Understanding Community Opposition to Industrial Scale Wind Farm Sitings and the Impacts of Federal Fast Track Initiatives in Southern California: A Case Study of the Tule and Ocotillo Wind Energy Facilities

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Abstract

As climate change forces energy policy to incorporate environmental impacts and fuel diversification into the traditional model of energy security, finding ways to site, develop, and deliver renewable energy has taken on increasing importance across the United States. With no consistent federal framework to implement these changes, much of the carbon abatement burden has fallen on individual states. While renewable energy has had overwhelming public support, a few renewable energy sitings have experienced significant opposition. This case study identifies and explores two very similar communities in southern California that have demonstrated significant opposition to the siting of the Ocotillo Express Wind Energy Facility and the Tule Wind Farm. Utilizing 18 in-depth interviews, three main themes emerge as contributing to opposition mobilization against these wind farms: community context, procedural justice, and distributional justice. Policy implications that emerge specific to this particular area highlight the need for significantly more local input into the siting process, more nuanced incentive structures, more flexible siting considerations, and revising the fast tracking process.

KEYWORDS: *NEPA, CEQA, fast tracking,* Ocotillo Express Wind Energy Facility, Tule Wind Farm

Introduction

With increasing demand for energy coming from every sector of the American economy, energy security has traditionally "come in three forms: supply expansion, demand management and reduction, and cost analysis" (Bernell & Simon, 2016). However, due to the increasing importance of climate change, issues concerning environmental impacts and finding ways to diversify energy sources have been added to the concept of energy security. To address these concerns many government agencies have been tasked with implementing "greener" technologies and policies designed to reduce the carbon footprint of post-industrial societies.

While a comprehensive, nationwide policy has been elusive in the United States, attempts to reduce greenhouse gas emissions have led to the implementation of new energy policies. Adopted by 38 US states, one of the most popular state policy programs has been the Renewable Portfolio Standard (RPS) which stands in contrast to policies that focus on the reduction of energy use. An RPS stipulates that a specified amount of renewable energy must be generated within a particular year (Bernell & Simon, 2016). California has been particularly aggressive with its implementation of Renewable Portfolio Standards. Established in 2002, the California RPS has been accelerated twice. Once in 2006, which required "20 percent of electricity retail sales be served by renewable energy resources by 2010" and then again in 2008 requiring that "all retail sellers of electricity shall serve 33 percent of their load with renewable energy by 2020" (California Energy Commission). As a result, renewable energy developers realized that they would need to think bigger if they were going to supply half of the energy needed to power the most populous state in the country.

One area within California that would emerge as a location to address this new demand for renewable energy was Imperial County. Billed by the Imperial Valley Economic Development Corporation as "The Renewable Energy Capital of the World," Imperial County has undergone a rapid transition, siting some 26 utility-scale renewable energy projects (defined as greater than 20 MW) that produce over 2,000 MW of power per year. To help facilitate this transformation, Imperial County would spend more than $1.1 million in state grant money to update the county's general plan which provides the framework for applying, siting, and eventually constructing renewable energy facilities (California Energy Commission, 2017). Further facilitating this transformation was a pair of federal incentives for renewables development: the federal fast track initiative and wind production tax credits.

While public support for renewable energy is overwhelmingly favorable, local community acceptance of industrial scale wind energy projects has become a significant barrier to development (Pasqualetti M. , 2001) (D'Souza & Yiridoe, 2014). This case study analyzes two such industrial scale wind energy projects, The Tule Wind Farm and the Ocotillo Express Wind Facility, to understand the conditions present for community opposition mobilization and what impacts the federal fast track initiative and wind production tax credits had on the siting process. To answer these questions, this case study draws from the energy policy and social movements' literature and examines 18 in-depth interviews with local community members, local tribal members, federal, state, and local government officials, and non-profit representatives. From these data, three overarching themes emerge and are explored: community context, procedural justice, and distributional justice.

This study expands on previous research by analyzing how local community factors, perceptions, and beliefs combined with patchwork federal incentives and processes to produce

local opposition mobilization against Tule and Ocotillo Wind Farms. Additionally, this study finds that a history of community resistance to a variety of project sitings combined with a lack of trust in government to create the initial set of conditions favoring community opposition mobilization. These conditions were then sparked within the communities surrounding Ocotillo and McCain Valley by perceived corruption in the siting process, an unfair distribution of costs and benefits, and a growing conflict between the siting of industrial scale wind energy projects and local environmental and cultural resources. Finally, the presence of a federal fast track initiative that sought to expedite the siting process worked to further exacerbate these factors and facilitate negative community attitudes. Analysis from this case study suggests a more collaborative approach to wind energy facility sitings, a reimagining of the fast track method and federal wind energy incentives, and greater control of the siting process by local communities could result in less community opposition.

Literature Review

Wind energy is largely viewed as a potential source of electricity that offers both environmental and social benefits (Petrova, 2013). Public opinion surveys have consistently shown that "two-thirds to three-fourths of those polled-even those in areas with existing wind turbines-support wind development" (Pasqualetti, Gipe, & Righter, 2002). However, despite seemingly wide-spread support and expectations, a few communities have met local industrial-scale wind energy project proposals with strong opposition. While not common, these cases remain important topics of research. Opposition mobilization, defined as collective actions taken by local communities, refers to lawsuits, petitions, coordinated appearances at public meetings/hearings, and letter writing campaigns (McAdam & Boudet, 2012).

One explanation for community opposition to wind energy projects in local communities is the Not-In-My-Back-Yard or NIMBY phenomenon. The concept of NIMBY is that while a majority of people are in favor of wind power, they are opposed to wind facilities being sited and constructed in their own neighborhoods. Presented with this social dilemma, communities in which wind energy projects are sited could mobilize in opposition, despite previous support for wind energy (Wolsink, 2000).

