U.S. Department of Commerce Civil Nuclear Trade Advisory Committee (CINTAC) Meeting Fifth Charter, 2016-2018

Thursday, March 15, 2018, 9:00am - 4:00pm Herbert. C. Hoover Building, Commerce Research Library 1401 Constitution Ave. NW Washington, DC 20230

MINUTES

8:30 – 9:00 Arrival, Coffee, and Networking

9:00 – 9:45 Welcome and TeamUSA Update

- Representatives from the Departments of Commerce, Energy, State, and EXIM Bank provided an update on recent activities and answered questions.
- <u>U.S. Government (USG) Speakers</u>
 - U.S. Department of Commerce: Jonathan Chesebro, Senior Nuclear Trade Specialist; Devin Horne, Civil Nuclear Trade Specialist
 - U.S. Department of Energy (DOE): Michelle Scott, Senior Advisor, Office of Nuclear Energy
 - U.S. Department of State (State): Alex Burkart, Senior Level Advisor for Nuclear Energy, Bureau of International Security and Nonproliferation
 - Export-Import Bank of the United States (EXIM): Craig O'Connor, Director of Business Development, Project & Structured Finance Division
- CINTAC Chair Gary Wolski welcomed members and reviewed the agenda.
- DOE Update (Michelle Scott)
 - Noted that DOE plans to attend the May 2018 Clean Energy Ministerial (CEM) in Copenhagen and that nuclear will be part of that conversation (nuclear workstream).
 DOE is working with Canada and Japan on this.
 - State (Alex Burkart)
 - The International Framework for Nuclear Energy Cooperation (IFNEC) Infrastructure Development Working Group (IDWG) will hold a workshop on "New challenges facing nuclear regulators" in Paris, France, May 28-29, 2018.
 - IDWG Workshop on New challenges facing nuclear regulators has 3 sessions planned (large reactors, new reactors, and small modular reactors (SMRs)).
 - The next IFNEC Steering Group meeting will be held in June 2018 in Argentina.
 - David Blee asked about the status of 123 Agreement negotiations. Alex said that the USG does not comment on ongoing negotiations.
 - o EXIM (Craig O'Connor)
 - EXIM is waiting for a Board four members voted out of Senate Banking Committee and awaiting Senate confirmation.

- EXIM has a long history of supporting nuclear and offers long-term financing and low interest rates.
- Noted that an EXIM Bank representative recently traveled to the Kingdom of Saudi Arabia (KSA) and that EXIM is actively engaged with India.
- Ralph Hunter asked about current limitations without a Board.
 - Craig noted that three Board members are needed to approve deals over \$10 million.
- Vijay Sazawal asked how long EXIM has been without a board quorum (answer: three years).
- David Blee noted that several EXIM Board nominations are pending and that the previous nominee for Chairman (Scott Garrett) was rejected by the Senate Banking Committee.
- DOC (Jonathan Chesebro & Devin Horne)
 - Devin noted that DOC's Energy and Energy Services Industry Trade Advisory Committee (ITAC 6) is looking for members.
 - ITAC 6 is advises the Secretary of Commerce and the U.S. Trade Representative (USTR) on trade matters affecting the energy and energy services sector.
 - A Federal Register notice (FRN) is expected to be published soon regarding recruitment for ITAC 6 and other renewed ITACs.
 - Jonathan noted that Gilbert Kaplan was nominated by the President to become DOC Under Secretary of Commerce for International Trade. Mr. Kaplan was appointed to that position on 3/20/18. His biography is available at https://www.commerce.gov/directory/gilbertbkaplan.
 - Jonathan noted that the Nuclear Energy Institute (NEI)'s April 23-25, 2018 Civil Nuclear Trade Mission to the KSA has received DOC trade mission certification.

9:45 – 10:00 Preparation for Discussion with Wilbur Ross

- Gary Wolski reviewed format for discussion with Secretary Ross and identified industry speakers for questions to ask the Secretary.
- David Blee was designated to ask the below question re China:
 - What is your position on China, and what suggestions do you have for U.S. civil nuclear companies as we await a final determination from the USG regarding civil nuclear exports to China?
- Graham Cable was designated to ask the below question re financing:
 - Given the challenges U.S. companies face to finance U.S. civil nuclear exports, is there a possibility that OPIC, the World Bank, or other multilateral development banks (MBDs) could change their policies so that they are able to support U.S. civil nuclear exports?
- Gary Wolski asked CINTAC members which question should be asked if there is time for a third question.
 - Donald Hoffman noted the importance of stating that Russia and China are outcompeting the United States (U.S. losing in the global market) and the need to convey a sense of urgency.

