EVALUATING PROCEDURAL JUSTICE IN THE TACOMA LNG PUBLIC REVIEW

PROCESS

by

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ABSTRACT

Evaluating Procedural Justice in the Tacoma LNG Public Review Process

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This thesis research focuses on the procedural justice of a public review process for the siting of an LNG facility in Tacoma, WA. Two sets of data — public comments and agency responses in an environmental impact statement, as well as media reporting on the public review process were analyzed in terms of actors, themes, and three procedural justice aspects including access, recognition and influence. Most quotations from each of these two sets of data were interpreted as indicating a lack of agency openness to be swayed by public input. Ultimately, this study found that the public review process for the Tacoma LNG project failed to meet these three aspects of procedural justice, and suggested that the public review process could be improved by striving for adequate tribal consultation, extending the public comment period, allowing more than one opportunity for public input, and including a breadth of stakeholders in the review process as a way to hold the agency preparing the EIS accountable to multiple stakeholders.

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Chapter One: Introduction

Liquefied natural gas (LNG) development is expected to increase dramatically over the next 20 years (Grigas, 2017, pp. 79-91). Ongoing expansion of LNG infrastructure in the Pacific Northwest, as observed through current LNG projects sited in British Columbia and Oregon, is contentious because of the region's role as a stronghold against fossil fuel development over the past decade (Gurewitz, 2018; Powell, 2016, 2018). This struggle for autonomy against the push to expand fossil fuel infrastructure in the Pacific Northwest is referred to by some researchers as the thin green line (Gurewitz, 2018). The thin green line describes the geopolitics of fossil fuel suppliers in Alberta, Montana and Wyoming trying to meet energy demands of markets in Asia by expanding fossil fuel infrastructure in the Pacific Northwest for transportation (Sightline Institute, 2014). The thin green line is high stakes because if fossil fuel infrastructure is allowed to continue expanding in the Pacific Northwest, it will disproportionately affect vulnerable communities and worsen climate change impacts (Sightline Institute, 2014). Conversely, if the Pacific Northwest blocks access to markets in Asia, it will cause natural gas to become more expensive for those markets due to less efficient transportation requirements (Grigas, 2017).

An LNG storage tank and bunkering facility (larger and more structurally and operationally complex than any in the U.S.) is being built in the Puyallup River Estuary (Powell & de Place, 2016). Construction of this facility began in 2016, and members of the public expressed concerns that the project lacked necessary permitting before and during construction (Indian Country Today, 2017). Further, community members also expressed concerns that despite legal mandates under the Medicine Creek Treaty and H.

S.B 402, the Port of Tacoma never consulted the Puyallup Tribe about the project (Indian Country Today, 2017; United States. Congress. House. Committee on Interior and Insular Affairs., 1989; United States. Congress. Senate. Select Committee on Indian Affairs., 1989). The public review process began on September 12, 2014, when the City of Tacoma "began a scoping process to solicit public input" (City of Tacoma, 2015, p. 1). Northeast Tacoma resident Steve Storms with Advocates for a Cleaner Tacoma (ACT) reported that a Public Disclosure Request (PDR) revealed that the Tacoma Fire Department had performed risk analysis modeling for the LNG facility, but refused to share it because "it would cause too much conflict with the City of Tacoma's stated position of supporting the LNG plant" (Storms, 2018). Similarly, National LNG expert and legal researcher Tarika Powell with Sightline Institute remarked that "the details of PSE's barge bunkering operations are thus far shrouded in mystery" (Powell & de Place, 2016). These statements reflect public concerns around lack of disclosure of information about the facility as well as questions about the completeness and representation of data in Environmental Impact Statements (EIS) and other official documents pertaining to the project (Powell & de Place, 2016; Storms, 2018). Many of these concerns focus around the size of a safety exclusion zone surrounding the facility (Powell & de Place, 2016; Storms, 2018). While the draft EIS (DEIS) specified a 550 foot safety exclusion zone enclosed within the property lines of the LNG facility, Braemar Engineering, Inc. (one of the technical consultation agencies and principal contributors preparing the 2015 EIS) contested the 500 foot perimeter, asserting that an LNG release would extend beyond the property lines of the project (City of Tacoma, 2015, p. 227; Powell & de Place, 2016). Despite this technical contradiction, the official determination of the EIS maintains that

the safety exclusion zone be limited to the property boundaries of the LNG facility, and public requests for additional risk analysis have been dismissed (City of Tacoma, 2015, p. 438; Powell & de Place, 2016; Storms, 2018; Tacoma Fire Department, 2017). Such omission of data could limit public participation, which would mean that the review process could be unfair and favor one side over the other.

Puyallup Tribal Council member Annette Bryan asserted that the Puyallup Tribe was not consulted about the project (Gurewitz, 2018). At a public meeting on October 3, 2018, Bryan explained that the City of Tacoma sent a letter to the Puyallup Tribe giving general notice about the LNG project, but that the tribe does not recognize the letter as meaningful consultation, as described in Executive Order (EO) 13175 concerning coordination and consultation with Indian tribal governments (350 Tacoma, 2018; Executive Office of the President, 2000, pp. 67249-67251). Although not legally enforceable, EO 13175 orders that: (a) tribes get to decide for themselves what the standard for consultation is; (b) each agency has to assign a person within their agency to make sure that there is an accountable, meaningful and timely consultation process and they have to write out what exactly their consultation process is; (c) each agency should negotiate with tribes to make consensual rules; (d) when an agency sends any "final draft regulation" it should be certified by the "official designated" for accountability (Executive Office of the President, 2000, pp. 67250–67251). Similarly, Tarika Powell called the process for the project "the worst [State Environmental Policy Act] SEPA review [she] had ever seen" (Gurewitz, 2018; Native Daily Network, 2018a). More specifically, in February 2018, Powell testified in court that the City of Tacoma had "obstructed" members of the public from pursuing any legal remedies by failing to

answer questions clarifying whether the City of Tacoma had made an official determination denying a supplemental EIS (SEIS), which limited public participation in the SEPA review process (Native Daily Network, 2018a). In addition, the Washington State attorney general called the review process "fictional" (Native Daily Network, 2018b). This is a strong claim implying gross inaccuracy or misrepresentation in the EIS, and is especially concerning because researchers like Powell and others have identified the Puyallup Tribe as a frontline community (Gurewitz, 2018; Powell, 2016). The term frontline communities refers to groups who are disproportionately impacted by fossil fuel development in terms of environmental and health outcomes, and are targeted for development because of their limited capacity to dispute project sitings (Gurewitz, 2018; Powell, 2016).

This research will evaluate the policy process for siting an LNG facility in the Puyallup Estuary, in order to find out how the project's EIS and public review processes include participation of locally impacted communities in terms of access, recognition and influence. Informed by Ottinger, Hargrave, & Hopson (2014), this research seeks to contribute to an understanding of how Washington State Environmental Policy Act (SEPA) implementation might be improved to produce better procedural justice outcomes. The research question guiding this study is "how procedurally just is this EIS public review process?" Ultimately, the controversy over the siting of this LNG facility reveals flaws in the public review process. For instance, one of these flaws is exemplified through the obstruction of public participation resulting from failures to inform the public about official SEPA determinations in the review process for the EIS (as described above). This investigation will offer suggestions for ways that public

review processes might better promote principles of procedural justice while reducing conflict over agency decisions.

Procedural justice considers the extent to which affected communities are able to participate in decision making processes, and in what ways. Kuehn (2000) pointed out that how procedurally just a decision-making process is influences public perceptions of distributive justice outcomes (p. 10688). Further, the overall political justice of procedural equity in decision-making processes relies upon recognition of social power structures to ask questions not only about the implementation of the process but also if the communities that are impacted by a policy agree in advance about how the process will be, as well as asking questions about if the process is designed in a way that inherently favors one side over another (Kuehn, 2000, pp. 10688–10692; Ottinger et al., 2014, pp. 663–664). Though even if a process is fair, it might still produce disproportionate outcomes, so procedural justice is only one element of environmental justice, overall (Kuehn, 2000, p. 10692).

An analysis of public participation can help to evaluate how procedurally just a policy is. For example, Ottinger et al. (2014) suggested three criteria for a participatory process to be considered just, based on access, recognition and influence (p. 663). While NEPA describes the public participation through the public comment EIS process, environmental justice scholars evaluate public participation across various criteria of procedural justice, including accessibility, recognition, and influence-based standards (Kuehn, 2000, pp. 10688–10692; Ottinger et al., 2014, p. 663). The public comment period is based upon a more adversarial or pluralistic model which favors technocratic language, rather than a more inclusive deliberative model (Morrell, 2013, pp. 102–104;

Ottinger et al., 2014, p. 664), and is designed to consider public participation through written and oral comments based on a draft EIS, which are then submitted to a designated EIS agency's appointed technical and scientific experts during a public comment period of at least 45 days (Morrell, 2013, pp. 94–104). In general, Morrell (2013) identified five stages of the EIS public comment process. The goal of this comment process is to solicit, analyze and respond to public input, which is how public participation for the EIS process is described under NEPA (pp. 93-94).

Drawing from Ottinger et al. (2014)'s study in the context of Tarika Powell's extensive research of the siting process specific to this LNG facility, this research will examine existing records and documents pertaining to the EIS process. Overall, the purpose of this work is evaluating to what extent and in what ways procedural justice is operationalized in the policy process for siting an LNG facility in the Puyallup River Estuary. This research will rely upon a qualitative coding case study design to analyze public comment data pertaining to the policy process for siting an LNG facility in the Puyallup River Estuary. A second data set of public reporting data will be used for comparison as a standard to validate the analysis of public comments and agency responses against. This study design will enable questioning focused around which qualities of the policy process support and impede procedural justice. More specifically, this work's use of qualitative methods will focus on analyzing public comments and agency responses from the 2015 EIS, and public reporting on the process. Public reporting includes a convenience sample newspaper articles and independent research representing public discourse on the siting of the LNG facility, which can be considered as an informal process parallel to the public comments submitted the formal review

process and allows for comparison. A case study approach through qualitative coding is justified because the subject being evaluated is a process.

Similar to Thorkildsen (2018), the methods of this thesis will rely upon ATLAS.ti software to code public comment and reporting data for qualitative analysis. The selected data (as detailed in chapter three) will be coded and analyzed based on the openness (or socially equitable qualities of design and implementation, such as accommodations for citizens who work hours outside of 9:00 AM TO 5:00 PM on weekdays) of public participation opportunities in the public review processes as a measure of access, agency engagement with public comments as a measure of recognition, and agency revisions to final EIS (FEIS) as a measure of influence. Public reporting on the process will be analyzed as an informal parallel to the official review process.

In overview, the methods of this thesis will start by developing a deductive coding scheme drawing from Ottinger et al. (2014) to evaluate aspects of access, recognition and influence in EIS process. Positive and negative indicators will form classifiers for each of the three categories, resulting in a total of six deductive codes — positive and negative codes for access, recognition and influence — using definitions and examples for each based in Ottinger et al. (2014). Data from the categories mentioned above will then be selected for analysis, limiting selection to textual data for textual to textual comparison and limiting public reporting data to the final March 29 release of the 2019 supplemental EIS (SEIS), marking the end of the decision-making process. The 2019 SEIS was released on March 29, 2019, and because its publication was delayed from early February 2019 it was not possible to include in data analysis for this thesis (Puget Sound Clean Air Agency, 2019). Selected data will then be coded using the top-down approach shown

above and by actor groups. The data will then be processed in-depth to allow inductive codes to emerge (i.e. aspects of procedural justice more broadly – not limited in terms of access, recognition and influence). Finally, the selected data will then be analyzed using co-occurrence tables for thematic patterns and responses across author groups.

Chapter Two: Literature Review

I. Introduction

In 2016 PSE began construction of an LNG facility in the Port of Tacoma, which lies within the Puyallup River Estuary. The facility is larger and more complex than any in the U.S., and will also serve as a fueling bunker for maritime ships (Powell & de Place, 2016). Members of the public expressed concerns not only that the project lacked necessary permitting before and during construction, but also that despite legal mandates under the Medicine Creek Treaty and the 1988 Puyallup Land Claims Settlement (H. S.B 402), the Port of Tacoma never consulted the Puyallup Tribe about the project. The City of Tacoma reissued an EIS for the facility in 2015. In addition, the PSCAA conducted a supplemental EIS on greenhouse gas emissions concerning the facility. This thesis applies a procedural justice framework to evaluate how the policy process for siting an LNG facility in the Puyallup River Estuary measures up to standards of access, recognition and influence (Ottinger et al., 2014). Beyond evaluating how procedurally just the public review process was, another purpose of this research is simply to document the public review process for Tacoma LNG. As such, this literature review will discuss relevant theoretical frameworks used in interpreting this issue through a procedural justice lens.

The literature review is organized into four key areas of discussion. A section explaining gaps in research provides the foundation for the literature review. The second section, Theoretical Frameworks, details aspects and concerns of regulatory, review and decision-making processes for LNG development through the lens of procedural justice. The next section, Context and Significance, establishes the sequence of events and

implications of each step in the LNG facility public review process. Finally, the last section, Conclusion, will reiterate the key points of this report and summarize its findings as well as implications thereof.

II. Theoretical Frameworks

Environmental policy refers to an array of decision-making processes affecting where people live, work, play and go to school, and includes decision making tools like EIS as described in environmental laws like the 1970 National Environmental Policy Act (NEPA) and Washington's SEPA (Kuehn, 2000, p. 10683; Morrell, 2013, p. 93). In general, there are five stages of the EIS public comment process, the ultimate goal of which is to solicit, analyze and respond to public input, and reflects how public participation for the EIS process is described under NEPA (Morrell, 2013, pp. 93–94).

The implementation and outcomes of environmental policy do not necessarily reflect principles of environmental justice. Politics differs from policy in that rather than relying upon legislative processes like laws and policies made by decision-makers, politics involves analyzing expressions and dynamics of structural power and oppression. While policy might focus on consistency between standards and criteria required by law, politics is concerned with the actual social, cultural, historical, geographic and economic, but not necessarily legal, outcomes that are actually produced. Some scholars offer frameworks like environmental justice to evaluate decision-making implications and outcomes, and include political standards based on distributive, procedural, corrective and social justice (Kuehn, 2000, pp. 10684–10699). While policy-based definitions of environmental justice lack specificity regarding outcomes and focus on distributive and legal criteria, political approaches require environmental justice to meet specific

outcomes that look beyond distributive and legal dimensions to examine social power relationships across cultural, historical and other mediums to include recognition justice, in addition to the political standards of environmental justice, mentioned above (Kuehn, 2000, p. 10683; Ottinger et al., 2014, pp. 664–666). Recognition justice essentially considers how different ideas are represented in relation to one another (Whyte, 2011, p. 200).

While NEPA mandates public review by soliciting public comment during the EIS process, environmental justice scholars evaluated public participation utilizing various criteria of procedural justice, including accessibility, recognition, influence and equity-based standards (Kuehn, 2000, pp. 10688–10692; Ottinger et al., 2014, p. 663). The public comment period is based upon a more adversarial, pluralistic or participatory model which favors technocratic language, rather than a more inclusive deliberative model (Morrell, 2013, pp. 102–104; Ottinger et al., 2014, p. 664), because it is designed to consider public participation through written and oral comments based on a draft EIS, which are then submitted to a designated EIS agency's appointed technical and scientific experts during a public comment period of at least 45 days (Morrell, 2013, pp. 94–101).

Procedural justice essentially considers the extent to which affected communities are able to participate in decision making processes, and in what ways. How procedurally just a decision-making process is influences public perceptions of distributive justice outcomes (Kuehn, 2000, p. 10688). Furthermore, the overall political justice of procedural equity in decision-making processes relies upon recognition of social power structures to ask questions about the implementation of the process and if the communities that are impacted by a policy agree in advance about how the process will

be structured and carried out, as well as asking questions about if the process is designed in a way that inherently favors one side over another (Kuehn, 2000, pp. 10688–10692; Ottinger et al., 2014, pp. 663–664). Though even if a process if fair it might still produce disproportionate outcomes, so procedural justice is only one element of environmental justice, more generally (Kuehn, 2000, p. 10692). For example, one disproportionate outcome could be if a distribution of toxic waste was more geographically concentrated in historically black and low-income neighborhoods than in more affluent and predominantly white neighborhoods; this environmentally unjust outcome could still be produced even if the decision-making process was perfectly ideal in terms of procedural justice. An analysis of how agencies administer a public review process can help to determine how procedurally just a process is. Three criteria for a participatory process to be considered just are accessibility, recognition and influence (Ottinger et al., 2014, p. 663).