It then becomes important to note that the reasons for community opposition can often be difficult to articulate and therefore cannot be easily quantified or conveyed in economic terms (Hirsh & Sovacool, 2013). This has led many researchers to conclude that the NIMBY framework is insufficient in explaining the complex motivations, concerns, and perceptions that can lead to community opposition mobilization (Rand & Hoen, 2017). Previous studies have identified several reasons for local opposition to wind energy projects, including rural/urban conflict (Brinkman & Hirsh, 2017), major aesthetic impacts such as view shed, flicker, and noise (Apostol, Palmer, Pasqualetti, Smardon, & Sullivan, 2016), a lack of trust between rural communities and wind energy developers and decision makers (Groth & Vogt, 2014), and failure to incorporate the communities interests and experience into decision-making processes (Breukers & Wolsink, 2007). Additionally, Hall et al. (2013) provides evidence of four themes that influence community acceptance of wind energy facilities: trust, distributional and procedural justice, and place attachment.

Community Context

Previous research has identified local community context as a factor that shapes community attitudes towards renewable energy development. Devine-Wright (2009) proposes a framework that considers place attachment and place identity important concepts to

understanding how community opposition to large scale projects results when a locally important area is disturbed. However, community context is not simply a measure of how much a renewable energy facility threatens a community. Understanding the community itself, independent of facility siting, is equally as important when evaluating the potential for community opposition mobilization.

To gain insight into why community context should be considered independent of potential facility sitings, Wright and Boudet (2012) found that community familiarity and significant historical issues will affect how information about a project will be received by the community. When considering local context for renewable energy projects sitings, research reveals that long term conflicts within a host community "necessitates prioritizing a community-centric view of the project ahead of a project-centric view of the community" (Colvin, Bradd Witt, & Lacey, 2016). Limited forms of public engagement that simply notify or consult community stakeholders generally fail to incorporate local expertise, knowledge, or factors that are specific to a siting and may result in the development of negative attitudes towards wind energy projects, which could lead to community opposition mobilization.

Procedural Justice

Another approach to understanding attitudes towards industrial scale wind energy can be understood through the concept of procedural justice. Procedural justice refers to the comprehensive fairness of the siting process of a project, which includes fostering trust between stakeholders. Previous research has provided some evidence that increasing levels of participatory planning may foster a general sense of trust among stakeholders and result in a higher rate of community acceptance (Loring, 2007).

Additionally, research concerning procedural justice reports that involving community stakeholders earlier in the siting process results in greater levels of community acceptance (Eltham, Harrison, & Allen, 2008) (Firestone, et al., 2017). By involving community stakeholders well before the siting process begins, developer and government stakeholders can incorporate community concerns and knowledge through open dialogue and facilitate better project outcomes (Petrova, 2016).

Finding ways to incorporate local community input into the public participation process must move beyond the "decide-announce-defend" cycle and provide a venue for a more collaborative governance approach, which includes the exchange of varying stakeholder values and opinions (Jami & Walsh, 2017). Collaborative governance refers to the process of bringing "public and private stakeholders together in collective forums with public agencies to engage in consensus-oriented decision making" (Ansell & Gash, 2008). Furthermore, collaborative governance approaches to wind energy project sitings have "been shown to be an effective way of achieving mutually agreeable results even in issues involving numerous stakeholders with divergent points of view, and because it relies on deliberative processes that tend to foster procedural justice" (Ottinger, Hargrave, & Hopson, 2014). This allows for a process that operates from the bottom-up, which closes the gap between those living with wind energy facilities in their communities and those who are making the decisions concerning where and how to site industrial scale wind projects (Walker & Baxter, 2017).

Distributional Justice

An additional concept aimed at understanding attitudes towards industrial scale wind energy projects is distributional justice. Distributional justice evaluates how impacts from wind farms are disseminated across a project area. Some impacts, such as job creation and tax

revenues are distributed more generally, benefitting workers who move from state to state or increasing county or state coffers. Alternatively, impacts such as light pollution, noise, and wildlife or environmental disturbance are concentrated locally. Previous research that has explored distributional justice finds that wind farms should be developed in coordination with local communities and that wind farm benefits, such as locally produced energy, government tax incentives, or developer profits should also be made available at the local level (Devine-Wright, Local Aspects of UK Renewable Energy Development: Exploring Public Beliefs and Policy Implications, 2005). Furthermore, some scholars argue that there is increasing wind energy support with increasing distance from a proposed wind farm site. This could be the result of the actual or perceived potential for community members to visibly interact with wind turbines consistently (Jones & Eiser, 2010). Other research, however, finds that most people living near a wind turbine, including some living as close as one-half a mile from a wind turbine, report an overall positive attitude toward wind turbines (Hoen, et al., 2018).

Part of the issue concerning how costs and benefits from a wind energy project are distributed is a direct result of scale. Transitioning to industrial scale wind farms, in order to generate large amounts of electricity, brings together a set of disparate stakeholders. As developers emphasize economic benefits and cost allocation of wind farms, some government and community stakeholders focus on societal issues, such as the environmental or cultural impacts of the same project (Fischlein, Wilson, Peterson, & Stephens, 2013). One way to mediate these countervailing perspectives is to redistribute the costs and benefits more evenly across the entire population (Jenkins, 2016).

Furthermore, according to the recent U.S. Department of Energy's Wind Vision Report, the low hanging fruit of wind energy production has mostly been developed and wind energy

projects will likely have to be sited closer to communities (Rand & Hoen, 2017). With such a gap between current production and production potential, "the main focus (of wind policy) must of course always be to trigger investment in new capacity" (Haas, et al., 2004). This drive to trigger investment in wind energy has led to policies designed to increase production capacity namely by developing larger, more efficient turbines (Szarka, 2006). This underscores the growing importance of how communities are integrated into industrial scale renewable energy siting processes as stakeholders and will continue to remain crucial in advancing renewable energy projects towards an industrial scale.

Methods

This case study attempts to understand community opposition and the impact of federal fast track initiatives on the Ocotillo and Tule wind farm project sitings in southern California. By utilizing a qualitative analysis of in-depth interviews, this case study can better identify the factors that led to community mobilization against the Tule and Ocotillo Wind energy facilities. This case study was conducted at the county level (unit of analysis) due to the unincorporated nature of the surrounding communities. Ocotillo and Tule were specifically selected due to their location inside a federally mandated energy corridor, which is subject to the Department of Interior's federal fast track initiative and government incentives program.

