



Good Neighbor Environmental Board Meeting

**Pier South Hotel
800 Seacoast Drive
Imperial Beach, California**

June 27–28, 2019

MEETING SUMMARY

JUNE 27, 2019

Welcome, Introductions and Overview of Agenda

Ann-Marie Gantner, Good Neighbor Environmental Board (GNEB) Designated Federal Officer (DFO), Federal Advisory Committee Management Division, Office of Administration and Resources Management, U.S. Environmental Protection Agency (EPA); Paul Ganster, Chair, GNEB; and Council Member Paloma Aguirre, City of Imperial Beach, California

Ms. Ann-Marie Gantner, GNEB DFO, and Dr. Paul Ganster, GNEB Chair, welcomed the participants and thanked Council Member Paloma Aguirre for hosting the meeting in Imperial Beach, California. Dr. Ganster thanked GNEB members for their contributions to the draft report, noting the interesting and complex topic.

Council Member Paloma Aguirre, Imperial Beach (California) City Council, welcomed the participants to Imperial Beach and noted that she has been working on border issues for a long time. She is proud to be the first Latina to be elected to the city council. Approximately 28,000 residents live within the 4.4 square miles of Imperial Beach, which is bordered by numerous natural resources. The city faces challenges from a variety of factors, including lack of infrastructure, cross-border and sewage pollution, and sediments. Also, the watershed in which Imperial Beach lies is shared by the United States and Mexico. Developing solutions for these challenges requires binational collaboration. She and Council Member Manny Rodriguez, Tijuana (Mexico) City Council, have been working together in the spirit of cooperation, and Council Member Rodriguez was instrumental in Tijuana's recent ban of single-use plastics. She highlighted Council Member Rodriguez's attendance at this meeting as an example of binational cooperation.

Dr. Ganster provided an overview of the agenda, which included more time devoted to discussion of the Board's latest report and fewer presentations than past GNEB meetings, and asked the Board members to introduce themselves. A list of meeting participants is included as Appendix A; the meeting agenda is included as Appendix B. The official certification of the minutes by the Chair is included as Appendix C.

North American Development Bank's (NADB) Participation in the Energy Sector

Denise Moreno Ducheny, U.S. Border Resident Representative, NADB Board of Directors

Ms. Denise Moreno Ducheny, NADB Board of Directors, explained that NADB was established in 1994 as a result of the North American Free Trade Agreement (NAFTA) to develop and finance environmental infrastructure along the U.S.-Mexico Border. The initial focus was on water and wastewater, but as the focus has evolved, NADB's jurisdiction and the types of projects that it funds have expanded. NADB is governed by a 10-member binational board of directors, with an equal number of representatives from the United States and Mexico. The Board meets two times per year, once on each side of the border.

NADB funds a variety of projects from different sectors, including water and wastewater, solid waste, water conservation, air quality, solar and wind energy, energy efficiency, and others. The majority of the grants funding is awarded in the water and wastewater category. As NADB's lending has increased and its portfolio has expanded, grants have increased, especially in the energy sector. Per the La Paz Agreement, NADB was able to fund projects within 100 kilometers (km) of each side of the border; this since has been increased to 300 km on the Mexico side. This has allowed several more industrial centers in Mexico that have a large impact on the environment of the border area to receive funding. NADB's funding has resulted in the establishment of 23 water treatment plants, 37 water distribution systems, 55 wastewater treatment plants, 92 wastewater collection systems, 23 water conservation projects, 16 solar plants with 337.5 megawatts (MW) of generation capacity, 12 wind farms with 1,724.5 MW of generation capacity, and two biogas facilities with 3 MW of generation capacity, among other accomplishments. As a result, NADB-funded projects have achieved a number of positive environmental impacts, with improved water and air quality, as well as waste collection and disposal.

NADB's lending portfolio focuses on energy, with 86 percent of loans placed in eligible green bond sectors. Approximately one-half of lending is for wind energy, and one-quarter for solar energy. With \$1.5 billion in funding, NADB supports 36 clean energy projects that have produced 2,874.8 MW of capacity. Ms. Ducheny displayed a map highlighting the locations of clean energy projects funded by NADB. She highlighted a wind energy project located in Tecate, Baja California, Mexico, that delivers electricity to San Diego, California, as well as a Wastewater Treatment Plant Cogeneration and Improvements Project in Ciudad Juárez, Chihuahua, Mexico. NADB also is considering projects related to solar roofs and energy efficiency (e.g., Property Assessed Clean Energy programs), vehicle energy use, natural gas issues, dual use (water/wastewater and solid waste), and geothermal resources (e.g., Salton Sea). Ms. Ducheny stressed that NADB serves as the "glue" to hold the projects together but does not provide all of the funds. All NADB projects are certified. Air quality projects must consider vehicle energy and fuel consumption, and natural gas projects must replace dirtier sources of energy (e.g., coal, diesel).

Q&A and Discussion

Dr. Ganster noted that when NADB and the Border Environment Cooperation Commission (BECC) merged, the concern was that community stakeholder and public input regarding border projects would decrease. He asked Ms. Ducheny to comment on this. Ms. Ducheny explained that the merger was careful to maintain BECC's culture of openness. NADB retained BECC's processes for stakeholder input and transparency. The environmental certification process established by BECC is performed at the same time as the financial analysis. All projects require public notice.

Dr. Teresa Pohlman, U.S. Department of Homeland Security (DHS), asked about the role that businesses along the border play in helping with finances. Ms. Ducheny responded that businesses usually request the financing.