When considering environmental justice in the context of tribal sovereignty, some scholars have noted that distributive, procedural and corrective justice are each important for tribes (Whyte, 2011, pp. 200–205). Such elements of environmental justice rely upon standards of recognition justice, with special attention to the situational particularities and environmental heritages of sovereign nations (Whyte, 2011, pp. 200–205). Because all Indigenous nations/tribes are not monolithic, the distinct differences between Indigenous cultures, histories and so on are called situational particularities (Whyte, 2011, p. 200). Similarly, environmental heritages refers to specific relationships between people and place, or "environmental identity" which includes things such as traditional food sources, building materials, and so on that are culturally specific to place (Whyte, 2011, p. 202).

In addition, an environmental justice analysis of tribal sovereignty needs to critically examine the historical, geopolitical and economic contexts of colonization because environmental justice depends on the sovereign capacity of tribal nations to have options available to choose from, which are structurally limited through specific situational contexts of colonization (Ishiyama, 2003, pp. 135–136).

To further complicate this issue, the Port of Tacoma is an independent port agency, which operates almost as if it is its own city (US EPA, 2016). While treaties between nations might regulate ports and their marine traffic to some extent, in terms of jurisdiction, the essential difference between a city and an independent port may be complicated to sort out because of their governing statuses are so similar (US EPA, 2016). In general, consultation refers to official coordination between tribal and nontribal (i.e. federal, state, and local) government entities (Executive Office of the President, 2000). Consultation is distinct from and not included in the public review process described under NEPA (Kuehn, 2000, p. 10683; Morrell, 2013, p. 93). While not legally enforceable, tribes are supposed to be able to set their own standards for what consultation means (Executive Office of the President, 2000, Section 3 C 2), and each SEPA agency is supposed to specifically define what their consultation process is and assign an official to make sure there is an accountable, meaningful and timely consultation process (Executive Office of the President, 2000, Section 5 A). Beyond that, agencies are also directed to consult with tribes to negotiate consensual rules (Executive Office of the President, 2000, Section 5 D), and when an agency submits any "final draft regulation," it is supposed to be certified by a "designated official" for accountability (Executive Office of the President, 2000, Section 7 A). Finally, even independent

agencies (like the Port of Tacoma) are encouraged to comply with these standards (Executive Office of the President, 2000, Section 8; US EPA, 2016).

While these theoretical frameworks provide a basis for what standards might describe how an ideal public review process is supposed to be structured and implemented in terms of procedural justice, they do not necessarily reflect how that process is actually carried out. The City of Tacoma began an EIS public review process on September 12, 2014 (City of Tacoma, 2015, p. 1). The public comment period closed on October 13, 2014 and lasted 31 days (City of Tacoma, 2015, p. 1). In terms of procedural justice, Morrell (2013) suggested that an accessible public comment period should remain open for at least 45 days (p. 94). The City of Tacoma held a public comment period for the 2015 EIS that closed 14 days earlier than recommended, and originally received only eight written public comments (City of Tacoma, 2015, p. 1; Morrell, 2013, p. 94).

III. Context and Significance

LNG development is expected to increase dramatically over the next 20 years (Grigas, 2017). Ongoing expansion of LNG infrastructure in the Pacific Northwest, as observed through current LNG projects sited in British Columbia and Oregon, is contentious because of the region's role as a stronghold against fossil fuel development over the past decade (Gurewitz, 2018; Powell, 2016, 2018).

Puyallup Tribal Council member Annette Bryan asserted that the Puyallup Tribe was not consulted about the project, and legal researcher Tarika Powell called the process for the project "the worst [State Environmental Policy Act] SEPA review [she had] ever seen." (Gurewitz, 2018). This is especially concerning because researchers, including

Powell, have identified the Puyallup Tribe as a disproportionately impacted frontline community that are targeted for development because of their limited capacity to dispute project sitings (Grigas, 2017; Gurewitz, 2018; Powell, 2016).

What disproportionate impacts facing frontline communities are these researchers referring to? The reason that development has disproportionately impacted the Puyallup Tribe is because the consequences of development affect the tribe in different ways than non-tribal communities are affected, while the benefits of development are materially distributed to non-tribal private corporations more than to tribal ones (Tacoma Daily Index, 2018). For instance, economic gains are enjoyed by non-tribal fossil fuel refineries in the Puyallup Estuary (Powell & de Place, 2016; Tacoma Daily Index, 2018), but water pollution from those fossil fuel refineries negatively impact habitat quality for salmon (Feist et al., 2017, p. 2392; Scholz et al., 2011, pp. 10-11; Tacoma Daily Index, 2018); Puyallup people culturally, economically and spiritually depend on salmon, whereas non-tribal communities do not have the same relationship with salmon, and therefore tribal and non-tribal communities are affected differently (Deloria Jr., Frank Jr., & Pavlik, 2012, pp. 4–12; Douglas, 2017, pp. 67–68; Guilmet & Whited, 1987, pp. 39– 42; Tacoma Daily Index, 2018; Wilkinson, 2006, pp. 37–42). This argument is simplistic in order to introduce connections for a richer explanation of how development has disproportionately impacted the Puyallup Tribe. In his own words, Chairman Bill Sterud shared that:

The Puyallup Tribe is one of the most urban reservations in the country. We know intimately the effects of industry and development on our culture. So we must balance city living with the need to protect the way of life our ancestors practiced before freeways and industry transformed our land. Coast Salish tribes have always moved through the region along the water, and we are dedicated to

practicing this ancient tradition. Reclaiming our traditions is a commitment we practice every day to make sure that our children, and their children, can enjoy these waters after we are gone. Today, the tips of our canoes touch the sand of beaches polluted by chemicals from upstream contamination. These same pollutants poison our tide flats and seep into our shellfish beds. Just like tribes across the nation, we live with the result of declining fish supply as salmon habitat gets degraded and salmon passage is blocked by roads. With every new development, like the Liquid Natural Gas plant, we are faced with a battle to protect our waters, our lifeforce, and our medicine. We gather with our fellow tribes during the journey to honor and celebrate our shared bond. We are all working to preserve the ways, lands, and waters of our ancestors. And we do this because it is sacred to us. So, as our natural resources are being depleted, and our waters are being threatened by continued spread of industry on our shorelines, we will gather in a ceremony to honor the medicine of the Salish Sea and all the waters we rely on (Tacoma Daily Index, 2018).

Sterud's statement provides a powerful explanation of how development has disproportionately impacted the tribe.

This thesis evaluates governmental decisions influencing the siting of an LNG facility in the Puyallup Estuary, in order to find out how the project's EIS and public review processes include participation of locally impacted communities. This contributes to an understanding of how the implementation of Washington's SEPA public review requirements may be improved to produce better procedural and environmental justice outcomes. In addition, this work supports environmental justice and public policy scholarship, because one unique aspect of this project is that it applies a procedural justice framework to analyzing a public review process within the context of overlapping jurisdictions in the Puyallup Estuary, including the Puyallup Tribe, Port of Tacoma and City of Tacoma (Dunkelberger, 2018b; Executive Office of the President, 2000; Powell & de Place, 2016; United States. Congress. House. Committee on Interior and Insular Affairs., 1989; US EPA, 2016).

Chapter Three: Methods

I. Introduction

This research will evaluate the policy process for siting an LNG facility in the Puyallup Estuary, in order to find out how the project's EIS and public review processes include participation of locally impacted communities in terms of access, recognition and influence. Informed by Ottinger et al. (2014), this research seeks to contribute to an understanding of how SEPA implementation might be improved to produce better procedural justice outcomes. The research question guiding this study is "how procedurally just is this EIS public review process?" Ultimately, the controversy over the siting of this LNG facility reveals flaws in the public review process. For instance, one of these flaws is exemplified through the obstruction of public participation resulting from failures to inform the public about official SEPA determinations in the review process for the EIS (Native Daily Network, 2018a). This investigation will offer suggestions for ways that public review processes might better promote principles of procedural justice while reducing conflict over agency decisions.

Drawing from Ottinger et al. (2014)'s study in the context of Tarika Powell's extensive research of the siting process specific to this LNG facility, this research examines existing records and documents pertaining to the EIS process. Overall, the purpose of this work is evaluating to what extent and in what ways procedural justice is operationalized in the policy process for siting an LNG facility in the Puyallup Estuary. This research will rely upon a qualitative coding case study design to analyze public comment data pertaining to the policy process for siting an LNG facility in the Puyallup Estuary. A second data set of public reporting data will be used for comparison as a

standard to validate the analysis of public comments and agency responses against. This study design will enable questioning focused around which qualities of the policy process support and impede procedural justice. More specifically, use of qualitative methods will focus on analyzing public comments to the draft 2015 EIS, agency responses to public comments, and public reporting on the process. The term public reporting data refers to a convenience sample of newspaper articles and articles of independent research that represent public discourse on the siting of the LNG facility. These public reports can be considered as an informal process parallel to the public comments submitted the formal review process and allows for comparison. A case study approach through qualitative coding is justified because the subject being evaluated is a process.

Similar to Thorkildsen (2018), the methods of this thesis will rely upon ATLAS.ti software to code public comment and reporting data for qualitative analysis. The selected data will be coded and analyzed using the six deductive codes. As a measure of access, the openness of public participation opportunities in the public review processes as a measure of access will be evaluated. Openness refers to socially equitable qualities of design and implementation, such as accommodations for citizens who work hours outside of 9:00 AM TO 5:00 PM on weekdays. Measure of recognitions will be evaluated based on agency engagement with public comments. Similarly, measure of influence will be interpreted through agency revisions to FEIS. Public reporting on the process will be analyzed as an informal parallel to the official review process.

In overview, the methods of this thesis begin with developing a deductive coding scheme drawing from Ottinger et al. (2014) to evaluate aspects of access, recognition and influence in EIS process. Positive and negative indicators will form classifiers for each

of the three categories, resulting in a total of six deductive codes, using definitions and examples for each based in Ottinger et al. (2014). Two sets of data will then be selected for analysis. The selection will be limited to textual data, and public reporting data will be limited to time-frame of public review process. Selected data will then be coded using the top-down approach shown above and by actor groups. The data will then be processed to allow inductive codes to emerge (i.e. aspects of procedural justice more broadly – not limited in terms of access, recognition and influence). Finally, the selected data will be analyzed using co-occurrence tables for thematic patterns and responses across author groups.

II. Data

This study analyzed two sets of data. The public comments and agency responses for the 2015 EIS compose the first set of selected data. Public reporting data was also analyzed as a second set of data to use as an informal parallel to the official review process.

All selected data was limited to textual data only. To reiterate, only written comments submitted in response to each of the two draft EIS were included in the first data set — this does not include any spoken public comments that were shared at public hearings in response to the 2015 draft EIS. Public reporting data was limited based on a time frame from the beginning of the 2015 EIS to the end of the 2019 EIS, which marks the end of the public review process. The 2015 EIS public review process was initiated on September 12, 2014 (City of Tacoma, 2015, p. 1). The 2019 SEIS was released on March 29, 2019, and because its publication was delayed from early February 2019 it was

not possible to include in data analysis for this thesis (Puget Sound Clean Air Agency, 2019).

One problem with selecting samples for the first set of data was that some public comments and corresponding agency responses could not be interpreted in terms of access, recognition or influence, as each of the six codes are defined through Ottinger et al. (2014). Public comments that were inconclusive in these terms are counted as the total population sizes of the EIS public comments in the first set of data, but are excluded from the selected sample for coding and analysis.

In terms of population size, a total of 27 written public comments were submitted to the 2015 EIS (City of Tacoma, 2015, p. 382). Of these, 16 public comments could not be interpreted in terms of any one of six access, recognition or influence codes and were categorically excluded from the selected data sample. This means that the sample size was 11 written public comments for the 2015 EIS. From these 11 public comments, 101 quotations including remarks from the public comments themselves as well as agency responses paired to those public comments met the definitions for one or more of the six deductive codes.

The second set of data was selected following this scheme. Only public reporting data dated up to the March 29 release of the 2019 SEIS that explicitly referred to the public review process for the LNG facility and could be interpreted in terms of access, recognition or influence were included in the selected data. The sample size for this second data set was 44 textual sources containing 183 quotations.

III.Coding

Six deductive (top-down) codes were drawn out from Ottinger et al. (2014), including positive and negative codes for each of three measures of procedural justice — these are access, recognition and influence. The codes that resulted are Access-Positive, Access-Negative, Recognition-Positive, Recognition-Negative, Influence-Positive and Influence-Negative. Some differences between the ways Ottinger et al. (2014) defined these codes are subtle. This section relies upon strong use of quotations to accurately capture and represent the original meanings and specific contexts through which Ottinger et al. (2014) discussed examples of access, recognition and influence in their own words. This preserves consistency between the deductive coding scheme used in this research and the original definitions of these three measures of procedural justice as they were described in Ottinger et al. (2014).

The first two of these codes are concerned with the procedural justice aspect of access. Ottinger et al. (2014) defined access through the passage "indicators of the accessibility of the processes, especially numbers of residents submitting comments and signing up to speak at public meetings," suggesting that access is measured through public participation (p. 664). Examples of access in the study included making the review process as accessible as possible in terms of social equity, such as "holding one set of hearings during the day and another in the evening, when people with full-time jobs would be able to attend" (Ottinger et al., 2014, pp. 665–666). Access was also exemplified through opening up the public review process to public participation in terms of social representation, for example "the county in which a facility is proposed may appoint a representative to [the lead agency] for consideration of the facility's application

– increasing the likelihood that local issues will be recognized and taken into account" (Ottinger et al., 2014, p. 665). These examples of access are considered positive indicators for access which are denoted using the code Access-Positive.

Conversely, Ottinger et al. (2014) also provided examples of lack of access, including parts of the review process that were not open to public participation, such as "the prescribed process for appealing decisions . . . in which the decision body's deliberations are closed" (p. 665). Similarly, lack of access was exemplified through prohibiting public participation, for example "residents who sought to bring such issues to the council's attention were barred from doing so" (Ottinger et al., 2014, p. 666). Another example of lack of access included informal review processes, such as "optional pre-application conferences in which they may engage in informal discussion with county officials about relevant county rules and procedures" (Ottinger et al., 2014, p. 665). These examples of lack of access are considered negative indicators for access which are denoted using the code Access-Negative.

The procedural justice aspect of recognition also forms two of the six deductive codes. Recognition was defined by Ottinger et al. (2014) as "public officials [who] and engaged with the substance of residents' input" (p. 664). This suggests that recognition is measured through the meaningful engagement of an agency with public input. Examples of recognition included an agency giving open-minded consideration to public comments, such as "commissioners striving to make sure they consider the full range of issues raised by residents" (Ottinger et al., 2014, p. 666). Recognition was also exemplified through the good-faith affirmation public input by an agency. For example "even as he questioned opponents' claim . . . County Commissioner Bruce Coe affirmed the relevance

of residents' comments to the county's ultimate decision" (Ottinger et al., 2014, p. 666). These examples of recognition are considered positive indicators which are denoted using the code Recognition-Positive.

Alternatively, the quality of an agency's dismissiveness of public input in the previous example marks an example of lack of recognition. Ottinger et al. (2014) shared other examples of lack of access, including the inattentiveness of an agency to listen to public input (p. 666). Lack of recognition was also exemplified through refusal of agency to consider public comments. For instance, "allowing decision-makers to refuse to recognize community perspectives if they weren't within the scope of the issues as defined by experts" (Ottinger et al., 2014, p. 666). These examples of lack of recognition are considered negative indicators for recognition which are denoted using the code Recognition-Negative.

