2014). For decision-makers the development of energy infrastructure projects creates rather complex situations where various, often conflicting interests and actors have legitimate political positions, at the national as well as at the local levels (Gezelius & Refsgaard, 2007). The weighing of different interests and values is likely to raise challenges to concrete prioritizations. The actual participation and involvement of different stakeholders becomes crucial in this regard.

Social science literature has investigated challenges related to local opposition to energy projects including the importance of the planning and siting process (Sovacool et al. 2012; Cain & Nelson 2013). Long-lasting local conflicts suggest that the traditional top-down approach to grid development is becoming increasingly insufficient, and call for increased and improved public involvement. Controversies over the construction of low carbon technologies such as wind farms - as well as over the construction of transmission lines (e.g., Cowell 2010; Pidgeon and Demski 2012; Ruud et al. 2011; Wustenhagen et al. 2007) suggest that better understanding and improvements in these processes are crucial. Unlike energy generating facilities, transmission lines can represent a special challenge for local acceptance and support, since they provide modest local benefits such as new jobs, income opportunities and local and regional tax income.

Some research literature has considered the deployment and conflicts over energy infrastructure in relation to general values and attitudes among the local inhabitants, other have investigated institutional differences, such as national traditions; planning systems; financial support mechanisms and ownership structures; and landscape protection organizations (Toke et al. 2008). We would argue that complimentary research addressing a better understanding of the local planning processes, and how these are perceived by various stakeholders, is crucial in order to better understand recent conflicts over energy infrastructure.

There is, however, a relatively limited body of research on acceptance and opposition related to grid development (c.f. Devine-Wright and Batel, 2013; Aas et al. 2014). Some studies have indicated that measures for early involvement and engagement are highly appreciated by the public (Cotton and Devine-Wright 2011; Schweizer-Ries 2010). Moreover, in a recent comparative survey from Norway, Sweden and the UK, a general finding was that the public perceived grid planning processes to be heavily dominated by experts and decision-makers at the national level, with only limited influence from local inhabitants and NGOs (Aas et al. 2014). In a similar vein, a nationally representative survey of UK adults demonstrated that local residents were perceived to have little influence on decision-making, in contrast to the influence exerted by electricity supply companies, the TSO, the national regulator and government ministries (Devine-Wright et al. 2010). Furthermore, case studies of grid development projects have also revealed how national authorities can be curtailing inputs from local citizens with regard to the decision-making process (c.f. Cotton and Devine-Wright 2013).

However, in sum, few studies to date have provided more detailed analyses of local inhabitants' perceptions of planning and consultation for grid development project. Hence, the aim of the present paper is to study how representatives of the local public experience and engage in processes pertaining to specific transmission line projects. The paper investigates how local inhabitants perceive the participatory aspects of the planning process in four concrete cases in Norway and the UK.

The following research questions are addressed:

1. *How do local inhabitants assess the opportunities for engagement in the concrete hV transmission grid development projects?*
2. *To what extent are the planning processes of grid development projects considered just and fair?*

A qualitative research approach has been employed, gathering data from four transmission line planning processes – two in each country. Norway and the UK have organized the processes of planning and licensing of electricity grids somewhat differently, yet there are similarities (Brekke & Sataøen 2012), which is further explained below. This background provides a possibility to investigate the nature and impact of comparable mechanisms for public engagement across different cases, as well as across national and institutional contexts (c.f. Toke et al. 2008).

## **2. Theoretical perspectives on public participation and justice**

For some time there has been a trend of increased public involvement in the affairs and decisions of policy-setting bodies across sectors and policy domains (Rowe and Frewer 2005; O’Faircheallaigh 2010). Increased public engagement is perceived to correspond with a democratic approach to science and technology governance that enhance transparency and

trust in policy-making processes (UNECE 2014). Still, objectives for involving the public in policy processes may be several and are not necessarily rooted in democratic principles. Fiorino (1990) distinguishes between three rationales for participation or involvement of the local public, namely instrumental, substantive and normative/democratic rationales. In the instrumental rational, participation is a means to reach a specific aim, for instance the most cost-effective solution. For the two latter rationales participation per se is the goal, respectively to gain new knowledge or insights (substantive) or as a necessity to secure democracy or as being a political right of the citizens (normative/democratic) (Fiorino 1990). To recognise and consider these different rationales for public participation is important, since participatory measures may be initiated by organisations holding different rationales. If left implicit, this can create tensions (Höppner 2009).

Previous research have found that planning and decision-making overly focused on formal decisional competencies, and without opportunities for meaningful deliberation often fuel conflicts (Wolsink 2013). Moreover, participation has often been limited to the final stages of technical projects, with few opportunities for early stage dialogue and involvement of stakeholders (Lengweiler 2008). Such limitations to traditional expert-driven planning processes are being recognized among decision makers and reflected in recent policy documents for transmission grid planning (e.g. Statnett 2013).