Dr. Patricia Juárez-Carrillo, The University of Texas at El Paso, asked whether NADB's focus or vision, established under NAFTA, had changed with the new United States-Mexico-Canada Agreement (USMCA). Ms. Ducheny replied that the focus and vision had not shifted thus far and that there had been attempts to incorporate environmental side agreements from NAFTA into the main agreement for USMCA. NADB has its own charter and stands alone. Furthermore, NADB is being used as a model to show how environmental considerations work as part of an agreement.

Mr. Erik Lee, North American Research Partnership, asked whether the project selection process truly is a bottom-up process. Ms. Ducheny responded that it is, and she has argued for prioritizing projects through regional sustainability plans because each region may have a different priority that could change the

project funding portfolio. This type of approach would provide more balanced projects in the border area versus the bottom-up approach that still is in use.

Mr. Soll Sussman, S Cubed Studio, commented that one reason that NADB management was involved in the Border Energy Forum was to call attention to funded projects and attract new projects. He asked whether NADB has examined methods to aggregate energy-efficiency and distributed-generation projects so that the capital is large enough to justify financing of the projects. Ms. Ducheny noted the delicacy of such an action and explained that agreeing to the Property Assessed Clean Energy funding program was the closest NADB had come to this.

Mr. Bryan Early, California Energy Commission, noted that energy efficiency can be complicated to finance, and the border community needs to understand that the financial benefits are real.

Mr. Mario Lopez, IEnova, commented that NADB workshops would be beneficial for new governors, mayors and state assembly members in Baja California as they take office. Ms. Ducheny stated that she would be happy to be invited to provide workshops on NADB.

Public Comments

Ms. Gantner called for public comments. No oral or written comments were offered.

Discussion of the 19th Report to the President and Congress on Energy Production, Transportation and Demand in the U.S.-Mexico Border Region

Dr. Ganster explained that GNEB has a statutory requirement to submit an annual report about the U.S.-Mexico border environment to the President and Congress; the report must represent a consensus of the Board. GNEB's 2018 letter, which met the statutory requirement, lays out the content of the current report. The Council on Environmental Quality (CEQ) responded to the letter, suggesting that the Board explore Executive Order (EO) 13807 and methods to ensure that the environmental approval process for infrastructure is more efficient. The ultimate goal is for the federal response to be more coordinated and move more rapidly.

The Board had reviewed the proposed outline for the report during its April 2019 teleconference and developed the current working outline, writing assignments and draft report from this discussion. Dr. Ganster explained that Mr. Lawrence Lucero, who has retired, has agreed to share his expertise about border energy issues and provide an informal review of the report.

Dr. Pohlman volunteered to provide language about EO 13807; Ms. Crystall Merlino, DHS, will assist. DHS representatives serve on the Federal Permitting Improvement Steering Council, which is separate from EO 13807, but the steering council and EO affect each other because federal cooperation is important. Additionally, DHS has invested in energy. For example, Immigration and Customs Enforcement uses a photovoltaic energy source on the island of Vieques, Puerto Rico, that generates enough power to operate a communications tower that is vital to the mission. DHS also has developed a resiliency plan. Ms. Merlino will provide a section on resilience for the report.

Ms. Gantner provided an update about the status of GNEB's renewal. The President has released an EO the renewal of Presidential advisory committees. GNEB is a nondiscretionary committee, and its future is unclear at this point. The Board, a presidential advisory committee established by EO, is renewed every 2 years by the Office of Management and Budget and U.S. Department of Justice. EPA is moving forward with expectations that GNEB will be renewed. Hopefully, news about renewal will be available by the end of September. Dr. Ganster added that GNEB is not an EPA committee, but rather an independent advisory committee for which EPA provides support. GNEB was formed in 1992 in the lead-up to

NAFTA, and the need for investment in the Board continues to this day. The current challenges in the U.S.-Mexico border region justify GNEB's continued existence. A Board member looked up and read the statutory purpose of the Board as passed by the 102nd Congress. The Board members discussed how to ensure that GNEB is renewed and the importance of articulating why GNEB is needed currently and in the future. Ms. Gantner promised to keep Board members informed of any developments.

Ms. Justine Kozo, County of San Diego Health and Human Services Agency, asked about the goal of the report and whether it is to provide education, make recommendations or request funding. Dr. Ganster responded that the purpose of the report is to make recommendations to the President and Congress regarding energy production, transportation and demand in the transborder region, including areas in which to make investments. The report will explore energy in the border region and what is possible in terms of expansion and trade. The Board must identify areas of opportunity, as well as real and potential problems to be addressed (e.g., energy access for the broader society, socioeconomic implications of heat waves). Because energy affects all border issues, it is difficult to separate it from these issues. The report must examine energy in terms of its effects on border society and on investment and trade. The challenge that GNEB will face in writing the report is the uncertainty surrounding current public policy on both sides of the border. It will be necessary to understand how Mexico's energy reform relates to the new Mexican presidential administration's energy trade and investment policies, which ultimately will affect the border region.

Ms. Rebecca Roose, New Mexico Environment Department, asked how the Board's previous recommendations have been used. Dr. Ganster replied that GNEB has identified issues important to the region and with national policy implications (e.g., invasive species, children's health along the border). GNEB cannot directly lobby Congress, so it is difficult to determine exactly what actions have resulted from the recommendations, but it is important that the reports repeatedly emphasize to the President and Congress that the border region is a distinct socioeconomic and geographic region of the United States. Data indicate that if the border region were classified as the 51st U.S. state, its ranking would be grim in terms of the environment and economics. The voice of tribal peoples in the border region also must be heard. Federal agencies review GNEB's report, which also is taken into consideration by Congressional staffers. The report also provides educational opportunities, which are difficult to measure. Ultimately, the report helps to educate the Washington, D.C., bureaucracy about border realities, especially because many federal agencies have representatives who serve on the Board. The U.S.-Mexico border region tends to be absent from U.S. policies; GNEB keeps the policy community aware of the border and its unique situation. Ms. Sylvia Grijalva, U.S. Department of Transportation, agreed that the reports keep the border in the consciousness of policymakers so that future projects consider border environmental issues.