Finally, two codes are also formed in terms of the procedural justice aspect of influence. Ottinger et al. (2014) defined influence through "evidence . . . that decision-makers changed, adjusted, or even nuanced their positions as a result of public participation" (p. 664). Examples of influence also included the openness of an agency to be change its position or be swayed by public comments, such as "citizen participation influenced the decisions of Kittitas County Commissioners, while [officials] were unswayed" which establishes a contrast between potential for influence and a lack of openness of an agency to being swayed (Ottinger et al., 2014, p. 666). While the ultimate decisions of an agency were also interpreted in terms of influence, the quality of an agency remaining undecided on an issue also exemplified influence. For example "Planning Commissioner David Black [went] so far as to state at one point during the

process that he was still undecided: 'Whether it's . . . essential or not, I haven't totally made up my mind'" (Ottinger et al., 2014, p. 666). Similarly, another example of influence included the quality of an agency giving weight to public input. For example, "while head counting is not an appropriate way to come to a decision in a quasi-judicial process, the statements of those testifying must be ascribed comparative weight in our decision making process" (Ottinger et al., 2014, p. 666). These examples of influence are considered positive indicators for influence which are denoted using the code Influence-Positive.

In contrast, Ottinger et al. (2014) also shared examples of lack of influence, including which public input is and is not given comparative weight by an agency. For example, "the hearing process embodies a classic pluralistic model, in which individual stakeholders argue for their interests in front of a decision-making body which will weigh them," and since this weight is interpreted in terms of influence, public comments that are not given weight relative to other public comments exemplify lack of influence (Ottinger et al., 2014, p. 665). Lack of influence was also exemplified by an unwillingness to be swayed, which might be thought of as a predetermined quality to the review process. For instance:

a predetermined inability for public comments to influence the Council's final recommendations. Simply put, it appears that state officials' minds were made up prior to soliciting public input. One interviewee told us that the state's Assistant Attorney General had visited her home and said of the . . . project that "it wasn't a question of 'if', it was 'when'". From this, she concluded that opposed residents had very little chance of stopping its siting . . . State decision-makers justified their refusal to be swayed by local opposition by invoking a greater good. According to the interviewee, "what the Assistant [Attorney] General told us is that it's for the good of the state and of the country. It doesn't matter that this county is the one that's impacted; it's for the overall good". This logic was echoed by State Representative Bill Hinkle in an email to Kittitas County resident Mike

Robertson: "If sighting [sic] of energy facilities were subjected to the County process solely throughout the State, we would never see any expansion of the power infrastructure in this State" (Ottinger et al., 2014, p. 666).

These examples of lack of influence are considered negative indicators for influence which are denoted using the code Influence-Negative.

Beyond these six deductive codes, data was also coded by actor groups (i.e. entity submitting public comment). These groups are denoted using codes that begin with the prefix Actor- followed by the abbreviated name of the group. For example, Actor-ECY denotes public comments submitted by the Washington State Department of Ecology. In addition to actor groups, themes of content were also coded. These themes are denoted using codes that begin with the prefix Theme- followed by one word summarizing the substance of the content. For example, Theme-Safety denotes any remarks relating to risk analysis, safety exclusion perimeters, public health impacts and vapor dispersion and thermal radiation modeling for the LNG facility.

Selected data was then processed to allow inductive codes to emerge in relation to procedural justice more broadly, and not limited in terms of access, recognition and influence.

IV. Analysis

Selected data was then analyzed using co-occurrence tables in ATLAS.ti to examine procedural justice patterns across actor groups and themes. Analysis of public discourse in a convenience sample of public reporting data was used as an informal parallel to the analysis of access, recognition and influence in public comments and agency responses in the official public review process.

Chapter Four: Results

I. Introduction

A primary set of data including the public comments and agency responses for the 2015 EIS was coded using a deductive scheme based on access, recognition and influence as defined through examples in Ottinger et al. (2014), as well as by actor groups and themes. A convenience sample of public reporting data was coded as a second set of data from which to set an informal standard of public discourse. Co-occurrence tables were used to examine aspects of procedural justice in the public review process by actor groups and themes.

All selected data was limited to textual data only. To reiterate, only written comments submitted in response to the 2015 EIS were included in the primary data set this does not include any spoken public comments that were shared at public hearings in response to the 2015 draft EIS. One problem with selecting samples for the first set of data was that some public comments and corresponding agency responses could not be interpreted in terms of access, recognition or influence, as each of the six codes are defined through Ottinger et al. (2014). Public comments that were inconclusive in these terms are counted as the total population sizes of the EIS public comments in the first set of data, but are excluded from the selected sample for coding and analysis. Therefore, only samples that could be interpreted using the deductive scheme are represented in these results.

Six deductive (top-down) codes were drawn out from Ottinger et al. (2014), including positive and negative codes for each of three measures of procedural justice these are access, recognition and influence. As a measure of access, the openness of public participation opportunities in the public review processes as a measure of access was evaluated. Openness refers to socially equitable qualities of design and implementation, such as accommodations for citizens who work hours outside of 9:00 AM TO 5:00 PM on weekdays. Recognition was evaluated based on agency engagement with public comments. Similarly, influence was interpreted through agency revisions to FEIS. The codes that resulted are Access-Positive, Access-Negative, Recognition-Positive, Recognition-Negative, Influence-Positive and Influence-Negative. Beyond these six deductive codes, data was also coded by actor groups (i.e. entity submitting public comment). These groups are denoted using codes that begin with the prefix Actorfollowed by the abbreviated name of the group. For example, Actor-ECY denotes public comments submitted by the Washington State Department of Ecology. In addition to actor groups, themes of content were also coded. These themes are denoted using codes that begin with the prefix Theme- followed by one word summarizing the substance of the content. For example, Theme-Safety denotes any remarks relating to risk analysis, safety exclusion perimeters, public health impacts and vapor dispersion and thermal radiation modeling for the LNG facility.

Table 1: Code definitions table		
Code	Definition	
Access-Positive	This is used for denoting access code indicators (i.e. examples	
	of access).	
Access-Negative	This is used for denoting access code negative indicators (i.e.	
	lack of access).	
Recognition-Positive	This is used for denoting recognition code indicators (i.e.	
	examples of recognition).	

Recognition-Negative	This is used for denoting recognition code negative indicators
	(i.e. lack of recognition).
Influence-Positive	This is used for denoting influence code indicators (i.e. examples of influence).
Influence-Negative	This is used for denoting influence code negative indicators
	(i.e. lack of influence).
Actor-350T	350 Tacoma
Actor-CER	Clean Energy Report
Actor-CHB	Citizens for a Healthy Bay
Actor-CITY	City of Tacoma
Actor-CQCT	CQ Congressional Testimony
Actor-CRC	Crosscut
Actor-DN	Democracy Now!
Actor-ECY	Washington State Department of Ecology
Actor-EPA	United States Environmental Protection Agency
Actor-HCN	High Country News
Actor-IWPN	Inside Washington Publishers news
Actor-K5	King 5 news
Actor-NDN	Native Daily Network
Actor-NTNC	Northeast Tacoma Neighborhood Council
Actor-NWTT	Northwest Treaty Tribes
Actor-OLY	The Olympian newspaper
Actor-PBD	The Pak Banker Daily
Actor-PORT	Port of Tacoma
Actor-PSE	Puget Sound Energy
Actor-PTOI	Puyallup Tribe of Indians
Actor-SI	Sightline Institute
Actor-SNS	States News Service
Actor-ST	The Seattle Times
Actor-TNS	Targeted News Service
Actor-TNT	The News Tribune
Actor-TW	Tacoma Weekly
Actor-UPS	The Trail newspaper at University of Puget Sound
Actor-USON	US Official News
Actor-WSDOT	Washington State Department of Transportation
Theme-Aesthetics	This code is used to denote remarks relating to the aesthetics
	of the LNG facility, including viewshed, light and noise
	pollution.
Theme-Artifacts	This code is used to denote remarks relating to cultural
	resources and artifacts of the Puyallup Tribe.
Theme-Consultation	This code is used to denote remarks regarding project-related
	consultation and coordination with Indian tribal governments
	as described in Executive Order 13175.
Theme-Coordination	This code is used to denote remarks relating to coordination
	between non-tribal government agencies.

Theme-Disclosure	This code is used to denote remarks relating to requests for disclosure or sharing of documentation, references, data, reports, and other types of information relating to the LNG facility, but does not include the category of general proofreading of draft EIS or suggesting revisions for agency to make to FEIS (i.e. as contained within the code Theme- Revisions).
Theme-Economy	This code is used to denote remarks relating to the expected human economic and financial impacts of the LNG facility, in general, but not within the category of jobs and employment, specifically.
Theme-Ecosystem	This code is used to denote remarks relating to protection, mitigation and conservation of fish and wildlife habitat quality and non-human ecosystem function, more generally.
Theme-Emissions	This code is used to denote remarks relating to air quality, atmospheric pollution and greenhouse gas emissions.
Theme-Hazards	This code is used to denote remarks relating to hazards such as climate change, sea level rise, earthquakes, soil liquefaction and terrorist attacks, inter alia, as they relate to the potential impacts on the structural and operational integrity of the LNG facility.
Theme-Location	This code is used to denote remarks relating specifically to the surrounding geographic context of selected site location for the LNG facility.
Theme-Pollution	This code is used to denote remarks related to soil, sediment and water contamination in the context of point-source pollution, but does not include remarks within the category of atmospheric emissions, such as greenhouse gas outputs.
Theme-Process	This code is used to denote remarks specifically directed toward the scope and implementation of the decision-making and policy process guiding the EIS overall, such as informal "rules" that determine what tests and standards are considered relevant to include in the EIS, rather than on what specific regulations and standards the project applicant should adhere to concerning the LNG facility, itself.
Theme-Regulations	 This code is used to denote remarks relating to the required or suggested project mitigation measures, rules, regulations, permits, and overall standards for the siting, design, construction and operation of the LNG facility.
Theme-Revisions	This code is used to denote remarks within the category of general proofreading of draft EIS that suggest revisions for the agency to make to FEIS, but does not include the category of requests for disclosure of information (i.e. as contained within the code Theme-Disclosure).
Theme-Safety	This code is used to denote remarks relating to public safety concerns specific to human health and welfare.

Theme-Structure	This code is used to denote remarks relating to the overall construction, design and technical specifications of the LNG facility.
Theme-Traffic	This code is used to denote remarks relating to vehicle traffic and road maintenance, as well as requested improvements to rail and other transportation infrastructure.
Theme-Violence	This code is used to denote remarks relating to (social) structural violence, such as colonization and white supremacy. Comments that identify disproportionate social impacts with the implication of environmental racism or other types of social violence in general will be signified using this code.

Table 1: Code definitions table

II. 2015 EIS

In terms of population size, a total of 27 written public comments were submitted to the 2015 EIS (City of Tacoma, 2015, p. 382). Of these, 16 public comments could not be interpreted in terms of any one of six access, recognition or influence codes and were categorically excluded from the selected data sample. This means that the sample size was 11 written public comments for the 2015 EIS. From these 11 public comments, 101 quotations including remarks from the public comments themselves as well as agency responses paired to those public comments met the definitions for one or more of the six deductive codes. Comprehensive tables of the results from the 2015 EIS data set are detailed in Appendix A.

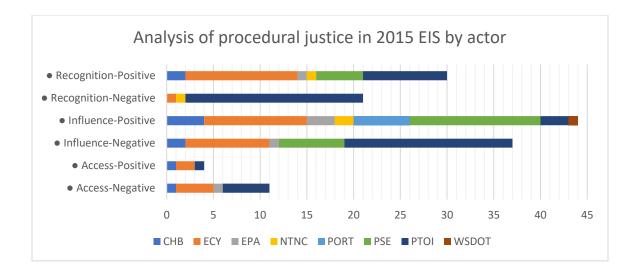


Figure 1: Analysis of procedural justice in 2015 EIS by actor

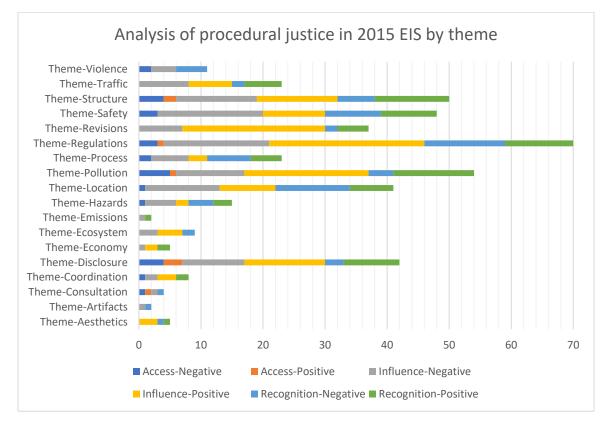
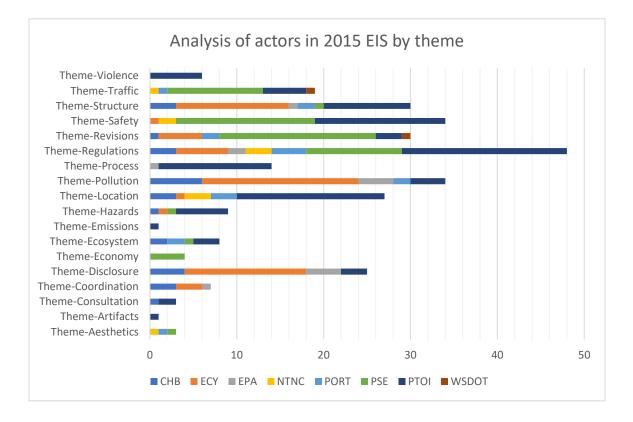


Figure 2: Analysis of procedural justice in 2015 EIS by theme





Access-Positive Results

Four quotations from three actors discussing five themes in the 2015 EIS public comments and agency responses were coded as Access-Positive. The Puyallup Tribe of Indians (Actor-PTOI) thanked the City of Tacoma for beginning "government-togovernment . . . discussions" (Theme-Consultation) for the project, which was interpreted as evidence of accessibility in the review process (Access-Positive) (City of Tacoma, 2015, p. 492). Another commenter, Citizens for a Healthy Bay (Actor-CHB) asked for "more information and assessment of the potential for encountering [contamination] during . . . construction" (Theme-Disclosure, Theme-Pollution, and Theme-Structure), and the City of Tacoma responded by meaningfully engaging with the comment (Recognition-Positive), providing the requested information (Access-Positive), and making changes to the FEIS (Influence-Positive) (City of Tacoma, 2015, p. 513).

The last two Access-Positive quotations are from a comment submitted by the Washington State Department of Ecology (Actor-ECY), "[requesting] a copy of [a] report," and "[asking] how many [permits] will be applied for and whether [pipelines] that go beyond the Port of Tacoma will apply for separate [permits]," (Theme-Disclosure, Theme-Regulations and Theme-Structure), which the City of Tacoma responded to by engaging with the comment (Recognition-Positive), releasing a copy of the report and providing the requested information (Access-Positive) and making changes to the FEIS (Influence-Positive) (City of Tacoma, 2015, pp. 400–402).

II.I Access-Negative Results

Conversely, the Access-Negative code for the public comments and agency responses of the 2015 EIS included 11 quotations from four actors discussing 11 themes. The Environmental Protection Agency (Actor-EPA) thanked the City of Tacoma "for [a] conversation . . . about the . . . project and associated [DEIS]," (Theme-Coordination and Theme-Process) which was interpreted as evidence of an informal review process (Access-Negative) (City of Tacoma, 2015, p. 384). In another comment, Actor-CHB calls for "additional information and assessment of the potential for [construction] to [pollute water]" (Theme-Disclosure and Theme-Pollution), which the City of Tacoma responds to by stating that references to a closed review process will be added to the FEIS, but does not disclose the requested information (Access-Negative and Influence-Positive) (City of Tacoma, 2015, p. 513).

There were five Access-Negative quotations from two comments submitted by Actor-PTOI, where the commenter discussed Theme-Consultation, Theme-Violence, Theme-Regulations, Theme-Process, Theme-Hazards, Theme-Location and/or Theme-Safety, which were interpreted as Access-Negative, Recognition-Negative and/or Influence-Negative because the City of Tacoma failed to recognize or respond to the Puyallup Tribe's comments pertaining to consultation, was dismissive and unwilling to consider concerns as credible, referred to undisclosed data and closed review processes, and/or had already reached a decision on the issues prior to receiving the comments (City of Tacoma, 2015, pp. 433–505). For example, at response three to comment 21, Actor-PTOI calls for more adequate security planning against terrorist threats (Theme-Hazards, Theme-Process and Theme-Regulations), which was interpreted as Access-Negative, Recognition-Negative and Influence-Negative because the City of Tacoma's response referred to closed review processes, was dismissive and unwilling to consider the comment as credible (City of Tacoma, 2015, p. 438).

