I. Opening of Meeting

Ginger Norris, Designated Federal Officer (DFO), President’s National Infrastructure Advisory Council (NIAC), Department of Homeland Security (DHS)

Ms. Ginger Norris, Cybersecurity and Infrastructure Security (CISA), Department of Homeland Security (DHS) and Designated Federal Officer (DFO) for the President’s National Infrastructure Advisory Council (NIAC), called the meeting to order and welcomed participants.

II. Roll Call of Members

Ginger Norris, DFO, NIAC, DHS

Ms. Norris then called roll of all present at the meeting. She stated that the NIAC was established under Section 10 of Executive Order (EO) 13231, Critical Infrastructure Protection in the Information Age, and was most recently amended and continued under EO 13811, Continuance of Certain Federal Advisory Committees, in October of 2017. She stated that the NIAC is composed of members appointed by the President and includes senior executives with expertise throughout the critical infrastructure sectors as identified in Presidential Policy Directive 21, Critical Infrastructure, Security, and Resilience. During its nearly 18-year history, the NIAC has conducted and completed over 30 in-depth studies, which resulted in more than 300 recommendations to the President, such as how to improve intelligence information sharing across government and industry and how to identify and reduce complex cyber risks for cyber physical systems that operate critical processes, all of which have been made available to the public. Ms. Norris then gave a few instructions for the public comment period and informed that, at that time, no written public comments. Ms. Norris call to order the Quarterly Business Meeting for the NIAC and turn the meeting over to the NIAC Chair, Ms. Constance Lau to provide opening remarks.

NIAC Members Present in Person:
Ms. Constance Lau, Mr. J. Richard Baich, Dr. Georges Benjamin, Mr. William Boston, Mr. Robert Carr, General Reynold Hoover, Mr. Kevin Morley, Joan M. McDonald, and the Secretary Kirstjen Nielsen.

NIAC Members Attending via Conference Call:
Dr. Beverly Scott, General Albert Edmonds, Ms. Margaret E. Grayson, Chief Rhoda Kerr, Mr. Richard H. Ledgett, Jr., Mr. George Hawkins, Mr. Keith Parker, Ms. Ola Sage, and Mr. Michael J. Wallace.
NIAC MEMBERS ABSENT:
Ms. Jan Allman, Mr. Rand Beers, Mr. William Fehrman, Mr. Benjamin Fowke, Mr. James Murren, and Mr. Carl Newman.

SUBSTANTIVE POINTS OF CONTACT PRESENT:
Mr. Scott Seu with Ms. Constance Lau; Mr. Charles Durant with Mr. William Fehrman; and Mr. Samuel Chanoski with Mr. Michael J. Wallace

SUBSTANTIVE POINTS OF CONTACT OBSERVING VIA CONFERENCE CALL:
Mr. Theodore Basta with Dr. Beverly Scott; and Mr. Frank Prager with Mr. Benjamin Fowke

OTHER DIGNITARIES PRESENT:
Ginger Norris, DHS; Dr. Ed Canuel, NSC; Deputy Director Matthew Travis, DHS; Assistant Deputy Bradford Willke, DHS; Mr. Frank Cavillo, DHS; Governor David Ige, State of Hawaii; Ms. Traci Silas, DHS; Lieutenant General Mike Minihan, U.S. Indo-Pacific Command (INDOPACOM); Major General Kenneth Hara, Adjoint General, State of Hawaii Department of Defense (DOD); Deputy Director Derek Chow, Hawaii Department Of Transportation; Mr. James Cruz, DHS; Ms. Patricia Hoffman, DOE; Mr. Jonny Greenwald, U.S. INDOPACOM; Ms. Cathy Johnston, U.S. INDOPACOM; Mr. Keith Yamanaka, USAG HI; Ms. Dolores Cook, DHS; Ms. Kirsten Turner, Hawaii State Energy Office (HSEO); Mr. Glenn Waka, Senate; Ms. Katie Hilbush, Senate; Mr. Jon Chin, State of Hawaii; Mr. Leo Ascuncion, Public Utility Commission (PUC); Mr. John Doyle, PUC; Ms. Erica Salvador, INDOPACOM; Mr. Christopher Yunkov, HSEO; Mr. Mark Ward, Hawaii Government; Ms. Amy Luersen, Hawaii Community Foundation, Mr. Kevin Takata, Attorney General, Criminal Justice Division; Ms. Amelia Lucas, House of Representatives; Mr. Paul Mow, Deputy Attorney General, Criminal Justice Division; and Ms. Holly Kim, Hawaii Government.

III. OPENING REMARKS AND INTRODUCTIONS

Constance H. Lau, NIAC Chair
Beverly A. Scott, NIAC Vice Chair
Ed Canuel, Director, Critical Infrastructure, National Security Council (NSC)
Matthew Travis, Deputy Director, Cyber Infrastructure Security Agency (CISA), DHS
Patricia Hoffman, Principal Deputy Assistant Secretary, Office of Electricity, Department of Energy

Ms. Lau welcomed everyone to this NIAC Quarterly Business Meeting (QBM), and she stated that it was a pleasure to be able to host this QBM in Honolulu, Hawaii. She thanked her fellow members who were able to make it to this meeting in-person and stated that she really appreciated them coming out to Hawaii. She shared that one does not truly appreciated the
location and isolation of Hawaii until they have been there, and she added that for the members attending on the phone she hoped that they would be able to visit Hawaii someday soon and that she would be very happy to host them there in Honolulu and show them their Island. She stated that this was also a very special meeting because there was a new member being sworn in, the [former] Secretary Kirstjen Nielsen. She then welcomed Deputy Director Matthew Travis to administer the oath. Deputy Director Travis stated that it was a great privilege and distinct privilege to swear in the former Secretary, and he added that without [former] Secretary Nielsen the cyber and subsidy would not exist. He shared that it was both her leadership and power of persuasion that helped get that bill across the finish line with congress, and he stated that CISA will always appreciate this, and that while they had always enjoyed her informal advice and counsel, they will now enjoy for formal advice and counsel as a member of the NIAC. He preformed the swearing in ceremony and [former] Secretary Nielsen was celebrated as a sworn in member of the NIAC.

Ms. Lau then stated that they would have some opening remarks from some of the NIAC’s federal partners. She stated that since this is a presidential advisory council, she wanted to start with Dr. Ed Canuel, from the National Security Counsel (NSC), for his opening remarks. Dr. Canuel thanked Ms. Lau and Dr. Beverly Scott for their continued leadership as counsel chairs and added that he particularly wanted to thank Ms. Lau for her hospitality and making all QBM participants feel very warmly welcomed here in Honolulu. He also thanked all the NIAC members for their dedication and important contributions. He also extended greetings from the President’s new Homeland Security Advisor, Dr. Julia Nesheiwat, and he stated that he has briefed her on the NIAC’s support role. He shared that Dr. Neseiwat is very excited to work with the NIAC. He shared that it was an honor to take part in the fast-tempo discussion that lead up to the latest, ground-breaking NIAC report, *Transforming the U.S. Cyberthreat Partnership*. He added that they looked forward to seeing the NIAC tackle the next related project, providing follow-up analysis on the report’s Critical Infrastructure Command Center concept.

He said that the administration remains committed to critical infrastructure security and resilience, a few current examples of related NSC priorities that impact critical infrastructure include COVID-19. He commented that for this situation they are taking a whole of government approach. He shared that the White House taskforce, containing the nation’s foremost infectious disease experts, is leading the federal response to the COVID-19. He explained that the taskforce efforts include monitoring, containing, and mitigating the virus, all while ensuring the Americans have accurate, up-to-date health and travel information. He shared that the NSC is supporting this taskforce and its many domestic preparedness and response activities through lines of effort, ranging from repatriations to quarantines.

He stated that another issues they are facing is election security and shared that the federal government was working closely with all 50 states and United Stated (U.S.) territories, local offices, and private sector partners to identify threats, broadly share information, and protect the democratic process. He commented that the diversity of election systems among states, multiple checks of redundancies in those systems, and post-election auditing all make it difficult for foreign adversaries to disrupt or change the vote tally. He shared that states have plans in place, like provisional ballots, to enable a reliable election to proceed in the case that interference does
occur. He continued by stating that while states have primary responsibility for administering elections, their agencies continue to support them by identifying best practices for voting systems, sharing threat information, and offering services and resources. He added that President Trump recently sign an EO on the responsible use of positioning navigation and timing (PNT) services, which directs the federal government to develop guidance that mitigates the risk of disruption to critical infrastructure relying on these PNT services. He emphasized that this EO will help Americans maintain uninterrupted access to essential services that are relied on daily, such as electricity, communications, and aircraft. He ended by saying that he was looking forward to this QBM.

Ms. Lau thanked Dr. Canuel for sharing and then proceeded to ask Deputy Director Travis to share any opening remarks he may have. Deputy Director Travis thanked Ms. Lau and Dr. Scott for their hospitality and their leadership in making this QBM happen, noting that this had been in the works for a while and adding that he appreciated the NIAC team fighting through government shut downs and other delays to bring the council to Hawaii. He also thanked the NIAC members who are participating in this meeting and General Minihan and his team for their continued partnership that they give to the department as well as to their stakeholders and infrastructure in Honolulu. He shared that this year, more than any, reminds people why this portfolio of critical infrastructure is so important and compelling.