Mr. Lopez asked whether the goal is to develop a report or ensure that the recommendations are implemented. Dr. Ganster explained that the Board reports primarily to the President, but also to Congress. The recommendations should address documented needs, be reasonable, and be achievable. Outreach to ensure that the recommendations are implemented is not within GNEB's mandate. Individual Board members may provide outreach if they make it clear that they are not representing GNEB as a whole, but this is challenging because Board members are volunteers with full-time jobs that do not allow them to allot the time needed to perform effective outreach.

Mr. John McNeece, III, University of California, San Diego, would like the Board to explore how to best market the report, especially given the network that exists across border states. Each state representative could provide outreach to officials in their states to ensure that those who can affect change receive the report. This effort would not require a good deal of resources. Dr. Ganster agreed. Ms. Roose suggested that each state offer a representative to serve on an outreach subcommittee. Mr. Lee added that the main challenge is how to "give legs" to outreach efforts. Outreach often is the area in which efforts fail. The process of educating D.C. politicians about the border region is a constant and ongoing effort.

Additionally, it is of critical importance to roll out the report at the Mexico Institute, which is located in the Ronald Reagan Building in Washington, D.C.

In response to a question from a Board member, Ms. Gantner and Dr. Ganster explained that the report is translated into Spanish, and they described the various challenges involved with the process that do not allow the Spanish version to be published at the same time as the English version.

Mr. Sussman volunteered to provide a case study from Hurricane Harvey that highlights energy resilience. Dr. Juárez-Carrillo agreed that the report should include a discussion of resilience. She asked how the report topics are determined. Ms. Gantner responded that the topics are determined by the White House and suggested to GNEB through the CEQ. Ms. Gantner meets each year with the CEQ Chair to discuss the report topic. Dr. Ganster added that GNEB advances a number of topics for consideration.

Dr. Margaret Wilder, University of Arizona, commented that GNEB is a “best-kept secret.” The Board is not as known as it should be and is underutilized in academic research. She supported the idea of outreach to publicize the Board and the report. She thought that it would be helpful to disseminate the report to academic communities, and she can assist with this. Ms. Jessica Helgesen, EPA Region 9, commented that the Border 2020 listserv has publicized the report in the past.

Dr. Alan Sweedler, City of Del Mar (California), emphasized the importance of providing education about the border region. Most Congressional staffers and members of Congress consider the region nonexistent. He asked whether individuals can present about the Board and its report. Ms. Gantner reiterated that GNEB members can discuss the report and recommendations as long as they are clear that they do not represent the entire Board. GNEB members can distribute hard copies of the report if they are available; Ms. Gantner can provide them on request. Dr. Ganster added that perception is important; Board members should not be seen as lobbying Congress and therefore must exercise common sense. Working with Congressional staffers who care about border issues is beneficial. A GNEB member added that the best way to publicize the Board and its report is to find a champion in Congress. Ms. Gantner explained that she is required to send a certain number of copies of the report to Congress, including seven copies to the Library of Congress.

After a break for lunch, the GNEB members continued discussion of the report. Dr. Ganster explained that Chapter 10 of the report would be developed from the previous nine chapters. Dr. Sweedler noted that the sections on each state provide valuable information, but additional factual information needs to be added (i.e., tables and charts with “facts on the ground”). The report needs to address what type of development is likely to be economically beneficial to the local region and how the United States can work with Mexico to achieve this. The report also should discuss how energy affects the environment, as well as the binational elements. Transborder binational elements should be included in every section. He explained that, similar to California, Baja California is an “energy island” and is more dependent on California than Mexico for its energy supply. This creates a symbiosis that offers both opportunities and challenges. The policies that California is developing provide Mexico the opportunity to develop the country’s indigenous resources (e.g., wind, solar, thermal) in Baja California. Assisting Baja California will provide California with a source of renewable energy, which is particularly important because California is mandated to have 100 percent renewable energy by 2025. What can the Board recommend that will encourage energy development in Baja California? On the other hand, Texas views Mexico as an energy demand center, and Mexico has become a net importer of energy. Mexico’s energy sector must be encouraged to develop indigenous resources. When considering the U.S. side of the border, the following questions must be asked: How can U.S. border communities benefit from transborder pipelines? What can GNEB recommend to ensure that U.S. border communities benefit from the cross-border transport of energy? Mr. Lopez reminded the group that not all benefits to border communities are monetary. He described the reasons for the transition to natural gas and the social benefits of this transition. Clean

energy also has health benefits. What can GNEB recommend to allow decision-makers on both sides of the border to promote national clean energy goals? When describing cross-border energy issues and how to improve public health and the environment within the report, colleagues in Mexico border states will need to provide input.

Mr. McNeece commented that Chapter 3 provides an overview and comparison of the U.S. and Mexico energy sectors and would be the best section in which to discuss specific energy flows and how they specifically benefit U.S. border communities, as well as describe obstacles to these benefits. These obstacles and challenges (e.g., lawsuits) should be discussed in Chapter 9. Three issues to consider are U.S. export of natural gas, export of electricity and import of natural gas. The Board also must consider that Mexico is moving toward 100 percent natural gas energy, and the country's dependence on the United States for this energy source creates a situation of uncertainty for Mexico in the current political environment. The North American Electric Reliability Corporation (NERC) should be discussed in this section as well.