Wüstenhagen et al. (2007) relate community acceptance of renewable energy technologies to 'procedural justice', 'distributive justice' and 'trust'. This approach to justice and trust describes well the identified public participation challenges and local perspectives on energy development projects (King et al 1998, Gross, 2007; Cain & Nelson 2013). 'Distributive justice' concerns fairness in the outcome, that is the distribution of costs and benefits (for more details about distributive justice see for instance Skitka et al. 2003, Gross 2007), whereas 'procedural justice' refers to general principles of citizen control, democracy and fairness in the process within which decisions are reached (Smith and McDonough 2001). In a just process, participants should be informed while participation should be broad, and decision-making power shared (Laird 1993; Leventhal et al. 1980, cited in Smith and McDonough 2001). Moreover, Gross (2007) has pointed to the interdependencies between process and outcome. Her findings suggests that fairness are influenced by both perceptions of process and outcome and that a fair process can enhance acceptance of the outcome (Gross 2007).

The perception of fairness will ultimately be a result of the perceived involvement of the public, and hence, the public engagement mechanisms conducted in the process. Methods of engagement are multiple and varied.<sup>1</sup> These methods will also vary according to different jurisdictions, and must also balance different principles like justice and expedience – which can also be the object of political debates (Diamond 2011). Hence, complex political and decision-making structures induce challenges for the actual design of engagement mechanisms. However, an important aspect to be more prominently stressed in this regard is the need for better understanding public beliefs and acceptance, and more actively use this

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<sup>1</sup> Rowe and Frewer (2005) lists more than 100 in their review of public engagement mechanisms, but underlines that there are undoubtedly more

knowledge to inform policy making and planning (Aas et al. 2014). More particularly, Keegan and Torres (2014) point to the need for more research on the design and management of community benefit arrangements among host communities for transmission lines.

In an attempt to systematize and clarify the different characteristics of involving the public, Rowe and Frewer (2005) classify the various mechanisms according to the flow of information between exercise sponsors and public participants. They distinguish between '*communication*', '*consultation*' and '*participation*'. '*Communication*' refers to one-way dissemination of information from the developer or decision-maker to the public, where feedback is neither required, nor sought. '*Consultation*' describes a one-way information flow moving the opposite way from the public to the developer/sponsor. The last category, '*Participation*', implies information being exchanged between the public and the developer and there is dialogue and negotiations that serves to transform opinions among the involved parties.

The ultimate issue, according to Rowe and Frewer (2005), is whether the local public involved in the engagement processes perceive the exercise as being conducted with a serious intent to collect the views of the affected population and to act on those views (Rowe and Frewer 2005: 262). This would also echo the intentions of the Aarhus Convention which commit national authorities to ensure public rights regarding access to information, public participation and access to justice, in governmental decision-making processes on matters concerning the local, national and trans-boundary environment (UNECE 2014). A core focus of the convention is measures providing stronger interaction between the public and public authorities in cases affecting the environment (ibid.).

In the following we define "procedural justice" as the local community's possibility to participate as "equals" in the decision-making process (Schlosberg 2004). We employ procedural justice theory as described by Fiorino (1990); Gross (2007); and Smith and McDonough (2001) as a fundament to understand more thoroughly which mechanisms and procedures contribute or not to perceptions of justice. Key aspects such as *information* (Gross 2007), *representation* (Smith and McDonough 2001) *consideration* (ibid.), *voice* (ibid.; Gross 2007), *logic* and *influence* or *outcome* (Smith and McDonough 2001) are frequently mentioned. *Information* deals with what type of information, how, when and to whom this is distributed by the developer and/or decision-maker. This also includes judgment of whether the information is timed rightly (for instance early enough and at several stages in the process), is sufficient and objective/impartial enough. *Representation* addresses efforts to ensure broad involvement of relevant actors in local communities, and facilitating transparency. *Voice* concerns to what extent the local public as well as single people are able (for instance at meeting or in letters) to express their opinions. *Consideration* deals with how the developer or decision-maker responds to comments, objections or suggestions from the public. Do they answer questions or suggestions? How, and with what level of detail? Are suggestions from the public valued or not? *Logic* concerns how the local stakeholders feel that the proposed project and/or chosen alternative are rational and reasonable, independent of agreeing with it or not. *Influence* is the ultimate outcome of the process, as seen from the public: Are their suggestions and concerns reflected in the final result?

In addition to the discussion of these key aspects, an emerging concept has been the broader notion of ‘energy justice’ (Sovacool & Dworkin 2014). ‘Energy justice’ can be understood as equitable distribution of benefits and burdens of energy production and consumption, as well as fair treatment of and communication with people in energy decision-making (ibid: 5). Related to this, the research literature has engaged with broader notions like ‘equity’ and ‘vulnerability’ (Hall et al. 2013: 415), building further on the notions of ‘social’ and ‘environmental justice’, with a major anchoring within the environmental justice literature (ibid.). McCauley et al. (2013: 107) point to the broad scope of energy justice, given a normative philosophical basis, aiming at providing all individuals, across all areas, with safe, affordable and sustainable energy. Heffron and McCauley (2014) emphasize further that there are three major tenets of ‘energy justice’; distributional, procedural and recognition justice (ibid.). Although the notion of ‘recognition justice’ has not been treated in an explicit manner in our data, there are findings related to perceptions of being treated fairly during the process that can be associated with this concept.

The above concepts and notions concern various mechanisms for public engagement and the perception of these by local citizens. This corresponds with the twofold aim this article is striving to fulfil with respect to local citizens: That is; (1) providing an assessment of how the local inhabitants perceive the process and the measures for public engagement; and (2) how the process is perceived in terms of procedural justice.