- Gary Wolski noted that his introductory remarks would mention competition from Russia and China.
- Seth Grae noted the importance of telling the Secretary that China is world's largest export market and that U.S. civil nuclear companies are having difficulty exporting there.
- Neil Numark noted that the recent announcement on steel tariffs is important and suggested that CINTAC ask the Secretary re this.
- Gary Wolski noted the importance of the KSA market as a national imperative and that he would convey this to Secretary Ross.
- Christopher Colbert designated to ask the below question (if time permits)
 - How do you see the President's recent announcement on tariffs and quotas for imports of steel impacting the competitiveness of downstream industries that utilize steel?
- Larry Sanders designated to ask the below question (if time permits):
 - How can U.S. nuclear suppliers better leverage the USG, including the DOC, to compete in emerging nuclear markets? From your experience, are there success stories from other U.S. industries we might learn from?
- Additional discussion prior to Secretary Ross's arrival:
 - Devin noted that DOC/ITA Deputy Assistant Secretary for Manufacturing Ian Steff was planning to travel to Taiwan and Japan and outlined the goals of his trip (to support U.S. companies doing business in these markets, host an energy roundtable in Taiwan, and co-chair a meeting of the U.S.-Japan Energy Working Group in Tokyo)
 - Vijay Sazawal asked how many reactors in Japan have restarted (answer: five so far).
 - ITA's IAEA U.S. Industry Program (USIP):
 - Hash Hashemian noted that he provided ITA with recommendations on how to improve ITA's USIP. Recommendations included extending the program for three days instead of two.
 - Devin noted that Ian Steff is supportive of a three-day program and provided an update on USIP planning. Noted that ITA plans to bring back the Showtime program with visiting ITA staff from top export markets and noted space challenges (Austria Center Vienna (ACV) not available this year).
 - Neil Numark noted that USIP used to be 3 days but that budgetary issues and ACV unavailability led to a shorter two-day program.
 - Donald Hoffman noted that a two-day program left little time for networking and interacting with foreign delegations.
 - John Bendo asked about the impact of moving USIP events outside of the IAEA General Conference. Devin noted that transportation could potentially be provided to transport foreign delegations to an offsite venue.
 - Tom Dolan asked if the USA Exhibit at the IAEA General Conference could be moved from the IAEA to a museum in US. Michelle Scott noted that the exhibit is torn down after the event.
 - Donald Hoffman noted the importance of U.S. industry and USG participation in international civil nuclear conferences.

10:00 – 10:15 Discussion with Commerce Leadership

- Wilbur Ross, Secretary of Commerce, made brief remarks to the CINTAC.
- Due to time limitations, Gary Wolski did not provide opening remarks and there was no time for questions.

Secretary Ross Remarks

- Noted that DOC is serious about helping the U.S. nuclear industry and thanked CINTAC members for their service and advice.
- Noted that nuclear energy is a high-priority for this Administration and that there is a joint U.S. Government (USG)-U.S. industry commitment to supporting exports.
- Noted that the President committed to revitalizing the U.S. civil nuclear industry in his June 2017 speech at DOE. Noted that DOC is working with the interagency on the President's Civil Nuclear Review, that DOC is listening to industry's suggestions, and that he is personally engaged to help industry and eliminate foreign trade barriers.
- Noted that CINTAC is a vital part of DOC's Civil Nuclear Trade Initiative (CNTI).
- Highlighted DOC stakeholder resources such as <u>ITA's 2017 Civil Nuclear Top Markets</u> <u>Report (TMR)</u> – which aims to help U.S. civil nuclear companies identify top export markets. The Civil Nuclear TMR ranks 50 countries in terms of their readiness for nuclear energy and openness to U.S. civil nuclear exports and provides individual market ratings for exports related to new builds, existing reactors and decommissioning.
- Noted that ITA's Civil Nuclear Toolkit, a U.S. industry guide for potential foreign buyers, will be ready to launch soon.
- Noted that ITA's Advocacy Center has 23 cases in the civil nuclear sector with a total project value of \$181 billion with \$51 billion in U.S. export content.
- Noted that DOC is advocating on behalf of U.S. industry re civil nuclear cooperation agreements (123 Agreements) and that DOC is mindful of DOD and congressional concerns in this area.
- Stated that DOC will advocate strongly for foreign governments to consider U.S. industry bids, and that the U.S. offers the best products in the world and should not be shut out of foreign markets.
- Thanked CINTAC for its <u>October 2017 letter</u> on the U.S.-KSA 123 Agreement and noted that the USG is working on this. Noted that DOC understands the economic implications of concluding a U.S.-KSA 123 Agreement and that DOC will dedicate staff and resources to KSA engagement.
- Noted ITA's annual U.S. Industry Program to the International Atomic Energy Agency (IAEA) General Conference. The 2017 program included 43 representatives from 29 U.S. companies/organizations, 14 foreign delegation meetings, and resulted in new foreign contracts and opportunities for U.S. industry in the KSA.
- DOC officials have taken recent trips to the KSA to support U.S. industry. Noted that the KSA is committed to diversifying its energy resources and that DOC's December 2017 Civil Nuclear Roundtable in Riyadh led to planned actions between the United States and the KSA.