Dr. Pohlman commented that encouraging Mexico to develop indigenous resources is beneficial, but this type of recommendation is not within the Board's purview. She volunteered to write a summary about resiliency for Chapter 1 and information about resiliency for Section 2.3 because DHS has been involved with efforts related to resiliency. Planning for resiliency costs more initially, but provides a good long-term return on investment. GNEB's recommendations must consider resiliency and the related long-term benefits. Ms. Grijalva added that the Board must keep in mind to whom the recommendations are presented—the U.S. President and Congress. Certain types of recommendations will be better received (e.g., regional sustainability plans). Ms. Gantner agreed and explained that although GNEB used to be binational, the current statute requires the Board to focus on the U.S. side of the border. Dr. Ganster noted that colleagues in Mexico can be consulted informally.

Mr. Early commented that the report is complex because of the various stakeholder perspectives and goals. Specific recommendations can help California to meet its energy goals and simplify the state's energy transition. The report can describe how different states view benefits and opportunities on the border, as well as their energy visions. Energy efficiency is a bipartisan issue that decision-makers find easy to support.

Dr. Juárez-Carrillo noted the importance of considering both surface water and groundwater. The United States and Mexico share aquifers for energy production. Water is essential and will affect future energy production. The availability and affordability of water for the public also is a critical issue.

Dr. Wilder also agreed with the suggestion to include resiliency, noting that the report will need to define resiliency because the term can have different meanings for different sectors. What does energy efficiency mean distinct from resiliency? Green infrastructure is important for energy efficiency and resiliency. GNEB should advocate for infrastructure that is less damaging to the environment. Dr. Pohlman explained that her agency had developed a definition of resiliency for the work it has been performing in this area, and she can help to develop a definition that suits the Board's and report's purposes.

Dr. Sweedler commented that Chapter 9 should advocate for open, free trade of energy and examine the binational transborder area as one region in terms of energy production and infrastructure. Microgrids should be considered because they factor into resiliency. Ms. Kozo suggested including case studies that focus on resiliency.

Ms. Roose asked what timeframe (e.g., 5, 10, 20 years) should be considered when developing the Board's recommendations. Would it be beneficial to use models of what the border region could look like in 20 to 30 years and then develop recommendations to help the region prepare for the projected changes?

Dr. Sweedler noted that using predictions is difficult because too many unknowns exist. He suggested looking 5 years out—and no further than 10 years—because the various factors become too speculative at that point.

Mr. Lee noted that energy independence is being promoted by the current U.S. and Mexico administrations. Energy independence is in conflict with the spirit of cooperation that the report encourages. Cooperation also is written into the new USMCA. Mr. Sussman compared the current energy independence situation to the past and wondered what recommendations the Board could make in this area. For example, one recommendation could be that NADB expand the geographical area in which it can provide funding or increase the number of natural gas projects. Examining the topic of “watergy” is helpful in the border area because of the agricultural areas and food transportation issues. The report can explore the food-water-energy nexus and how energy affects environmental issues. As Nobel laureate Richard Smalley advocated, economical clean energy is the top solution for the world’s most pressing problems.

Ms. Helgesen noted that the outline for Section 9.7 on California–Baja California considerations includes a section on the benefits of sharing energy resources across the border. In terms of developing recommendations, she wondered whether each state section should be viewed in this manner.

Dr. Sweedler agreed that each state should be described in this manner. Dr. Ganster added that case studies could be included to emphasize this.

Dr. Wilder noted that a discussion of the socioeconomic status of the border region is missing from the report and should be included in each section. The report must seriously consider the household and community scales in the analysis of energy and energy poverty. She agreed that the report should discuss watergy, as well as binational desalination plants. Official procedures for binational desalination and export of water exist; producing water requires large amounts of energy and money, which could be addressed in the report. Dr. Ganster agreed that the water-energy linkage is critical. Dr. Wilder volunteered to draft a section discussing binational desalination. She added that how border residents experience energy must be addressed, including a discussion of federal programs to help low-income families afford energy (e.g., Low Income Home Energy Assistance Program).

Mr. Lee summarized that a key question the Board is trying to answer is how to use energy to solve problems simultaneously in border region communities. Dr. Ganster added that Mexican communities have a long history of income transfers through energy subsidies. The report needs to address the energy needs of the entire population, especially in terms of public health (e.g., heat-related deaths caused by lack of accessible, affordable energy).

Dr. Pohlman reiterated that the purpose of the recommendations is to suggest reasonable actions that are palatable to the President and Congress and can be achieved. This must be considered when developing the recommendations.

Mr. Lopez cited Border 2020 and wondered why similar cross-border groups have not been established for port of entry planning and to examine energy in the border region. Long-term energy planning is needed on both sides of the border, with federal agencies taking the lead. Dr. Ganster commented that it may not have been included because of differences in energy agencies on both sides of the border, but this would be a good recommendation, particularly given the clear successes and positive impacts of Border 2020. Dr. Sweedler commented that a border energy resource committee existed at one point to address cross-border energy issues, and perhaps establishment of this type of a group could be revisited.

Dr. Juárez-Carrillo commented that recommendations should consider climate change, particularly the predicted increase in heat waves.