He shared that coming out of the holidays they were faced with a not-anticipated Iranian crisis that caused CISA to develop action terms for how they were going to be valuable for the infrastructure community and what kind of things can they share, advise, and provide to ensure that their shields were up in the face of this crisis. He stated that this was immediately followed with a severe vulnerability announcement on Microsoft Windows 10, then a vulnerability with Citrix, and now a vulnerability now with COVID-19 and determining what the impact of this will be on supply chain and on owners and operators across the country. He stated that not even two months into the year the U.S. has been faced with all of this and added that the work of the council is critical. He shared that as a new agency they are still trying to get their full fleet underneath them and grow out to the realization that congress intended and that they need the advice and good ideas from the NIAC and from its individual members.

He shared that meetings like these are important to them and shared that Director Christopher Krebs sent he regrets and said that it was only because of the criticality of the elections that he was not at the QBM as well. He shared that the White House had called a meeting for February 27th to discuss how to prepare for Super Tuesday and thereafter. He emphasized that whether it is election, ransomware, 5G, supply chain risks, there are a lot of problems that they need the NIAC’s help in not only solving but also in framing for them. He stated that these deliberations and the counsel are valuable to them. He stated that he would be remised if he didn’t point out Mr. James Cruz, who has been working in Honolulu, and shared that where CISA has the most impact is out in the field and that Mr. Cruz is there to work with members of the public to ensure that their baseline for security can be maximized and that DHS and CISA can be a helpful partner in helping them understand, helping them be better prepared, and helping them become more resilient against the threat. He thanked Ms. Lau and said that he looked forward to this meeting.
Ms. Lau stated that it was actually Director Krebs idea, about a year ago, to bring the council out to Hawaii, and she said that unfortunately the government shut down had delayed this but that she was glad that they were finally able to hold the meeting in Hawaii. She then asked Principal Deputy Assistant Secretary Patricia Hoffman, Department of Energy (DOE), to share some opening remarks. Principal Deputy Assistant Secretary Hoffman thanked everyone for being there and for participating in the NIAC. She stated that the NIAC is a very important group to provide advice and counsel and added that she looked forward to today’s conversations.

IV. APPROVAL OF DECEMBER 2019 MINUTES

Ms. Lau called to order the approval of the NIAC meeting minutes from the December 2019 QBM. She asked if there were any changes or corrections to those minutes. Mr. Kevin Morley submitted a wording clarification to the meeting minutes. As there were no additional edit, Ms. Lau stated that they would approve the meeting minutes as circulated with Mr. Morley’s change made.

V. KEY NOTE SPEAKERS

Ms. Lau introduced Governor of Hawaii, Governor David Ige, and she asked him to provide any comments he had. She stated that after Governor Ige’s comments, Lieutenant General Mike Minihan, Deputy Commander of U.S. Indo-Pacific Command (INDOPACOM) would be providing comments as well.

Governor Ige thanked the NIAC for allowing him to participate with the NIAC and expressed that he felt truly honored and wanted to thank Ms. Lau, Dr. Scott, and all of the members of the council for traveling all of the way to Hawaii to see firsthand some of the special challenges and opportunities that being 2500 miles out in the middle of the Pacific Ocean really provides. He thanked the NIAC for accommodating his schedule, sharing that he had just come from a press conference concerning COVID-19. He added that they have had their very first person of interest in Hawaii, a traveler from California who was a healthcare worker and had provided healthcare services to someone who was found to be COVID-19 positive. He stated that they were prepared for this and was glad to announce that they have their state lab online and can test for the COVID-19 virus in Hawaii. He shared that this had been a concern for him because the normal turn around when sending a sample out to Atlanta, Georgia, would have been 7 days or more.
He again thanked everyone for being here, and he commented when dealing with emergencies that they have, sharing that [former] Secretary Nielsen was a terrific partner when she was Secretary, in terms of leaning forward, there are unique challenges that being out in the middle of the Pacific Ocean presents. He thanked all of the federal agencies for their proactiveness and for recognizing these challenges, mentioning that the Federal Emergency Management Agency (FEMA) and the other agencies definitely lean forward. He added that they do have additional supplies of critical food, water, and medical equipment staged in the Island, which allows them to respond to emergencies very differently. He shared that having Indo-Pacific Command and all of the other major commands in the Islands allows for close interaction. He stated that when they were in the middle of the volcanic eruption of 2018, they were able to stand up a title 10 unified command. He said that part of the challenge they faced during this was that it was one of the biggest eruptions they had experienced, destroying 700 homes, and they had to prepare for mass evacuations of thousands of people depending on the flow of the lava, and he stated that, with the support of INDOPACOM, they went through many different scenarios about what would be required, since the state did not have the resources, if they needed to evacuate 8,000 individuals due to the lava flow. He shared that having access and coordinating the response with INDOPACOM was central for them to be able to respond to this emergency.

He thanked all of the federal partners involved and shared that, for those on the council, there were many things that require a coordinated federal, state, and county response, and critical infrastructure is one of those that benefits from them working together. He mentioned that they are at a critical inflection point in terms of being able to support and protect the critical infrastructure in the nation. He added that the threats and challenges are more intense and those wanting to do damage to the U.S. are much more equipped, focused, and targeted. He stated that the private sectors are focused, generally, on crimes and other activities, and state actors are better resourced and are more focused, and he stated that many private sector companies are not generally prepared for dealing with state actors, adding that he really appreciated the work of the council in improving and advocating for better coordination between private sector critical infrastructure providers and all of the federal agencies.

He shared that one of the challenges is that the entire world has gone to just-in-time sourcing, stating that before they would have months of supplied various goods and services in the Islands, but now they are down to typically less than a week’s supply. He shared that they don’t have much more than a week’s supply of any commodity in the Island and that there definitely needs to be better coordination on the different fronts. He stated that this does highlight the vulnerability for critical infrastructure should they lose the harbor or their generating station and shared that much of Indo-Pacific would be impacted by this. He shared that this would impact access to fuel and resources that are fundamentally important to keep DHS working in Hawaii as well as for the state to be able to provide services to their community. He added that infrastructure, government functions, critical business capabilities are becoming more interconnected and interdependent and these are reliant upon secure and resilient energy and other lifeline services. He stated that the work of the commission is to highlight this, and he added that the increase of complexity has not been matched with a greater shared understanding of the overall system needs and critical infrastructure risks. He commented that in Hawaii they have recognized that simple solutions and past practice are not going to be enough to address and
mitigate the sweep of catastrophic hazards, national security threats, and infrastructure vulnerabilities that they face.

He shared that there are a number of ongoing initiatives, in both the public and private sectors, and he knew that they have programs that are addressing these issues from natural hazard preparedness, response, recovery, and mitigation to cyber and homeland security and strengthening their community lifelines. He applied the work that has been supported and initiated. He highlighted some of the efforts in Hawaii.

The first he shared about was the Critical Energy Infrastructure (ICEI), which was a collaborative effort to develop a framework approached to address the interdependencies of the critical energy infrastructures, and the initial members of this unique partnership are U.S. INDOPACOM, DHS, the Department of Energy, and the State of Hawaii, which is represented by the Department of Defense’s (DOD) office of Homeland Security and the Hawaii State Energy office (HSEO). He shared that this effort has created information flows and cooperation through a consortium approach that is necessary to build shared situational awareness of critical energy infrastructure and to facilitate robust discussions on systems capabilities, needs, and mitigation strategies. He shared that ICEI objective is to create a cross-sector and cross-government approach to state wide energy resiliency. He added that by leveraging the ICEI partners’ authorities, abilities, and resources, they are creating a structure for coordinating efforts aimed at comprehensive outcomes to address cross-sector interdependence and mitigate cascading failures. He stated that they have established a shared platform by securely collecting and sharing sensitive information amongst their partners. He stated that this effort is supporting their shared responsibility for and interest in Hawaii’s energy infrastructure, energy sectors, strategic communications, and resiliency planning.

The second he shared about was cybersecurity. He discussed their efforts to secure Hawaii’s cyber systems, sharing that for many years the State Office of Enterprise Technology Services (ETS) has used the Homeland Security funding to harden Hawaii’s communications network infrastructure, to enhance their cybersecurity programs, and to increase cyber staff security training and developing. He shared that they have worked closely with DHS to conduct penetration testing in their electric system, which is fundamentally important, and other major Information Technology (IT) systems to find and fix any holes in their network or security systems, and he shared that this work is really valuable as their day to day people are not up to speed on all of the different cyber threats and having next-step, external experts who do penetration tests and who really test their security is very important to them. He shared that ETS has also partnered with the National Guard to facilitate critical infrastructure assessments, and at the State, HDOT has discussed the assessment of harbors and highways, which are currently underway and expected to be completed in March. He added that the harbor is the deep water seaport in Hawaii, and similarly to Puerto Rico, it is a critical importance for moving the majority of Hawaii’s goods, which include food, fuel, and medicine, which must pass through the harbor system and enter the hub and spoke system that allows them to distribute to all of the islands.
He then shared that they lose a lot of sleep in hurricane preparedness. He stated they think about what might happen if a category 4 or 5 storm came to Honolulu Harbor and shared that this is certainly something that they think about and worry over. He said that HDOT has also partnered with the Army Corps of Engineers to assess the harbor and identify possible modifications and has worked with FEMA to increase surveillance technology, enhance security, and engage the maritime administration for Geographic Information System (GIS) and bring in another expertise to improve the operations in the harbor.