Finally, one comment from Actor-ECY contained four Access-Negative quotations discussing Theme-Structure, Theme-Pollution and/or Theme-Disclosure, which were interpreted as Access-Negative, Recognition-Positive and/or Influence-Negative because the City of Tacoma refused to make changes to FEIS, referred to closed review processes, and/or denied requests for information (City of Tacoma, 2015, pp. 399–403). For example, at response 19 to comment eight, Actor-ECY requested information pertaining to stormwater management (Theme-Disclosure, Theme-Pollution and Theme-Structure), which was interpreted as Access-Negative, Recognition-Positive and Influence-Negative because the City of Tacoma's response referred to closed review

processes, meaningfully engaged with the comment and refused to make changes to the FEIS (City of Tacoma, 2015, p. 403).

II.II Recognition-Positive Results

The 2015 EIS contained 30 quotations from six actors discussing 14 themes that were coded as Recognition-Positive. Actor-ECY submitted one comment containing 12 Recognition-Positive quotations discussing Theme-Coordination, Theme-Location, Theme-Regulations, Theme-Structure, Theme-Disclosure, Theme-Pollution, Theme-Revisions, Theme-Safety and/or Theme-Hazards, which were interpreted as Recognition-Positive, Access-Positive, Access-Negative, Influence-Positive and/or Influence-Negative because the responses from City of Tacoma noted and meaningfully engaged with the comment, refused to make to make changes to FEIS, released requested information, agreed to make changes to FEIS and/or referred to closed review processes (City of Tacoma, 2015, pp. 398–404). For example, one quotation that was most characteristic of this set was at the ninth response for the eighth comment, the Department of Ecology called upon the City of Tacoma to account for cleaning up contamination at the site, and the City of Tacoma responded that toxic materials encountered during construction would be mitigated, but refused to address any contamination beyond the project footprint, which was interpreted as Recognition-Positive and Influence-Negative because the agency refused to make changes to FEIS but noted and engaged with the comment (City of Tacoma, 2015, p. 399).

Actor-PTOI submitted two comments containing nine Recognition-Positive quotations discussing Theme-Hazards, Theme-Traffic, Theme-Emissions, Theme-Safety, Theme-Regulations, Theme-Location, Theme-Process and/or Theme-Structure, which

were interpreted as Recognition-Positive and/or Influence-Negative because the agency noted and/or meaningfully engaged with the comment, and/or had already reached a decision on the issue prior to receiving the comment (City of Tacoma, 2015, pp. 437–509). In one example at the fifth response to comment 21, the Puyallup Tribe noted a lack of traffic studies and called for the City of Tacoma to address project-related air quality impacts, and the City of Tacoma's response simply reiterated what was already in the DEIS, which was interpreted as Recognition-Positive and Influence-Negative because the agency engaged with comment but had already reached a decision about the issue prior to receiving the comment (City of Tacoma, 2015, p. 439).

Puget Sound Energy (Actor-PSE) submitted one comment containing five Recognition-Positive quotations discussing Theme-Regulations, Theme-Safety, Theme-Traffic, Theme-Revisions, Theme-Aesthetics and/or Theme-Economy, which were interpreted as Recognition-Positive, Influence-Positive and/or Influence-Negative because the City of Tacoma's responses meaningfully engaged with the comment, demonstrated a willingness to hear the comment out despite being technically unconvinced by it, made changes to FEIS and/or was ultimately unswayed by the comment (City of Tacoma, 2015, pp. 478–483). For example, at response 22 to comment 27, Puget Sound Energy "requests edits regarding the need for fire protection services," and although "the City of Tacoma disagrees with" and does not make "the proposed deletions," still does make changes to the FEIS in response to the comment, which is interpreted as Recognition-Positive and Influence-Positive because the City of Tacoma demonstrated a willingness to hear the comment out despite being technically unconvinced by it (City of Tacoma, 2015, p. 483).

Actor-CHB submitted one comment containing two Recognition-Positive quotations, and while one was already detailed under the Access-Positive results, the other was a response to Actor-CHB's request that the City of Tacoma work closely alongside Actor-ECY and Actor-EPA to ensure that contamination will be adequately addressed during construction (Theme-Pollution, Theme-Structure, Theme-Coordination, Theme-Location and Theme-Regulations), which was interpreted as Recognition-Positive because the City of Tacoma's response engaged with the comment (City of Tacoma, 2015, p. 513).

Another Recognition-Positive quotation in response to a comment made by Actor-EPA pointed out that different waterways have different levels of pollution and called for the FEIS to reflect this (Theme-Disclosure, Theme- Pollution and Theme-Regulations), which was interpreted as Recognition-Positive and Influence-Negative because the City of Tacoma's response meaningfully engaged with the comment but did not make changes to the FEIS (City of Tacoma, 2015, p. 386).

The final Recognition-Positive quotation in response to a comment submitted by the Northeast Tacoma Neighborhood Council (Actor-NTNC) highlighted the importance of improving fire response capacity on the Blair-Hylebos peninsula, where the project is located (Theme-Regulations, Theme-Location and Theme-Safety), which was interpreted as Recognition-Positive because the City of Tacoma's response was receptive to the comment and noted it's importance (City of Tacoma, 2015, p. 455).

II.III Recognition-Negative Results

Conversely, the Recognition-Negative code for the public comments and agency responses of the 2015 EIS included 21 quotations from three actors discussing 15 themes. Across two comments submitted by Actor-PTOI there were 19 Recognition-Negative quotations discussing Theme-Disclosure, Theme-Pollution, Theme-Structure, Theme-Artifacts, Theme-Revisions, Theme-Process, Theme-Traffic, Theme-Location, Theme-Regulations, Theme-Hazards, Theme-Ecosystem, Theme-Safety, Theme-Violence and/or Theme-Consultation, which were interpreted as Recognition-Negative, Influence-Positive, Influence-Negative and/or Access-Negative because the City of Tacoma's responses were dismissive of, unwilling to consider and did not engage with the comment, referred to closed review processes and undisclosed data, made changes to FEIS and/or had already reached a decision on the issue prior to receiving the comment (City of Tacoma, 2015, pp. 433–507). For example, one quotation at response ten to comment 21 submitted by Actor-PTOI called for more specific planning for mitigation of any pollutants encountered on-site (Theme-Location, Theme-Pollution, Theme-Process, Theme-Regulations, Theme-Revisions and Theme-Structure), which was interpreted as Recognition-Negative and Influence-Positive because the City of Tacoma's response was dismissive of and failed to engage with the comment, but did make changes to FEIS (City of Tacoma, 2015, p. 440).

Another Recognition-Negative quotation at response 21 to comment 8 submitted by Actor-ECY contended that use of certain construction methods is an important consideration in terms of potential to contaminate water quality, and called for the EIS to address these potential impacts, which the City of Tacoma responded to by denying the

credibility of the commenter's claims (Theme-Disclosure, Theme-Pollution and Theme-Structure), and was interpreted as Recognition-Negative and Influence-Negative because the City of Tacoma was not receptive to considering expert critique, had already reached a decision prior to receiving the comment and did not make changes to FEIS (City of Tacoma, 2015, p. 404).

The final Recognition-Negative quotation at response three to comment 26 submitted by the Northeast Tacoma Neighborhood Council (Actor-NTNC) expressed concerns regarding noise and light pollution produced by the LNG facility, and requested monitoring of noise levels (Theme-Aesthetics, Theme-Location and Theme-Regulations), which was interpreted as Recognition-Negative and Influence-Positive because the City of Tacoma responded to the comment by dismissing the residents concerns, but made changes to FEIS (City of Tacoma, 2015, p. 456).

II.IV Influence-Positive Results

The 2015 EIS contained 44 quotations from eight actors discussing 14 themes that were coded as Influence-Positive. There were 14 Influence-Positive quotations from one comment submitted by Actor-PSE discussing Theme-Aesthetics, Theme-Ecosystem, Theme-Traffic, Theme-Revisions, Theme-Regulations, Theme-Safety, Theme-Economy, Theme-Hazards and/or Theme-Structure, which were interpreted as Influence-Positive and/or Recognition-Positive because the City of Tacoma's responses engaged with the comment, made changes to FEIS and/or heard the comment out despite being technically unconvinced by it (City of Tacoma, 2015, pp. 476–483). For example, at response seven to comment 27, PSE "[requested] that the text regarding each entity's rights and responsibilities be revised," (Theme-Hazards, Theme-Regulations, Theme-Regulations, Theme-Revisions,

Theme-Safety and Theme-Structure), which was interpreted as Influence-Positive because the City of Tacoma responded by making changes to FEIS (City of Tacoma, 2015, p. 477).

There were 11 Influence-Positive quotations from one comment submitted by Actor-ECY discussing Theme-Coordination, Theme-Regulations, Theme-Structure, Theme-Disclosure, Theme-Pollution, Theme-Revisions and/or Theme-Hazards, which were interpreted as Influence-Positive, Access-Positive and/or Recognition-Positive because the City of Tacoma's responses made changes to FEIS based on the comment, released requested information and/or meaningfully engaged with the comment (City of Tacoma, 2015, pp. 398–404). For example, at response 17 to comment eight, Actor-ECY asked about the status and number of constructions permits for the project (Theme-Disclosure, Theme-Regulations and Theme-Structure), which was interpreted as Influence-Positive, Access-Positive and Recognition-Positive because the City of Tacoma's response meaningfully engaged with the comment, made changes to FEIS and released the requested information (City of Tacoma, 2015, p. 402).

There were six Influence-Positive quotations from one comment submitted by the Port of Tacoma (Actor-PORT) discussing Theme-Regulations, Theme-Ecosystem, Theme-Aesthetics, Theme-Location, Theme-Traffic, Theme-Structure, Theme-Revisions and/or Theme-Pollution, which were interpreted as Influence-Positive because the City of Tacoma responded by making changes to FEIS (City of Tacoma, 2015, p. 491). For example, at response 3 to comment 29, Actor-PORT "[disagreed] with the need to use a bubble curtain for driving pile under 30 inches, following the recommendations of the U.S. Fish and Wildlife Service," which was interpreted as Influence-Positive because the

City of Tacoma made changes to FEIS "to reflect that a bubble curtain may not be required per recommendations of the U.S. Fish and Wildlife Service" (City of Tacoma, 2015, p. 491).

There were four Influence-Positive quotations from one comment submitted by Actor-CHB discussing Theme-Coordination, Theme-Regulations, Theme-Location, Theme-Pollution, Theme-Disclosure and/or Theme-Structure, which were interpreted as Influence-Positive, Recognition-Positive, Access-Positive and/or Access-Negative because the City of Tacoma's responses made changes to FEIS, engaged with the comment, referred to closed review processes and/or disclosed requested data (City of Tacoma, 2015, p. 513). For example, at response two to comment 31, Actor-CHB calls for "more information and assessment of the potential for encountering [contamination] during . . . construction," (Theme-Disclosure, Theme-Pollution and Theme-Structure), which is interpreted as Influence-Positive, Access-Positive and Recognition-Positive because the City of Tacoma's responses engaged with the comment, disclosed the requested data and made changes to FEIS (City of Tacoma, 2015, p. 513).

There were three Influence-Positive quotations from one comment made by Actor-PTOI discussing Theme-Ecosystem, Theme-Safety, Theme-Revisions, Theme-Pollution, Theme-Structure, Theme-Location, Theme-Process, Theme-Regulations and/or Theme-Disclosure, which were interpreted as Influence-Positive and/or Recognition-Negative because the City of Tacoma's responses made changes to FEIS and/or were dismissive of the comment (City of Tacoma, 2015, pp. 439–440). For example, at response nine to comment 21, Actor-PTOI calls for "the [impacts] to the water, fish, or Tribal properties" to be "fully [analyzed]," inter alia (Theme-Ecosystem, Theme-

Location, Theme-Pollution, Theme-Process, Theme-Regulations, Theme-Revisions, Theme-Safety and Theme-Structure), which was interpreted as Influence-Positive because the City of Tacoma responded by making changes to FEIS (City of Tacoma, 2015, p. 439).

There were three Influence-Positive quotations from one comment submitted by Actor-EPA discussing Theme-Regulations, Theme-Pollution, Theme-Disclosure and/or Theme-Structure, which were interpreted as Influence-Positive because the City of Tacoma made changes to FEIS (City of Tacoma, 2015, p. 386). For example, at response two to comment four, Actor-EPA calls for "the EIS [to] state that [construction] will depend upon the soil and sediment quality characterization within the project area," which was interpreted as Influence-Positive because the City of Tacoma responded by making changes to FEIS (City of Tacoma, 2015, p. 386).

There were two Influence-Positive quotations from one comment submitted by Actor-NTNC — aside from one quotation that was detailed in the Recognition-Negative results, in the other Actor-NTNC expressed concerns of traffic congestion resulting from the project (Theme-Location, Theme-Regulations, Theme-Safety, Theme-Traffic), which was interpreted as Influence-Positive because the City of Tacoma responded by making changes to the FEIS (City of Tacoma, 2015, p. 456).

There was one Influence-Positive quotation from one comment submitted by the Washington State Department of Transportation (Actor-WSDOT), suggesting an update to an infrastructure project (Theme-Revisions and Theme-Traffic), which was interpreted as Influence-Positive because the City of Tacoma responded by making changes to the FEIS (City of Tacoma, 2015, p. 445).

II.V Influence-Negative Results

Conversely, the Influence-Negative code for the public comments and agency responses of the 2015 EIS included 36 quotations from four actors discussing 17 themes. There were 18 Influence-Negative quotations from two comments submitted by Actor-PTOI discussing Theme-Violence, Theme-Safety, Theme-Ecosystem, Theme-Hazards, Theme-Regulations, Theme-Location, Theme-Process, Theme-Artifacts, Theme-Revisions, Theme-Structure, Theme-Traffic, Theme-Emissions and/or Theme-Disclosure, which were interpreted as Influence-Negative, Access-Negative, Recognition-Negative and/or Recognition-Positive because the City of Tacoma's responses referred to closed review processes or undisclosed data, did not engage with the substance of the comment, had already reached a decision on the issue prior to receiving the comment, were dismissive of the comment, were unwilling to consider the concerns expressed in the comment as credible, meaningfully engaged with the comment, made changes to the FEIS and/or refused to make changes to the FEIS (City of Tacoma, 2015, pp. 437–508). For example, in response 15 to comment 30 Actor-PTOI expressed concerns that the project is sited in an area that is particularly vulnerable to an array of geological hazards (Theme-Ecosystem, Theme-Hazards, Theme-Location, Theme-Regulations and Theme-Safety), which was interpreted as Influence-Negative and Recognition-Negative because the City of Tacoma's response was dismissive had already reached a decision on the issue prior to receiving the comment (City of Tacoma, 2015, p. 508).

There were nine Influence-Negative quotations from one comment submitted by Actor-ECY discussing Theme-Disclosure, Theme-Pollution, Theme-Structure, Theme-

Location, Theme-Regulations and/or Theme-Coordination, which were interpreted as Influence-Negative, Access-Negative, Recognition-Positive and/or Recognition-Negative because the City of Tacoma's responses were not receptive to expert critique, refused to make changes to the FEIS, refused to disclose requested information, referred to closed review processes and/or meaningfully engaged with the comment (City of Tacoma, 2015, pp. 398–404). For example, at response nine to comment eight Actor-ECY called for "cleanup considerations [to] be included," such as "measures . . . to prevent releases . . . [of] contamination" (Theme-Coordination, Theme-Location, Theme-Pollution, Theme-Regulations and Theme-Structure), which was interpreted as Influence-Negative and Recognition-Positive because the City of Tacoma responded by engaging with the comment but refused to make changes to the FEIS (City of Tacoma, 2015, p. 400).

There were seven Influence-Negative quotations from one comment submitted by Actor-PSE discussing Theme-Regulations, Theme-Revisions, Theme-Safety, Theme-Traffic and/or Theme-Economy, which were interpreted as Influence-Negative and/or Recognition-Positive because the City of Tacoma was unswayed by the comment, did not make changes to the FEIS and/or meaningfully engaged with the comment (City of Tacoma, 2015, pp. 477–484). For example, at response 13 to comment 27 Actor-PSE disputes any "public health and safety risk to support reducing . . . response time to the . . . LNG Facility . . . [by] repaving . . . Taylor Way" (Theme-Economy, Theme-Safety and Theme-Traffic), which was interpreted as Influence-Negative and Recognition-Positive because the City of Tacoma's response engaged with but was unswayed by the comment (City of Tacoma, 2015, p. 479).