Ms. Roose commented that she would edit the section on New Mexico to include the most critical information based on the discussions at this meeting. She will include water in Sections 9.1 and 9.2; Section 9.2.3 can include water regulations and regulatory challenges related to energy. Section 9.2.4 can include a discussion of climate change regulations. Mr. McNeece added that the New Mexico section does not include the aggressive plans by Purdue University to develop an energy park near the border. Dr. Pohlman agreed that the energy park should be included in this section.

Dr. Sweedler noted that some topics are important to include to educate the reader but may not have specific recommendations attached. These topics should not be neglected.

Following a break, the GNEB members discussed each individual section of the report.

Dr. Wilder provided an overview of Section 2.1. Mr. Early will send to the GNEB members a California Energy Commission study, performed at the request of the state legislature, about barriers that low-income families face in meeting their energy needs. As a result of the study, energy equity indicators were developed. Dr. Juárez-Carrillo will send to the GNEB members a study on the effects of extreme heat.

Mr. Rob Roy, La Jolla Band of Luiseno Indians, provided an overview of Section 2.2, noting that tribes have not been included in true and meaningful consultation by federal agencies on issues that affect them. Dr. Ganster asked whether any tribal groups viewed alternative energy as a viable economic strategy. Mr. Roy responded that tribes have been developing renewable energy projects with grants from the U.S. Department of Energy (DOE) and Bureau of Indian Affairs, but those he is aware of are outside of the border region. Ms. Merlino suggested including information about tribal locations in the border region to provide context. Mr. Roy will include this information. Ms. Roose will connect Mr. Roy with Ms. Pilar Thomas, a tribal member and former DOE staff member, who knows a great deal about energy development in Indian country. Ms. Helgesen will provide a border map with tribal locations.

Dr. Jeffrey Payne, National Oceanic and Atmospheric Administration, could not attend the meeting but had submitted Section 2.3 for the Board's review. Dr. Wilder thought that this section was rather general and could be made more specific. The projects described in the section can be used to develop recommendations. Dr. Sweedler would like the number of extreme heat days added to the pertinent portion of this section because it has a direct bearing on the topic. Dr. Wilder agreed, noting that high heat affects transmission lines, which in turn triggers other crises. Ms. Michelle Freeark, Arizona Generation and Transmission Cooperatives, Inc., can speak to transmission line failure, as well as NERC and the Federal Energy Regulatory Commission (FERC).

In terms of resiliency, Mr. Roy cited the example of grids being shut down in rural areas of the border because of wind events, and tribes often are affected. Clean energy must be resilient to natural events. Dr. Pohlman commented that DHS may have information on grid shutdowns, but this information may be classified. Mr. Sussman added that not only grids lose power; photovoltaics are temperature sensitive and less efficient in certain conditions.

Mr. Early provided an overview of Section 2.4. Dr. Sweedler thought that this section describes an area in which the differences in the U.S. and Mexico energy sectors is significant. U.S. states have highly developed and sophisticated energy regulations, technology and so forth, whereas Mexico does not have energy development. He recommended that this section point out that enormous strides could be made in Mexico to reduce energy demand, which would benefit communities on both sides of the border, using U.S. energy regulations and technologies as exemplars.

Mr. McNeece thought that this section had a more programmatic focus and seemed out of place in Chapter 2. He thought that it should be included in Chapter 3. Mr. Eddie Moderow, Texas Commission

on Environmental Quality, thought that it also could be included in Chapter 4. He suggested including a discussion about energy efficiency in each state section. He cautioned about mentioning Mexico's energy efficiency because the United States uses four times as much energy as Mexico. Dr. Sweedler added that different energy efficiency regulations exist on each side of the border. Mr. Early agreed that Section 2.4 should be moved to Chapter 3 or 4. He recommended that data be presented throughout the report in a uniform matter for ease of comparability.

Dr. Ganster noted that trade of used vehicles and appliances across the border is a unique element of the border region that is related to energy use.

Mr. Lee provided an overview of Chapter 3, noting the uncertainty of the current situation because the new Mexican administration would like to return to the old energy model that was in place before the quick, sweeping reforms of 2014. Dr. Sweedler commented that the purpose of this chapter is to show where the two systems collide at the border. In Mexico, energy is federally regulated, and states have little control. The opposite is true in the United States, which provides challenges to binational cooperation.

Mr. McNeece provided an overview of Chapter 4. He will work with Mr. Lee and Dr. Sweedler to integrate Chapters 3 and 4 and include Section 2.4. They also will work to decrease the text related to oil and add information about energy efficiency. Dr. Wilder noted that the comparisons included in Chapters 3 and 4 lend themselves to table format. Dr. Sweedler suggested using the case study of the combined-cycle plant in Mexicali, Baja California. GNEB should discourage the building of energy plants in Mexico because companies believe that the regulations are loose compared to the United States. Cross-border regulations should be standardized so an accidental incentive to build in Mexico is not created that is detrimental to the environment on both sides of the border.

Ms. Roose, Mr. Moderow and Mr. Leonard Drago, Arizona Department of Environmental Quality, will provide information about their respective states for Mr. McNeece to include in Chapter 4. Mr. McNeece also will include information about California's status as an energy island, as well as information about the National Environmental Policy Act (NEPA). Mr. Gilbert Anaya, U.S. International Boundary and Water Commission (USIBWC), will provide information about how USIBWC and its Mexican counterpart handle permitting. Ms. Roose volunteered to provide additional information about New Mexico for Chapter 9, as well as for Chapter 4. Mr. McNeece stated that it would be helpful to have a chart outlining each state's governing bodies and their responsibilities.