Since construction of hV-transmission electricity networks often provide fewer local benefits compared to for instance an energy plant or a new road useful for the community, procedural justice is crucial to gain acceptance. One can argue that national grid decisions should entail procedural justice to be legitimate or effective, and that community opposition also can be an expression of a demand for procedurally more just processes (c.f. Ottinger et al. 2014).

Based on the literature discussed above, we will analyse our data according to the following analytical categories (see section 5): ‘Information’, ‘representation’, ‘voice’, ‘consideration’, ‘logic’ and ‘influence’. We employ these categories in order to analyse the different aspects of procedural justice. We will also, in section 6, seek to assess to what extent and how these categories are interconnected.

### **3. Grid and hV transmission line development in Norway and UK**

Norway and the United Kingdom both have significant plans for transmission grid development and expansion. In both countries, these encompass renewal and increased capacity of existing grids as well as construction of new lines. The need arguments are often related to connecting low-carbon energy (wind, water, as well as nuclear in the UK) to the grid, but also to the need for safety of delivery and for a generally more robust network and energy provision. New, cross-regional- and national grids also open up for trade and exchange that both can spark more business as well as create a more robust system overall at the European level (Ruud 2014).

There are both similarities and differences between Norway's and the UK's 'national grid regimes' (Brekke & Sataøen 2012). This pertains to planning as well as licensing, and the execution of the transmission line projects (ibid.). A difference between the two systems is the general decision-making processes, and the actors and levels being central to the process. In the UK, in order to ensure that the grid development is in line with national and strategic priorities, the Government formulates National Policy Statements (NPS) (ibid.). NPS's are made for all major projects specifying priorities and targets for future development (ibid.). In Norway, however, one observes a lack of involvement from the political level at this stage. Grid companies are conducting the needs assessment, through regional and nationwide power system reports and assessments (ibid.).

When it comes to the formal features of the planning and concession process there are, on the other hand, several similarities between Norway and the United Kingdom. The division of phases, including consultations before application, with impact assessment studies, and application procedures handled by a dedicated licensing authority are quite comparable (ibid.). Moreover, the formal consultation bodies and stakeholders are partly similarly defined in the two countries, although organizational structures differ somewhat. The importance of improved early political involvement has been recognized as an important and previously neglected aspect of the Norwegian grid development regime, and a reform of the system was approved by the Parliament in 2012 (White Paper on grid development/Ministry of Petroleum and Energy 2012). Following this decision, in large transmission line projects there is now a pre-assessment phase where the Ministry of Petroleum and Energy conducts a concept evaluation (ibid.). Hence, there has been a recent modification implying an initial, political assessment of transmission grid projects in Norway. However, both the Norwegian cases included in our analysis were conducted in advance of this reform.

Both the Norwegian and UK grid development regimes demonstrate a similar variation of mechanisms employed in order to offer ways to consult with or discuss with concerned parties. Based on the variation observed empirically we identify: 1) formal, law-anchored procedures that the actors are obliged to follow for the process to be legal, for instance public hearings; 2) institutionalized guidelines for measures supposed to enhance participation, that are found in protocols, best practice templates, for instance “open office days” arranged by the grid company and; 3) Ad hoc measures: This can be defined as specific measures implemented in each project or locality, for instance extra on-site inspections and meetings.

In addition to such quite well-established mechanisms, social scientific literature has also identified and discussed alternative ways of ensuring public engagement in grid projects. In the case of a French-Spanish interconnection project an independent and neutral body (National Public Debate Commission) was employed for governing the public engagement exercises (Ciupuliga & Cuppen 2013).

Generally, for both Norway and the UK, however, inputs from stakeholders and local communities can be communicated during the process according to the above-mentioned main categories of public engagement procedures, albeit with no guarantee of substantially conditioning the final decision and outcome of the process. Hence, although the need for the

concrete projects have been considered in advance – frequently by national experts, the further specification and detailing of projects in both countries will take place in some kind of exchange of views or dialogue with stakeholders during the process.

Previous nation-wide surveys conducted in both countries demonstrate a general acceptance of need for hV transmission lines, albeit data from both countries indicate that the general public have limited knowledge about electricity supply and grids (Aas et al. 2014). The UK public holds significantly less positive beliefs about hV grids than the Norwegian public. Independent of this, both countries have experienced recent conflicts over new hV transmission lines such as in Hardanger in West Norway and the Beaully–Denny in Scotland (Ruud et al 2011; Richie et al 2013).

## 4. Methodology, study areas and analysis

### 4.1 Selected cases and study areas

A qualitative, comparative case study design was used. We selected four transmission line projects as cases, two from Norway and two from the UK. The four cases were selected to ensure a high degree of variation across national contexts and the following criteria were important in order to be able to compare the findings across the cases and secure a diversity of responses:

- At the time of interviews the transmission lines were at different temporal stages in the planning process.
- The cases were different in terms of major “need-arguments” used to legitimize them.
- They included cases with border crossing issues (between countries and/or regions).
- They were located in different geographic regions in the two countries with different interests and stakeholders.

Having selected the main cases, we identified local communities for in-depth qualitative studies. Here, we aimed to select locations where the project could or should spark engagement, for instance due to significant conflicting interests, with different routing alternatives and/or potential for specific mitigating actions. Key characteristics of the four cases as well as the selected communities for in-depth qualitative focus groups interviews is presented in Table 1.