There were two Influence-Negative quotations from one comment submitted by Actor-CHB, one recommended that "Puyallup Tribe Water Quality Standards should be included in the list of regulations and the Project should comply with them," (Theme-Consultation, Theme-Coordination, Theme-Ecosystem, Theme-Location, Theme-Pollution, Theme-Regulations and Theme-Revisions) and another requesting "additional information discussing sea level rise and associated impacts" (Theme-Disclosure, Theme-Hazards and Theme-Ecosystem), which were both interpreted as Influence-Negative because the City of Tacoma was unswayed by the comment (City of Tacoma, 2015, p. 514).

III. Public Reporting

The term public reporting data refers to a convenience sample of newspaper articles and articles of independent research that represent public discourse on the siting of the LNG facility. Public reporting data was limited based on a time frame from the beginning of the 2015 EIS to the end of the 2019 EIS, which marks the end of the public review process. The second set of data was selected following this scheme. Only public reporting data dated up to the release of the 2019 SEIS that explicitly referred to the public review process for the LNG facility and could be interpreted in terms of access, recognition or influence were included in the selected data. The sample size for this second data set was 44 textual sources, containing 183 quotations. Comprehensive tables of the results from the public reporting data set are detailed in Appendix B.

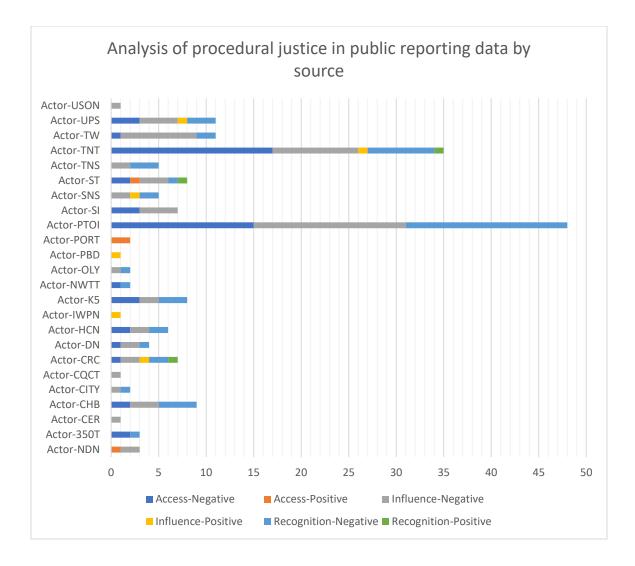


Figure 4: Analysis of procedural justice in public reporting data by source

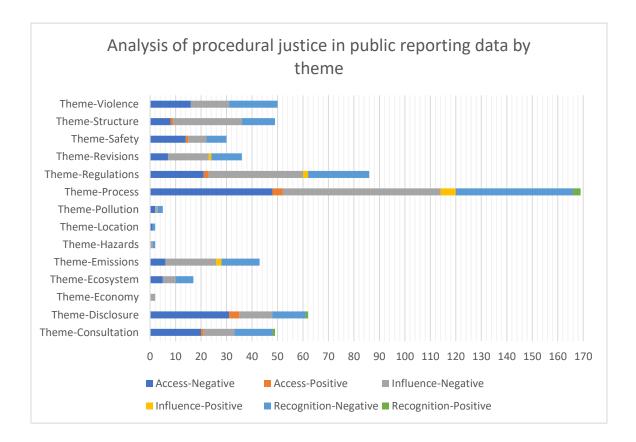


Figure 5: Analysis of procedural justice in public reporting data by theme

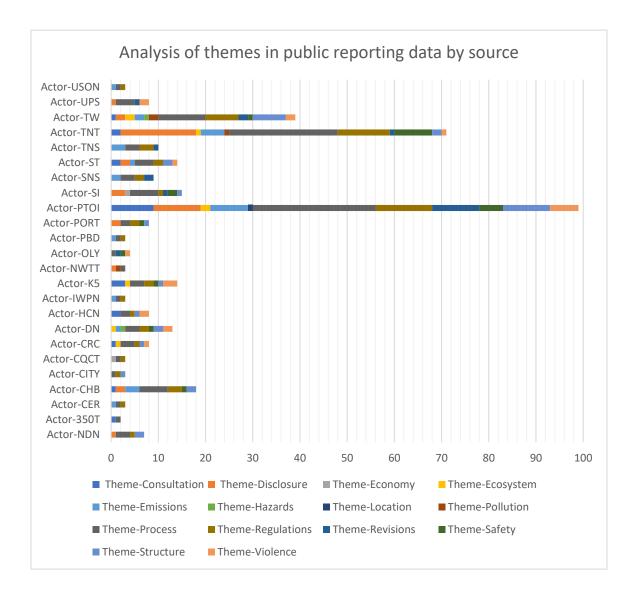


Figure 6: Analysis of themes in public reporting data by source

Access-Positive Results

Four quotations across three articles from three sources discussing six themes in the public reporting data were coded as Access-Positive (Mapes, 2018; Native Daily Network, 2018b; Port of Tacoma, 2014). Two quotations from an article reported by Actor-PORT disclosing permits and correspondence related to the notice of violation and discussing permits and federal safety standards (Theme-Disclosure, Theme-Process, Theme-Regulations, Theme-Structure and Theme-Safety) were interpreted as Access-Positive because they suggested efforts to improve public participation in the review process by making information more accessible (Port of Tacoma, 2014).

In another quotation, The Seattle Times (Actor-ST) reported that "the city has reworked its tribal consultation policy to ensure and improve early contact with tribal leaders," (Theme-Consultation, Theme-Disclosure, Theme-Process) which was interpreted as Access-Positive and Recognition-Positive because it suggested that the City of Tacoma has taken steps to make public participation in the review process more socially equitable and demonstrated a willingness to listen to concerns about lack of adequate consultation (Mapes, 2018). One quotation from an article reported by Native Daily Network (Actor-NDN) explained that "copies of . . . letters [pertaining to the project] were . . . obtained via a public records request" (Theme-Disclosure and Theme-Process), which was interpreted as Access-Positive because it suggested that information for public participation was accessible (Native Daily Network, 2018b).

III.I Access-Negative Results

Conversely, there were 53 quotations across 23 articles from 13 sources discussing 13 themes in the public reporting data that were coded as Access-Negative (350 Tacoma, 2018b; Bryan, 2018; Bryan & Malott, 2018; Cockrell, 2018; Democracy Now!, 2018; Dunkelberger, 2018; Dunkelberger, 2018a, 2018c; Hanchard, 2018; Mapes, 2018; Morrow, 2018; Northwest Treaty Tribes, 2016; Nunnally, 2016; Powell & de Place, 2016; Puyallup Tribe of Indians, 2018, 2019a, 2019b; Quirke, 2018; Ruud, 2018a; Secaira, 2019; The News Tribune, 2018a, 2018b; The Seattle Times, 2018).

There were 17 quotations from five articles reported by The News Tribune (Actor-TNT) discussing Theme-Safety, Theme-Pollution, Theme-Disclosure, Theme-Process, Theme-Regulations, Theme-Coordination, Theme-Emissions and/or Theme-Consultation, which were interpreted as Access-Negative, Recognition-Negative and/or Influence-Negative because they suggested that public participation in the review process may be limited by a lack of access to complete and accurate information about the project, that the public feels excluded from the review process by the PSCAA, that the PSCAA may not have given weight to data that does not justify permit approval for the project, that the PSCAA may have reached an ultimate decision prior to soliciting public input, that the PSCAA may not be providing comparative weight to public input from tribal communities and/or that the PSCAA may be dismissive of particular topics such as tribal consultation (Cockrell, 2018; Nunnally, 2016; Ruud, 2018a; The News Tribune, 2018a, 2018b). For example, Actor-TNT reported that groups such as "[Actor-CHB] and others critical of the project focus on the time frame used in the study, numbers behind the analysis and . . . exclusion of tribal communities" (Theme-Consultation, Theme-Disclosure, Theme-Emissions and Theme-Process), which was interpreted as Access-Negative, Recognition-Negative and Influence-Negative because it suggested that the public feels excluded from the review process, that the PSCAA may not have given weight to data that does not justify permit approval for the project and that the PSCAA may have reached an ultimate decision prior to soliciting public input (Cockrell, 2018).

There were 15 quotations from six articles reported by Actor-PTOI discussing Theme-Violence, Theme-Location, Theme-Consultation, Theme-Ecosystem, Theme-Process, Theme-Revisions, Theme-Regulations, Theme-Disclosure, Theme-Safety, Theme-Emissions and/or Theme-Structure, which were interpreted as Access-Negative, Recognition-Negative and/or Influence-Negative because they suggested that there was a lack of adequate tribal consultation, that the PSCAA may have reached an ultimate decision prior to soliciting public input, that public participation in the review process may have been limited by a lack of access to information about the project and/or that the PSCAA may have not been swayable or receptive to considering public input in the review process (Bryan, 2018; Bryan & Malott, 2018; Dunkelberger, 2018; Puyallup Tribe of Indians, 2018, 2019a, 2019b). For example, Actor-PTOI reported that "tribal consultation . . . requirements [must be] met," and "environmental impacts . . . of the LNG plant must be adequately analyzed and this information must be released to the public" (Theme-Consultation, Theme-Disclosure, Theme-Ecosystem, Theme-Process, Theme-Regulations, Theme-Revisions, Theme-Safety, Theme-Structure and Theme-Violence), which was coded as Access-Negative, Recognition-Negative and Influence-Negative because it suggested that the PSCAA may have reached an ultimate decision prior to soliciting public input, that public participation in the review process may have been limited by a lack of access to information about the project, that the PSCAA may not have meaningfully included tribal governments in the review process and that the PSCAA may not have been receptive to considering public input (Puyallup Tribe of Indians, 2018).

21 other quotations from 13 articles reported by ten sources including 350 Tacoma (Actor-350T), Crosscut (Actor-CRC), Democracy Now! (Actor-DN), Tacoma Weekly (Actor-TW), King 5 News (Actor-K5), High Country News (Actor-HCN), The Trail Newspaper at University of Puget Sound (Actor-UPS), Actor-PTOI, Actor-CHB,

The Seattle Times (Actor-ST), Northwest Treaty Tribes (Actor-NWTT) and/or Sightline Institute (Actor-SI) in discussion of Theme-Ecosystem, Theme-Consultation, Theme-Violence, Theme-Regulations, Theme-Process, Theme-Structure, Theme-Safety, Theme-Pollution, Theme-Disclosure, Theme-Theme-Revisions and/or Emissions, were interpreted as Access-Negative, Recognition-Negative and/or Influence-Negative because they suggested that there was a lack of adequate tribal consultation, that the PSCAA may have been dismissive of particular topics such as tribal consultation, that the PSCAA may have reached an ultimate decision prior to soliciting public input, that the PSCAA may not have been receptive to considering public input concerning treaty rights, that the PSCAA may have not been open to being swayed by public input, that public participation in the review process may have been limited due to a lack of access to information about the project and/or that the PSCAA may have not given comparable weight to data that does not justify permit approval for the project (350 Tacoma, 2018b; Bryan & Malott, 2018; Democracy Now!, 2018; Dunkelberger, 2018a; Gurewitz, 2018; Hanchard, 2018; Mapes, 2018; Morrow, 2018; Northwest Treaty Tribes, 2016; Powell & de Place, 2016; Quirke, 2018; Secaira, 2019; The Seattle Times, 2018). For example, Actor-K5 reported that "the protesters say [PSE] has not consulted with the Puyallup Tribe and lack key permits to continue construction, including a supplemental environmental impact statement" (Theme-Consultation, Theme-Process, Theme-Regulations, Theme-Structure, Theme-Violence), which was interpreted as Access-Negative, Recognition-Negative and Influence-Negative because it suggested that the City of Tacoma may have reached an ultimate decision prior to receiving public input, that there may have been a lack of adequate tribal consultation, and that the City of

Tacoma may not have been receptive to considering public input that did not justify permit approval for the project (Morrow, 2018).

III.II Recognition-Positive Results

The public reporting data contained three quotations across three articles from three actors discussing three themes that were coded as Recognition-Positive (Cockrell, 2019a; Mapes, 2018; Secaira, 2019).

Actor-TNT reported that the PSCAA extended the timeline for responding to public comments on the SEIS (Theme-Process), which was interpreted as Recognition-Positive and Influence-Positive because it suggested that the PSCAA took measures to meaningfully consider public input and that the PSCAA may not have reached an ultimate decision prior to soliciting public comments (Cockrell, 2019a).

Crosscut (Actor-CRC) reported that the PSCAA had not yet "made any final decisions" regarding the SEIS determination and that they were "processing information and considering what [they have] heard" (Theme-Process), which was interpreted as Recognition-Positive and Influence-Positive because it suggested that the PSCAA took measures to meaningfully consider public input and that the PSCAA may not have reached an ultimate decision prior to soliciting public comments (Secaira, 2019).

Actor-ST reported that "the [City of Tacoma] . . . reworked its tribal consultation policy to ensure and improve early contact with tribal leaders" (Theme-Consultation, Theme-Disclosure and Theme-Process), which was interpreted as Recognition-Positive and Access-Positive because it suggested that the City of Tacoma took measures to

meaningfully consider public input and more equitably include tribal governments in the review process (Mapes, 2018).

III.III Recognition-Negative Results

Conversely, there were 51 quotations across 22 articles from 16 sources discussing 14 themes in the public reporting data that were coded as Recognition-Negative (350 Tacoma, 2018b; Bryan & Malott, 2018; Cockrell, 2018; Democracy Now!, 2018; Dunkelberger, 2018a, 2018c; "ENVIRONMENTAL, HEALTH, AND SOCIAL JUSTICE GROUPS URGE AIR AGENCY TO REEXAMINE FRACKED GAS CLIMATE IMPACT," 2018; Gurewitz, 2018; Hanchard, 2018; Mapes, 2018; Morrow, 2018; Northwest Treaty Tribes, 2016; Puyallup Tribe of Indians, 2018, 2019a, 2019b; Quirke, 2018; Rose, 2019; Ruud, 2018a; Secaira, 2019; "Sierra Club: Environmental, Health, Social Justice Groups Urge Air Agency to Reexamine Fracked Gas Climate Impact," 2018; Sterud, 2018; Tacoma Fire Department, 2017; The News Tribune, 2018b).

There were 17 quotations across five articles reported by Actor-PTOI discussing Theme-Location, Theme-Consultation, Theme-Violence, Theme-Ecosystem, Theme-Safety, Theme-Revisions, Theme-Disclosure, Theme-Process, Theme-Structure, Theme-Regulations and/or Theme-Emissions, which were interpreted as Recognition-Negative, Access-Negative and/or Influence-Negative because they suggested that the PSCAA may have not given weight to data that does not justify permit approval for the project, that the PSCAA may not have equitably included tribal governments in the review process, that public participation in the review process may have been limited due to lack of access to

information about the project, that the PSCAA may not have been swayable or receptive to considering public input that did not support the analysis in the draft SEIS and/or that the PSCAA may have reached an ultimate decision prior to soliciting public input (Bryan & Malott, 2018; Puyallup Tribe of Indians, 2018, 2019a, 2019b; Sterud, 2018). For example, Actor-PTOI reported that the SEIS used incorrect data to justify permit approval for the project and demanded adequate tribal consultation (Theme-Consultation, Theme-Disclosure, Theme-Emissions, Theme-Process, Theme-Regulations and Theme-Revisions), which was interpreted as Recognition-Negative, Access-Negative and Influence-Negative because it suggested that the PSCAA may not have given weight to data that did not justify permit approval for the project, that the PSCAA may not have equitably included tribal governments in the public review process and that the PSCAA may have reached an ultimate decision prior to soliciting public input (Puyallup Tribe of Indians, 2019b).