He mentioned that they have a project called Ko‘olaupoko and that he wanted to thank the leadership of Mr. Scott Seu and his team for working and engaging the windward side of their island to really look at how they can strengthen Ko‘olaupoko self-resilience and self-reliance, really looking at scenarios about what they can do to help improve the resilience of that community as it is one of the most vulnerable parts of the island in terms of critical infrastructure. He shared that most of the main energy occurs on the west side of the island and is transmitted over. He added that it brings together the Ko‘olaupoko community leadership with critical infrastructure owners to talk about emergency management response agencies, to understand the vulnerabilities and what would happen should a catastrophic event occur, to share concerns, to prioritize solutions, and to discuss a plan for safe recovery of area services for the residents should there be a major hurricane. He shared that this really allows them to strengthen the community focus for one of the most vulnerable parts of O‘ahu. He added that this type of engagement really helps their communities to recognize their vulnerabilities and be a partner in working to be more resilient, not only in providing awareness but also a shared buy-in for identifying priorities to improve community preparedness and disaster response should a disaster occur.

He thanked the NIAC again for coming all of the way to Hawaii for this QBM and hoped that they now have a better understanding of the challenges that they face there on the islands. He thanked all of the federal partners for their partnership, for helping them better serve their communities, for allowing them to be better prepared should there be a natural disaster, and, most importantly, for working with them to ensure the safety and security of their communities.

Ms. McDonald asked Governor Ige, as Hawaii is not just one island but a series of islands, when they discuss coordination and integration, what are some of the challenges from a digital standpoint and from a gathering of the various response personnel they have to face. Governor Ige stated one of the big challenges is that a bulk of the resources are on O‘ahu and being able to reach out and provide support to each of the counties is a challenge. He shared that two years ago when Hurrian Lane was lined up and tracking to hit every single major island, they reached out to FEMA and discussed what this meant, engaging INDOPACOM and acknowledging what the impact of this category four storm would be to every harbor, island, airport, and everything else and recognizing that every single community had just-in-time sourcing, which would cause significant shortages.

He shared that they did have discussions with Matson and their private sector partners. He stated that the Coast Guard shut down all harbors at the same time as the hurricane was approaching, and Matson asked if they wanted them to turn their ship around and head back to the West Coast,
which means that they would be without supplies for probably two weeks rather than the normal reconstruction and then the whole sequencing of bringing things in would be messed up. He stated that this is definitely a huge challenge as just-in-time sourcing has impacted the way of life across Hawaii and brings a bigger challenge to how they respond to a disaster. He said that it points out the need for better coordination with the private sector, who need to be more engaged and part of the conversation should there be a disaster.

Mr. Morley stated that he appreciated Governor Ige’s remarks and wanted to share with him some good news. He shared that he had the pleasure of meeting with many of the water utilities from all of the islands the previous day and giving them good deep dive on cyber security protocols that they could implement based on the cybersecurity framework, and he understood that they would be doing some work with DHS this May. He stated that he was not saying everything was perfect, but they are working to put everyone on the right path and ensure everything is working well.

Mr. Charles Durant, point-of-contact (POC) for Mr. William Ferhman, asked Governor Ige if given the tyranny of distance and the fact that everyone has a shortage of cyber personnel, he found this location exacerbated this issue. Governor Ige shared that it certainly did and that they have a tremendous shortage, which is why he has been advocating for inclusion of a space component to their National Guard. He added that they were awarded one of the space commands and, from their perspective, this would help them build a category of state employees in cybersecurity. He stated that they have been very active in this, and the National Security Agency (NSA) has been a terrific partner in starting cyber camps over the summers. He shared that they changed their public education so that it now requires computer science curriculum in all of their high schools, and he shared that he has also been a strong advocate of early college and having their high school students be able to access and take college course. He said that this still remains a challenge, as it is all around the country, but they are trying to tackle it from early on to all the way through the education system.

Mr. Boston asked Governor Ige about food, water, and toilet paper storage and, if there was the port capability to bring in these goods, would there be warehouse and logistics set for them. He shared that in the case of sending aid to Puerto Rico after a hurricane, they got lots of equipment, men, and materials to the port but could not get it unloaded and could not respond to the hurricane disaster. Mr. Boston wondered if there was the capability in Hawaii to store these things and logistics for this. Governor Ige responded that they do not have as much capability as they need and that this is one shortage that they have identified. He shared that the challenge is that all of the warehousing for all businesses has disappeared, so where they before were able to count on this, and also on the significant storage on the military base, has all pretty much gone away. He shared that this is a big challenge and that he has been promoting food security and has been trying to transition their agriculture from pineapple and sugar for export to producing more of the food consumed on the island, which would not help if there was a hurricane that wiped out all of the crops but being able to grow more of the food that they consume would help them be a more resilient community.
Governor Ige added that one of the teams that did very well in their last cyber camp was a team of girls, which was exciting for him to see, and he added that the First Lady is always promoting more ladies getting involved in cyber security and computer science in general, and he knows that they need to produce more computer science and cyber people but that they cannot generate enough of it. He shared that he asked about the Internet of Things (IoT) because virtually every appliance and thing a consumer uses will have some kind of cyber responsibility moving forward. Deputy Director Travis stated that, along these lines, he wanted to put a plug in for the National Science Foundation and all of the scholarships that they have for the cyber corps, and he hoped that Hawaii was taking full advantage of these wonderful education opportunities. Governor Ige said that he would definitely make sure of this.

Lieutenant General Minihan then began his remarks by thanking Hawaii for what it does for the mission of INDOPACOM and for his family. He said that it is an honor to serve the State of Hawaii, noting that he acknowledges that he is a guest in Hawaii, but the foundation of military power and free and open Indo-Pacific starts here in Hawaii, as it did in the forties. He shared that the culture, the workforce, and the work ethic is inspiring each and every day and he wanted to make sure that they knew that he and INDOPACOM appreciates them. He added that it was not lost on him that the original voyagers, navigators, and astronomers were native Hawaiians, and to this extent, he shared that Ms. Lau was pivotal for what they are experiencing today as this was an endeavor that started years ago and added that Ms. Lau takes after her ancestors as a pioneer and her work is really bearing fruit. He thanked her for her leadership. To [former] Secretary Nielsen, he stated that any meeting that the starts out with an oath of office is a great one. He shared that it was the same oath he has taken repeatedly throughout his career and it reminds us that this is a team sport and important on every single level.

He said that he had received many thank you’s for them hosting the NIAC, but he wanted to flip it around and say that the honor was theirs to host the NIAC at INDOPACOM Headquarters. He shared that they realized with the mission set out there, with 52% of the globe, with the majority of the challenges this nation face, and with the partners and allies that rely on them it is a team sport and cannot be done without everyone. He said that being able to articulate a mission is great but being able to all work together is even better. He said that one of the most important things they could do with the challenges ahead of them is see them similarly and this is plowing through a lot of challenges within itself, with information sharing especially, which is a never ending challenge that they need to solve so that if there is someone at the table with something to contribute they will never be asked to leave. He apologized for that happening during the NIAC briefing and stated firmly that they will continue to work on this.

He shared that, in addition to the discussion, the partnerships that come and questions asked show that there are experiences in this room that go hand-in-hand with what may happen in Hawaii and he felt that the partnerships are absolutely essential to moving this forward quickly. He added they can all agree on the way ahead and on the challenges, but the reality is that there is an accelerated need to pull all of this together quickly because the challenges may deliver on their timeline not ours, so he always has this feeling that he is behind and that they have work that needs to be done quickly. He restated something the Mr. Cruz has said, which was that they come together in Hawaii as a family, as an Ohana, and this is part of the culture of Hawaii, the
Hawaiians, and also the teammates who took the oath and are stepping up to this mission. He shared that missions are meaningless without partnerships, and there are a lot of complex ones that they need to sow. He also stated that Mr. Cruz has said that a lot of things are done in silos, and this is a not a critic but a nature way of doing things. He added that tearing down these silos quickly is incredibly important.

He said that it is hard to imagine a more complex scenario than the challenges here on the Island and that the Governor Ige hit on some of these. He shared that they have to bring together the federal, state, and local and bring together the inner-agencies at the federal, state, and local. He shared that they are surrounded by thousands of miles of water, the Hawaii islands are separated by water, and they have adversary challenges. He commented that he could not describe to the NIAC the mood-shift on the island when the first hurricane forecast puts a line over where someone lives and has the complexities that have been discussed today. He said that a seriousness comes across everyone, from the children to the wisest on the Island; they know exactly what this means. He shared that in addition to buying generators and other necessities, there is an action that happens in the early stages of this that brings together the federal, state, and local in a very meaningful way. He shared that the team is very good at connecting early, but it disconnects as soon as the forecast line goes the other way, and there will be a day when they will have to deal with the complexities described earlier.

He then said to Governor Ige, Major General Kenneth Hara, and Ms. Lau that when he is intimidated by the challenge ahead, which is often, he has to break it down into simple small steps. He stated that there is a difference between a rehearsal orientation of looking at an issue and an exercise. He shared that an exercise lens usually has too many givens that would water down what would really be done. However, he shared that when it is rehearsed someone sits down with him and asks him what four steps would been done first when the line is going to cross the Honolulu Harbor; they get all of the right people in there and walk around the wheel of infrastructure agencies, inter-agencies, state, federal, and local; and they start building up a list of the top ten things that would help them when the issue happens and would get them to a good place. He said that he views these types of rehearsals as a series and offered that INDOPACOM would be interested in hosting the first one and could then hand off to get after the other information. He felt that it would go very nicely with the issues discussed. He told the NIAC that he appreciated their time and once again extended what a great honor it had been to host them at INDOPACOM headquarters.