The coding of important themes and events in East County Magazine allows this case study to pinpoint key players, significant events, and strategies. Articles and editorials were identified and compiled using key search terms (Ocotillo, Tule, Ocotillo Wind farm, Tule Wind Farm, wind farm, wind energy) within the East County Magazine online archives database. These were then sorted and coded by relevant news articles and editorials. This process took place over two time periods. Once from September 2017 through October 2017 and then again

from February 2018 through March 2018. During these time periods, articles were coded to

Themes	Description

identify key players, organizations, and events.

The primary data used for this case study were qualitative interviews. Individuals mentioned in East County Magazine articles or editorials as well as the EIR/EIS for either Tule or Ocotillo wind energy facilities were contacted for interviews. Fifty- two individuals were initially contacted. Of those 52 individuals, 18 agreed to participate in an in-depth interview. Fourteen phone interviews were conducted in addition to four in person interviews which were conducted in southern California during field study. Interviewees consisted of 5 local community members, 5 local, state, or federal government employees, 3 environmental advocates, 2 Native American tribal advocates, 2 reporters covering Ocotillo and Tule, and 1 spokesperson for Iberdrola Renewables, the developer of Tule Wind. Interviews ranged from 26 minutes long to 1 hour and 20 minutes, with an average length of 52 minutes. The interviews were semi-structured and focused on potential issues surrounding industrial wind development. The questions focused on past, present, and potential future issues concerning the siting of renewable wind energy facilities as well as interviewees' involvement with the siting process and thoughts on potential environmental issues. A complete list of questions asked and participant interviewees can be found in the appendix section. The 18 interviews were then transcribed and coded to identify major themes contributing to community mobilization in the unincorporated areas of McCain Valley and Ocotillo in southern California. The findings of this case study were directed by the social movements' and energy policy literature. Table 1 shows the codebook produced from the transcribed interviews.

Procedural Justice	Inaccurate interpretation of scientific evidence to support the siting of a project (s) Issuance of take permits for protected species Insufficient public input in siting process (community voices were not heard) Lack of trust in the siting process or lack of information concerning public participation Corruption (certain organizations or individuals paid off in exchange for project support) Fast track initiatives and conflict or perceived conflict between government agencies or jurisdictions Local, state, or federal representatives speaking out against wind farm sitings
Distributional Justice	Loss or perceived loss of property values No direct benefits from job or energy creation Health or Nuisance issues (such as blinking lights, shadow flicker, noise) Did not deliver the energy promised or offset the carbon as promised View shed and cultural resources issues (loss of scenic views or sacred places) Environmental issues (dust, native plant destruction, ground disturbances, fires) Loss of recreational areas or general concern about the unequal distribution of costs and benefits
Community Context	Prior history of land-use issues including conflict over aquifer access, the siting of a landfill and/or Blackwater training facility. Prior conflict between the unincorporated communities surrounding Ocotillo or Tule and the county, state, or federal government. Concern over the loss of traditional agricultural economy

Table 1: Interview Codebook

From these resulting themes, this case study explores how community mobilization in opposition to Ocotillo and Tule wind farms occurred from the perspectives of three stakeholders: the community, the developer, and government. By understanding the perspectives of each stakeholder, this case study outlines both historical and ongoing factors that led to negative attitudes towards the siting of Ocotillo and Tule wind farms and how negative community attitudes eventually led to community opposition mobilization.

Case Study: Ocotillo and Tule Wind Energy Facilities

Imperial County descriptive data can provide some important context for the local communities both within and surrounding the Tule and Ocotillo wind projects. As of 2015, Imperial County had an approximate population of 178,206 with 81.8% Hispanic, 12.6% White, 2.54% Black, and 1.36% Asian. The median income is $41,079 which is noticeably lower than the median income of the State of California, which stands at $61,818. The average median age of the county is 32.2, up from 31.9 in 2014, suggesting residents in Imperial County are getting older (DataUSA, 2016). Finally, the unemployment rate in Imperial County was 17% in January of 2018 (Schneider, 2018).

Both projects are located east of San Diego, with Tule Wind being sited on a combination of Bureau of Land Management (BLM) land and private property in McCain Valley. The Ocotillo Express Wind Facility is similarly sited on a combination of BLM and state land in the unincorporated town of Ocotillo. Because Tule Wind is situated on the eastern border of San Diego County and Ocotillo is right on the western border of Imperial County, I contend that the community surrounding Tule Wind is much more representative of the community in Imperial County than the population residing in San Diego. This is an important distinction considering "wind turbines sometimes inflame preexisting social and economic conflicts between urban and nonurban residents, reflecting an inner struggle that counter poses the progressive values of modern life against the conservative virtues of rural existence" (Hirsh & Sovacool, 2013). To focus on the rural/urban divide, however, would be to focus on a very small part of the story behind community mobilization in response to the Ocotillo and Tule Wind energy projects.

Analysis

Three main themes emerged from the research process: community context, procedural justice, and distributional justice. For a deeper analysis of how community opposition mobilized, each major theme is further divided into a set of sub-themes and explored in turn.

Community Context

As with many social movements, the networks of people and organizations that mobilized in opposition to the Ocotillo and Tule wind farms were in place long before the project proposals. Because the project area is located in the desert, the large aquifer that lay beneath the wind farms has been at the center of community issues for decades. The result of this issue has had a direct impact on community attitudes towards wind farm sitings. One side of the water usage debate, according to a local interviewee who is also an anti-wind farm advocate, is community concern with water scarcity and its historical impact on local community members:

> I have lived here, where I am, for 40 years and for 40 years I have been involved in one big project after another. I'm the lead contact person doing technical research on a lawsuit to protect the full source aquifer, the ground water basin out here, and that lawsuit was filed in January of 1999. It's been going on since 1992, but actually I moved to Ocotillo in 1977 and the first week I was in the town people asked if I would help them fight the export of groundwater (Interview #14).