There were seven quotations across three articles reported by Actor-TNT discussing Theme-Violence, Theme-Ecosystem, Theme-Safety, Theme-Regulations, Theme-Structure, Theme-Disclosure, Theme-Process, Theme-Emissions, Theme-Coordination and/or Theme-Consultation, which were interpreted as Recognition-Negative, Access-Negative and/or Influence-Negative because they suggested that the PSCAA may not have given weight to data that did not justify permit approval for the project, that the PSCAA may have reached an ultimate decision prior to soliciting public input, that the public felt excluded from the review process, that the PSCAA may not have given comparable weight to input from tribal communities and/or that the PSCAA may have been dismissive of particular topics such as tribal consultation (Cockrell, 2018;

Ruud, 2018a; The News Tribune, 2018b). For example, Actor-TNT reported that "[Actor-CHB] and others critical of the project focus on the time frame used in the study, numbers behind the analysis and . . . the exclusion of tribal communities" (Theme-Consultation, Theme-Disclosure, Theme-Emissions and Theme-Process), which was interpreted as Recognition-Negative, Influence-Negative and Access-Negative because it suggested that the public felt excluded from the review process, that the PSCAA may not have given weight to data that did not justify permit approval for the project, and that the PSCAA may have reached an ultimate decision prior to soliciting public input (Cockrell, 2018).

There were four quotations from one article reported by Actor-CHB discussing Theme-Disclosure, Theme-Emissions, Theme-Process, Theme-Structure and/or Theme-Regulations, which were interpreted as Recognition-Negative and/or Influence-Negative because they suggested that the PSCAA may not be giving weight to data that does not justify permit approval for the project, that the PSCAA may have reached an ultimate decision prior to soliciting public input, and/or that the public felt excluded from the review process (Bryan & Malott, 2018).

There also were 23 other quotations across 14 articles reported by Actor-NWTT, Actor-DN, Actor-CRC, Actor-TW, Actor-UPS, Actor-ST, Actor-K5, Actor-HCN, The Olympian (Actor-OLY), Actor-350T, the City of Tacoma (Actor-CITY), Targeted News Service (Actor-TNS) and/or States News Service (Actor-SNS) discussing Theme-Revisions, Theme-Emissions, Theme-Regulations, Theme-Structure, Theme-Process, Theme-Consultation, Theme-Violence, Theme-Safety, Theme-Disclosure, Theme-Ecosystem, Theme-Hazards and/or Theme-Pollution, which were interpreted as

Recognition-Negative, Access-Negative and/or Influence-Negative because they suggested that the PSCAA may have not given weight to data that does not support permit approval for the project, that the PSCAA may not be receptive to considering public input concerning treaty rights, that the PSCAA may not have equitably included tribal governments in the public review process, that the PSCAA may not be giving comparable weight to comments from tribal communities, that the PSCAA may be dismissive of particular topics such as tribal consultation, that the PSCAA may have reached an ultimate decision prior to soliciting public input, that the PSCAA may not have been open to being swayed by or receptive to public comments that were not in support of the project, that public participation in the review process may have been limited due to lack of access to information about the project and/or that there may have been a lack of scientific rigor in the preparation of the SEIS (350 Tacoma, 2018b; Democracy Now!, 2018; Dunkelberger, 2018a; "ENVIRONMENTAL, HEALTH, AND SOCIAL JUSTICE GROUPS URGE AIR AGENCY TO REEXAMINE FRACKED GAS CLIMATE IMPACT," 2018; Gurewitz, 2018; Hanchard, 2018; Mapes, 2018; Morrow, 2018; Northwest Treaty Tribes, 2016; Quirke, 2018; Rose, 2019; Secaira, 2019; "Sierra Club: Environmental, Health, Social Justice Groups Urge Air Agency to Reexamine Fracked Gas Climate Impact," 2018; Tacoma Fire Department, 2017). For example, Actor-TW reported that there were "challenges of the plant's environmental review about [pollution threatening] the salmon runs" as well as "safety [issues] of [siting the facility] so close to sea level ... within earthquake and lahar zones [and] close ... to densely populated areas" (Theme-Ecosystem, Theme-Hazards, Theme-Pollution, Theme-Process, Theme-Regulations, Theme-Safety, Theme-Structure and Theme-Violence)

which was interpreted as Recognition-Negative because it suggested that the City of Tacoma may have been dismissive of these concerns in the review process (Dunkelberger, 2018a).

III.IV Influence-Positive Results

The public reporting data contained six quotations discussing Theme-Revisions, Theme-Process, Theme-Regulations and/or Theme-Emissions across six articles reported by six sources including Actor-UPS, Actor-CRC, Actor-TNT, Actor-SNS, the Pak Banker Daily (Actor-PBD) or Inside Washington Publishers news (Actor-IWPN) that were coded as Influence-Positive, Influence-Negative and/or Recognition-Positive because they suggested that the PSCAA may have reached an ultimate decision prior to soliciting public comments, that the PSCAA may have been open to being swayed by public input, that the PSCAA may not have reached an ultimate decision prior to soliciting public input and/or that the PSCAA may not have given weight to data that did not justify permit approval for the project ("ADV and ECO host 'The Human Impacts of LNG: A Panel," 2019; "AIR AGENCY WILL CONDUCT CLIMATE ANALYSIS OF PROPOSED TACOMA LNG FACILITY," 2018; Cockrell, 2019a; "Fitch Rates Puget Sound Energy's Senior Secured Notes 'A," 2018; Secaira, 2019; "Sierra Club To Keep Fighting LNG With Local Impact Focus After GHG Loss," 2018).

III.V Influence-Negative Results

Conversely, there were 66 quotations across 29 articles from 19 sources discussing 14 themes that were coded as Influence-Negative ("ADV and ECO host 'The Human Impacts of LNG: A Panel," 2019; Bryan & Malott, 2018; Cockrell, 2018, 2019b; Democracy Now!, 2018; Dunkelberger, 2018; Dunkelberger, 2018a, 2018c; "ENVIRONMENTAL, HEALTH, AND SOCIAL JUSTICE GROUPS URGE AIR AGENCY TO REEXAMINE FRACKED GAS CLIMATE IMPACT," 2018; Gurewitz, 2018; "IMPROVING ENERGY INFRASTRUCTURE; COMMITTEE: SENATE ENERGY AND NATURAL RESOURCES," 2017; "IMPROVING ENERGY INFRASTRUCTURE; COMMITTEE: SENATE ENERGY AND NATURAL RESOURCES," 2017; "Lifecycle Study Finds GHG Cuts From LNG Project, Warns Of Domestic Gas," 2018; Mapes, 2018; Morrow, 2018; Native Daily Network, 2018b; Powell & de Place, 2016; Puyallup Tribe of Indians, 2018, 2019b; Quirke, 2018; Rose, 2019; Ruud, 2018a, 2018b; Secaira, 2019; "Sierra Club: Environmental, Health, Social Justice Groups Urge Air Agency to Reexamine Fracked Gas Climate Impact," 2018; "Sixteen Environmental, Public-health Organizations Oppose Greenwashing of Fracked Gas-to-methanol Refinery," 2018; Sterud, 2018; Tacoma Fire Department, 2017; The News Tribune, 2018b).

There were 16 quotations across five articles submitted by Actor-PTOI discussing Theme-Violence, Theme-Consultation, Theme-Ecosystem, Theme-Process, Theme-Revisions, Theme-Regulations, Theme-Disclosure, Theme-Safety, Theme-Emissions and/or Theme-Structure, which were interpreted as Influence-Negative, Access-Negative and/or Recognition-Negative because they suggested that the PSCAA and/or City of Tacoma may have reached an ultimate decision prior to soliciting public comments, that the public felt excluded from the review process, that the PSCAA may not have given weight to data that does not support permit approval for the project, that the City of Tacoma may not have been receptive to comments that did not support the project, that

the PSCAA may not have equitably included tribal governments in the review process and/or that the PSCAA may not have been open to being swayed by public input (Bryan & Malott, 2018; Dunkelberger, 2018; Puyallup Tribe of Indians, 2018, 2019b; Sterud, 2018). For example, in one article Actor-PTOI called for "[the governor] to initiate a supplemental review . . . the Tribe's legal rights to consultation [to be honored] . . . changes to the project [to be evaluated], and the science of methane leaks [to be fairly considered]" (Theme-Consultation, Theme-Disclosure, Theme-Emissions, Theme-Process, Theme-Regulations and Theme-Revisions), which was interpreted as Influence-Negative, Access-Negative and Recognition-Negative because it suggested that the PSCAA may have reached an ultimate decision prior to soliciting public comments, that the PSCAA may not have equitably included tribal governments in the public review process and that the PSCAA may not have given weight to data that did not support permit approval for the project (Puyallup Tribe of Indians, 2019b).

There were nine quotations across five articles reported by Actor-TNT discussing Theme-Ecosystem, Theme-Violence, Theme-Safety, Theme-Regulations, Theme-Disclosure, Theme-Structure, Theme-Coordination, Theme-Process, Theme-Emissions, Theme-Consultation and/or Theme-Revisions, which were interpreted as Influence-Negative, Access-Negative and/or Recognition-Negative because they suggested that the PSCAA may have reached an ultimate decision prior to soliciting public input, that the PSCAA may have not given weight to data that did not support permit approval for the project, that the public felt excluded from the review process, that the PSCAA may not have given comparable weight to input from tribal communities, that the PSCAA may have been dismissive of particular topics such as tribal consultation, and/or that the

PSCAA may not have been open to being swayed by public input (Cockrell, 2018, 2019b; Ruud, 2018a, 2018b; The News Tribune, 2018b). For example, Actor-TNT reported that "[Actor-CHB] and others critical of the project focus on the time frame used in the study, numbers behind the analysis and ... the exclusion of tribal communities" (Theme-Consultation, Theme-Disclosure, Theme-Emissions and Theme-Process), which was interpreted as Influence-Negative, Access-Negative, and Recognition-Negative because it suggested that the PSCAA may have reached an ultimate decision prior to soliciting public input, that the PSCAA may not have equitably included tribal governments in the public review process and that the PSCAA may not have given weight to data that did not support permit approval for the project (Cockrell, 2018).

There were eight quotations across two articles reported by Actor-TW discussing Theme-Ecosystem, Theme-Pollution, Theme-Structure, Theme-Regulations, Theme-Emissions, Theme-Process, Theme-Disclosure and/or Theme-Revisions, which were interpreted as Influence-Negative because they suggested that the PSCAA may have reached an ultimate decision prior to soliciting public input (Dunkelberger, 2018a, 2018c).

There were four quotations across two articles reported by Actor-UPS discussing Theme-Violence, Theme-Process, Theme-Disclosure and Theme-Revisions, that were interpreted as Influence-Negative, Influence-Positive, Access-Negative and/or Recognition-Negative because they suggested that the City of Tacoma may not have been open to being swayed by public input, that the City of Tacoma may not have equitably included tribal governments in the public review process, that public participation in the review process may have been strained by a lack of access to information about the

project, that the City of Tacoma may not have been receptive to considering public comments that did not support the project and/or that the City of Tacoma may have been open to being swayed by public input ("ADV and ECO host 'The Human Impacts of LNG: A Panel," 2019; Gurewitz, 2018).

There were four quotations from one article reported by Actor-SI discussing Theme-Economy, Theme-Process, Theme-Safety, Theme-Structure, Theme-Revisions and/or Theme-Disclosure, which were interpreted as Influence-Negative and/or Access-Negative because they suggested that the City of Tacoma may have reached an ultimate decision prior to soliciting public input, that the public review process may have been "fast-track[ed]," and/or that public participation in the review process may have been limited by a lack of access to information about the project (Powell & de Place, 2016).

There were 25 quotations across 14 articles reported by Actor-CHB, Actor-ST, Actor-CRC, Actor-SNS, Actor-K5, Actor-TNS, Actor-HCN, Actor-DN, Actor-NDN, Actor-CITY, Actor-OLY, the Clean Energy Report (Actor-CER), the CQ Congressional Testimony (Actor-CQCT) and/or US Official News (Actor-USON) discussing Theme-Ecosystem, Theme-Consultation, Theme-Violence, Theme-Safety, Theme-Hazards, Theme-Structure, Theme-Process, Theme-Regulations, Theme-Disclosure, Theme-Revisions, Theme-Emissions and/or Theme-Economy, which were interpreted as Influence-Negative, Access-Negative and/or Recognition-Negative because they suggested that the PSCAA may have reached an ultimate decision prior to soliciting public input, that the PSCAA may not have equitably included tribal governments in the public review process, that the PSCAA may have been dismissive of particular topics such as tribal consultation, that the PSCAA may not have given comparable weight to

public input from tribal communities, that the PSCAA may not have been open to being swayed by public input, that the public felt ignored by the PSCAA, that the PSCAA may not have given weight to data that did not support permit approval for the project, that there may have been a lack of scientific rigor in the preparation of the SEIS and/or that the public review process may have been fast-tracked (Bryan & Malott, 2018; Democracy Now!, 2018; "ENVIRONMENTAL, HEALTH, AND SOCIAL JUSTICE GROUPS URGE AIR AGENCY TO REEXAMINE FRACKED GAS CLIMATE IMPACT," 2018; "IMPROVING ENERGY INFRASTRUCTURE; COMMITTEE: SENATE ENERGY AND NATURAL RESOURCES," 2017; "Lifecycle Study Finds GHG Cuts From LNG Project, Warns Of Domestic Gas," 2018; "Sierra Club: Environmental, Health, Social Justice Groups Urge Air Agency to Reexamine Fracked Gas Climate Impact," 2018; "Sixteen Environmental, Public-health Organizations Oppose Greenwashing of Fracked Gas-to-methanol Refinery," 2018; Mapes, 2018; Morrow, 2018; Native Daily Network, 2018b; Quirke, 2018; Rose, 2019; Secaira, 2019; Tacoma Fire Department, 2017). For example, Actor-HCN reported that construction continued "despite protests, tribal lawsuits, and the absence of a key permit from the [PSCAA]," which had "issued a notice of violation last spring, but . . . refused to halt construction or consult with the Puyallup Tribe" (Theme-Consultation, Theme-Process, Theme-Regulations, Theme-Structure and Theme-Violence), which was interpreted as Influence-Negative, Access-Negative and Recognition-Negative because it suggested that the PSCAA may have reached an ultimate decision prior to soliciting public input, that the PSCAA may not have equitably included tribal governments in the review process,

and that the PSCAA may have been dismissive of particular topics such as tribal consultation (Quirke, 2018).

IV. Conclusion

Two sets of data were analyzed using a deductive coding scheme based on aspects of procedural justice. A primary set of data including the public comments and agency responses from the 2015 EIS resulted four Access-Positive, 11 Access-Negative, 30 Recognition-Positive, 21 Recognition-Negative, 44 Influence-Positive and 37 Influence-Negative quotations. Detailed tables of 2015 EIS results are provided in Appendix A. A secondary set of public reporting data resulted four Access-Positive, 53 Access-Negative, three Recognition-Positive, 51 Recognition-Negative, six Influence-Positive and 66 Influence-Negative quotations. Detailed tables of public reporting data results are provided in Appendix B.

Each set of data was also analyzed based on actors who submitted public comments or reported publicly about the review process. The public comments and agency responses from the 2015 EIS contained 55 quotations from Actor-PTOI, 39 quotations from Actor-ECY, 26 quotations from Actor-PSE, ten quotations from Actor-CHB, six quotations from Actor-ECY, six quotations from Actor-PORT, four quotations from Actor-NTNC and one quotation from Actor-WSDOT. The public reporting data contained 48 quotations from Actor-PTOI, 35 quotations from Actor-TNT, eleven quotations from Actor-TW, eleven quotations from Actor-UPS, nine quotations from Actor-CHB, eight quotations from Actor-K5, eight quotations from Actor-ST, seven quotations from Actor-CRC, seven quotations from Actor-SI, six quotations from Actor-

HCN, five quotations from Actor-SNS, five quotations from Actor-TNS, four quotations from Actor-DN, three quotations from Actor-NDN, three quotations from Actor-350T, two quotations from Actor-CITY, two quotations from Actor-NWTT, two quotations from Actor-OLY, two quotations from Actor-PORT, one quotation from Actor-CER, one quotation from Actor-CQCT, one quotation from Actor-IWPN, one quotation from Actor-PBD and one quotation from Actor-USON.