*[Insert Table 1 here: Key characteristics of the four cases and the focus groups interviews conducted for each case hV transmission line project in Norway and UK. ]*

**[Insert Figure 1 here: A map showing the four cases; Sogndal-Ørskog and Sydvestlinken in Norway; and Mid Wales and Hinkley Point C in the UK]**

## 4.2 Focus group interviews and analyses

We conducted fifteen focus group interviews with representatives for local residents of the selected communities near the proposed transmission lines, seven in Norway and eight in the UK. Focus group interviews are especially useful to gain insight into the way particular issues are discussed in relatively homogenous groups, by being of a social nature (Krueger, 1994). Focus groups are useful for investigating group feelings, perceptions and opinions, as well as comparing and contrasting perceptions across groups (Conradson, 2005). All interviews were conducted during the spring of 2013. Potential participants from the local communities selected for the focus groups were recruited through discussions with representatives from the municipalities, the power line project and key stakeholder representatives. They were all representatives from the community where the focus groups were held, not necessarily representing typical interest- or activist groups. Both landowners and non-landowners were included. The interviews followed a semi-structured interview guide which worked as a check list that was similar across all groups and both countries. The Norwegian interviews were conducted in Norwegian and later translated into English, while UK interviews were conducted in English.

All interviews were audiotaped and transcribed in full. A comprehensive coding system was developed jointly for Norway and the UK, based on the themes from the interview guide and informed by existing research on local conflicts on energy infrastructure development. Finally, based on the qualitative data analysis program ATLAS.ti (ATLAS.ti 1999) we assigned codes and identified citations to all of the focus group interviews for Norway and the UK, preparing them for content analysis. The coded transcripts then formed the basis for organizing, selecting and comparing the data across the two countries and four cases. The analytical framework employed in this study informed the selection of perception data that were to be compared across cases and the national contexts. Quotations have been selected in order to highlight significant perceptions, and eventual differences between the cases.

## 5. Results and analysis

In order to further look into how the different mechanisms are perceived, this section presents findings from the focus groups and the issues emerging in the material – according to the six analytical categories of 'information', 'representation', 'voice', 'consideration', 'logic' and 'influence' – as presented in section 2. The categorized findings will be related to our overall research questions on the local inhabitants' perception of the public engagement measures in the processes, and the perceived degree of justice and fairness.



## 5.1. Information

Participants perceived that providing sufficient information is a basic fundament for engagement, and consequently the least the TSO should do. Such one-way flow of information is seen as democratically important in order to provide an opportunity of being correctly informed and updated. Inadequate or poorly timed information provision was mentioned as something that deprived people of the possibility to get involved by being kept in the dark:

*“it’s like we said earlier that we feel that the information, for the most part, has been non-existent (...) and it’s like XX says: you can go on the internet and find it, but what the heck...if you don’t know what you are looking...am I supposed to search in the evening, finding out if something is happening around me? It can’t be like that...”*(Sydvestlinken 3, 6:92).

There are also indications of respondents considering positively the TSO's information efforts, regardless of whether their inputs have been taken into account. This can be illustrated by some UK informants;

*Informant 1: Well on the surface I don’t see how they could have done much more...we’ve had lots of stuff through the post haven’t we?*

*Informant 2: Yeah loads.*

*Informant 1: We’ve had the shop in the thing.*

*Informant 3: The shopping precinct.*

*Informant 1: Had meetings. They couldn’t have done much more I don’t think. Whether you agree with the result is another thing but I think they’ve made every effort. (Nailsea/Hinkley Point C 2a, 6:111)*

Nevertheless, dissatisfaction with information is dominating in all four cases. Three main ‘problems’ were underlined in the way that provision of information was performed by the TSOs or regulatory authorities: the quantity/amount, the quality and the type of communication channels used.

Dissatisfaction with quantity/amount of information is uttered in different manners spanning from the information being totally absent to being too heavy and complicated. The following extract is an example of the first:

*Moderator: If you were not a landowner, what kind of information did you receive?*

*R1: Nothing.*

*R2: Zero. Zero information. (Ørskog-Sogndal, 1:69).*

As evident in the above citation this seems to be the case mostly for non-landowners. This was an issue emerging in Norwegian focus groups, but not present in the UK. On the contrary; one informant expressed frustration over receiving too much information:

*“I think that’s partly my apathy at the moment because I’m so full of information that I don’t believe and trust, what was the latest bit of information and has it changed again?”*  
(Nailsea2/Hinkley Point C 2b, 7:118)

An issue associated with a (too) heavy information load was expressed in the UK, namely the fact that information seems to be inconsistent and changing across time, and therefore is perceived as active misinformation:

*“it’s just changed, every couple of months you just hear something different (Nailsea2/Hinkley Point C 2b, 7:100);*

*“I am definitely against being pushed to make a decision on misinformation or wrong information, I want the right information that’s my only fear” (Yatton/ Hinkley Point C 1, 5:170)*

The citations indicate dissatisfaction with the quality of information in terms of being inconsistent, biased and/or favouring of what informants felt to be the TSO’s preferred outcome:

*“They have fixed their minds on [what they think are] the best solutions before anyone else has a saying. And then they find documentation and argumentations that fits them the best.” (Ørskog-Sogndal, 1:216).*

Perceptions of the quality differ somewhat. Some felt the information given was sufficient and good:

*“So, I felt, during these years the process went on, that we received...we received very good information” (Ørskog-Sogndal 3, 3:243)*

Maps presented on the internet and received by mail were particularly highlighted as highly useful by some of the Norwegian informants. However, by others criticized the level of detail provided. Some thought that the information was too general or vague or failing in answering to specific questions. One landowner thought that the maps in the initial landowner notification lacked clear routing and was too coarse and unspecific. As a consequence this landowner did not realize that he would in fact be highly affected and understood this accidentally when reading the local newspaper.