Alternatively, a second local interviewee and proponent of wind farm sitings, believed that water scarcity within the local community wasn't an issue at all:

> I think there were two elements involved in that. One was strictly a belief situation and that stems back from early on when they said, oh, we don't have enough water and at that point it was proven that 2,200 acre-foot of water was flowing south into Mexico and just going into a dry lake down there. So there was plenty of water for people to use. It couldn't sustain a major agricultural effort like Imperial County is famous for but there was plenty of water to use. But it was more of a feeling based, emotional based type

> thing. No, we don't want any changes, we come out here for the beauty of the desert (Interview #11).

But water scarcity is only one of several past issues that has fractured and divided the local communities. Some twenty years before the Ocotillo and Tule Wind projects, a garbage dump proposal was gaining support within Imperial County. Drawing upon these local networks, Donna Tisdale (another local interviewee) organized a petition drive, funded a limited litigation campaign, and formed her own non-profit organization, Backcountry Against Dumps (BAD), to fight against the dump proposal. Despite severe financial constraints, the movement against the dump proposal was eventually successful, utilizing the designation of the water aquifer, which would lay underneath the proposed dump site, to block development of the dump. Furthermore, Tisdale was able to expand her network into other parts of California, as well as into Ohio, Indiana, Florida, and Georgia—all states with similar dump sites that were run by the same developer. This type of previous experience and activism is well documented in the social movements' literature and is important in understanding the local community context surrounding the industrial scale wind energy projects (Goodwin & Jasper, 2015).

These same networks would eventually rally around BAD to oppose the Ocotillo and Tule Wind projects. Initially, the opposition utilized the same tactic that had worked so well previously: litigation. But as one interviewee describes it "this is a low income community. I don't know what the average pay is here but it's very, very low…we went to a gunfight with a knife and we knew it" (Interview #8). In 2012, the Quechan Tribe sued to halt construction of the Ocotillo project arguing that the federal government failed to protect Native American cultural resources, including a sacred site and a spiritual view shed on which the wind farm was built. Also in 2012, the Desert Protective Council—a desert conservation organization located in San

Diego— filed a lawsuit to stop the construction of Ocotillo Wind. The lawsuit alleged that the former Secretary of the Interior, Ken Salazar, along with the County of Imperial, and Pattern Energy violated the right-of-way provisions of the Federal Lands Policy Management Act (FLPMA) by approving the project. Furthermore, the lawsuit claims that adequate measures to protect endangered Peninsular Bighorn Sheep and golden eagles were not conducted by the Department of the Interior or Imperial County thus invalidating their issuing of the ROW to Ocotillo Express LLC. Additionally, some local residents of Ocotillo expressed concern over the proximity of the project to houses and the resulting potential for noise and light pollution from the turbines.

However, in March of 2013, both lawsuits were dismissed by a federal judge who concluded that the BLM had followed the appropriate steps in regard to both consulting Native American tribes in the area and with respect towards laws that protect endangered wildlife. Ocotillo Wind was constructed in two phases, reaching its full generating capacity after completion of the project in July of 2013. Realizing they were severely outmatched in resources and political influence, community opposition quickly acknowledged that they would not be able to rely solely on a litigation strategy and quickly expanded their networks to include national non-profits working in California. With larger non-profit organizations, such as the Sierra Club, refusing to oppose renewables development, much of this new strategy depended upon smaller non-profit organizations that had experienced some success stopping projects through endangered or protected species litigation (Goodwin & Jasper, 2015). A second wave of lawsuits were filed on behalf of burrowing owls, lizards, and other birds whose habitats were located in the project areas of both Tule and Ocotillo Wind farms. It is likely, without direct intervention by then President Obama to allow the taking of some federally protected species,

that such a litigation tactic would have been successful. But the policy push from local, state, and federal leaders for renewable energy development was much stronger than during the proposed dump crisis. Despite organized petition drives and protests and an expansive network used to pressure various levels of government, in January of 2017 the United States Court of Appeals, Ninth Circuit denied BAD's appeal and affirmed the previous judgement of the lawsuit.

The dismissal of these lawsuits further deepened distrust between the small unincorporated areas of McCain Valley/Ocotillo and various levels of government. According to a local interviewee this was nothing new. Imperial County had always viewed the city of Ocotillo "as the black sheep of the county." He felt that the county didn't care about the local unincorporated communities and forced them to follow what he thought were odd rules and regulations:

> When I first moved out here, if anybody wanted to get a permit from the county for anything, they wanted you to pay for curb, gutter, and sidewalk out in front of your house. I mean there's no drainage in this community. The storm drain is the alluvial fan of the desert floor.…if anybody wanted to put in a garage, let's say or whatever, and you need to get a permit from the county, they were going to take money and put it in a bond that you provide for curb, gutter, and sidewalk (Interview #8).

When pushed for why the county might be stricter with permitting in Ocotillo, the local interviewee responded, "They just don't care about us out here. They refer to us as those people out there. And that was something I heard before I got involved with any of this" (Interview #8). Further exacerbating this sense of abandonment that local interviewees felt towards local, state, and federal government was Pattern Energy, the Ocotillo Wind farm developer. When asked how the relationship between the local government, local citizens, and the developer had evolved over time, one interviewee responded, "No, there's no trust" (Interview #6). The idea that the county and developer were working together to push the wind project proposals through left

local citizens feeling as if they had few institutional options. Furthermore, this perceived constraint on the policy process, namely that local citizens had no real voice in local government, would become a contributing factor to the development of the emergent social movement (McAdam & Kloos, 2014). Understanding the local context surrounding residents and politicians—the seat of Imperial County is more than 30 miles away from Ocotillo in El Centro, CA— is essential to the development of such fierce opposition to the project proposals.

Procedural Justice

All 18 interviews conducted referred to some aspect of procedural justice as a motive for opposition mobilization. Sub-themes that emerge from the procedural justice parent code are interconnected and largely revolve around lack of trust or faith in the local government, perceived corruption and manipulation of the siting process, and the amplifying effects that federal incentives and fast tracking had on these existing procedural issues.

