DEPARTMENT OF ENERGY CASE STUDY

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Abstract

This paper is a case study on the Department of Energy's (DOE) types of conflict and how they are most frequently addressed. The study looked at their best practices and how the DOE could improve. A content analysis of information available regarding conflict for the Federal Government revealed that environmental conflicts were the most frequent and costly. This has led the Federal Government to issue policy regarding Environmental Collaboration and Conflict Resolution (ECCR) and reporting requirements. Annual reports and trend analysis on a number of ECCR cases from 2007 to 2017 were utilized to assess practices for the DOE and their associated entity, the Federal Energy Regulatory Commission (FERC).

Introduction

The United States Department of Energy (DOE) has been known to have conflict in various areas, from conflict caused with the public by policy written and administered to internal conflict within the organization. The DOE responsibility for cleanup of nuclear sites, and the sprawling nature and infrastructure intensive nature of energy production and delivery systems often cause environmental conflict with property owners and environmentalists who do not want the process or distribution in their surroundings, sometimes referred to as "Not In My Back Yard, or NIMBY" (MacLachlan, 2002).

The DOE is a cabinet level department, serving as an advisory body to the President of the United States. The department was formed on 04 August 1977 and is responsible for policy regarding energy and nuclear safety. It consists of three primary offices, and a host of 30 program and staff offices (*DOE-ORG-CHART-December-2017-revised.pdf,* n.d.). The three primary offices are the Office of the Under Secretary for Nuclear Security and National Nuclear Security Administration, the Office of the Under Secretary for Science, and the Office of the Under Secretary of Energy. It is the later office that contains a policy office that is most responsible for much of the policy regulating energy. The office has a budget of $30.6B and employs 14,000 employees and 95,000 contractors (*Fy-2017-doe-annual-performance-report-fy-2019-annual-performance-plan.pdf,* n.d.) (*Energy Department FY 2019 Budget Fact Sheet.pdf,* n.d.).

The DOE is currently responsible for the nuclear cleanup of 16 sites comprising of two million acres across 11 states, making it the largest and most diverse area of program management within the DOE ("Project Management," n.d.). These projects account for $60B in cleanup efforts. In addition, the Federal Regulatory Commission (FERC) has responsibilities to

"Promote Safe, Reliable, Secure, & Efficient Infrastructure" (*AFR-2017.pdf*, n.d.), resulting in policy affecting significant infrastructure projects that also have environmental impacts and cause conflict with landowners and environmental groups. Although the DOE is currently utilizing Environmental Collaboration and Conflict Resolution (ECCR), the number of growing cases could be an indicator that they need to reassess their policy on addressing these issues, and focus more on preventative conflict management measures such as ombudsry, interest-based negotiation and conflict coaching (Brubaker, Noble, Fincher, Park, & Press, 2014a)

Research Question

The DOE utilizes ECCR to manage and resolve environmental conflict, in alignment with policy established by the Office of Management and Budget and Council on Environmental Quality. This policy calls for Federal agencies to "foster collaboration to build relationships, enhance public engagement, minimize or prevent conflicts, and manage and resolve conflicts when they arise" (*OMB_CEQ_Env_Collab_Conflict_Resolution_20120907_2.pdf*, n.d., p. 2). This paper will attempt to answer the following questions:

1. *What are the most common types of conflict in the Department of Energy, and how are they most frequently addressed?*
2. *What are the best practices for conflict management in the Department of Energy or similar government agencies, and how can the Department of Energy improve?*

Literature Review

Policy

The DOE has a long track record of support of conflict management, adopting the principles outlined in the Office of Management and Budget (OMB) and Council on Environmental Quality (CEQ) Joint Memorandum on Environmental Conflict Resolution signed 28 November 2005. This memorandum directed agencies to "increase the effective use of environmental conflict resolution and build institutional capacity for collaborative problem solving" (*OMB CEQ Joint Statement_1.pdf*, n.d., p. 1). The joint memo recognized the challenges of balancing public interests and various agencies objectives, and sought a methodology to reduce the costly litigation, lengthy processes, costly delays, wasted investments, and hostility between stakeholders.

The DOE built on the 2005 memorandum, adopting the 07 September 2012 Joint Memorandum on Environmental Collaboration and Conflict Resolution (*OMB_CEQ_Env_Collab_Conflict_Resolution_20120907_2.pdf*, n.d.), increasing the use of third-party assisted environmental collaboration and environmental conflict resolution. The memorandum specifically built on the 2005 memorandum, calling for more upfront environmental collaboration, stressing the "value of collaboration in policy making, conflict prevention and management, and conflict resolution" (p. 2).