Topics perceived not being presented thoroughly were project impacts such as noise (N) and health risk related to electromagnetic fields (N), the need for the grid (N), subsea cable/underground routing alternatives – cost and technical constraints (N, UK). It was often highlighted that it would have been important to have more information about how much it would cost people namely to underground the HVPL’s so that they could better position themselves regarding its very construction. Given these data, information about the project and its technicalities are important, as well as receiving adequate contextual information about why the grid is being built and whether there exist other alternatives and options.

A final quality issue addressed was that the presentation of information, and language used in the documents was too technical and difficult to comprehend. It was claimed that it was hard or even impossible to grasp what the project would mean for affected individuals.

There were also negative perceptions about the communication channels employed. In the Sydvestlinken case in Norway, meetings only being announced through the printed press were

by some seen as insufficient, when people rarely have the local newspaper and are predominately internet-users. Some claimed that information should be provided through personal letters to all in order to ensure that the information actually are received and read by all citizen member groups. However, both Norwegian and UK experiences indicate that information sent by ordinary mail was not read by some of the addressees.

In the UK, one informant claimed that most people thought the information package that was delivered to all affected community members was ‘junk mail’, since it was perceived to be just a piece of folded paper. Moreover, this informant claimed that some of the most adversely affected people did not get the information package. This was seen as unfortunate in itself but also due to what was perceived as a very short period of time to provide input and objections (Portbury/ Hinkley Point C 3). Other UK informants underline the extensive efforts made by the TSO to provide information through various channels - such as local shops - where the possibility to request and attain more information was viewed positively. Norwegian informants, particularly non-landowners, claimed that announcement of public meetings through the newspaper were too anonymous (in the form of a small notification) and too close upon the public meeting (Sydvestlinken).

## 5.2. Representation

In the Norwegian focus groups concerns about whom were informed, and thus had the chance to participate were expressed quite strongly.

*«Moderator: Does that mean that the residents in this area...except from you – they weren't really participating at the initial public meeting, because they weren't...?»*

*R1: No, we hadn't been notified at that time.*

*R2: No, well it could possibly be some that saw the newspaper notification the same day. And had the possibility. (Sydvestlinken 1, 4:46)*

Also in Norway, an opinion that emerged quite often was that landowners got “special treatment”, suggesting that if you were not a landowner you did not have a possibility (or at least not as good possibility as a landowner) to participate, as shown in this example:

*«For the...most part we are not landowners. But we have...we haven't got the chance to say anything at all almost, or like...influenced the process at all.» (Ørskog-Sogndal, 1:234)*

Views specifically concerned about the importance of carefully trying to avoid to leaving people (unintentionally) out and give all a chance to have a say was most explicitly expressed in one group in Ørskog-Sogndal:

*“It's a small community. And we are...I'd nearly say we're all family. And we should have all received the same information and attended the whole process and attended meetings and everything, and received...I think it is important.” (Ørskog-Sogndal, 1:176 )*

Members of this focus group contended that all local inhabitants should have an equal right to be informed and have a say in the matter – as shown in the citation above – but some utterances show concerns for specific groups as well. One specific example was in relation to

the HVPL routing being put up close to the local school/kindergarten, one informant then felt at least that all parents should have a right to get information/be properly involved.

### 5.3. Voice

Some informants had voiced their concerns through hearing appeals, either as landowners or through community groups/NGOs. Other pointed to informal meetings in early phases and formal appeals at later stages being the opportunity they had to voice their concern. Attendance in public meetings varied strongly among the Norwegian informants. For the most part landowners attended (this again likely relates to information provision), and even fewer have attended on-site inspections (which in most cases are open only for invited).

For both mechanisms, some informants didn't know there had been such arrangements, and had not received information about it. As such they did not have a chance to express their views. One landowner expressed contention and good dialogue on the on-site inspection he attended. Some informants admitted that few questions were raised at public meetings. One Norwegian informant expressed difficulties with absorbing information and raising questions. UK informants also expressed a nuance to this:

*P3: You got the impression that you could say what you wanted to, but whether they were answered...I mean the one I went to they were – people had a huge store and there were plenty of opportunities to say, but I can't remember...(laughs) getting them out.*

*P2: Your words were being carried away by the wind.*

*P1: Exactly, exactly.*

*P2: Because it sounded so ineffectual standing there. (Llanymynech2/Mid Wales 5b, 4:127)*

### 5.4 Consideration

Consideration means whether ones inputs are being noticed and seriously considered. There are particularly two factors relating to how inputs are being processed that are evaluated by the local inhabitants; namely whether issues/questions are answered/processed properly and whether inputs are acknowledged in one way or another. Some said they experienced that questions asked in meetings were not thoroughly answered (Sydvestlinken). Another informant said that they were told that what they wanted assessed would be assessed, only to experience that this was not done – at least not thoroughly enough according to the informant.