VI. **DHS Port Regional Resiliency Assessment Program**

*Constance H. Lau, NIAC Chair*

*James Cruz, Protective Security Advisor, DHS*

*Derek Chow, Deputy Director, Hawaii Department of Transportation*

Ms. Lau introduced Mr. Cruz and said she credited DHS with having protective security advisors and cybersecurity advisors on the ground in Hawaiian and added that she feels this makes for better coordination of the federal resources there locally. She also introduced Deputy Director...
Derek Chow, of the Hawaii Department of Transportation (HDOT), who would be joining Mr. Cruz in this discussion. She shared that DHS has been doing a regional resiliency assessment program on their ports, and she shared that those who attended the preparatory meetings on February 27th saw how critical the ports are for the state of Hawaii and everyone who lives there, including U.S. INDOPACOM. She acknowledged that some of the partners of this study were at today’s QBM.

Mr. Cruz thanked Ms. Lau for the opportunity to be here and share a view of what they are doing in Hawaii, especially when it came to the different programs used for working together with the industry partners who were at the QBM. He shared that what they are doing takes a lot of collaboration with everyone in Hawaii, from the county, state, and private industry partners, and he shared that he was pleased to be presenting with one of his colleagues from the HDOT. He stated that it was an honor for them to be at this QBM. Mr. Cruz invited Deputy Director Chow to share his introduction. Deputy Director Chow stated that it was an honor to be there and explained that he was the Deputy Director for the HDOT and hoped to be able to share information that was of use to the NIAC.

Mr. Cruz shared that during this morning’s briefings they had discussed critical infrastructure and his leadership discussed how much they work together, especially when it comes to understanding their critical facilities, looking into the critical knows, and looking at the criticality of their critical infrastructures, and he explained that, as they move into looking at the port, the DHS Regional Resiliency Assessment Program (RRAP) is what they do every day. He stated that when they got RRAP kicked off it became one of the top 4 RRAPs provided throughout the states. He shared that this was a great thing for Honolulu because the Port of Honolulu (PoH) had been talked about for years but working with the state, with the Hawaii Emergency Management Agency (HEMA), and with their Hawaii energy office has yielded many discussions about the port and what the port operations really look like as a whole concept.

He shared that in Hawaii they always work together no matter what type of disasters, concerns, or events happen (e.g. an oil spoil or a hurricane). He added that they come together as a family when they do their response, and he said that it is great to see how they can start with the RRAP and track everything they know, don’t know, and need to know down. He emphasized that this is a great thing about the RRAP when it comes to CISA providing a lot of DHS resources to support this program.

Deputy Director Chow thanked CISA for assisting PoH and the Harbor Division with this, and he added that he retired from the Corps of Engineers almost two years ago, and he shared that as the Chief of Civil Works, he did a lot of work studying the Ports throughout Hawaii and throughout the Pacific Islands. He stated that they always looked at this through the Corps of Engineers lens, but he shared that they have never had the opportunity to take advantage of the resources of an agency that has the knowledge and reach-back capabilities to really broaden the way they look at their critical infrastructure. He shared that this is a whole different perspective that they are taking advantage of and he is looking forward to getting into the port that is being developed for them. He explained that this is a long, detailed effort that is looking at not just...
what the state has done but also what other federal agencies and the county have done, collecting it all, and putting it in one document. He shared that Hawaii’s harbor is a system.

He explained that Honolulu Harbor is the hub to where their containerized cargo comes in and Kalaeloa Barbers Point Harbor is the hub to where their bulk items come in, which includes their fuel, and he stated that if this hub is interrupted, which is the focus of their discussion, then there is no way for them to get items off to their neighboring islands. He shared that although those islands have commercial ports, they do not have the same systems, equipment, or infrastructure to allow ships to deliver goods the way they are able to receive them in Honolulu, so it is very important that they have this assistance from CISA. He said that while there have been a lot of studies and they know what they know, RRAP helps them see their blindspots, and he added that they are appreciative of all CISA does.

Mr. Cruz stated that in September 2019 they had their first RRAP meeting, which was hosted by the Lieutenant Governor of Hawaii, Mr. Josh Green, and he shared that this was a great event to bring all of the different partners in to get an overview of what they were trying to do with the RRAP and that it produced a lot of good feedback. He stated that they were looking at an alternate port concept and what those really looked like. He explained that they are looking at the concepts and support given to them by DOD, but they are looking to define and refine what the operation or process looks like. He stated that DOD has a quick turn over and they found that some of the foundation to what they do as an out to port concept with DOD is not there. He said that there is a lot of learning to do with the people that they have been engaging with. He explained that they also looked at what the alternate port, reverse hub, and spoke alternative concepts looked like, at what would happen if the Honolulu port went into the red and was not operational, and at what would they need to do as a whole partnership with their industry partners to bring the island back to recovery from any type of event.

He said that they looked at some of the plans and operations Deputy Director Chow mentioned and shared that over the years they have seen many AARs from exercises, lessons learned, best practices throughout the different work being done, whether state, county, or federal, but it has always been done in the silo. He added that now they recognize that they must get all of this data together, see exactly what the whole picture looks like, and then take it from there based on what their roles and responsibilities are for each of their private industry partners, the state entities and organizations, or federal side support because they have FEMA arriving to the ground and they need to support FEMA’s operations at the same time.

He stated that there were the three things they looked at on the port. He reiterated that they especially look at the supply chain because 90 percent of all of the goods come through the Honolulu Harbor, so they are looking at what that impact could be and what they need to do operationally to understand how it would affect the survivability of Island residents and bring up everything in the critical infrastructure to 100 percent green. He shared that energy is an important key in Hawaii and supports critical interdependencies in other industry partners, so getting ground truth is what they are collecting and putting together. He stated that they are making some options for consideration to bring to their stakeholders in Hawaii. He added that this is something that is really coming to light in a fruitful way and that there are a lot of
discussions and collaborations, and he shared that the best thing for him is having their POC working closely with their representative from Idaho National Laboratories and with DOD harbors directly on everything they can do to support what they are trying to do as well. He added that Hawaii Energy has been part of this and that their industry partners from the Hawaiian Electricity Company (HECO), Water Supply, and other suppliers are part of their great collaboration team to support the RRAP.

Deputy Director Chow stated that if one wanted to see how important the Hawaiian ports are, today was a good example. He shared how he was at Costco the previous evening and the line for toilet paper was almost out the door, and he added that he heard from his mother that today it was the same way. He explained that with the scare of COVID-19 coming in and people being told to prepare for 14 days of quarantined within their homes, everyone is panicking. He stated that this shows how important the harbors are as the shelves are bare and they do not have any more stock to restore the shelf because they are a just-in-time service and do not have warehouses or major distributions in Hawaii. He added that when goods arrive, they come off the ship and are delivered to stores. He said that it is very important that their ports stay open.

He concluded by saying that while the RRAP will shed light onto their blind side, it will identify things that they should think critically of, and he would like to have further discussions with the NIAC and other agencies that may have resources to assist them because they are an enterprise funded organization, and all of the funds they collect they stand on for their operations and they do not receive money from state general funds. He stated that any money they collect from the shippers, tenants, and other maritime people at the harbor to support their industry is spent on maintenance, operation, and modernization of the program. He emphasized that whatever results come out of the RRAP report will need federal assistance to get where they need to be so that they have a resilient system and can recover as quickly as possible.

Mr. Cruz stated that they had this research focused on a category three hurricane scenario and they were doing lots of interviews with different people and different organizations, agencies, and private industries. He added that they brought up the COVID-19 event and some of its impacts were discussed during discussions about the RRAP and how operations were affected. He shared that they discussed personnel that could get sick from COVID-19 and how this impacts operations. He stated that these are discussions they have to have to ensure that they have the right people trained so that they can have the right people to operate their critical equipment in order for them to get the green light to help everyone come through survivability or recover from any type of event on the islands.

He shared that there are very detailed discussions that are being discussed at every level. He said that he believes they need to have plans in detail to understand how they can operate and look at their interdependencies: what industries support what industry, sectors, and federal agencies. He commented that there are a lot of things assumed at this point and they want to make sure that they have the right continuity for each of their partners. He added that there is a lot of data out there, huge amounts of data, that the RRAP team collected, and the RRAP team came up with over 300 files that talked about the port operations, but he shared that none of the things that came out of those files were answered and this lead to a lot of great discussions on how they
could bring this to each of their partners who support that port because this is a key issue in regards to have continuity for operations through any event that they will respond to.

He continued that because there were a lot of entities that come to the table, they are able to get a variety of perspectives. He shared an example of a meeting they recently had with one of their interagency partners and someone from the University of Hawaii, who had a 3-D scanning tool, he shared that they could use this tool to look a 3-D scan to provide some of the GIS and look at the detailed measurements of certain critical infrastructure to help determine how long the grid line is from one point to another, and he shared that they can help through the RRAP process. He shared that discussion like this is what leads them to other resources to have the RRAP come to completion, providing a lot of recommendations for consideration but also bringing other tools that they can share with their state, county, and industry partners. He felt that this was the best way they could engage with one another and provide additional tools to have a better RRAP product. He stated that there is a lot of correlation going on and shared a list of all the people who are involved in the RRAP discussions. He shared that they have weekly interviews going on with their different partners so that they can get questions answered, see what they are missing, see if their partners have any answers or suggestions on how to fix this, and, if they do not, see what they can do to assist them in getting a better answer so that they can support their operations.