- Noted that the United States is dependent on uranium exports from Russia and noted that he was interested in hearing CINTAC's thoughts re how concerned the USG should be re this. Noted that the United States has limited enrichment capabilities and asked CINTAC if this is a concern for the United States.
- Briefly addressed questions that CINTAC provided in advance of the meeting, including how the United States can turn around the U.S. civil nuclear industry and how the U.S. can improve its ability to finance civil nuclear projects.
 - Re how to revitalize U.S. industry, he noted that the U.S. civil nuclear industry is not owned or controlled by the USG but that USG actions can help support industry. Noted the President's Civil Nuclear Review and that suggestions from U.S. industry are welcome; noted that the USG plans to expand advocacy for U.S. companies and that the USG hopes for a fix to the EXIM Bank Board (since its \$10 million limitation is not helpful for industry).
 - Re financing, he noted the <u>CINTAC's July 2017 letter</u> re the importance of financing and the recommendation that DOC analyze the financing practices of competitors.
 - Re the <u>CINTAC's October 2017 letter on NAFTA</u>, he noted that the USG hoped for a conclusion soon on NAFTA.

10:15 – 10:30 Identify Action Items/Takeaways from Conversation with Secretary Ross

- Ian Steff, Deputy Assistant Secretary (DAS) for Manufacturing, U.S. Department of Commerce
- Gary Wolski, CINTAC Chair
- DISCUSSION (DAS Steff led the discussion and offered to answer questions that were not addressed in the Secretary's remarks and that were not answered due to time limitations).
 - Gary Wolski asked China question (what is your position on China, and what suggestions do you have for U.S. civil nuclear companies as we await a final determination from the USG regarding civil nuclear exports to China?)
 - DAS Steff Response:
 - The USG understands the importance of China as a key export market for U.S. civil nuclear goods and services. The USG realizes that U.S. companies have been impacted by recent delays in the USG's assessment of 10 CFR Part 810 export licenses (Part 810) for China and have expressed concern about how these delays affect their company and their customers in China.
 - Noted that there is an awareness within the USG about the importance of this issue and the need to expeditiously conclude a policy determination. The USG encourage companies involved in the Chinese market to review their intellectual property protections. The USG appreciates industry's patience and will provide more information as soon as guidance becomes available.
 - David Blee asked which agency has the lead on the review.
 - DAS Steff noted that all agencies are involved and that it is an Administration-wide effort led by the NSC and other agencies.
 - Dan Lipman noted that NEI has solicited its members to ask how the USG current policy on export authorizations has impacted U.S. companies. NEI has concrete

examples of business that has been impacted by the stand down and is close to having this information available for the USG.