As for the acknowledgement of inputs, perceptions of this is somewhat divided. Some felt they had a good dialogue with the proponent, and that their inputs had been taken seriously, even to the extent that routings had been adjusted. In contrast, several examples are brought forward – especially from the UK – of informants not finding their inputs/views present in the subsequent authorities' official project documents. Moreover, the reasons for rejecting inputs are by some perceived to be unsatisfactory. One Norwegian informant perceived his input to be overlooked as the rejection did not target the actual issue at stake:

*“The working group [a teamwork probably set up at a meeting] had much common sense, and actually some competence. And we used some hours to get familiar with it. So I believe it was a certain quality on what we delivered [the inputs given]. And when you see that they don't care about arguments or even reason with something else...or just ignore, then I think*

*it's pretty arrogant. Because they could have spent some time to explain how we have counted wrong or what we had considered wrongly, or that it was amateurish or whatever... But I don't think simply neglecting it was an especially ok signal. (Sydvestlinken 2, 5:126)*

To receive an adequate, polite response, irrespective of whether the input has a genuine influence on the project decision, is therefore seen as important and a value in itself, also because it is an indication whether local inhabitants and stakeholders are treated as 'equals'. Moreover, some UK informants expressed dissatisfaction with only receiving a confirmation that the letter was received, although no answers to the input were given. Hence, the inputs were seen as not being taken notice of and something done merely to comply with concessionary legislation, as illustrated by this informant;

*"I don't think anybody's had a reply and I don't think they're taking any notice they were just going through the motions just to be seen to be .... Doing what they're supposed- and they can say "We've consulted with the people of Portbury [name of place – Hinkley Point C 3]" I'm sorry but in your book what does consultation mean? Isn't it a two-way thing?" (Portbury/ Hinkley Point C 3, 8:102).*

### 5.5 Logic

The importance of logical and justifiable reasons for what is proposed (for instance that there is actually a "need") is also evident in our material. Even though many accept and understand the need for the respective projects, some respondents said that it would have been easier to accept outcomes if they had known more about why specific decisions for instance on routing were taken or why the project is important. This obviously relates to information. When it comes to logic it is also questioned whether there actually is a need for the line. Some thought the need is more rooted in the grid company's' and the electricity producers' need for profit rather than a need for the electricity itself. For instance, in the Sydvestlinken case it was uttered that the export of electricity to Sweden would result in a "double whammy"- higher electricity prices in Norway as well as visual damages stemming from the construction of the grid.

Another issue brought forward in various ways relates to TSO/authorities' arguments for specific decisions. Argument alternation is one aspect pointed out. Informants experienced that when they had confronted a perceived weakness in an argumentation, this criticism was not accounted for, but to the contrary, replaced by another statement. One example is informants – after inquiring the contractor – refuting a TSO argument about subsea cable delaying the process only to find the TSO changing their argumentation to the political process being slow.

Another example is when an argument is used to legitimate a specific part of the route, while the same argument is ignored or invalid for other parts of the route. This was perceived to be the case when concern for an old coniferous forest was said to be the reason for avoiding the line going through an area (desired and suggested by the informants). Informants questioned this logic as a transformer station would be placed in the same area:

*“When they are giving a statement, and they then say it can’t go through the combination route [local name of one of the suggested routing alternatives] because it runs through old coniferous forest. And we then point out that they have placed a transformer station in the same area. Right? You start to wonder...” (Ørskog-Sogndal, 2:268)*

Additionally it is also perceived unfair in the case were the HVPL will go through a nature reserve, which is the strictest area protection category in Norway. Respondents found little logic in this, and also points to examples where landowners have restrictions on their land use (e.g. prohibited to cut trees), while such restrictions obviously not apply to the TSO/government as they can go about and decide that the HVPL should go through the same area. In this case it was also questioned what kind of signal placing the line in a protected area actually gives to the public – namely that environmental issues are not that important.

## 5.6 Influence

An overarching concern among the informants was the aspect of influence. This was a recurring subject expressed in different ways throughout all focus groups, with clear linkages to other themes presented and discussed. A key finding from both countries is a significant perception of the outcome already being decided prior to the public being engaged. The public engagement exercises are often perceived as public relations exercises to comply with concessionary legislation. Several expressions and metaphors are used to describe this, such as a 'play', a 'theatre', a 'public relations exercise', a 'fait accompli', 'lip service', or a 'paper exercise'. One Norwegian informant describes his experiences as a 'train ride' to a predestined destination:

*“And you...you’re invited to meetings, and they tell you that nothing is decided, it’s only at the planning stage. It’s a machine! The locomotive has started, and it follows the tracks. Woof! And then there’s a few stations along the road, and you...they run past, but...they are obliged to do things along the route. So I...yes, you could say I felt very helpless.” (Sydvestlinken 2, 5:90)*

A common perception in both the Norwegian and UK cases is that the inputs are being registered and processed by the sponsors, and thus just following procedural rules. However, the inputs are seen to have very limited effect. One Norwegian informant explained this feeling of powerlessness in this way;