Many interviewees expressed that the inability or unwillingness of the local government to resolve local issues had caused many community members to become weary of trusting local government officials. After the siting and construction of the wind farms, many interviewees felt they had completely lost faith in the local government. This was best summed up by another local interviewee:

> "I don't trust the developer at all. People were getting upset at some of the meetings, which is understandable. I mean, very upset. To move to a rural area to live out the rest of your life and they're going to come in and put this project in here to profit off of, you know people were so upset. They were shouting out in the meetings and stuff. We said, keep it professional. Let's try to work with them and try to be professional you know and so we trusted them. There was some trust, they told us this and we started believing some of the stuff that they were telling us only to find out that they were all lies. They lied to us. And the county sided with them so we lost our faith in the county because they were going right along with them" (Interview #7).

Additionally, the multi-use nature of federal lands (camping, scenic hiking, energy development, water aquifer) placed a great deal of stress on development. As one BLM interviewee stated:

> When people simply say, I oppose this project, there's not a lot that any agency can do with a comment like that. It's not a vote, we're not going to say how many are opposed and how many are in favor and then the majority rules. That's the whole thing about multiple uses of resources. You know, one person's source of energy is another person's impact to a treasured resource and you really can't have multiple users on the same piece of ground without conflict and regulations attempt to address those things. So yeah, I think if you have regulations about further protecting certain resources and those resources happen to occupy the same space or you want to put an industrial development, you're bound to have increased, you know, the more you do that the more conflict you'll encounter (Interview #4).

It became rather obvious, over the course of my fieldwork, that local community members either completely lacked information or exhibited real confusion concerning the siting process in general, including how EIR/EIS comments contributed to the projects and what options the collective community or individual community members had at public meetings/hearings. Furthermore, the perception that public participation in the siting process was a formality remained consistent across local interviewees regardless of their support/opposition of the wind farms. As one local wind farm supporter stated:

> Looking at the whole process now, from the perspective of distance and time…and looking at the involvement of the federal government or lack of involvement by the federal government, my feeling is that when Pattern came out there to make the initial approach to the community, the project had already been approved at all levels of government. I mean these arrangements had already been made…. [In Imperial County] there's not political clout. There's not financial clout. There's very little there. (Interview #11).

Another sub-theme that stood out as particularly unique and problematic for community members was federal fast tracking and wind energy incentives.

Sub-theme Analysis: Federal Fast Track Initiative and Wind Energy Incentives

In 2009, Marcilynn Burke, then the Deputy Director of the Bureau of Land Management, testified before the House Natural Resources Committee that the BLM was "expediting permitting for 32 "fast track" renewable energy projects that have the potential to qualify for financial incentives under the provisions of the American Recovery and Reinvestment Act." Additionally, the BLM would participate "in California's Renewable Energy Action Team, an operational and management working group staffed by the BLM, the U.S. Fish and Wildlife Service, the California Energy Commission, and the California Department of Fish and Game. Through a Memorandum of Understanding (MOU) signed in 2008, the Action Team was given the responsibility for expediting and streamlining renewable energy processing in California" (U.S. Department of the Interior, 2009). These fast track projects accelerated the process of siting, constructing, and delivering renewable energy. Both Tule and Ocotillo Wind Farms operated under these fast track provisions and were eligible for other federal incentives designed to encourage renewable energy development. However, contrary to the stated purpose, some interviewees felt that the implementation of the federal fast track and the rush for federal incentives by developers further fueled opposition towards Tule and Ocotillo Wind Farms by speeding up the very processes that local opposition groups had already taken issue with:

> We were guinea pigs here on these two projects [Ocotillo and Tule]. These were the first, among the very first in the nation. Our area was designated an energy corridor by the federal government. It sounds great, right? Let's fast track these big, green energy projects. What we found out was that there was this new fast track project that was so insanely fast. I mean, you know, we're talking about people who got stacks and stacks and stacks, several feet high of documents and, you know, they only had a matter of days to read. In one case, somebody came into court and got the documents, got documents that morning, one of the Indian tribes, and they asked for a continuance so that could respond and they were told no. Well, this is crazy to fast track to the point where people literally don't even have enough hours, it's impossible for anybody to even

> read the material, let alone research it and respond to it. So it's basically designed to stifle, you know, the public voices (Interview #15).

Furthermore, many interviewees felt that the rush of developers to capitalize on federal wind incentives further alienated local community members from the siting process:

> If you're talking about really large scale solar or wind, the fast track, it was like having it accelerated, really, because there were these payments in lieu of taxes…that would provide the developer, if they completed by a certain date, with a 30 percent rebate basically on the cost of construction. So it's a huge amount of money. I mean some of these developers got like $200,000,000 back from the government when they developed these projects. That was part of why it created the fast track and, you know, on the positive side, I think the administrations were trying very hard to say we need to move faster towards changing our energy grid, towards renewable energy. And they at the time felt that this was a great way to do it, to support very large scale projects. I think that in hindsight, even at the time, some of us were skeptical that this was the right way to go, that we really felt strongly that looking at the already built environment and a smaller project closer in to the load would be better. We still feel that way. But, you know, their ultimate idea for it was a positive thing that they wanted to help develop renewable energy. Unfortunately because of those deadlines and things, it felt like an extremely rushed process and there was very little time to consider how you could do it better. Could you move it to another site? Could you make it smaller? That was the other thing is that they would go out and get contracts for the energy before they even had a permit to build the project (Interview #10).