He stated that in May 2020 they will be hosting workshops and will have various islands video conferenced in to the conference room so that they can talk about all of the ports, how deep the ports are, what are the capabilities of each port, what vessels can be brought in, and how can they bring fuel into these ports if the Honolulu port was shut down. He added that there is a lot of data that they have to validate to ensure that they are answering the right ask and providing the right feedback at the end of the RRAP report. He shared that they also have two other initiatives going on: 1) the Energy Interdependency Working Group and 2) the Information Sharing Analysis Organization (ISAO). However, he said that everything should feed into the RRAP. He then opened the room up for any questions that they may have.

Ms. Lau asked Mr. Cruz to explain what ISAO is and where it is hosted. Mr. Cruz shared that ISAO was started a little over a year ago, and he stated that they are trying to have an information sharing platform where the federal, state, and local industries can met and receive cybersecurity threat information, and the ISAO discusses what they need to do to understand the threat that they have received from intel and how much of this intel threat can be shared with their industry partners, their state, and their locals, at a level where they can take this information and mitigate any concerns in their own systems. He stated that he was not the cyber guy, but he emphasized that physical and cyber must be worked together, and he shared that he works with Giovanni Williams, who has been their Cybersecurity Advisor for the last ten months. He added that they are working on this piece from the federal side to determine what resources they have now and what resources they could give to support the threat information to cyber, and he shared, on the state side, that they are working with the State Fusion Center Office of Homeland Security and General Kaelevi, who is working on the draft chart and on how this will mix in well with the federal charter. He shared that a lot of this works with their industry partner (e.g. the energy and water sectors) and looking at the refineries. He said that they are looking at the top
four or five sectors that are crucial lifelines identified in Hawaii based upon discussions and collaborations with the state. He said that this creates a “no kidding” information sharing platform that will hopefully work and help information to be shared across all of the sectors and agencies and in a formal way that they can use to support their operations and to defend themselves through the recommended mitigation that have been provided by ISAO. He will not tell them what to do but will provide them will recommended options for their consideration.

Ms. Lau asked if any council members or POCs had any questions, sharing that she would be taking questions from the phone shortly as well. She shared that how the general resources actually interact with state and local resources was an area that they have discussed. Deputy Director Travis asked Mr. Cruz when he expected that the RRAP would be completed and their findings available for further studies. Mr. Cruz stated that the RRAP can take up to 18-months depending on what they are looking at, especially when it comes to what the criticality is in certain sectors and especially when it comes to the port. He shared that they are looking at an 18-month timeline for his RRAP and in June they are hoping to release a draft of the RRAP, based on the findings they get from the workshop in May. He said that this would allow them to get those recommendations to Major General Hara, their Technical Advisory Group (TAG) lead, who can use this information for whatever is needed and may help gain funding for the state because he believed it would be during the time of the year that they submit those findings. He felt it was a great time to do it. He shared that they are hoping to complete the RRAP earlier than 18-months as the RRAP team is moving very quickly with this program. He added that with all of the collaboration going on and with all this information being shared, there is great information being shared, and he added that DHS is trying to make everything unclassified so that they can share information with their industry partners. He said that this is a great practice.

Mr. J. Richard Baich asked Mr. Cruz to share something that exemplifies that sharing Mr. Cruz had mentioned so that it was more tangible. Mr. Baich was interested in knowing what they had been sharing, stating that he understood it was unclassified, and where they saw this work well. Mr. Cruz stated that since September 2019 he has always walked into a facility or any type of project thinking they should first discuss their resiliency efforts and their plans and operations. He said that because of this he built a relationship with them, and he saw some city owners just asking questions about where the information was going to be stored and if it would be under Protected Critical Infrastructure Information (PCII), but when he started to have discussions with other partners, he found that there was no hesitation that this needed to be done now without concern to whether there was propriety or open source information. He said that lately they have been discussing their concerns, even if they are of a sensitive nature, and expressing that everyone needs to understand these and will share them up to a point because they cannot resolve the issue without help from the state and county. He stated that there is more detailed information being shared through proprietary information with certain working group planner members, such as FEMA planners, HDOT planners, the Office of Homeland Security planners, Hawaii Energy Office planners, DOD federal Marriott partner planners, and U.S. Coast Guard partner planners, who are well engaged because it is the port which is a regulatory area. He shared that there is a lot of information sharing of details of operations and business practices because they cannot make money without help from others at the port.
He explained that they can have a pier but if that pier is damaged it cannot be used until someone fixes it. He posed the question of whether state or county would repair the pier, which can cause there can be a delay to the repair of this pier because of a lack of coordination, and he asked what did this mean and were there any points of litigation. He then answered that some of these things will need to be worked into their plans. He shared that these things may not be shared with the public but only the working group and then protected under PCII. He then added that the what he had seen in the RRAP was an unclassified, official use only, document, and then as needed there is a PCII document that can be shared with that industry partner. They place a coversheet over the PCII document to protect that data so that it cannot be giving for any type of Sunshine Laws, Freedom of Information Act (FOIA) requests, or any type of legal or civil actions, which protects the data from those entities and is the reason why a lot of their information is in a PCII so that they can protect it for others.

General Reynold Hoover stated that one of the lessons learned from Hurricanes Irma and Maria in Puerto Rico was that a lot of the first responders, guards, and reservist were victims themselves and were not able to respond. He asked Mr. Cruz if they were going to speak with those in Puerto Rico to see what advice they have, given that they were isolated during a catastrophic event and the people thought to be available, the Puerto Rico and the Virgin Islands, were not available to come to the fight and help them in the needed response time. Mr. Cruz stated that this was a great question and added that they looked at some of the after action reports that FEMA and other partners had created after Puerto Rico. He stated that it is important to look at the resources and at the manning levels because it is difficult to operated or to be resilient if everyone is not making it to work because something has happened. He also shared that they have had discussions with the Nation Guard concerning what their support looks like when an operation is in the red and that they are part of the discussion as well. He explained that they are working to identify what key resources are needed.

He showed a key example of this by sharing about a crane that they purchased for Pearl Harbor. He shared that when they started doing discussion about it, they had to find out who was operating the crane during contingencies, who was licensed to do this, and if it would still be operational during an event. He shared that there were different layers of responsibility within this and this made it difficult to find answers to their questions. He stated that the discussion in May will greatly help them as he believes the Memorandum of Understanding (MOU) between the state and Pearl Harbor expires November 2020 and needs to be renewed. He emphasized that they did talk about a lot of the manning support when it came to emergency disasters and what that looks like if the guard or employees are are or are not available. He added that they had a quick opportunity for there to be a briefing from the Puerto Rico emergency management team, who spoke on the lessons learned and best practices.

Mr. William Boston stated that they found they could get material to the Island of Puerto Rico but could not get it unloaded up the port, and he asked Deputy Director Derek Chow what backup systems they had in place to operate the cranes, in terms of operators and backup generators. Deputy Director Chow stated that the cranes are operating off of light power and that all the critical systems have generator backup. He added that is that they do recognize that they are in the middle of the Pacific Ocean and have limited supplies, so one thing that they are
emphasizing in their plans and working with the RRAP is the prevention aspect of it, sharing he knew that there was a great focus on restorations and alternate usages of other ports, but he stated that they really needed to build a resiliency in their existing infrastructure because they need to minimize the damages that they will experience there because they will not get assistance for quite a while after a disastrous event and do have limited resources.

Ms. Joan McDonald stated that she knew they were already working on the RRAP, but they are now facing a real-time situation, referencing his example of the lines for toilet paper, medical supplies, and other needs and how this brought the current situation back home as to what the needs are, and she asked how they were engaging the shippers in this real-time situation while at the same time planning for future events. Deputy Director Chow replied that he first wanted to give credit to Governor Ige and Lieutenant Governor Green for the leadership that they are providing them on how they should go beyond their means and find out who they should be talking to and working with to have a comprehensive plan. He shared that for the harbors, there primary, or first line of defense, is the Coast Guard. He added that the Coast Guard has their own procedures and are screening and evaluating each of the ships to find out which ports they have been to prior to arriving to Hawaii. He shared that if a ship had previously been at a port that they were concerned about, and the timeline they had set between that port and their arrival at Hawaii’s port, he believed it is 14 days, had not been reached, they would restrict or prohibit that ship’s entrance. He added that they have a checklist and procedure to follow and are their first line of defense. He explained if the ship does dock, then they have a procedure to follow as well and would work closely with the ships.

He shared that the cruise ship industry has been very cooperative with them, some canceling calls or considering quarantining or restricting their crews and even the passengers on the ships, and this would mean that all they would have to do is provide the land support with the resupplying of the ship. He added that Governor Ige has been leading an effort to provide them with the financial resources and items, doctors, and expert technicians needed to deal with a crisis once it come to them. He shared that if there is someone who comes through the port and is suspected of having the virus, there is a procedure that they will follow to isolate and quarantine that individual.

Ms. Lau apologized to the audience for having to end discussions, but she encouraged anyone who still had questions to speak with Mr. Cruz and Deputy Director Chow at the end of the QBM. She thanked Mr. Cruz and Deputy Director Chow for their presentation.