- Gary Wolski noted that repeat orders are on hold due to the China review and asked if there is a method for letting previous orders go while new orders are reviewed.
 - DAS Steff noted that the China dynamic is evolving and that the Administration believes China needs to change its behavior across sectors.
 U.S. industry should convey its ideas for creative solutions and the impact of the stand down, and tell the USG how companies are protecting their IP in China. He requested that companies send information in a timely manner given that discussions are happening real time.
- Jeff Harper asked if Secretary Ross understands the challenges faced by the U.S. civil nuclear industry.
 - DAS Steff noted that the Secretary understands the economic implications of this industry and the importance of 123 Agreements. He noted the Secretary's support for the President's Civil Nuclear Review and desire to see the Review yield a more robust U.S. industry. He noted that the Secretary has taken a great deal of interest in this industry and has met with many companies in the sector.
- David Sledzik asked if there is a USG review on Russia.
 - DAS Steff noted that China is the primary focus now in terms of examining U.S. market share and trade flows, but that Russia is not out of the question.
- DAS Steff noted his upcoming trip to Japan and Taiwan, highlighting that he will have high-level meetings with Taiwanese officials; he noted that there are significant decommissioning opportunities in Taiwan and Japan.
- Graham Cable asked if it is possible for MDBs, the IFC, OPIC, and others to finance nuclear (e.g. by classifying it as a green type of energy).
 - DAS Steff noted the that the Administration wants a solution to EXIM and noted his recent visit to the KSA with EXIM officials (EXIM is able to support U.S. industry in the KSA despite its current limitations). He noted that EXIM has a history of working with the KSA.
 - He emphasized that DOC is open to discussing novel solutions (e.g. OPIC, USTDA support for nuclear) and noted that DOC is aware that U.S. competition come in with a full package (financing, training, etc.). He noted strong USG advocacy in support of industry and noted that DOC welcomes ideas from industry re financing solutions.
- Vijay Sazawal noted that he worked at Westinghouse (WEC) when Russia broke up and when Siemens was competing against WEC in the Czech Republic. He noted that at that time the USG publicly announced that it had a "war chest" and that it would match Siemens offer, which led to WEC winning the deal. He said that this type of rhetoric is helpful: if a OECD member breaks OECD rules, the USG will match.
- Chris Colbert noted the recently imposed steel tariffs and that there are no U.S. manufactures of certain types of steel products. He asked how the Administration plans to mitigate the impact of tariffs on steel given U.S. industry needs.
 - DAS Steff said that he has received lots of industry input on 232 and noted that there will be a comprehensive exclusion process that will be done until March 18. U.S. companies can apply for exclusions based on HTS code and

product type. There are also country exemptions and DOC is working with USTR on this.

- Chris Colbert noted that U.S. companies would like all steel types to be available in the United States.
 - DAS Steff noted that industry submissions should demonstrate that U.S. firms are talking to potential steel manufactures in the United States.
- Dan Lipman asked re the status of the uranium 232 petition.
 - DAS Steff noted that he has been involved in meetings re the petition and that there is a timeframe for review. He noted that DOC is fully engaged with the interagency on this and that DOC wants industry input.
- David Blee asked re the timeframe for a decision on the uranium 232 Petition. DAS Steff and Jonathan Chesebro noted that a decision would be made very soon.
- Hash Hashemian noted the input that he provided to DOC re ITA's IAEA U.S.
 Industry Program (USIP) and asked if DAS Steff would lead the 2018 USIP. DAS
 Steff noted that he plans to be there. Hash asked DAS Steff if he had any questions re his input.
 - DAS Steff thanked Hash for his input and noted that DOC would do a 3-day program and that visiting ITA staff from top markets would participate.
- Hash Hashemian asked what DOC is doing to improve the U.S. Pavilion at the IAEA General Conference.
 - DAS Steff noted that DOC would be involved in the U.S. Pavilion along with the USG interagency. He noted the desire for U.S. industry support of the Pavilion. DOC will continue to engage with industry on how U.S. industry can support the Pavilion.

10:45 - 11:15

Update from the White House

• Aaron Weston, Director for Nuclear Energy, National Security Council

Director Weston Remarks and Discussion

- Director Weston noted that the review is deliberative and that at this time he cannot say much he noted that he is here to listen and get industry input.
- Director Weston asked what financing mechanisms should be in place to help industry.
 - Graham Cable replied that the USG should say what it can provide up front versus later (e.g. upfront MoU with a foreign country instead of a final authorization of a financial commitment provided at the end of a deal). USG could also note that it will engage U.S. institutions to support a particular deal.
 - Director Weston noted that the USG typically does not say up front what it can offer. He asked what the ideal USG policy would be to represent U.S. industry export interests (e.g. engage with emerging nuclear markets).
 - Graham Cable replied that the USG should note that it will provide "a competitive financing package" and commitment and then USG could engage with relevant institutions (do up front alignment with U.S. commercial activity versus at end).
- Director Weston asked for input from industry re financing solutions.
- Bob Kalantari ask if U.S. can finance overseas nuclear projects with USG foreign aid.