Referring to the review of the DOE website above, ECCR is shortened to Environmental Conflict Resolution (ECR) and is described as an Alternative Dispute Resolution (ADR) process that utilizes a neutral third party in the prevention or resolution of conflict. The site then identifies that ECR can also include collaborative processes that prevent or resolve environmental issues. Although a subtlety, the shortening of ECCR to ECR and comparison to

ADR insinuates that the focus may be more on the resolution of the dispute once it occurs, instead of focusing on conflict management strategies to actually prevent conflict from occurring.

The Federal Departments and Agencies prepares a report annually pursuant to the 07 September 2012 OMB-CEQ policy memorandum on ECCR. The 2017 reports that the number of ongoing ECCR cases for FERC has gone from 21 cases out of a total of 257 total federal government cases (or 8.17%) in 2006, to 115 cases out of 489 total cases (or 23.52%) in 2017 (*Fy_2017_epa_eccr_annual_report_final.pdf*, n.d.). While one can argue that it is positive that FERC is utilizing the ECCR process, one could also surmise that there needs to be more focus on conflict prevention (Brubaker, Noble, Fincher, Park, & Press, 2014b).

Environmental Conflicts

Environmental conflicts can occur at the policy level over laws or regulations, or at the instance level, where the issue or project occurs (Dukes, 2004). The magnitude of the environmental conflicts can be determined by the bargaining power, or extent by which competing interest have the ability to reach a bargain or the ease of pursing other alternatives (MacLachlan, 2002).

Energy Landscape Conflicts

The notion of NIMBY has continued to expand over the years and has now transitioned to renewable energies. This new area of conflict between land use for renewable energy and NIMBY philosophy has been termed energy-landscape conflicts. These conflicts occur when individuals and social groups place a high value on the unspoiled landscapes (van der Horst & Vermeylen, 2012).

Infrastructure Projects

Large Construction Projects

DOE efforts often result in significant construction projects for nuclear cleanup, production, or transmission of energy. Two main categories of conflict usually arise as a result of large construction projects, internal, and interface conflicts. Internal conflicts usually occur between the internal groups associated with the project involved with the planning, design, and execution of the project. Interface conflicts exist between the internal groups and the social groups that interact with the project and the internal participants. Interface conflicts on large projects arise primarily due to attitudinal differences between the various groups (Awakul & Ogunlana, 2002). There is a recognition that environmental aspects of projects often delay projects, resulting in significant project cost growth and delay of delivery of critical projects to public benefit. This, coupled with the need to invest in infrastructure to strengthen our economy, improve world trade, create jobs, and reduce the costs of goods and services has prompted Executive Order 13807 targeted at improving the environmental review to improve the execution of infrastructure projects ("Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects," 2017).

Transmission Lines

Energy transmission lines are some of the primary causes of conflict due to the continued demand on energy worldwide. This often results in an environmental conflict. Consensus building can be effective if the overall process includes participation by stakeholders, trust building, and focus on the key objectives. Often times, the focus turns to items like renewable energy or whether there is a true need for the energy, instead of maintaining focus on the design and construction of the transmission line (Keir & Ali, 2014).

Oil & Gas Extraction & Distribution

Oil exploration has resulted in conflict in many areas around the world, Nigeria experiencing significant conflict and violence. This conflict has been attributed to poor communication efforts. This communication is required both internally and externally to the organization (Nwagbara & Brown, 2014).

Environment Collaboration and Conflict Resolution

Environmental conflict is costly and time consuming for the Federal Government, costing millions of dollars and thousands of employee hours annually. The Federal Government has developed a program called Environmental Collaboration and Conflict Resolution (ECCR) to try and combat the challenges associated with environmental conflict. The Federal Government has utilized ECCR for more than 3,800 cases since 2006 and currently has over a decade of data on how it has improved outcomes for them (*ECCR_Benefits_Recommendations_Report_ 5-02-018.pdf*, n.d.). The ECCR has been proven to save time and money, improve relationships between the government and stakeholders, and improve overall outcomes.

In a study of 123 ECCR participants, the ECCR process saved time in 75 percent of the cases, and saved money in 81 percent of the cases. In addition, the Environmental Protection Agency (EPA) identified that their cases took 45 percent less time and had 79 percent fewer attorney hours than litigation (*ECCR_Benefits_Recommendations_Report_ 5-02-018.pdf*, n.d.).

ECCR has been proven to improve the relationships between the government and other stakeholders and improve outcomes. In a survey of over 700 participants that have utilized the process, 82 percent agree that the process improved relationships and created new ones. And even when the process did not reach an agreement, 64 percent of the participants still responded that progress was made, and their working relationships improved. Finally, ECCR improves outcomes with high settlement rates ranging from 63 to 93 percent, as well as creative solutions (*ECCR_Benefits_Recommendations_Report_ 5-02-018.pdf*, n.d.).