Mr. Lee provided an overview of Section 4.3, outlining the energy permitting process. Dr. Pohlman noted that under EO 13807, permitting processes themselves have not changed. What has changed is that agencies will cooperate, and each agency is no longer required to perform its own NEPA studies. The One Federal Decision movement allows agencies to standardize and streamline their processes. In response to a question from Dr. Ganster, Dr. Pohlman indicated that it would be beneficial for the GNEB to recommend that the federal government continue to increase efficiency through EO 13807. She noted that her colleague, Ms. Jennifer Hass, DHS, could develop language for this recommendation.

Ms. Roose volunteered to provide information about New Mexico for greenhouse gas and Clean Air Act discussions in Chapter 4. She thought that the state tables that had been proposed could be placed in Section 4.4. The NEPA overview also could be included in Section 4.4.

Dr. Sweedler provided a general overview of Chapter 5, which provides a "stroll along the border" with information about various states. Mr. Lee provided an overview of Section 5.2, and Ms. Roose provided an overview of Section 5.3. She plans to make the section more streamlined and include the most salient points based on the discussion. Ms. Tiffany Goolsby, South Central Council of Governments, agreed with the plan for revising Section 5.3 and volunteered to provide information about economic development projects in New Mexico for this section. Dr. Ganster agreed that the sections on states should be

streamlined, but the size of each state should be taken into consideration when determining the length of each section. Information that is useful but not integral to the main body of the report will be included in appendices. Dr. Wilder recommended that the order of the state sections go from east to west.

The GNEB members discussed the shutdown of the Navajo Nation generating station, which devastated the local community. Dr. Sweedler noted that a recommendation that national policy should not discourage the use of coal as an energy source would prevent a similar situation from occurring in the future. He thought that the Navajo Nation example should be included as a case study. Ms. Freark volunteered to develop a section for Chapter 5 about the Navajo Nation's stance on coal power.

Ms. Helgesen thought that a summary of Border 2020 would be beneficial to include in Chapter 1. Ms. Roose agreed and thought that more detailed information about Border 2020 could be included in Section 4.4.3. Ms. Helgesen volunteered to provide language about Border 2020 for these sections.

Dr. Ganster recessed the meeting at 5:36 p.m. PDT.

JUNE 28, 2019

Discussion of Next Meetings and Other Business

Ms. Gantner outlined the timeline for completing the report:

- July 29: All drafts due to Ms. Gantner and Dr. Ganster.
- August 2: All sections due to the contractor from Ms. Gantner and Dr. Ganster.
- August 8: Compiled and formatted report due from the contractor to Ms. Gantner and Dr. Ganster.
- August 13: Draft sent to Board for review and comment.
- September 2: All comments due on final draft.
- September 9: Comments compiled and circulated to all GNEB members.
- September 19: Teleconference for final approval of report. The teleconference will be held from 12:00 p.m. to 4:00 p.m. EDT.
- Late September and October: Editing of report.
- October and November: Production of report.
- No later than December 31, 2019: Transmission of the report.

A quorum must be present on the teleconference to approve the report. Alternates do not count as part of the quorum because they do not vote. Members are not required to attend for the full length of the teleconference if they are unable.

In response to a question from a Board member, Ms. Gantner and Dr. Ganster explained that if GNEB's charter is not renewed, the report still will be released in some format, possibly through academic channels.

Public Comments

Ms. Gantner called for public comments. Mr. Mike Anthony, San Diego Border News, worked on cross-border protocols. He has lived in Imperial Beach for a long time and used to take walks to the Tijuana River. The area currently is facing the largest biohazard in North America in the last 50 years. Pollution is vectorized by sea mist, dust and so forth. This pollution has personally affected his health and that of his son. The Scripps Institution of Oceanography performed water testing and found pollution values 1,000 times greater than those reported by the San Diego Health Department, indicating that this department has perpetrated fraud. He is interested in this topic and open to collaborating with GNEB to address it.

Continued Work on Development of the 19th Report

Dr. Ganster explained that because of the uncertainty of Mexican energy policy, Chapters 7 and 8 may need to be revised immediately before the report is published. Chapter 9 also has opportunities to present recommendations.

Dr. Wilder recommended framing the report around the themes of vulnerability, efficiency and resiliency. The recommendations also can be organized within these framing concepts. The report can be punctuated with exemplar cases in the various states that serve as case studies to illustrate each framing concept discussed in the report. The GNEB members agreed with the idea of framing the report around key concepts.

Ms. Melanie Scruggs, Texas Commission on Environmental Quality, suggested affordability and reliability as potential framing concepts. Dr. Wilder noted that affordability and reliability are included within the broader concept of resiliency. The Board will need to provide definitions for its framing concepts. Mr. Lee thought that economic development is a framing concept, and the GNEB members agreed.

Dr. Pohlman explained that DHS had developed a definition of resiliency that she and Ms. Merlino could adapt for the Board's needs that includes the concept of social science and has universal appeal.

Dr. Sweedler wondered how border communities benefit from having pipelines other than tax benefits. He described the reality of border communities and advocated for a recommendation about providing training that has a lasting impact on these communities. Ms. Goolsby commented that the sections on New Mexico and tribes reference the need for increased transmission lines to bring renewable energy to the market. This could be a recommendation because this would have tangible community benefits through the increase in opportunities for renewable energy projects.

Dr. Wilder thought that NEPA and environmental justice laws should be enforced when transmitting energy across the border, which would help to prevent negative impacts on humans and the environment.