**VII. PANEL DISCUSSION:**
**COMMUNITY BASED RESILIENCE EFFORTS IN HAWAII**

*Scott Seu,* President and CEO, Hawaiian Electric (Moderator)

*Major General Kenneth Hara,* Adjutant General, State of Hawaii Department of Defense

*Joshua Stanbro,* Chief Resilience Officer and Executive Director, City and County of
Honolulu Office of Climate Change, Sustainability, and Resiliency

Colton Ching, Senior Vice President of Planning and Technology, Hawaiian Electric

Amy Luersen, Chair, Kahaluu Neighborhood Board and Vice President of Community Collaboration, Hawaii Community Foundation

Ms. Lau introduced the final panel and shared that Governor Ige did a great job describing Ko’olaupoko Resiliency Effort, and Ms. Lau stated that they wanted to share this with the council because the council has talked about community enclaves and their value and about the fact that a lot of national resilience has to be built from the ground up with community level resilience, regional resilience, and state resilience. She stated that they have been leading an effort on the windward side of the island to try to get at some of these issues. She turned the panel over to Mr. Scott Seu, her POC, who led the introductions of the panelists and acted as the moderator of the panel.

Mr. Seu announced that the panel would be touching on Ko’olaupoko a bit, but he also wanted to allow the panelist to go beyond Ko’olaupoko and share a little about what they each are doing in their own perspective areas. He introduced himself and stated that he was the newly elected President and Chief Executive Officer (CEO) of HECO. He shared that Governor Ige had mentioned Ko’olaupoko and the work that a large number of people are doing to boost the resilience of that part of the island of O’ahu. He shared that, as Governor Ige had described, this is on the windward side of the island, which is the eastern side of the island and is separated from the major part of downtown Honolulu from the Kohala mountain range. He explained that the electricity they provide to that side of the island is provided by three transmission lines that go over that fairly steep mountain range, these lines go down into the Ko’olaupoko substation, and the power is distributed from there to the communities.

He shared that when they saw the effects Hurricane Maria hit Puerto Rico in 2017, Mr. Colton Ching and the entire HECO team decided they needed to take a broader view of their system from a broader resilience perspective, and he added that this is why they began to convene in a series of discussions to really look at resilience, but he shared that the most important thing is that they purposely tried to take a broad, holistic view of resilience. He explained that if they only view through the eyes of HECO, they would tend to focus on infrastructure and electrical infrastructure. He added that they broadly invited community groups, which would represent people at the ground level, non-profit organizations, elected officials, native Hawaiian cultural organizations, fellow critical infrastructure owners and operators, large customers, Castle Hospital, their Marine base, and their government partners at the state and country levels. He shared that they look at resilience in a way they have entitled the Three Pillars of Resilience, which is infrastructure, emergency preparedness, and community resilience. He added that their philosophy was if they could make great strides and progress at the community level then that would take some of the pressure and timing burden off of what they do in the more complicated...
and more costly infrastructure solutions. He explained that they wanted to advance all three pillars simultaneously.

He then introduced Major General Hara, who is their TAG and Adjutant General; Mr. Joshua Stanbro, who is the Chief Resilience Officer for the City and County of Honolulu, which is actually the entire island of O‘ahu; Ms. Amy Luersen, who is acting as both the Neighborhood Board for the community of Kahaluu, which is on the windward side, and also as the Vice President of Community Collaboration at Hawaii Community Foundation; and Colton Ching, who is Senior Vice President of Planning and Technology at HECO. He welcomed everyone and asked them to briefly share about their role with respect to community resilience.

Major General Hara stated that he has been Adjutant General for the last three months and as this he is the commander of the National Guard, the director of HEMA, and the Homeland Security Advisor to Governor Ige. He shared that he was going to speak about the importance of partnerships but realized that it is not just about that. He stated that there is one more step. He explained that it is about building these partnerships so that they can gain trust in each other, so that when disaster occurs it is not the first time that they are meeting. As they have discussed, Hawaii is an island state in the middle of the Pacific Ocean and all of the challenges that come with this. He shared that their approach is an all of community approach. He shared some of the initiatives that they are doing.

He shared that he has been encouraging the use of the Hawaii Hazards and Awareness Resiliency Program (HHARP) ten modules, which partners with the community. He stated that they first began by talking about the different types of disasters in detail, so that they know what they can expect, then they work with that community to look at their asset capability, what can they bring in if there is a disaster, do an analysis on what their vulnerabilities are, and finally, they create a plan with them and help them facilitate a disaster response plan. He gave an example with one of the communities that they are helping right now. He shared that as they were going through the process, the community shared that they had many homes and people that needed to be evacuated in the Tsunami inundation zone and asked if the National Guard could provide vehicles to do evacuations, but then they found out that there was a member of the community who owned a bus company and could provide twelve buses for this and would alleviate the National Guard from this mission.

He shared that when there is a major disaster on the island, with the harbors and the importance of the harbors, they need a laid out area to put things, and he shared that they would not push things out but the containers would have to remain on the ships and would not even be able to come into port, which is a huge challenge. He stated that they need to be focused on opening these lines of communication so that they can get those critical supplies to the point of distribution. He added that their priority will not be going to the small, isolated communities, which is why they focus on resiliency at the community level.

He stated that Mr. Cruz had shared about the ISAO pilot they have right now and added that they are looking to start with cyber but will also look at other threats and initially focusing on the defense critical infrastructure and key resources. He shared that one thing that is really
productive for them is the Hawaii Emergency Preparedness Executive Consortium (HEPEC). He shared that they hold a meeting four times a year and all of the Homeland Security and Emergency Management Stakeholders attend as well as about 200 people from almost 60 different organizations over all different levels of government, inter-agency, and private and public partnerships. He added that once a year they do an annual hurricane exercise called Makani Pahili, which also helps them.

He gave an example about the dual status command, which is the construct for an officer to be able to command a Title 10 active duty and Title 32 National Guard forces. He shared that when they did a status command for the Kilauea Volcano, and he got the Title 10 active duty status, it was not the first time they had met. He added that they had already gotten to know one another and participate together in an exercise, in which they had been in stride together and they had felt like they belonged on his staff. He said it was phenomenal how they were able to focus on the disaster.

Mr. Seu asked Mr. Stanbro to share some information about what a Chief Resilience Officer does, and Mr. Stanbro stated that a Chief Resilience Officer does a lot. He stated that he has the privilege of serving in the role of Chief Resilience Officer and that this is an emerging concept. He shared that they are really lucky in the islands to have an elector who established this office by popular vote and charter mandate, in 2016, that established this office of Climate Change, Sustainability, and Resilience. He said that because of their tyranny of distance and because they have hurricanes tracking closer and closer, people have a sense of their vulnerability and wanted to establish an office that was at cabinet level, in the Major’s office, to try to coordinate across departments. He added that they serve as a bridge to the local community and try to really focus on this issue that is emerging.

He shared that they have learned a lot and have benefitted hugely from the 100 Resilience Cities network, which were part of the Rockefeller Foundation, and he shared that this was an international group of cities that was like a learning lab. He shared that the Urban Sustainably Directors Network (USDN), which is about 216 cities across Canada and the U.S., gets together and shares information with FEMA and Global ILS partnership. He shared that they have been at the cross-roads with a lot of these groups as they try to figure out what a Chief Resilience Officer should focus on. He said that there is a sorting process that needed to occur where they triaged where they can have the most leverage with other partners. He said that this is why it is so critical, and he thanked the NIAC for coming to Hawaii for this QBM because the perception of Hawaii often derives the vulnerability of the place and the amount of resources they actually have, which is why it is really important to see things on the ground and to see it in-person. He said that there are some of the places where they are more precariously situated than some of their brothers and sisters on the island.

He shared that their approach is to come out of the gate fast as an office, go to the community and start the trust building exercise. He stated that government in general may have some barriers of trust, and as a new office there is a lack of knowledge, so they spent the first year going to every neighborhood board and community meeting and explaining what resilience was, the concept as they understood it, and then asking the community what their concept of resilience
was and what they were worried about in an island community, which is what they built the Oʻahu Resilience Strategy off of. He stated that they told the community to tell them what the city and local government need to do to be more resilient as an island community, and then from this the community has a sense of what people should do. He shared that it gave them a list of what the local governments role, jurisdiction, and responsibilities can be as well as gave them a nice network map of things that people were concerned about where they should go and have partnerships for.

He shared that it was great to have Ms. Lau sitting on the local steering community of twenty business, non-profit, outside of government leaders to build this network. He added that it was also great to sit down with Mr. Cruz to get a perspective on what the federal agencies could tie in as well. He said that all disasters are local, and he asked who are the local leaders that they know they need to plug into so that they are not just meeting the first time during a disaster and so that they can pick up any slack in between. He shared that they hope they are starting to identify this and know that this is there responsibility as a local city government. He shared that they tried to align with this and then build upward and outward bridges. He said that they are finding ready and able partners on all sides.

Ms. Luersen then introduced herself. She shared that she had worked with the Hawaii Community Foundation, one of the two hats she wears, for many years. She said in many ways they are very typical for a community foundation, adding that they receive funding from generous donors, make grants for the community, and try to help the community be better. She shared that a couple of years ago, they were faced with this knowledge of resiliency and their lack of resiliency in Hawaii for many reasons, not just in terms of natural disasters but also in terms of the cost of living and some of the other things that effect their community. She shared that there was a study done in 2017 by Aloha United Way, the Alice Report, which indicated that 48% of Hawaii households are living at or below the poverty. She went on to explain that these communities are struggling to survive in Hawaii. She shared that one of the things they did was to create the CHANGE framework, which shows that they need business, government, and everyone to be working together to make a difference for Hawaii. She added that the only way they are actually going to be able to make a difference with these major problems is for them to be all in together.