Data Methods

This study was a content analysis on information available about the Department of Energy (DOE). The data is available from the DOE website. The data were obtained from annual reports pursuant to the OMB-CEQ policy memorandum on ECCR are produced by Federal Department Agencies, and the data synthesized into a published study (https://www.udall.gov/OurPrograms/Institute/ECRReport.aspx). These reports have been published

annually since 2006 and provide a basis for trend analysis for how each federal department is utilizing ECCR.

The 2017 report was the last report available for review, and provided a trend analysis of reporting from 2007 through 2017 (*FY17ECCRSynthesisReport_Final.pdf*, n.d.). Reports were reviewed for both the DOE and the Federal Electric Regulatory Commission (FERC), as they are an entity associated with the DOE. The key data reviewed was the number of ECCR cases for each entity in each year from 2007 through 2017. The reports were reviewed to determine not only numbers, but types and categories of cases, and suggested areas of improvements offered by the agencies.

The latest summary report illustrates 120 cases (25%) were associated with planning, and 137 cases (28%) were associated with siting and construction (*FY17ECCRSynthesisReport_Final.pdf*, n.d.). The 2017 report from FERC illustrate that 103 of their reported 115 cases were related to siting and construction, representing 75 percent of the overall siting and construction related cases for all agencies ("Udall Foundation," n.d.). The summary report also identifies that agencies are still "Building ECCR personnel and staff capacity" (*Fy_2017_epa_eccr_annual_report_final.pdf*, n.d., p. 6), illustrating that some agencies still require additional resources.

Findings

A review of material available on the DOE and FERC websites indicate that the focus of conflict management has been on environmental conflict. The information further suggests that focus was placed on Environmental Conflict Resolution at the Federal level beginning in 2005. This focus promulgated annual reporting to help capture and quantify the use of ECR. This focus was renewed and expanded in 2012 to include collaboration, resulting in the Environmental Collaboration and Conflict Resolution (ECCR). This indicates that the Federal Government realizes the importance of collaboration early in the process as a preventative measure to eliminate, or greatly reduce the number of conflict cases that actually reach a critical point that requires ADR.

Review of the data for the DOE and FERC reveals that the trend for the DOE has reduced significantly since the inception of the program in 2005, starting with 136 reported instances in 2008, peaking at 152 cases in 2009, and dropping to 31 in 2015, spiking to 89 in 2016, and dropping to an all-time low of 20 in 2017. The FERC, however, appears to be trending upward, starting in 2007 with 21 cases, dropping to an all-time low in 2008 of 16, then climbing to a high of 115 in 2017, with some peaks and valleys in between. The findings indicate a trend of decrease in ECCR cases for DOE for the decade of data available, and a significant increase in cases for the 11 years reported by FERC.