The Board members discussed how to incorporate the four organizing concepts into the report. Dr. Wilder suggested that the report initially define the concepts and describe what the report will discuss, and Board members can determine how to discuss these concepts in their sections. Case studies highlighting the concepts should be included throughout the report. The chapter on recommendations can list the recommendations organized by the framing concepts. Mr. Sussman agreed that the framing concepts provide a constructive overview for the report and can be woven into the body of the report easily. Dr. Sweedler reminded the Board members that inclusion of the organizing concepts would need to be consistent throughout the sections, and this would not be easy. Mr. Lee suggested developing a new chapter about how the four organizing concepts can encourage energy development and efficiency in the border region and keeping the remaining sections as is.

The GNEB members agreed that the four organizing concepts needed to be defined before any of the sections were revised. GNEB developed the following definitions for these concepts:

- **Vulnerability** is a state of susceptibility to harm from exposure to stressors on the energy system and from the limitations in the capacity to adapt.
- **Resilience** is the capacity of energy systems and their users to deal effectively with change.
- **Energy efficiency** is getting the same or better service from technology for less energy.
- **Economic development** provides opportunities for individuals and communities to participate in and benefit from enhancements and improvements to the energy sector.

The vulnerability definition was adapted from a 2006 paper by W.N. Adger; Ms. Roose will send the reference to Ms. Kristen LeBaron, The Scientific Consulting Group, Inc.

Dr. Juárez-Carrillo asked how climate change would be included in the report. Dr. Wilder responded that this topic would fall under vulnerability. She noted that vulnerability and resilience must be connected to each other; building resiliency addresses vulnerability.

The GNEB members discussed the best approach to identify case studies within the organizing concepts; as they are revisiting their sections, the GNEB members will develop key examples and case studies that emphasize the four organizing concepts.

Ms. Roose noted that recommendations should be developed with the following key question in mind: What does GNEB want decision-makers to do differently in the border region based on the information contained in the report? The recommendations should focus on the key guiding principles for energy production, transport and use in the border region.

The GNEB members identified topics for report recommendations to address:

- Resilience and sustainability; define these terms and how they relate to border energy and the main subject of the report.
- Regional sustainability plans; specifically, regional binational energy plans as part of broader sustainability goals.
- Rational provision of energy for border communities; for example, locating energy projects in border communities when it makes economic and environmental sense.
- Delineation of U.S. and Mexico border communities and the benefits and costs of energy development and trade.
- Equity; explore federal aid programs, workforce development, human resources development and so forth to reduce energy poverty and household energy vulnerability among low-income families.
- Border 2020 process coordination, especially as it relates to energy.
- NADB and energy; encourage and support NADB's energy investments. Potential top recommendation.

- Water as part of energy development and energy and water development (watergy).
- Energy interdependence; elaborate the concept of and focus on the border region.
- Incentives and funding for transmission line/microgrid projects that benefit all/low-income communities; locating energy investments in the border region so that communities benefit. Also a top-tier recommendation.
- Robust infrastructure planning that considers sensitive and rural communities.
- Local energy generation in border communities.
- Government establishment of a process (with a timeline) for relevant local, state, tribal and federal agencies to collaborate and communicate to increase resiliency, provide for strategic economic development, and implement better projects to improve communities.
- Encouragement of NERC's continued study of adding Mexico representation to NERC and incorporating cross-border flows to protect system reliability. Another important recommendation.

Ms. Roose volunteered to organize the recommendations into the relevant organizing concepts, and Mr. Lee explained that he has an intern who can donate time to the report. Mr. McNeece added that he would like the report to include a map with gas pipelines and transmission lines in the border region.

Adjournment

Dr. Ganster thanked the GNEB members for their participation and contributions to the report and adjourned the meeting at 12:13 p.m. PDT.

Action Items

- GNEB members will:
 - Reframe the report under the four identified organizing concepts: vulnerability, resilience, energy efficiency and economic development.
 - Ensure that each section addresses the socioeconomics of the border.
 - Ensure that the report addresses the energy needs of the entire border population, as well as public health (e.g., heat-related deaths).
 - Develop key examples and case studies that emphasize the four organizing concepts.
 - Send to Ms. Gantner the originals or links to the originals of any images and maps contained in the report.
 - Research the possibility of including maps of gas pipelines in the report.
- GNEB members contributing to the sections on states will:
 - Work together to consolidate information into tables and charts to ensure that data are presented uniformly throughout the sections.

- Streamline the information contained in the main body of the report by developing an appendix with information that is useful but not integral to the main body.
- Include information about energy efficiency—including the differences on each side of the border—in their sections.
- Develop a chart that includes each state’s relevant energy bodies and their responsibilities and authority.
- Mr. Anaya will provide information for Chapter 4 about how the USIBWC and its Mexican counterpart handle permitting.
- Mr. Drago will assist Mr. McNeece by providing relevant information about Arizona for Chapter 4.
- Mr. Early will:
 - Forward to the GNEB members a study about the barriers low-income families face in meeting their energy needs.
 - Include information about binational opportunities in Section 2.4.
- Ms. Freeark will:
 - Provide text about NERC and FERC for Section 2.3.
 - Develop a section for Chapter 5 about the Navajo Nation’s stance on coal power.
- Dr. Ganster will:
 - Ensure that text describing how energy flows benefit U.S. communities is added to Chapter 3.
 - Ensure that Section 2.4 is moved to Chapter 3 or 4, as appropriate.
- Ms. Gantner will keep Board members apprised of any developments about GNEB’s renewal.
- Ms. Goolsby will provide information about economic development projects in New Mexico for Section 5.3.
- Ms. Hass will provide text for a recommendation to encourage agencies to continue to increase efficiency by following the One Federal Decision policy.
- Ms. Helgesen will:
 - Provide a border map of tribal lands.
 - Provide a summary of Border 2020 for Chapter 1 and more detailed information for Section 4.4.3.
- Dr. Juárez-Carrillo will send to the GNEB members a study on the effects of extreme heat.