Additionally, every interviewee referenced the environmental or wildlife impacts to either Tule or Ocotillo Wind as driving opposition mobilization. The largest of these issues was the creation of take permits for the critically endangered Peninsular Big Horn sheep found in the area of Ocotillo Wind. This prompted the former supervisor of the Anza-Borrego Desert State Park, which shares a five mile common boundary with the Ocotillo Wind Farm, to speak out:

> Probably the most egregious violation of protected status came when…there were turbines that were proposed to be cited in the foothill area, which was a documented Big Horn sheep lambing area. So then you have an endangered population, you have documented lambing, and you're going to go ahead and approve towers inside of a lambing area. So in order to facilitate that, US Fish and Wildlife service simply wrote out a take permit to the developer to take a number of female sheep, the ewes that were known to give birth on that sight. It was about five or six animals. They gave a take

> permit for them and for their lambs. So take means anything from disturbed, you know chased off the site, up to and including injury and death (Interview #18).

Interviewees felt that the fast track process ignored both local input and environmental laws put in place to protect species from the hazards of industry. When asked how the public participation process and NEPA and CEQA factored into the fast track process the former supervisor continued:

> For instance, my brother was also a biologist here at state parks and he and I drove all the way down to Ocotillo for what was billed as a BLM public meeting and we got there and they said, ok there is going to be a presentation by the project proponent and the representative from BLM and we're not going to take any public testimony. We're going to have some stations set up around the perimeter of the room and you'll be able to go around and hear a little spiel from the reps and then you can write your comments on a little card. And everybody was in just a total uproar and said, no, you advertised this in the official government announcement as a public meeting and uh, this is not a public meeting. Basically we just got the shaft again and they said no, we're not taking public testimony. Well we were all ready to rock and roll. Everybody had their little speeches and, you know, they were pissed off and it just became more and more clear that, hey, this is the way that operation is going to go. They don't want to hear from us and uh, you could appeal to the higher powers in government, but those are the same higher powers that fast tracked this thing. Make it happen. Fast track is a euphemism for basically avoiding NEPA and CEQA and all the other environmental protections that we thought we had (Interview #18).

The issuance of take permits created a jurisdictional mess, with local, state, and federal agencies struggling to craft a comprehensive renewable energy policy that didn't encroach on state or federal laws such as the Endangered Species Act or CEQA. As a California government representative, who asked to remain anonymous, responded when asked how take permits work in conjunction with the NEPA and CEQA processes stated:

> California has a few species that are considered fully protected, which means there's no take, which means you can't, unintentional or intentional, you can't take even one of those species that are considered fully protected. I have no ability to issue a take permit. So, because I have no ability, essentially, even if you do minimization measures, which are great and we encourage them, if one dies on your site then we still have to go through the process and you could still be held legally [responsible]. You could still

> have law enforcement come forward and [the developer] be held responsible because you're violating California Fish and Game code (Interview #16).

The issuance of take permits contributed to a new round of local protests, with a news conference and showing of solidarity held at the Pattern Energy headquarters in La Jolla, CA and another general protest being held at the local construction site (East County Magazine, 2012). As Linda Ewing, a local resident, stated to the National Wind Watch, "They didn't need to fast track it. They could have been more considerate of what is here" (Varin, 2012). Due to the community's lack of faith in government and perceived lack of meaningful public participation in the siting process, the implementation of federal fast track initiatives combined with federal renewable energy incentives to create a much stronger response to the wind farm sitings.

Distributional Justice

Distributional justice refers to "the expectations for justice regarding how costs and benefits were shared from the wind farm[s]" (Hall, Ashworth, & Devine-wright, 2013). Nearly 80 percent of interviewees referred to some aspect of distributional justice as a motive for opposition mobilization. The two most frequent sub-themes that emerged from the parent code were jobs, and, more generally, the allocation of costs and benefits impacting the project areas. Many interviewees referred to the promise of jobs as a factor in their support/opposition to the siting of Tule and Ocotillo wind farms. According to the former Director of Planning and Development in Imperial County, jobs were a major benefit to renewable wind energy siting in Imperial County:

> They [Imperial County government officials] wanted to meet several objectives, one of which is to bring new wealth into the community but also to generate jobs. And they also knew they were going to be competing with agricultural businesses…and by the way, renewable energy companies don't go to San Diego or very rich counties. They go to areas where there's a lot of open land and few resources and they….say look we're

> going to create so many jobs for you...The argument we were trying to make was: Look, it's such a small dent. The promise of all these jobs. This new infusion of money into construction, jobs, and property taxes is going too far exceed the impact. So we kept pushing forward because all of these lands, a thousand acres of land, to grade it and to do the infrastructure and to bring in supplies, there was a lot of people working. A lot of jobs that were being generated. Granted, they were temporary jobs, but they were jobs" (Interview #8).

However, most interviewees that lived within the local communities felt that the short-term nature of the jobs created did not offset the long term impacts such as noise, view shed disruption, health effects, and light pollution. As one community member stated:

> That's the carrot that they dangled in front of their [local government] face. That this thing was going to create a bunch of jobs. And so they got people from clear up from Brawly, it is all Imperial County you know, like 50 miles north of El Centro. All of these people they got went to the Board of Supervisors meeting and were in favor of the project. First of all they can't see it from their house other than the red lights at night, but they thought they were all going to get jobs. In fact there was rumors that Pattern Energy had went up there and had a job fair to get people to sign up for these jobs. But the jobs that they were offering, a turbine technician has to be able to climb up in the tower so those were the high paying jobs, so the only jobs that they were offering were people to cut weeds, you know, laborers and stuff like that. But they got all of these people on board because they all thought that they were going to get jobs here. And so it didn't seem fair that a community of 300 people vote against hundreds of thousands of people in Imperial County that were for the project that don't even live out here. They don't come out here. And their votes all counted (Interview #7).

Additionally, many interviewees felt that the nature of the jobs created, whether they would be permanent/temporary or technical/unskilled, was intentionally left ambiguous until the project siting was approved.