She mentioned the volcano eruption on the Hawaii Island and shared that the Community Foundation created a fund to receive donation and support that community. She said that the month before this volcanic eruption, there was flooding on the island and they created funding there to create support for that community. She shared that within two months they had a very active response but that these were not isolated incidents, and she posed the question “how do we as a Community Foundation play a different role in terms of helping our communities be more active and be more proactive in that?” She said that what they did was created a Strong fund for Oʻahu, Kauai, Maui, and Hawaii Island at the Community Foundation, which are permanent funds that are intended to be able to support their community and help them to be better prepared and better able to immediately respond. She shared that they are hoping that these are public and private partnerships that they can actually help get funding to the communities as quickly as possible.
She said that these two examples have made it possible for them to get money out to the community within 48 hours, which is fast. She said that when talking about the ports and food not being there, she gave an example of the Big Island port, which she had been mostly involved with, where they had four times the amount of food donated to them and had no one in their warehouse to manage it. She explained that they were also 40 miles, one way, from where the shelters were and from where the food needed to be delivered every day. She shared that the Community Foundation was able to help the capacity of the non-profit organize the warehouse, explaining that they gave them the money needed to hire a warehouse manager and driver to drive the food every day. She said that when the community is affected, those who help are often those who have also been affected by the disaster. She shared that the capacity of the non-profit is really stretch in times of disasters and they are working to get a head of this.

Mr. Colton Ching stated that one of his responsibilities at HECO is the electric infrastructure for the five islands that HECO serves. He shared that when he first started at HECO, 29 years ago, this was already a difficult challenge to take on, but today, the challenge and importance of doing this continues to grow. He shared that when someone talks to people from their local electric utility, they should ask why they need to plan their electric system and why is this important. He stated that the discussion needs to go beyond just the electric infrastructure. He shared that he is an engineer, loves their infrastructure, and understands the importance of it, but the real value of the electric system here on the islands is that their service goes well beyond the supply of electricity. He shared that every other infrastructure within Hawaii and all of their customers fundamentally depend on electricity being there in order for them to be fully capable in whatever they are doing, whether it is producing fresh water, telecommunication, controlling traffic flow on roads, and other the things that they have in Hawaii. He emphasized that this makes the importance and dependency on electricity all that much more meaningful and part of the HECO missions and plans that they develop.

He shared that when they think about resilience and plan out their electric systems, they have to think about how they are going to wrestle with the very important objective of building a resilient electric system, not just for the purpose of having electricity, but for all of the things that they do and often take for granted. He added that they need to balance the need for resilience with a whole range of other, equally important but not as acute objectives that they have, such as affordable energy; clean, reusable greenhouse gas reducing energy; keeping their prices stable; reliable power, which is not the same thing as resilience; and many other important and competing interested that they need to make. He said that as they have started their new process, called Integrated Grid Planning (IGP), of planning their electric generation system, transmission system, and distribution system for the next 25 years, which also includes several important things, such as resilience, they started off by engaging their customers and other stakeholders in the Hawaiian community to help them identify how to make these important trade-off decisions.

He said that a key facet of what they are doing in their IGP approach is to start off with a range of stakeholder discussions. He shared that he and his team spent 2019 working with 34 separate working group and stakeholder meetings to discuss the issue of resilience and other topics. He added that the topic of resilience was so important to them because they are trying to explicitly incorporate resilience as an objective into their plans, and he shared that for the first time, as part
of this process, they convened a separate resilience working group, including stakeholders from first responders; other infrastructure owners; large customers; and state, local, and federal government agencies. He shared that they helped them figure out, from a community perspective, what resilience meant to them and what priorities did they have on achieving resilience. He stated that this is an example of one of the many working group meetings that they conducted last year and added that they have many more meetings planned for this year, including four general public meetings. He said that it had been a very helpful effort to get on the ground, direct from their customer and other partners’ perspectives on how to use resilience in their plans. He added that they have yet to do any analysis and modeling to figure out what their plans will be, but that already he can tell that those plans will be better because they are rooted in making sure what ever plans are developed are being done with the objective of delivery, resilience, and other objectives that start first with what they are hearing from their customers concerning what they see as their priorities. He added that this idea becomes a north star to guide all of their work going foward.

Mr. Seu asked Ms. Luersen to speak about how important it is to build resilience before the disaster hits. Ms. Luersen shared that there were a lot of things they learned going through the reactive process of setting up the funds. She stated that Hawaii was a mountainous island state, which means that there are a lot of communities that only have one road in and one road out. She said that when the mudslide happened in Kauai and this community was cut off for months, with the only way in was by boat. She stated that further up the coast from Ko’olaupoko there are roads that could easily erode into the sea and bridges that could flood. She shared about a when Hurricane Iselle hit the island in 2014, which was a tropical storm when it hit, the community came together. She added that when the lava started to flow, there were already relationships built with each other and the county, government, and non-profits were able to very quickly build those relationships back and be able to respond in a cohesive manner. She said that it is really important to find ways keep a strong relationship so that when the disaster goes a way the relationships will not.

She added that because Hawaii is mountainous and because they could easily have communities that are isolated, the concept that came out of a lot of their resiliency strategies makes a lot of sense to a lot of communities. She shared that the more they can do to create this opportunity to create hubs with food, shelter, and a gathering place where the community can be stored and dispersed ahead of time is important. She mentioned that they had heard about reports on what happens if food does not get off the ship, but she shared that even if it does get off the ship, if the roads are closed, it will not get to those communities, so they need to get food stored in those communities more quickly so that, for at least a period of time, that community can help sustain itself. She added that the community leadership knows what resources there are in their community, explaining that they know who has a tracker or who could do what. She shared that the more they can build this ahead of time the stronger they are and the more able they will be to sustain themselves.

Mr. Seu shared that Ms. Luersen had just shown the connectivity of the community, and he asked Major General Hara to speak on the connectivity between the federal, state, and local and how do they connect all of these dots. Major General Hara shared that there needs to be an
establishment of partnership and a building of trust. He added that they need to know who their federal partners are and what they can bring and offer to the state. They have tremendous relationships with FEMA Region 9 and Mr. Robert Fenton, Jr., and he shared that (former) Secretary Nielsen and prior secretaries also visited Hawaii, so it is not just FEMA but also DHS and DOD. He also shared that having U.S. INDOPACOM along with a component command is a huge benefit for them.

He shared that HEPEC is one of their main foundations. He added that on the Homeland Security side they have a meeting about every three weeks, called a partners meeting, with their Homeland Security stakeholders law enforcement. He shared that at these meetings they exchange best practices, they have at least one subject-matter expert (SME) that presents at the meeting, and it is great opportunity to share knowledge and build partnerships. He shared that for disasters, they have a video teleconference and teleconference bridge. He added that although he had only been the Adjutant General for three months, he had previously served as the Deputy Adjutant General for five years, so he was not walking blindly into his role. He shared that the first year they had 60 named storms that crossed the Pacific, and he said that the 140 line is their trigger to start the first video conference. He shared that the first one they had was rusty. He explained that simple things like people checking in, knowing who was talking, knowing what they were talking about, understanding when the county shared their current operations and their needs were really rusty, but that after doing it 60 times they became good at it. He shared that having the hurricane exercises and being able to bring all of the right people in for that is a huge benefit for them.

Mr. Seu asked Mr. Stanbro to share what his biggest take-away was from his work to develop the O’ahu Resilience Strategy. Mr. Stanbro shared that his biggest take-away was that there is wisdom in community. He shared that it is tough to get there because a lot of the time they have to attend a lot of meetings and get beaten up the first couple of meetings because they had not been there for a while and they did something or another city department did something that they are going to take the blame for, but going back over and over gets them there eventually. He shared that it is not going to be the same in every place because they are islands separated by water, communities that are separated by history, and a lot of rich context that makes Hawaii a wonderful place to be but also a tough place to have a rubber stamp that takes care of all the problems with each solution status. He emphasized that the main take-away was that there are different priorities based on where people are located, and if they are able to meet this, they will build trust, and if they are not able to but can explain why they cannot, then they will also build trust. He explained that people can understand when they are given a why and a rationale.

He shared that another big take-away was the relationality and trust between them and their partners. He said that it was through working with their partners that they were able to discuss how to go to a community without an agenda, see if there is a way to surface what they want to do, and then discover if there is a way to help them while also achieving personal goals, which would be a win-win. He shared that it takes a lot of time to go and have these conversations and to get people to see that they are not out there because they want to do something else, and he shared that it is really encouraging to see different entities, whether non-profit, business, or government level, slowly coming to the realization that they need to plan based on what the...
community’s needs are and then have their actions follow this, if possible, versus always talking it out, though he admits that in some cases it has to be this way. He said that they know when a hurricane, like Katrina or Sandy, hits anywhere, the connectivity of a community is the biggest predictor of how quickly a community will bounce back because the first, first responder is their neighbors, so if they can get help from them or there is trust and they know each other, these are the communities that will stand back on their feet the fastest.