*«We receive some information, we get the chance to give an input, and then it’ll be treated in the Ministry and Agency and all this that has address Oslo. And when it is treated there, then it has left us, then it is over. And the next thing to do is to put chains on [civil obedience] if you’re especially interested. I don’t trust Statnett or others that have an outcome responsibility thinking about what’s important for me. You get much too distanced. (Sydvestlinken 3, 6:86)*

A third aspect is what some informants in both countries see as a ‘divide and conquer’ strategy employed by the TSO, for instance when proposing different route alternatives. The TSO is perceived as having decided beforehand what route to favour, but present other



alternatives so that the affected communities - instead of fighting overall against the proposed project - divide themselves and fight against the route that is affecting them the most;

*“...it’s the old tactic of divide and conquer, as you say, if you say there’s route A or there’s route B, people on route A are saying well go for route B and people on route B are saying go for route A and developer will say well there’s no overall objection, nobodies objecting to the actual project so we’ll carry on” (Nailsea2/ Hinkley Point C 2b, 7:108)*

This practice is seen as dividing local communities and at the same time making sure that the TSOs preferred solution is implemented.

Seen in the light of these experiences, some stakeholders felt other ways of influencing the project outcome, such as working towards journalists and the media, as well as lobbying against politicians, could be more effective way of achieving their objectives. This was a viewpoint found in both the UK case studies, and expressed by landowners and other participants alike. This is a strategy that also was used by several key stakeholders in Norway in the Hardanger powerline conflict (See Ruud et al 2011).

## 6. Discussion

Seen from the view of the local inhabitants, the data analysed in this article reveal a number of challenges and shortcomings in terms of achieving a just and fair planning process for hV transmission power-lines in Norway and the UK. Interestingly, there is much coherence in opinions across both countries and among the four cases. It is also worth noting that the one Norwegian grid project that was dropped (after notification), received responses similar to the other cases, whereas one could expect this process to be somewhat more positively assessed (c.f. Gross 2007). Moreover, the present findings are in accordance with the perceptions of the general publics in the two countries: Grid planning processes are considered to be expert-, top-down driven processes with limited opportunities for local inhabitants to influence the outcome (Aas et al. 2014; Devine-Wright et al. 2010).

Former research has suggested that people’s willingness to accept outcomes increases as long as they perceive the decision-making process as fair (Tyler 2000, Gross 2007, Lind and Tyler 1988). Given this major finding across different cases, there is a clear risk that unfair processes can lead to damaged relationships and divided communities (Gross 2007). The rather unison call for improved and more just processes are also in line with previous findings in procedural justice research on other hV transmission networks (Ciupuliga and Cuppen 2013); other types of energy infrastructure (i.e. wind farms, see Gross (2007), as well as on other planning processes regarding land use policies (Smith and McDonough 2001). All studies report insufficiencies in terms of providing information and good representation from all affected stakeholders and inhabitant in local communities.

Employing different analytical categories related to procedural justice stand out as a fruitful way of analysing the data from the Norwegian and UK cases. In addition to capture different aspects or dimensions of procedural justice, important interdependencies between these

dimensions can also be observed. Prominent connections can be found between 'information' and 'representativeness', 'voice' and 'influence'. One could claim that information forms the basis on which local inhabitants act in relation to the process, and that the lack of differentiated information clearly affects the ways different inhabitants can perceive that they are fairly represented, have a fair chance of being heard ('voice'), and – thereby – actually influence on the process and its outcome.

Given the essential role of information, it is important to acknowledge that the views and perceptions of the informants might also be based on misconceptions, or lack of knowledge of legal demands and formal procedures. Some think information is too short and simple, while others find it too complex and dominated by technical 'jargon'. Such communicative challenges imply the importance of aiming at adapted information, tailored to the presumptions of the local inhabitants and stakeholders, when designing public engagement efforts. Local inhabitants often have different qualifications to interpret or understand the information provided, and thereby also different prerequisites for demanding more information in order to participate more actively in the process. The way the inhabitants' opinions are being heard and processed can also be seen as closely connected to the notion of 'recognition justice' (c.f. Heffron & McCauley 2014).

In sum, the data from the case studies also bring forward a range of suggestions which can serve as inputs for improved involvement of local inhabitants in grid development projects, and thereby improved processes. Proper information is the fundament on which much of the process is based. Although much of the positive evaluations observed in the material was related to information, one can discern suggestions for improvements from these case studies. One is the need to make more efforts in order to actually ensure that appropriate information is received and understood at key stages in the process. Second, it is important to provide information with different levels of complexity tailored to different needs of different groups and individuals, with different qualifications and premises to engage.

In terms of 'representation', it is pertinent that the developer and/or the decision-maker facilitate processes where all interests are 'seen' and treated as equally as possible. In cases where some stakeholders are receiving more information and given more ('better') opportunities to consult or discuss with the developer due to legal demands (for instance landowners of areas where grids and pylons might be placed), this could be better explained, since 'unequal' treatment might trigger divisions in local communities (Gross 2007). Use of modern digital media could also ease reaching out to as many as possible, as well as provision of information of different character and targeting specific groups. How the developer or the decision-maker consider inputs and suggestions from the public – including how such considerations are made visible – is another critical area. There are many examples across the cases where informants report of standardized mass-responses or negligence, often leaving local publics with a feeling of inferiority. Critical comments regarding lack of logic in terms of how the developer reason and legitimate its proposals underlines the need for planning processes that are coherent, especially in terms of needs, and technical and economic premises



(for instance national and regional grid system plans, different development projects and sections of a specific process).