While some federal and local government interviewees felt the benefits of Ocotillo and Tule outweighed the costs, local community and non-profit interviewees believed that the allocation of costs and benefits were fuel for opposition mobilization. More specifically, that certain pro-wind farm businesses, organizations, and individuals within the local communities

were targeted for benefits while opponents, some of which live within a half mile of a wind turbine, received none of the benefits and an overwhelming amount of the cost when including persistent nuisance issues:

> The Optimist Club, they did receive $75,000. The museum up here around the corner, they got $750,000 because they supported the project. Another, the food bank in El Centro received, I don't know how much they got, but a lot of money. It's almost like they had to sign a contract that if they got the money then they had to speak favorably about the project at the Board of Supervisors meetings and they did. So it's kind of interesting. We [local community members] didn't get nothing. Nothing. They did promise us that one time, if we wouldn't fight the project of course, that we could have high speed Internet and a swimming pool somewhere in the community, which none of that meant anything to us (Interview #9).

Other community participants added that visual impacts to local view sheds were costs that the local community must bear unfairly. While interviewing a spokesperson for Iberdrola, the developer of Tule Wind, I asked how their company could mitigate something like visual impacts:

> They are what they are. Some people like them, some people don't. It's a 400 foot tall machine. You can't hide it. You're going to see it. Some people like them, some people don't. Beauty is in the eye of the beholder (Interview #2).

Additionally, the potential loss of cultural resources was also a component to community mobilization around the Ocotillo and Tule Wind facilities. In a 2013 lawsuit, the Quechan Tribe sued the Department of the Interior for "allowing the construction of 112 wind turbines in an area that contains cultural and biological significance to the Tribe" (Quechan Tribe of the Fort Yuma Indian Reservation v. United States Department of the Interior et al, 2012). These cultural resources include a medicine wheel, petroglyphs, and a Native American burial ground. As a tribal interviewee put it:

> Every time there is a culture in place, that's where they go. They don't go anywhere else because it's against the law to go into their property and take things. It's against the law. It's wrong. But to the Native American it's different, they can break the laws. There are environmental laws you know. But they let us know that they make the laws and they can break the laws, I guess (Interview #17).

The result of the Quechan Tribe lawsuit was a protest by three Native American tribes. The lawsuit was dismissed in May of 2013.

The ambiguity of jobs created, combined with the potential loss of community cultural and environmental resources due to the siting process, were considered by local community members as important factors contributing to opposition mobilization.

Conclusion/Policy Implications

The focus of this research has been to formally analyze opposition mobilization and the impacts of federal fast track initiatives and federal wind incentives on the Tule and Ocotillo Wind projects in southern California. Drawing on 18 in-depth interviews and over 35 magazine articles, this case study was able to identify three overarching themes that interviewees identified as significant factors contributing to opposition mobilization. These three themes are community context, procedural justice, and distributional justice. Furthermore, local interviewees felt that the presence of federal fast tracking and wind energy incentives combined to suppress local input into the siting process.

Because this is a case study, this research does not attempt to generalize findings. However, by eventually analyzing multiple case studies, future research may be able to identify general trends and patterns. In the case of Tule and Ocotillo Wind farms, the need to address issues concerning procedural and distributional justice suggest that earlier entry and more frequent input of communities into the siting process, distributing costs and benefits in a more

equitable and consistent way, and finding ways for community, government, and developer stakeholders to collaborate, instead of litigate, could reduce opposition mobilization and expedite siting proposals.

Echoing these findings, the federal fast track initiative and wind energy incentives were reported to not only suppress community input and concerns, but intensify the perception of winners and losers and harden the stance of wind farm opponents. Finding ways to fast track wind farm sitings may require much earlier collaboration with potential wind farm host communities and consider alternative development strategies such as offshore siting, community investment, and more nuanced government regulation of incentives and benefits. As developer and government stakeholders continue to look to expand renewable wind energy to take on a larger, if not prominent role in producing industrial scale electricity, failure to properly account for the community as an equal stakeholder may slow or even stop the proliferation of industrial scale renewable energy facilities. Future research should find ways to evaluate if a consistent application of incentives is even possible, as the system is currently configured, where developers seeking to maximize profits are allowed to negotiate freely with underfunded states and counties who have reduced or leveraged bargaining power. In this particular case, one permanent job resulted from the construction of Ocotillo Wind in Imperial County. This has left many residents wondering if economic diversity (with county wide benefits) is worth the cost of these wind farm impacts (focused solely on the local community).

With climate change expected to become an ever increasing issue worldwide, the race to reduce carbon emissions will require many more renewable energy projects. Having a process that perpetuates renewable energy facility sitings is paramount to a successful transition from

fossil fuels to renewables. Determining exactly what that process should entail may not prove to be easy, but that doesn't mean it's impossible.

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Appendix:

List of Interviewees

Number	Name	Organization	Interview Type
1	Lara Rozzell	External Energy Coordinator for the National Park Service	Phone
2	Harley McDonald	Senior Business Developer Iberdrola Renewables	Phone
3	April Maurath-Sommer	Executive Director of Protect Our Communities Foundation	Phone
4	Miriam Liberatore	Bureau of Land Management	Phone
5	Wil Micklin	Ewiiaapaayp Band of Kumeyaay Indians	Phone
6	Donna Tisdale	Community Member	In-person
7	Jim Pelley	Community Member	In-person
8	Armando Villa	Director of Planning and Development Imperial County	In-person
9	Parke Ewing	Community Member	In-person
10	Lisa Belenky	Centers for Biological Diversity	Phone
11	Richard Hamilton	Community Member	Phone
12	Rob Nikolweski	Reporter- San Diego Tribune	Phone
13	Mike Fitzgerald	Ecosphere	Phone
14	Edie Harmon	Community Member	Phone
15	Miriam Raftery	East County Magazine Editor	Phone
16	Anonymous	California State Employee	Phone
17	Preston Arrow-weed	Cultural Resources Activist	Phone
18	Mark Jorgensen	Retired California State Parks	Phone

INTERVIEW QUESTIONS

PROJECT TITLE: ***Western State Renewable Energy Study*** (2014)

Oregon State University

Questions for agency staff / city planners / county officials

1. Please tell me about the issues that have historically driven politics in your community, prior to the announcement of any particular renewable energy ("wind") projects (education, land use, employment, etc.).
    a. Please list the community groups that were most active prior to the announcement of any particular renewable energy ("wind") projects.
    b. What were the specific interests and concerns of each of these groups?
    c. How responsive have elected representatives / decision makers been to community groups in the past? Can you provide specific examples?