He shared that this is one of the strengths they have on the island. He explained that they built the resilient strategy around three weaknesses and a strength. He shared that executive coaching always tells people to not fix their weaknesses because they will spend all their time trying to squeeze 5% gain out of that, but instead focus on the strength and make sure the strength is as strong as their natural strengths. He said that is what they tried to do. He explained that this was what they tried to do with their strategy, looking at how they could make the community cohesion and the social bonding that an island community has given the inner connection and the cooperative spirit, leverage it, and take it as far as it could go, filling in the holes with some of the infrastructure and other things.

Mr. Seu shared that some of what they have heard is this theme of broader context of the risks, especially in Hawaii given that they are so isolated. He commented on how they are aggressively working toward goals as an electric company and as state to get off of fossil fuels, and from a climate change perspective, they are doing great strides in terms of trying to mitigate their impacts, but he asked Mr. Ching if he felt that they are doing enough to adapt and how do they do both: advance the ball of getting off fossil fuel while also focusing on resilience as it is becoming more of a real-time issue.

Mr. Ching stated that they absolutely need to do more. He added that the most optimistic people in the room will agree that no matter how successful they are in Hawaii, there is the need to mitigate the effects of climate change and reduce or eliminate the use of fossil fuels. He shared that as an island state they will be impacted more than most by the global effects of climate change and their contribution. He added that they absolutely need to work on adaptation to mitigate this situation. He said that their leading efforts are their mitigation on using fossil fuels and that finding ways to use renewable energy gives them an advantage to take steps of adaptation because they can honestly say that they are doing their share, and maybe even more, on the mitigation side, and they need to really do the work on adaptation as well. He shared that adaptation is a much more difficult challenge to take on, not because it is technically harder but because successful adaptation work requires more coordination and collaboration among many different people. He shared that people, and engineers, tend to do work in silos, whether it is private industry or government, and they all tend to gravitate to doing things within their individual pseudonyms, but affective adaptation requires them to breakdown the silos and work together.

He explained that it would be the worst outcome if the electricity utility had one set of plans to adapt and make changes to their infrastructure around their own ideas of how they should be adapting and then the local and state government say that they are going to make zoning and land use changes that runs counter to what the electricity utility had thought was the best thing to do
and then they both fail. He said they absolutely need to do adaptation, but in order for any community to be success at this, it requires them to all work together.

Mr. Seu then gave a summary of what had been discussed. He shared that first was connectivity: build those relationships before. Next, he reiterated that they cannot stay in their silos, they need to breakdown the walls and walk in each other’s shoes to really understand what each other is doing and what is important, and they need to focus in on what the community’s needs are. He then thanked the panelist and asked Ms. Lau if there was time for any questions to be asked.

Ms. Lau thanked the panelists and shared that they had one phone question from Mr. Frank Prager, POC for NIAC Member Mr. Benjamin Fowke. However, before the question was asked, Ms. Lau shared that, when Ms. Luersen was remarking about some communities only having one road in, she was reminded of when they were doing their long-duration power outage study and looking at how they would survive that. She shared that they spoke with Mr. Mark Stevens, who is the City Manager for New Bern, North Carolina, and he shared that this was a situation in Florence, where the community realized that the state was not necessarily going to come to their rescue and that they would need to do it themselves.

Ms. Norris then read the phone question, in which Mr. Prager shared that, as the NIAC may recall, they included a lot more than infrastructure in their vision of community enclaves in the long-term power outage study. He then asked if the panelists were using any of the concepts developed in the long-term power outage study in their resilience work, and he specifically asked if they were incorporating the lifeline pieces of the enclave vision, e.g. medical supplies, communications, water, wastewater, etcetera. Mr. Seu responded that the answer was yes. He went on to explain, for those less familiar with the concept of a community enclave, that it also called a hub. He shared that the idea was that, within a community itself, there is an identify location that could serve as a place where residents could come to in order to receive critical services in the event that they were somehow cut off or normal services were disrupted. He stated that this would host lifeline services of food, clean water, and communications to the extent that it involves getting a person’s cell phones recharged.

He shared that Mr. Stanbro’s work, in terms of the O’ahu Resilience Strategy and Ko’olaupoko Resilience discussions, is all trying to be captured. He said that the next step, there in Hawaii, is to identify two or three possible locations to pilot this. He shared that there may be different ways to approach this. He said that one resilience hub, for example, may be pre-identifying how they would isolate that central location, from an electric distribution circuit perspective, so that they can readily create a relatively small island, and then they would pre-wire it so that they could bring in a two and a half megawatt emergency generator if needed. He added that this location could be co-located with a supermarket, a bank, a gas station or electric vehicle charging center, a dialysis center, and so on. He said that all of the life line services or the most critical ones would be the concept.

Mr. Stanbro added that it works on several different levels if people think about a resilience hub as serving all of these different community needs on a micro-grid should anything go awry. He shared an example of Puerto Rico, where people were driving around, burning gas, trying to
catch a signal so they could let others know they were okay, and he stated that the last thing anyone should be doing is burning critical resources solely to get in contact with people. He shared that it not only works on the community level, but also at their level, where they are trying to work together, adding that resilience helps provided them with this great opportunity to say, “how can we work with the utility to actually meet some critical city and county goals at a community facility, like a park”. He said that their initial turn was to think if they wanted to bring resilient up then they should work with FEMA to figure out how do they plan to put these in the right spots so that they can be of the most service at this level as well. He shared that this creates a great ability to work across different levels of government and with the private sector to deliver, hopefully, a solution that will work across community lines as well. He stated that this was a great microcosm of how this can be down with IGP.

Ms. Luersen also added that if they had those reliance community gathering places, this is where the community first responders could be, and she stated that this is also where the formal first responders could go to talk with those communities and figure out what is needed. She shared that this was one of the challenges that they faced on Kauia, where the community leaders knew what was needed but there was not strong communication with them, which caused them to lose time. She shared that having just the concept of a resiliency hub is a way to start to build that local community leadership. She explained that it allows the leaders to know where to go and gives the first responders the knowledge of who the need to look for there. She felt that this would help them immensely. Ms. Lau again thanked the panelist and closed the discussion.

VIII. PUBLIC COMMENT

There were no public comments submitted.

IX. NEW NIAC BUSINESS

No new NIAC Business was shared.

X. CLOSING REMARKS

Ginger Norris, DFO, NIAC, DHS

Constance H. Lau, NIAC Chair

Constance H. Lau, NIAC Chair

Beverly A. Scott, NIAC Vice Chair

Ed Canuel, Director, Critical Infrastructure, National Security Council (NSC)

Matthew Travis, Deputy Director, Cyber Infrastructure Security Agency (CISA), DHS

Patricia Hoffman, Principle Deputy Assistant Secretary, Office of Electricity, Department of Energy

Ms. Lau asked Dr. Canuel to begin the closing remarks. Dr. Canuel thanked Governor Ige and Lieutenant General Minihan for sharing their insights with everyone today, and he thanked both panels, sharing that whether it be the panel that touched on supply chain matters to the panel that
shed light at the complexity of community resilience, these panels made everyone smarter and that they are thinking about these issues even better now because of these different perspectives that were revealed to them. He thanked Major General Hara, telling him that he inspired Dr. Canuel to tear down silos rather than build them. Dr. Canuel shared that the NSC is going to continue to foster a closer dialog between the NIAC and government stakeholders, strengthening linkages between the NIAC’s recommendations and the relevant departments and agencies. He thanked the NIAC for their hard work and asked them to please keep their recommendations coming as these recommendations play a crucial and valuable role in protecting the nation’s critical infrastructure.

Deputy Director Travis then gave his closing remarks. He thanked the NIAC and all the panelist and speakers. He thought that it was clear that the problem set is very complex. He channeled the CISA motto, which states “Defend Today; Secure Tomorrow.” He shared that there are immediate things that they need to do in the face of COVID-19 or the next hurricane, but it is also the longer term planning that needs to be done to make sure that infrastructure is as resilient as it needs to be. He thanked Governor Ige for not only his partnership with DHS but also for his national leadership in his role in the Council of Governors. He stated that he was looking forward to continuing his work with the state and all of the stakeholders here. He thanked the NIAC for a very good session.

Principal Deputy Assistant Secretary Hoffman shared in her closing remarks that as they move forward and coordinate some of their plans that she was really impressed with the resilience discussion. She shared that this is a passion of hers and posed the question, “How do we continue to merge the lessons learned for the RRAP process into the resilience plan but also into the Hazard Mitigation plan for the state?” as she shared that this will open up opportunities for funding, not only with communities but also in its infrastructure as FEMA goes toward work funding. She felt that they should continue to take a holistic approach as they invest in the future, and she thanked them for the great discussion and shared that she appreciated it.

Ms. Lau thanked Governor Ige, Lieutenant General Minihan, and all of their federal partners for joining the council, and she particularly wanted to thank the panelists and speakers, sharing that this was a really good discussion with a grist for future discussions. Ms. Lau shared, to Dr. Canuel’s point on keeping the recommendations coming, that the NSC is ensuring this because they have issued an additional tasking that Mr. Baich and Mr. Ledgett will be leading on cyber issues. She added that the NSC is keeping them busy and thanked them for that.

XI. ADJOURNMENT

Constance H. Lau, NIAC Chair

Ms. Lau shared that the next NIAC QBM would be May 21, 2020, and will be held back in Washington, D.C. She hoped to see everyone there and thanked everyone again for coming to this QBM in Hawaii. She then adjourned the meeting.