Finally, each set of data was analyzed based on categorical thematic content. The public comments and agency responses from the 2015 EIS resulted 70 Theme-Regulations, 54 Theme-Pollution, 50 Theme-Structure, 48 Theme-Safety, 42 Theme-Disclosure, 41 Theme-Location, 37 Theme-Revisions, 23 Theme-Process, 23 Theme-Traffic, 15 Theme-Hazards, eleven Theme-Violence, nine Theme-Ecosystem, eight Theme-Coordination, five Theme-Aesthetics, five Theme-Economy, four Theme-Consultation, two Theme-Artifacts and two Theme-Emissions quotations. The public reporting data resulted 169 Theme-Process, 86 Theme-Regulations, 62 Theme-Disclosure, 50 Theme-Violence, 49 Theme-Consultation, 49 Theme-Structure, 43 Theme-Emissions, 36 Theme-Revisions, 30 Theme-Safety, 17 Theme-Ecosystem, five Theme-Pollution, two Theme-Economy, two Theme-Hazards and two Theme-Location quotations.

Chapter Five: Discussion

I. Introduction

The purpose of this research was to document procedural justice in the Tacoma LNG public review process. To accomplish this, the study analyzed public comments and agency responses from the 2015 EIS and public reporting on the process. The qualitative coding process relied upon a deductive scheme based on aspects of access, recognition and influence described by Ottinger et al. (2014), who importantly noted that most public review processes in general fail to adequately meet these standards. Similarly, most quotations from each of the 2015 EIS and public reporting data sets were interpreted as Influence-Negative. The following sections will provide context for the findings of this study, explore some implications of those findings and make suggestions as to how these findings might be used to improve the public review process.

II. Ideal Review Process

This section will summarize descriptions of an ideal review process in terms of procedural justice, which were elaborated in more detail in the literature review. The official requirements for the EIS public review process may not necessarily reflect what scholars consider procedurally just. According to Morrell (2013), once an agency has "[determined] whether to conduct" a public review process, it should "draft public consultation documents," solicit public input, "hold [a] public comment period" that is at least 45 days long (and include hearings if necessary), "respond to comments" and reach an ultimate decision, in that order (pp. 94–96). However, this study is concerned with the procedural justice rather than the regulatory compliance of the review process.

Therefore, this section will describe an ideal review process based on procedural justice scholarship rather than official requirements.

More specifically, Ottinger et al. (2014) considered measures that increase public participation in terms of social equity and representation, such as "holding one set of hearings during the day and another in the evening, when people with full-time jobs would be able to attend" and "the county in which a facility is proposed [appointing] a representative to [the lead agency] for consideration of the facility's application – increasing the likelihood that local issues will be recognized and taken into account" to be indications that a public review process is accessible (pp. 665–666).

Further, Ottinger et al. (2014) interpreted an agency's meaningful consideration of and engagement with public comments as signs that a public review process is procedurally just in terms of recognition (p. 664). For example, "commissioners striving to make sure they consider the full range of issues raised by residents," and particularly, "even as he questioned opponents' claim . . . County Commissioner Bruce Coe affirmed the relevance of residents' comments to the county's ultimate decision" shows that an agency gave open-minded consideration to public comments regardless of whether they expressed support of or opposition to a project, or were perceived as technically credible or otherwise compelling (Ottinger et al., 2014, p. 666). These are examples of positive outcomes for procedural justice in terms of recognition.

Other researchers have offered deeper consideration of the recognition aspect of procedural justice. While tribal consultation is distinct from and not included in the public review process described under NEPA, some scholars have noted that standards of recognition, with special attention to the situational particularities and environmental

heritages of sovereign nations greatly affect procedural justice overall (Kuehn, 2000, p. 10683; Morrell, 2013, p. 93; Whyte, 2011, pp. 200–205). Although not legally enforceable, tribes are supposed to be able to set their own standards for what consultation means (Executive Office of the President, 2000, Section 3 C 2). Each SEPA agency is directed to specifically define what their consultation process is and assign an official to make sure there is an accountable, meaningful and timely consultation process (Executive Office of the President, 2000, Section 5 A). Beyond that, agencies are also directed to consult with tribes to negotiate consensual rules (Executive Office of the President, 2000, Section 5 D), and when an agency submits any "final draft regulation," it is supposed to be certified by a "designated official" for accountability (Executive Office of the President, 2000, Section 7 A). Finally, even independent agencies (like the Port of Tacoma) are encouraged to comply with these standards (Executive Office of the President, 2000, Section 8; US EPA, 2016).

Finally, Ottinger et al. (2014) viewed the openness of an agency to change its position or be swayed by public comments as indications that a public review process is procedurally just in terms of influence (p. 664). Signs that an agency was open to being swayed by public input were identified as "evidence . . . that decision-makers changed, adjusted, or even nuanced their positions as a result of public participation," such as "Planning Commissioner David Black [went] so far as to state at one point during the process that he was still undecided: 'Whether it's . . . essential or not, I haven't totally made up my mind" and remarking that "while head counting is not an appropriate way to come to a decision in a quasi-judicial process, the statements of those testifying must be ascribed comparative weight in our decision making process," which demonstrates the

quality of an agency giving weight to public input as well as its openness to being swayed by it (Ottinger et al., 2014, p. 664–666).

III. Actual Review Process

The City of Tacoma began an EIS public review process on September 12, 2014 (City of Tacoma, 2015, p. 1). The public comment period closed on October 13, 2014 and lasted 31 days (City of Tacoma, 2015, p. 1). This means that The City of Tacoma held a public comment period for the 2015 EIS that closed 14 days earlier than recommended, and originally received only eight written public comments (City of Tacoma, 2015, p. 1; Morrell, 2013, p. 94). The Puyallup Tribe maintains that they have not been adequately consulted with during the public review process for this project (Puyallup Tribe of Indians, 2019c).

This study found that most quotations from only the 2015 EIS were interpreted as indicating a potential for public input to influence the review process. These results can be viewed in detail in Appendix A. Each of these evaluations were made typically because the City of Tacoma made changes to the FEIS in response to a public comment. However, a different conclusion can be drawn through comparing these results to those of the public reporting data set.

A comprehensive evaluation of the 2015 EIS in the context of public reporting data, however, found that the number of quotations indicating a lack of potential for public input to influence the review process were greater than those indicating positive potential for influence (as detailed in Appendix A). Most often, this was because quotations suggested that the City of Tacoma may have reached an ultimate decision prior to soliciting public comment and/or that the City of Tacoma may have not been open to being swayed by public input in the review process (City of Tacoma, 2015, pp. 398–514). In addition, some public reporting on the 2015 EIS described the review process as "expedite[d]" and "fast-track[ed]" ("IMPROVING ENERGY INFRASTRUCTURE; COMMITTEE: SENATE ENERGY AND NATURAL RESOURCES," 2017; Powell & de Place, 2016).

IV. Suggestions

One of the purposes of this study is to make suggestions that could improve Washington's SEPA public review requirements and implementation in order to reduce conflict over agency decisions and produce better procedural and environmental justice outcomes, overall. That being said, procedural justice is only one component of environmental justice, more generally, and so meeting procedural justice standards does not mean that the outcome of a process will be environmentally just (Kuehn, 2000, p. 10692). Although the Puyallup Tribe and actors in opposition to the project were more strongly represented across the sample of 2015 EIS quotations of public comment and agency responses as well as media reports, this study found that their input may not have been ascribed comparative weight in the City of Tacoma's decision making process, had the same potential to sway the minds of decision makers or influence the ultimate outcome of the EIS. In response to these findings, this study recommends that the public comment period should be extended, allow more than one opportunity for public input, and should include a breadth of stakeholders in the public review process to oversee the agency preparing the EIS and hold them accountable to multiple stakeholders. This would support more deliberative agency engagement with public comments,

accommodate greater public participation during the public comment period, and help to ensure that an agency is not able to categorically dismiss particular topics of public input in the review process.

More specifically, it is important to return to a discussion of tribal consultation and sovereignty rights. The Puyallup Tribe maintains that there has not yet been adequate tribal consultation, and the literature suggested that the environmental heritages and situational particularities of sovereign nations are crucial to aspects of recognition within procedural justice, overall (Ishiyama, 2003, p. 131; Puyallup Tribe of Indians, 2019c; Whyte, 2011, pp. 200-204). The need for adequate tribal consultation is further supported by Kuehn (2000) and Morrell (2013) who suggested that pluralistic models of public participation should strive to be more deliberative. Tribal consultation is one method that is appropriate to this public review process because its foremost aim is to build consensus between the agency and those who are in strongest opposition to the project, which directly addresses the essential controversy over this public review process, as well as fosters a diversity of actors in the public review process.

In addition, this study was unable to include analysis of the 2019 SEIS that was prepared by the PSCAA due to deadline limitations following its delayed publication, and it is an important area for future research.

V. Conclusion

This study found that two sets of data were mostly interpreted as indicating that the agencies preparing EIS documents for Tacoma LNG were not open to being swayed by public input in the review process. The City of Tacoma held a public comment period

that closed 14 days sooner than the recommended 45 day period (City of Tacoma, 2015, p. 1; Morrell, 2013, p. 94). The public review process could be improved by extending the public comment period, allowing more than one opportunity for public comments, and officially requiring EIS preparing agencies to be accountable to a breadth of stakeholders.

References

- 350 Tacoma. (2018a). Voices of Environmental Justice Puget Sound Energy LNG Project. Retrieved from https://www.youtube.com/watch?v=a1EFGM00uIY
- 350 Tacoma. (2018b, December 10). What's Wrong with Puget Sound Energy's Fracked Gas Project. Retrieved February 2, 2019, from 350 Tacoma website: https://www.350tacoma.org/pselng/
- ADV and ECO host "The Human Impacts of LNG: A Panel." (2019, March 7). The Trail: University of Puget Sound.
- AIR AGENCY WILL CONDUCT CLIMATE ANALYSIS OF PROPOSED TACOMA LNG FACILITY. (2018, January 24). *States News Service*.
- Bryan, A. (2018). Puget Sound Energy should halt construction of LNG plant until we have answers. *Puyallup Tribe*, 2.
- Bryan, A., & Malott, M. (2018, December 20). Wrongs must be righted at Tacoma LNG plant. Retrieved February 2, 2019, from The News Tribune website: https://www.thenewstribune.com/opinion/article223386895.html
- City of Tacoma. (2015, November 9). Tacoma LNG Final Environmental Impact Statement (FEIS). Retrieved August 29, 2018, from City of Tacoma website: https://www.cityoftacoma.org/government/city_departments/planning_and_devel opment_services/planning_services/pse_proposed_tideflats_lng_facility/final_env ironmental_impact_statement___f_e_i_s_
- Cockrell, D. (2018, October 26). New criticism raised about Tacoma's LNG plant ahead of important hearing Tuesday. Retrieved February 2, 2019, from The News

Tribune website:

https://www.thenewstribune.com/news/local/article220690265.html

- Cockrell, D. (2019a, January 18). Flood of response pushes completion of latest Tacoma LNG review to March. Retrieved February 2, 2019, from The News Tribune website: https://www.thenewstribune.com/news/local/article224768400.html
- Cockrell, D. (2019b, March 29). LNG site resumes permit process after new report backs findings of earlier review. Retrieved March 31, 2019, from thenewstribune website: https://www.thenewstribune.com/news/local/article228605034.html
- Deloria Jr., V., Frank Jr., B., & Pavlik, S. (2012). Indians of the Pacific Northwest: From the Coming of the White Man to the Present Day. Golden, CO: Fulcrum Publishing.
- Democracy Now! (2018, April 3). Activists Blockade Puget Sound Energy HQ to Protest Natural Gas Plant. Retrieved December 11, 2018, from Democracy Now! website:

https://www.democracynow.org/2018/4/3/headlines/activists_blockade_puget_so und_energy_hq_to_protest_natural_gas_plant

- Douglas, M. (2017). *The Casino Economy: Indian Gaming, Tribal Sovereignty, and Economic Independence for the Puyallup Tribe of Indians* (Thesis). Retrieved from https://digital.lib.washington.edu:443/researchworks/handle/1773/38048
- Dunkelberger, S. (2018a, February 23). Port fined \$159,000 to 'deter future malfeasance' over withholding documents | Puyallup Tribal Free News. Retrieved March 16, 2019, from Puyallup Tribal News website:

https://www.puyalluptribalnews.net/news/port-fined-159000-to-deter-futuremalfeasance-over-withholding-documents/

- Dunkelberger, S. (2018b, May 17). Delay in ship conversion, permits continue to plague LNG plant. Retrieved December 11, 2018, from Tacoma Weekly website: https://tacomaweekly.com/front-page/delay-in-ship-conversion-permits-continueto-plague-lng-plant/
- Dunkelberger, S. (2018c, October 11). Critics raise questions about LNG plant's latest impact study. Retrieved December 2, 2018, from Tacoma Weekly website: https://tacomaweekly.com/news/critics-raise-questions-about-lng-plants-latestimpact-study/
- Dunkelberger, S. (2018d, December 21). Skepticism mounts over LNG plant as Tideflats review moves forward. Retrieved February 2, 2019, from Tacoma Weekly website: https://tacomaweekly.com/news/skepticism-mounts-over-lng-plant-astideflats-review-moves-forward/

ENVIRONMENTAL, HEALTH, AND SOCIAL JUSTICE GROUPS URGE AIR AGENCY TO REEXAMINE FRACKED GAS CLIMATE IMPACT. (2018, November 20). *States News Service*.

Executive Office of the President. (2000, November 9). Executive Order 13175 of November 6, 2000: Consultation and Coordination With Indian Tribal
Governments. Retrieved December 4, 2018, from Federal Register website: https://www.federalregister.gov/documents/2000/11/09/00-29003/consultationand-coordination-with-indian-tribal-governments

- Feist, B. E., Buhle, E. R., Baldwin, D. H., Spromberg, J. A., Damm, S. E., Davis, J. W., & Scholz, N. L. (2017). Roads to ruin: conservation threats to a sentinel species across an urban gradient. *Ecological Applications*, 27(8), 2382–2396. https://doi.org/10.1002/eap.1615
- Fitch Rates Puget Sound Energy's Senior Secured Notes "A." (2018, September 1). *The Pak Banker Daily*.
- Grigas, A. (2017). *The new geopolitics of natural gas*. Cambridge, Massachusetts: Harvard University Press.
- Guilmet, G. M., & Whited, D. L. (1987). Cultural Lessons for Clinical Mental Health Practice: The Puyallup Tribal Community. *American Indian and Alaska Native Mental Health Research*, 1(2), 32–49.
- Gurewitz, K. (2018, February 23). Tarika Powell: Tacoma and Environmental Justice in the Northwest. Retrieved December 2, 2018, from The Trail website: http://trail.pugetsound.edu/?p=14877

Hanchard, J. (2018, February 22). Seattle takes stand against Tacoma LNG plant.
Retrieved December 11, 2018, from KING5 News website: https://www.king5.com/article/news/local/seattle-takes-stand-against-tacoma-lng-plant/281-521884663

IMPROVING ENERGY INFRASTRUCTURE; COMMITTEE: SENATE ENERGY AND NATURAL RESOURCES. (2017, March 14). *CQ Congressional Testimony*.