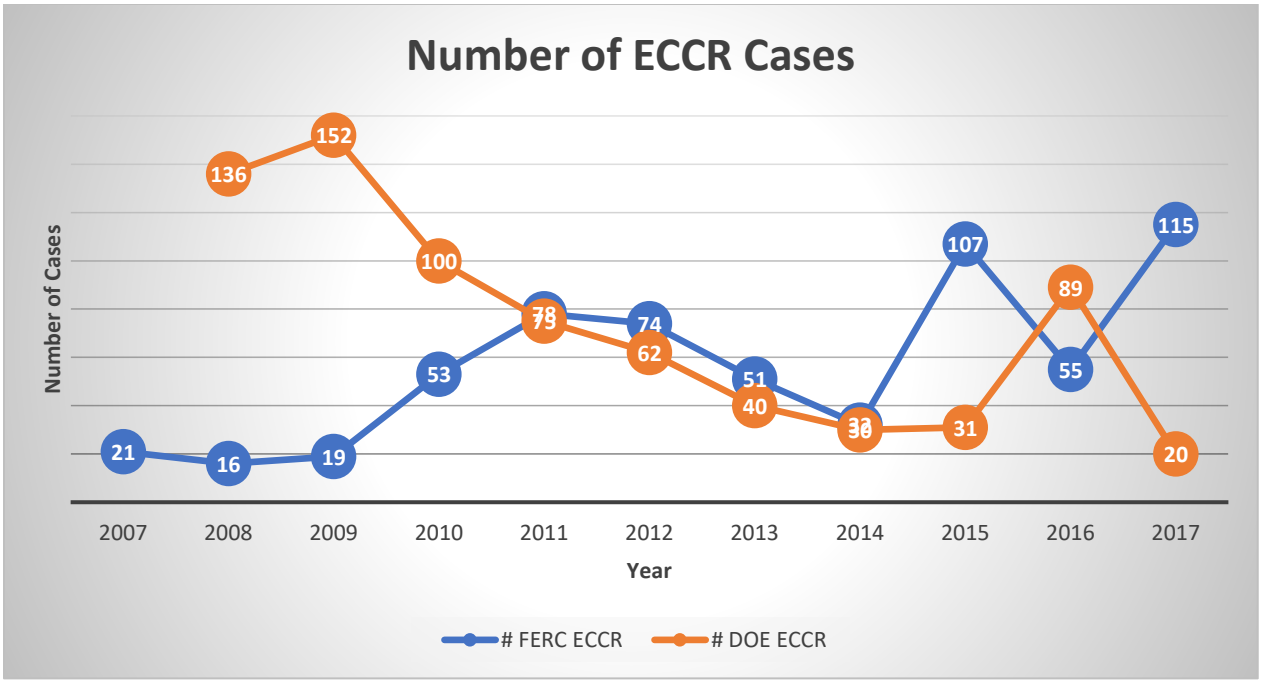

Figure 1. Number of ECCR cases for the DOE and FERC from 2007 through 2017.

This trend in data, coupled with the review of the specific example cases and methodologies provided in the individual annual report indicates a potential structural issue in how FERC is addressing preventive conflict management across the organization. Increased number of cases that are likely ADR versus proactive engagement efforts indicate that FERC may not have the processes and resources required within the organization to execute the proactive practices of conflict management. This would not be surprising, as the initial focus in 2005 was on ECR, not stressing the importance of the collaboration aspects of the ECCR process. The Federal Government re-issued new policy in 2012 amplifying the original call for ECR, and adding collaboration to the efforts and renaming it ECCR (*FY17ECCRSynthesisReport_Final.pdf*, n.d.). Due to the initial lack of focus on the preventative approach to conflict management, there is a likelihood that FERC, as well as other government agencies, have not structured and resourced their organizations to facilitate the required early engagement efforts to reduce or eliminate environmental disputes early in the process.

Upon review of the individual, detailed reports for the DOE and FERC, they describe multiple examples of implementation of ECCR efforts. However, the approaches taken seem to be inconsistent across both organizations. There may not be a consistent organizational structure to ensure focus on prevention. Review and modification of the organizational structure, and implementation of standardized processes and procedures could improve preventative measures for conflict management, potentially reducing the number of ECCR efforts focused on ADR.

Implications

The material reviewed indicates that the majority of external conflict issues for the Federal Government is related to environmental conflict. As such, the Department of Energy and related Federal Energy Regulatory Commission are significant players in this area due to their cleanup efforts and infrastructure projects related to the delivery of reliable energy. This has prompted

the Federal Government to issue policy to reduce the amount of environmental conflict by utilizing the ECR and now ECCR process (*OMB CEQ Joint Statement_1.pdf*, n.d.) (*OMB_CEQ_Env_Collab_Conflict_Resolution_20120907_2.pdf*, n.d.). This answers the question of *What are the most common types of conflict in the Department of Energy, and how are they most frequently addressed?* These environmental conflicts are addressed through the ECCR process. The data reviewed from the annual ECCR cases reported, indicate a downward trend for the DOE and an upward trend for FERC (*Fy_2017_epa_eccr_annual_report_final.pdf*, n.d.). This upward trend for FERC, coupled with their inconsistent approach to proactive conflict management indicates that their organization is not yet organized and resourced to meet the 2012 requirements for a collaborative approach to conflict management to reduce number of cases. This indicates that the DOE has a healthy program to ensure a proactive conflict management approach, while FERC may need to assess why their trend is increasing. This answers the second question of *What are the best practices for conflict management in the Department of Energy or similar government agencies, and how can the Department of Energy improve?* The best practices are a collaborative and proactive approach to conflict management. The DOE appears to have a healthy program that is effectively utilizing this approach, while FERC may need to modify their organization and resourcing to improve performance.

Conclusion

The Federal Government recognized the importance of conflict resolution as it pertained to environmental issues over a decade ago and issued policy for Federal agencies to implement Environmental Conflict Resolution processes and programs in their agencies(*OMB CEQ Joint Statement_1.pdf*, n.d.). Seven years later, the Federal Government realized the importance of proactive conflict management that was facilitated via collaboration, and added that to the policy to result in Environmental Collaboration and Conflict Resolution (ECCR) (*OMB_CEQ_Env_Collab_Conflict_Resolution_20120907_2.pdf*, n.d.). Based on data and specific cases reviewed, organizations may still be lagging on establishing the organizational structure and resourcing required to perform the preventative conflict management efforts. While the Department of Energy appears to be meeting the intent of the policy and managing their ECCR cases effectively, the FERC appears to be trending in a direction that indicates that they need to assess their ECCR program, specifically on preventative measures. Measures could be incorporated into a conflict management tool that would improve the overall preventative management of conflict (Young et al., 2016).

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