2. What can you tell me about the individuals and groups that have been active during the siting of the recent renewable energy ("wind") projects (environmental groups, businesses, neighborhood associations, unions, etc.)? [Provide list of proposed projects and dates if needed.]
    a. What were the specific interests and concerns of each of these groups?
    b. How did these groups come together / form in response to the proposal(s)?
    c. How would you characterize the response of elected representatives / decision makers to each group's interests? Can you provide specific examples?
    d. How would you characterize the response of the proponent(s) of the project(s) to each group's interests to particular groups' interests? Can you provide specific examples?
    e. How would you characterize the resources available to opponents of the project(s)? Supporters of the project(s)?
    f. Have community groups been receiving support, monetary or otherwise, from outside the community?
    g. What were the stances of political and business leaders in the community about the project? Did they changed over time? Why?

3. What forms of public participation did elected officials, proponents, and decision makers use during the process of siting the project(s)?
    a. What was the nature of public involvement in the planning process?
    b. What role did you play in this process?
    c. What forms of public participation were used by the elected representatives / decision makers during the process? By the proponent(s)?
    d. When were these participation processes implemented?
    e. Did you attend or facilitate any of these processes?
    f. Were all interested parties fully able to express their concerns?
    g. In your opinion, were there any groups that were left out of or marginalized from these processes? Why or why not?

   h. What role did experts or expert knowledge play in providing comments on the project(s)? Can you provide specific examples?
   i. Were you or others concerned about possible conflicts between the expansion of renewable energy and existing state and federal environmental regulations (e.g. Endangered Species Act)? Can you provide specific examples?
   j. What role did the comments play in the decision making process? Can you provide specific examples of changes made to the plan as a result of comments received?

4. How have community members and groups made their voices heard outside of these processes for participation in decision-making (ballot initiatives, letter-writing campaigns, protests, social media, etc.)?
   a. Have you been surprised by the community's reaction to these proposal(s)? Why or why not?
   b. Did you anticipate lawsuits as a result of the siting process(es)? If so, around which issues?
   c. Have particular events are actions galvanized community involvement or action regarding the siting proposal(s)? Probe here.
   d. [If multiple projects were proposed in the county] Were any projects more controversial than others? If so, why?

5. Are there any important issues related to the project(s) that we haven't covered yet?

Questions for Active Community Members

1. I would first like to ask you some questions about your political involvement prior to the announcement of the proposed facility.
    a. Did you attend city/county/agency meetings prior to the announcement of renewable energy ("wind") projects? If so, which ones/dates? If so, please tell me about the types of political issues that you were most interested in.
    b. Prior to the announcement, were you involved in any community groups?
    c. Did you participate in any other political activities, outside of official meetings/hearings, prior to the announcement of renewable energy ("wind") projects?
    d. Have you run for political office?
    e. How responsive have elected representatives and business leaders been to community groups in the past? Can you provide specific examples?
    f. What issues have historically driven politics in the community (education, land use, employment, etc.)?

2. Did you attend city/county/agency meetings about the renewable energy ("wind") projects?
    a. If so, what was it about the ("wind") issue that got you interested in attending? If not, why not?
    b. Did you get involved as part of a community group? Which one and why that group?
    c. What are your specific interests and concerns about the ("wind") proposal(s)?
    d. Do you feel your voice has been heard during the process?
    e. How would you characterize the resources available to supporters and opponents the renewable energy ("wind") projects?
    f. Have you (or your community group) been receiving support, monetary or otherwise, from outside the community?
    g. What role did experts or expert knowledge play in providing comments on the project(s)? Can you provide specific examples?
    h. Were you or others concerned about possible conflicts between the expansion of renewable energy and existing state and federal environmental regulations (e.g. Endangered Species Act)? Can you provide specific examples?
    i. What are the stances of political and business leaders in the community about the project? Have they changed over time? Why?

3. Have you participated in any other political activities, outside of official meetings/hearings organized by the city, in response to the siting proposal, including ballot initiatives, letter-writing campaigns, protests, etc?
    a. Have you been surprised by the community's reaction to the siting proposal? Why or why not?
    b. Have particular events are actions galvanized your involvement regarding the siting proposal? Probe here.
    c. [If multiple projects were proposed in the county] Were any projects more controversial than others? If so, why?

4. Are there any important issues related to the project(s) that we haven't covered yet?

Questions for Project Representatives

1. What are the main criteria your company uses for selecting the site of a renewable energy ("wind") project?
    a. How did this site(s) match up with those criteria?
    b. What sort of background information did you collect on the community prior to the announcement of the siting proposal?
    c. What was the initial response of influential individuals in the community to your proposal? Has this changed over time?
    d. What was the initial response of local citizens or groups to your proposal? Has this changed over time?

2. What forms of public participation did your company use during the siting process?
    a. When were these participation processes implemented?
    b. Did you attend or facilitate any of these processes?
    c. Were all interested parties fully able to express their concerns?
    d. Would you characterize the public input process associated with the project as fair? Why or why not?
    e. What role did experts or expert knowledge play in providing comments on the project(s)? Can you provide specific examples?
    f. Were you or others concerned about possible conflicts between the expansion of renewable energy and existing state and federal environmental regulations (e.g. Endangered Species Act)? Can you provide specific examples?
    g. What role did the comments play in the decision making process? Can you provide specific examples of changes made to your plans as a result of comments received?

3. How have community members and groups made their voices heard outside of these processes for participation in decision making, including ballot initiatives, letter-writing campaigns, protests, etc?
    a. Have you been surprised by the community's reaction to your siting proposal(s)? Why or why not?
    b. Do you anticipate lawsuits as a result of this siting process(es)? If so, around which issues?
    c. Have particular events are actions galvanized community involvement or action regarding your siting proposal(s)?
    d. [If multiple projects were proposed in the county] Were any projects more controversial than others? If so, why?

4. Are there any important issues related to the project(s) that we haven't covered yet?