Indian Country Today. (2017, August 7). Puyallup Battle LNG Facility in Tacoma. Retrieved November 17, 2018, from Indian Country Today website: https://webcache.googleusercontent.com/search?q=cache:FiYIkFpiPLgJ:https://ne wsmaven.io/indiancountrytoday/archive/puyallup-battle-lng-facility-in-tacoma-

Uas1XkEDVE-AKmnxc-cU1A/+&cd=1&hl=en&ct=clnk&gl=us

- Ishiyama, N. (2003). Environmental Justice and American Indian Tribal Sovereignty: Case Study of a Land–Use Conflict in Skull Valley, Utah. *Antipode*, *35*(1), 119– 139. https://doi.org/10.1111/1467-8330.00305
- Kuehn, R. (2000). A Taxonomy of Environmental Justice. *Environmental Law Reporter*, *30*(9), 10681–10703.
- Lifecycle Study Finds GHG Cuts From LNG Project, Warns Of Domestic Gas. (2018, October 21). *Clean Energy Report*.
- Mapes, L. V. (2018, April 9). A 'monstrosity' or a step forward? Puyallup Tribe, PSE in showdown over Tacoma natural-gas plant. Retrieved December 11, 2018, from The Seattle Times website: https://www.seattletimes.com/seattlenews/environment/puget-sound-energy-puyallup-tribe-in-showdown-over-lngplant-on-tacoma-tideflats/
- Morrell, E. (2013). Public Comment Periods and Federal Environmental Impact Statements: Potentials and Pitfalls from the American Experience. *Michigan Journal of Sustainability*, 1(8). http://dx.doi.org/10.3998/mjs.12333712.0001.008

Morrow, A. (2018, April 2). Liquefied natural gas protesters build longhouse blocking PSE headquarters. Retrieved December 11, 2018, from KING5 News website: https://www.king5.com/article/tech/science/environment/liquefied-natural-gasprotesters-build-longhouse-blocking-pse-headquarters/281-534218264 Native Daily Network. (2018a). *Tarika Powell Tacoma LNG Testimony* [Youtube video]. Retrieved from

https://www.youtube.com/watch?v=jeX7dcz1Enk&feature=youtu.be

- Native Daily Network. (2018b, December 1). Attorney General Calls Fracked Gas Review Fictional. Retrieved December 4, 2018, from Native Daily Network website: http://www.nativedailynetwork.com/2018/12/agl-calls-fracked-gasreview-fictional/
- Northwest Treaty Tribes. (2016, January 4). Puyallup Tribe stands up against gas plant. Retrieved August 23, 2018, from Northwest Treaty Tribes website: https://nwtreatytribes.org/puyallup-tribe-stands-up-against-gas-plant/
- Nunnally, D. (2016, July 2). Big, gray and safe? Facts behind Tacoma's LNG plant. Retrieved December 11, 2018, from thenewstribune website: https://www.thenewstribune.com/news/local/article87326512.html
- Ottinger, G., Hargrave, T. J., & Hopson, E. (2014). Procedural justice in wind facility siting: Recommendations for state-led siting processes. *Energy Policy*, 65(65), 662–669. https://doi.org/10.1016/j.enpol.2013.09.066
- Port of Tacoma. (2014, August 21). Puget Sound Energy LNG facility. Retrieved August 27, 2018, from Port of Tacoma website: https://www.portoftacoma.com/puget-sound-energy-lng-facility
- Powell, T. (2016, February 8). How Industry and Regulators Kept Public in the Dark After 2014 LNG Explosion in Washington. Retrieved August 30, 2018, from Sightline Institute website: https://www.sightline.org/2016/02/08/how-industryand-regulators-kept-public-in-the-dark-after-2014-lng-explosion-in-washington/

Powell, T. (2018, January 10). Mapping BC's LNG Proposals. Retrieved November 17, 2018, from Sightline Institute website:

https://www.sightline.org/research_item/maps-british-columbia-lng-proposals/

- Powell, T., & de Place, E. (2016, May 17). Tacoma's Proposed LNG Plant Raises Safety Concerns. Retrieved August 26, 2018, from Sightline Institute website: https://www.sightline.org/2016/05/17/tacomas-proposed-lng-plant-raises-safetyconcerns/
- Puget Sound Clean Air Agency. (2019, March 29). Final SEIS Tacoma LNG. Retrieved March 29, 2019, from http://www.pscleanair.org/460/Current-Permitting-Projects
- Puyallup Tribe of Indians. (2018, February 2). Puyallup Tribe asks Gov. Jay Inslee to stop construction of LNG plant. Retrieved from http://puyalluptribe.com/tempFiles/FinalPuyallupReleaseCallonInsleefinal.pdf
- Puyallup Tribe of Indians. (2019a, January 31). TAKE ACTION: No LNG outreach to Tacoma City Council — Email. Retrieved February 2, 2019, from http://puyalluptribe.com/lng/2019/01/31/no-lng-outreach-to-tacoma-city-council-emailcampaign/
- Puyallup Tribe of Indians. (2019b, March 29). Puyallup Tribe rejects flawed new review of Tacoma LNG. Retrieved March 31, 2019, from http://news.puyalluptribensn.gov/puyallup-tribe-rejects-flawed-new-review-of-tacoma-lng/
- Puyallup Tribe of Indians. (2019c, April 11). Washington Tribes stand with the Puyallup Tribe. Retrieved April 11, 2019, from http://news.puyalluptribensn.gov/washington-tribes-stand-with-the-puyallup-tribe/

Quirke, S. (2018, March 16). Northwest tribes aid a fight against fossil fuels. Retrieved
December 11, 2018, from High Country News website:
https://www.hcn.org/articles/tribal-affairs-columbia-river-tribes-aid-a-fight-against-fossil-fuels

- Rose, O. (2019, February 13). Fight for social and environmental justice: Stop the LNG plant. Retrieved March 16, 2019, from The Olympian website: https://www.theolympian.com/opinion/letters-to-the-editor/article226211290.html
- Ruud, C. (2018a, February 23). Seattle City Council 'troubled by' LNG plant in Tacoma, draft resolution shows. Retrieved February 2, 2019, from The News Tribune website: https://www.thenewstribune.com/news/local/article201671569.html
- Ruud, C. (2018b, May 11). Tacoma LNG plant has "potentially significant" permitting issues. Opening could be delayed. Retrieved December 11, 2018, from thenewstribune website:

https://www.thenewstribune.com/news/local/article210885199.html

- Scholz, N. L., Myers, M. S., McCarthy, S. G., Labenia, J. S., McIntyre, J. K., Ylitalo, G.
 M., ... Collier, T. K. (2011). Recurrent Die-Offs of Adult Coho Salmon Returning to Spawn in Puget Sound Lowland Urban Streams. *PLOS ONE*, *6*(12), e28013. https://doi.org/10.1371/journal.pone.0028013
- Secaira, M. (2019, January 31). Tacoma's long-delayed natural gas plant has a community on edge. Retrieved January 31, 2019, from Crosscut website: https://crosscut.com/2019/01/tacomas-long-delayed-natural-gas-plant-hascommunity-edge

- Sierra Club: Environmental, Health, Social Justice Groups Urge Air Agency to Reexamine Fracked Gas Climate Impact. (2018, November 20). *Targeted News Service*.
- Sierra Club To Keep Fighting LNG With Local Impact Focus After GHG Loss. (2018, February 20). *InsideEPA.Com/Climate*.
- Sightline Institute. (2014, March 20). The Thin Green Line. Retrieved January 24, 2019, from Sightline Institute website: https://www.sightline.org/research/thin-greenline/
- Sixteen Environmental, Public-health Organizations Oppose Greenwashing of Fracked Gas-to-methanol Refinery. (2018, December 29). US Official News.
- Sterud, B. (2018, May 19). UTC and TOTE Maritime decisions question LNG plant's future. *Puyallup Tribe*.
- Storms, S. (2018, February 8). How dangerous is an 8-million gallon LNG plant? Retrieved August 29, 2018, from Puyallup Tribal News website: https://www.puyalluptribalnews.net/news/how-dangerous-is-an-8-million-gallonlng-plant/
- Tacoma Daily Index. (2018, July 24). Canoe Journey restores connections and celebrates the life-giving force of local waterways. Retrieved March 1, 2019, from Tacoma Daily Index website: http://www.tacomadailyindex.com/blog/canoe-journeyrestores-connections-and-celebrates-the-life-giving-force-of-localwaterways/2443526/
- Tacoma Fire Department. (2017). Proposed LNG Facility FAQs City of Tacoma. Retrieved December 11, 2018, from

https://www.cityoftacoma.org/government/city_departments/fire/proposed_l_n_g _facility_f_a_qs

- The News Tribune. (2018a, March 13). Prosecutor, Port feel withering heat of judicial sunshine. Retrieved February 2, 2019, from The News Tribune website: https://www.thenewstribune.com/opinion/article204949909.html
- The News Tribune. (2018b, December 5). Silently withholding records such as Tacoma LNG safety studies betrays open government. Retrieved February 2, 2019, from The News Tribune website:

https://www.thenewstribune.com/opinion/editorials/article222673675.html

The Seattle Times. (2018, April 9). LNG facility: Not a good idea. Retrieved December 11, 2018, from The Seattle Times website:

https://www.seattletimes.com/opinion/letters-to-the-editor/lng-facility-not-agood-idea/

 Thorkildsen, E. (2018). Framing Climate Change: Evaluating Articulations of Support for Mitigation Policy alongside Communication Scholarship in Washington State (Master of Environmental Studies Thesis). The Evergreen State College.

United States. Congress. House. Committee on Interior and Insular Affairs. Settlement of land claims of the Puyallup Tribe of Indians in the state of Washington : hearing before the Committee on Interior and Insular Affairs, House of Representatives, One Hundred First Congress, first session on H.R. 932 ... hearing held in Washington, DC, February 23, 1989. , 24570406 (WaOLN)7629574 (DGPO)92053243 (OCoLC)ocm24570406 § (1989).

United States. Congress. Senate. Select Committee on Indian Affairs. Settlement of land claims of Puyallup Tribe of Indians in the state of Washington : hearing before the Select Committee on Indian Affairs, United States Senate, One Hundred First Congress, first session, on S. 402 ... February 24, 1989, Washington, DC., 19897729 (WaOLN)5774654 § 402 (1989).

US EPA, O. (2016, September 26). Ports Primer: 3.2 Port Governance [Overviews and Factsheets]. Retrieved December 4, 2018, from US EPA website: https://www.epa.gov/community-port-collaboration-and-capacity-building/ports-primer-32-port-governance

- Whyte, K. P. (2011). The Recognition Dimensions of Environmental Justice in Indian Country. *Environmental Justice*, 4(4), 199–205. https://doi.org/10.1089/env.2011.0036
- Wilkinson, C. (2006). Messages from Frank's Landing: A Story of Salmon, Treaties, and the Indian Way. Seattle, WA: University of Washington Press.

Appendices

Table 2: A	Analysis of	procedural	justice in 2015	EIS by actor		
	Access- Positive	Access- Negative	Recognition- Positive	Recognition- Negative	Influence- Positive	Influence- Negative
Actor- CHB	1	1	2	0	4	2
Actor- ECY	2	4	12	1	11	9
Actor- EPA	0	1	1	0	3	1
Actor- NTNC	0	0	1	1	2	0
Actor- PORT	0	0	0	0	6	0
Actor- PSE	0	0	5	0	14	7
Actor- PTOI	1	5	9	19	3	18
Actor- WSDOT	0	0	0	0	1	0

Appendix A. Comprehensive results of 2015 EIS data set

Table 2: Analysis of procedural justice in 2015 EIS by actor

Table 3: Anal	Table 3: Analysis of procedural justice in 2015 EIS by theme											
	Access- Positive	Access- Negative	Recognition- Positive	Recognition- Negative	Influence- Positive	Influence- Negative						
Theme- Aesthetics	0	0	1	1	3	0						
Theme- Artifacts	0	0	0	1	0	1						
Theme- Consultation	1	1	0	1	0	1						
Theme- Coordination	0	1	2	0	3	2						
Theme- Disclosure	3	4	9	3	13	10						
Theme- Economy	0	0	2	0	2	1						
Theme- Ecosystem	0	0	0	2	4	3						
Theme- Emissions	0	0	1	0	0	1						
Theme- Hazards	0	1	3	4	2	5						
Theme- Location	0	1	7	12	9	12						

Theme- Pollution	1	5	13	4	20	11
Theme- Process	0	2	5	7	3	6
Theme- Regulations	1	3	11	13	25	17
Theme- Revisions	0	0	5	2	23	7
Theme- Safety	0	3	9	9	10	17
Theme- Structure	2	4	12	6	13	13
Theme- Traffic	0	0	6	2	7	8
Theme- Violence	0	2	0	5	0	4

Table 3: Analysis of procedural justice in 2015 EIS by theme

Table 4: Anal	Table 4: Analysis of themes in 2015 EIS by actor Actor Actor Actor Actor											
	Actor- CHB	Actor- ECY	Actor- EPA	Actor- NTNC	Actor- PORT	Actor- PSE	Actor- PTOI	Actor- WSDOT				
Theme- Aesthetics	0	0	0	1	1	1	0	0				
Theme- Artifacts	0	0	0	0	0	0	1	0				
Theme- Consultation	1	0	0	0	0	0	2	0				
Theme- Coordination	3	3	1	0	0	0	0	0				
Theme- Disclosure	4	14	4	0	0	0	3	0				
Theme- Economy	0	0	0	0	0	4	0	0				
Theme- Ecosystem	2	0	0	0	2	1	3	0				
Theme- Emissions	0	0	0	0	0	0	1	0				
Theme- Hazards	1	1	0	0	0	1	6	0				
Theme- Location	3	1	0	3	3	0	17	0				
Theme- Pollution	6	18	4	0	2	0	4	0				
Theme- Process	0	0	1	0	0	0	13	0				
Theme- Regulations	3	6	2	3	4	11	19	0				
Theme- Revisions	1	5	0	0	2	18	3	1				

Theme- Safety	0	1	0	2	0	16	15	0
Theme- Structure	3	13	1	0	2	1	10	0
Theme- Traffic	0	0	0	1	1	11	5	1
Theme- Violence	0	0	0	0	0	0	6	0

Table 4: Analysis of themes in 2015 EIS by actor

Table 5:	Analysis of	procedural j	justice in public	reporting data	by source		
	Access- Positive	Access- Negative	Recognition- Positive	Recognition- Negative	Influence- Positive	Influence- Negative	
Actor- 350T	0	2	0	1	0	0	
Actor- CER	0	0	0	0	0	1	
Actor- CHB	0	2	0	4	0	3	
Actor- CITY	0	0	0	1	0	1	
Actor- CQCT	0	0	0	0	0	1	
Actor- CRC	0	1	1	2	1	2	
Actor- DN	0	1	0	1	0	2	
Actor- HCN	0	2	0	2	0	2	
Actor- IWPN	0	0	0	0	1	0	
Actor- K5	0	3	0	3	0	2	
Actor- NDN	1	0	0	0	0	2	
Actor- NWTT	0	1	0	1	0	0	
Actor- OLY	0	0	0	1	0	1	
Actor- PBD	0	0	0	0	1	0	

Appendix B. Comprehensive results of public reporting data set

Actor- PORT	2	0	0	0	0	0
Actor- PTOI	0	15	0	17	0	16
Actor- SI	0	3	0	0	0	4
Actor- SNS	0	0	0	2	1	2
Actor- ST	1	2	1	1	0	3
Actor- TNS	0	0	0	3	0	2
Actor- TNT	0	17	1	7	1	9
Actor- TW	0	1	0	2	0	8
Actor- UPS	0	3	0	3	1	4
Actor- USON	0	0	0	0	0	1

Table 5: Analysis of procedural justice in public reporting data by source

Table 6: Anal	Table 6: Analysis of procedural justice in public reporting data by theme											
	Access- Positive	Access- Negative	Recognition- Positive	Recognition- Negative	Influence- Positive	Influence- Negative						
Theme- Consultation	1	20	1	15	0	12						
Theme- Disclosure	4	31	1	13	0	13						
Theme- Economy	0	0	0	0	0	2						
Theme- Ecosystem	0	5	0	7	0	5						

Theme- Emissions	0	6	0	15	2	20
Theme- Hazards	0	0	0	1	0	1
Theme- Location	0	1	0	1	0	0
Theme- Pollution	0	2	0	2	0	1
Theme- Process	4	48	3	46	6	62
Theme- Regulations	2	21	0	24	2	37
Theme- Revisions	0	7	0	12	1	16
Theme- Safety	1	14	0	8	0	7
Theme- Structure	1	8	0	13	0	27
Theme- Violence	0	16	0	19	0	15

Table 6: Analysis of procedural justice in public reporting data by theme

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Table	Table 7: Analysis of themes in public reporting data by source													
	Theme- Consultation	Theme- Disclosure	Theme- Economy	Theme- Ecosystem	Theme- Emissions	Theme- Hazards	Theme- Location	Theme- Pollution	Theme- Process	Theme- Regulations	Theme- Revisions	Theme- Safety	Theme- Structure	Theme- Violence
Actor-350T	1	0	0	0	0	0	0	0	1	0	0	0	0	0
Actor-CER	0	0	0	0	1	0	0	0	1	1	0	0	0	0
Actor-CHB	1	2	0	0	3	0	0	0	6	3	0	1	2	0
Actor-CITY	0	0	0	0	0	0	0	0	1	1	0	0	1	0
Actor-CQCT	0	0	1	0	0	0	0	0	1	1	0	0	0	0
Actor-CRC	1	0	0	1	0	0	0	0	3	1	0	0	1	1
Actor-DN	0	0	0	1	1	1	0	0	3	2	0	1	2	2

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2	0	0	0	0	0	0	0	2	1	0	0	1	2
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3	0	0	1	0	0	0	0	3	2	0	1	1	3
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Table 7: Analysis of themes in public reporting data by source