- Mr. McNeece will:
 - Work with Mr. Lee and Dr. Sweedler to integrate Chapters 3 and 4, including adding Section 2.4, decreasing the text related to oil, and adding information about energy efficiency.
 - Add information about California’s status as an energy island.
 - Add a discussion of NEPA to Section 4.4.
- Mr. Moderow will assist Mr. McNeece by providing relevant information about Texas for Chapter 4.
- Dr. Pohlman and Ms. Merlino will:
 - Include information about the One Federal Decision policy (EO 13807) and related issues in appropriate sections of the report.
 - Provide a summary about resilience for Chapter 1 and detailed text about resilience for Section 2.3.
- Ms. Roose will:
 - Include the topic of water in Sections 9.1 and 9.2, water regulations and regulatory challenges related to energy in Section 9.2.3, and climate change regulations in Section 9.2.4.
 - Connect Mr. Roy with Ms. Pilar Thomas, who knows a great deal about energy development in Indian country.
 - Assist Mr. McNeece by providing relevant information about New Mexico for Chapter 4.
 - Provide relevant text about New Mexico for Chapters 4 and 9.
 - Provide information about New Mexico for greenhouse gas and Clean Air Act discussions in Chapter 4.
 - Provide the Adger (2006) reference to Ms. LeBaron.
 - Organize the recommendations into the relevant organizing concepts.
- Mr. Roy will include information in Section 2.2 about tribal locations to provide context.
- Mr. Sussman will provide a case study about resilience following Hurricane Harvey.
- Dr. Wilder will develop a section on binational desalination.

Appendix A: Meeting Participants

Chair

Paul Ganster, Ph.D.

Director
Institute for Regional Studies of the Californias
San Diego State University
San Diego, CA

Designated Federal Officer

Ann-Marie Gantner

Designated Federal Officer
Good Neighbor Environmental Board
Federal Advisory Committee Management
Division
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Nonfederal, State, Local, and Tribal Members

Leonard Drago

Ombudsman/Tribal Liaison
Director's Office
Arizona Department of Environmental Quality
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Bryan Early

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and Advisor to Chair Weisenmiller on Mexico
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John McNeece, III

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Soll Sussman

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Del Mar, CA

Federal Members***U.S. Department of Agriculture—Natural
Resource Conservation Service*****Salvador Salinas**

State Conservationist
Natural Resource Conservation Service
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U.S. Department of Homeland Security**Teresa R. Pohlman, Ph.D., LEED, AP**

Executive Director
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Federal Alternates***U.S. Department of Transportation*****Sylvia Grijalva**

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Rick Van Schoik

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North American Research Partnership
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Margaret Wilder, Ph.D.

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***International Boundary and Water
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El Paso, TX

***International Boundary and Water
Commission*****Gilbert Anaya**

Division Chief
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Texas Commission on Environmental Quality

Jim Rizk

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Other Participants

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San Diego Border News
San Diego, CA

Denise Moreno Ducheny

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North American Development Bank Board of
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Joshua Pitt

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Melanie Scruggs

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Paloma Torres

Council Member
Imperial Beach, CA

Appendix B: Meeting Agenda



**Good Neighbor Environmental Board
Pier South Hotel, 800 Seacoast Drive, Imperial Beach, California
June 27 – 28, 2019**

AGENDA

Meeting Day 1

Thursday, June 27

- | | |
|-----------------------|---|
| 8:30 a.m. | Registration |
| 9:00–9:30 a.m. | Welcome, Introductions and Overview of Agenda <ul style="list-style-type: none">• Ann-Marie Gantner, Designated Federal Officer, EPA• Paul Ganster, Chair, Good Neighbor Environmental Board• Council Member Paloma Aguirre, City of Imperial Beach• Board Introductions |
| 9:30–10:00 a.m. | North American Development Bank’s (NADB) Participation in the Energy Sector <ul style="list-style-type: none">• Denise Moreno Ducheny, U.S. Border Resident Representative, NADB Board of Directors• Q&A and Discussion (15 minutes) |
| 10:00–10:15 a.m. | Break |
| 10:15–10:30 a.m. | Public Comments |
| 10:30 a.m.–12:00 p.m. | Discussion of the 19th Report to the President and Congress on Energy Production, Transportation and Demand in the U.S.-Mexico Border Region |
| 12:00–1:00 p.m. | Lunch |
| 1:00–3:00 p.m. | Continuation of Discussion on Development of the 19th Report |
| 3:00–3:15 p.m. | Break |
| 3:15–5:30 p.m. | Continuation of Discussion on Development of the 19th Report |
| 5:30 p.m. | Recess |

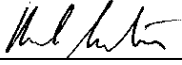
Meeting Day 2

Friday, June 27

8:00 a.m.	Registration
8:30–9:30 a.m.	Discussion of Next Meetings and Other Business
9:30–9:45 a.m.	Public Comments
9:45–11:30 a.m.	Continued Work on Development of the 19th Report
11:30–11:45 a.m.	Break
11:45 a.m.–2:00 p.m.	Continued Work on Development of the 19th Report
2:00 p.m.	Adjournment

Appendix C: Chair Certification of Minutes

I, Paul Ganster, Chair of the Good Neighbor Environmental Board (GNEB), certify that this is the final version of the complete minutes for the face-to-face meeting held June 27–28, 2019, and that the minutes accurately reflect the discussions and decisions of the meeting.



Paul Ganster, GNEB Chair

September 27, 2019

Date