Overall, the ultimate issue is whether the local public involved in the engagement processes perceive the exercise as being conducted with a serious intent to collect the views of the affected population and to act on those views (Rowe and Frewer 2005; 262). Our findings here can be read as quite harsh for the grid developers and decision-making authorities: The major feature of the local inhabitants' perceptions in the present data, is the understanding of the processes as compulsory exercises, undertaken more of duty and less with a goal to involve and listen to local publics. Therefore, the present data reveal a gap between official goals of transmission line planning processes that takes the aim of local engagement seriously (c.f. e.g. Statnett 2013), and what is actually experienced and perceived in concrete cases.

Clearly, being a fair project leader (developer) is a huge challenge (Smith and McDonough, 2001). A more differentiated and thorough public engagement exercised with more adapted information might demand larger budgets and more personnel, at least in the early stages. On the other hand, allocation of more personnel in the planning process might result in a less conflicting process which takes less time, leading to no net increase in the costs. The critique emerging from the local inhabitants through the data in this study might also be met with a careful consideration of what attitudes and expectations the developer (from leaders to employees) are bringing forward to a planning process. This can also be seen as a question of trust from the local inhabitants' perspective towards the developer, and thereby a way of approaching a local perception of more just processes.

An interesting example from the research literature, briefly mentioned above, is the case of a French-Spanish interconnection transmission line. Here an independent and neutral body (National Public Debate Commission) was employed as a facilitator (Ciupuliga and Cuppen 2013). Such an alternative approach to public engagement processes is highly relevant in the present perspective. A similar approach has been employed in the UK, where local community representatives have participated in a deliberative workshop lead by an academic institution, as a way of facilitating the process (Cotton and Devine-Wright 2013). In addition, the structure of these workshops – with a focus on deliberation and dialogue, can be conducive to fairer processes, seen in the light of the findings in this study. More knowledge and practical experiences from alternative processes, is therefore also needed – in addition to more research on what mechanisms and efforts contribute to better participatory process, where and when. This knowledge will contribute to a broader understanding of procedural justice as an important dimension of the wider energy justice research field, which is of crucial importance for the further de-carbonization of the European energy system.

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	Norway		United Kingdom	
Case	Ørskog-Sogndal (ØF)	Sydvestlinken (SVL)	Hinckley Point C	Mid-Wales
Project owner	Statnett SF	Statnett SF	National Grid Plc.	National Grid Plc.
Location	West Norway	South-East Norway	South-West of England	Mid Wales
Total length and type	300 km, OH cables on regular metal pylons	60 – 110 km (depending on alternatives), OH cables on land, sub-sea cable for fjord crossing	46.6 km overhead line, using the new T pylon design, plus 8 km of underground line through and either side of the Mendip Hills 'Area of Outstanding Natural Beauty'	Approx. 39-51 km, including 13 km of line underground and use of new T pylon design.
Voltage level	420 kV	420 kV	400 kV	400 and 132 kV
Landscape type	Large-scale, elevated fjord-mountain landscape 0 – 1500 m a.s.l. Roads, farms and small settlements along the fjords mostly	Lowland landscapes with mix of farmland, boreal forests and villages/towns 0 – 100 m a.s.l.	Limestone hills, heathland, levels and moors. Sparsely populated to the south of the line, that depends mainly on tourism and agriculture, more highly populated to the north of the line, closer to Bristol	Mountain area with valleys and rounded green hills. Sparsely populated, economy dependent mainly on farming, tourism and small businesses
Start date	2005/2006	2010	2007	2007
Project status as of end of year 2014	Approved final concession 31.12.2011. Constructions postponed because of lawsuits	Project abandoned June 2013 because of “lack of socioeconomic profitability”	Application submitted to planning inspectorate	Stage of consultation and assessments to develop final draft design for the connection and substation before submitting application to Planning Inspectorate
Key need arguments	Improve security of supply to Mid-Norway. Connection for new small-scale HP plants.	Improve power flows between Norway and Sweden	Connect to new nuclear power station; improve security of supply	Connect to new wind farms; improve security of supply
Communities and for focus group interviews	Sykkylven (x2) Ålfoten (x2)	Tønsberg Råde Moss	Nailsea (x2) Yatton Portbury	Welshpool Llanymynech (x2) Shrewsbury
Number of inhabitants in the municipalities of the studied locations	Sykkylven = approx. 7,500 Bremanger = approx. 4,000 (Ålfoten approx. 200)	Tønsberg = approx. 42,000 Råde = approx. 7,000 Moss approx. = 31,000	Nailsea = approx. 15,630 Yatton = 7,550 Portbury = 827	Welshpool = approx. 6700 Llanymynech = approx. 890 Shrewsbury = approx. 102,330
Number of focus	4	3	4	4

groups				
Number of participants in focus groups	3-8	3-7	4-8	4-8

Figure(s)

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