- Director Weston asked CINTAC what the ideal end result should look like; suggested looking at the USG complex and how it can effectively support U.S. industry (e.g. USG could ask foreign government to provide some percentage of financing for expected nuclear project before plans in place).
- Graham Cable noted that there is lots of HR development, regulatory development, and education needed in advance of building a nuclear power plant (NPP) and that USG aid could support this infrastructure development.
- Gary Wolski noted that CINTAC may send a letter to Secretary Ross re what USG can do re financing nuclear projects.
- David Blee noted that a U.S. infrastructure initiative that is domestically focused could support U.S. civil nuclear industry, and also noted USG support needed for countries that want smaller NPPs.
- Russell Neely asked if the USG is considering nuclear as clean energy as part of the Civil Nuclear Review.
 - Director Weston said he was unclear about the current clean energy definition and noted that is a policy decision above his level; noted that the President has described nuclear as "clean and renewable".
- Larry Sanders asked about the key focus areas of Aaron's work and if he provide this information to U.S. industry.
 - Director Weston noted the four tracks of the review (preserve the current fleet, R&D/innovation, fuel cycle, global exports).
- Hash Hashemian asked re the status of the Review.
 - Director Weston noted that the President's speech noted the initiatives to be done and that the review is one tool to revitalize and expand U.S. industry. He added that it is a complex process that aims to drive the USG interagency towards this goal.
- David Blee noted that CINTAC recommended the creation and re-establishment of the White House Director for Nuclear Energy position and is glad Aaron is in place.

11:15 – 11:45 Puerto Rico (PR) Initiative Update

- Eddie Guerra, Rizzo Associates
- Eddie Guerra gave a PowerPoint presentation to the group [see "Puerto Rico Initiative Update Presentation on CINTAC website].
- Alex Burkart noted that IAEA would review safeguards for any NPP in PR and said USG interagency would be involved.
- Michelle Scott noted that the public in PR is not supportive of civil nuclear energy in PR.
- Chris Colbert noted that a pre-feasibility study would assess public acceptance in PR
- Chris Colbert motioned for a CINTAC vote to approve the PR letter and White Paper CINTAC voted to approve the letter and White Paper.

11:45 – 12:00 Advocacy Center Briefing

• Stephen Renna, Advocacy Center Director, U.S. Department of Commerce

Remarks & Discussion

- Stephen Renna gave an overview of ITA's Advocacy Center (AC), its mission (to support U.S. jobs through exports), and noted that it aims to counter foreign government advocacy on behalf of companies in those countries.
- Stephen Renna noted that the AC currently has 1100 active cases, that it has closed 100 cases in favor of U.S. companies, which included \$50 billion of contracts received by U.S. companies with \$40 billion in U.S. export content.
- Stephen Renna noted that there is no fee involved for using the AC companies must be approved for advocacy. To be considered for advocacy companies need to submit an advocacy questionnaire. The AC makes a national interest determination for bids with less than 50% U.S. export content.
- Colin Austin asked if an applicant needs to be a U.S. company.
 - Stephen Renna said no, approval is based on U.S. export content and U.S. national interest foreign flagged companies can receive advocacy.
- Colin Austin asked what the advocacy process is when there is more than one U.S. company competing for a bid.
 - Stephen Renna noted that the AC has to support any U.S. company that meets AC standards, and noted the difference between exclusive (in support of the one U.S. Bidder) versus national advocacy (in support of all U.S. bidders, when multiple U.SS. bidders exist). When national advocacy is in place the AC can speak to the specific capabilities of each U.S. company that is bidding.
- Gary Wolski asked if the AC can support a procurement before is out publicly.
 - Stephen Renna said yes and noted that the AC encourages companies to engage with the AC early re future potential procurements. The AC may not provide exclusive advocacy if a procurement is in an early phase and other potential U.S. competitors are not yet aware of the tender.
- Tom Dolan asked if the AC has specific examples of civil nuclear advocacy center cases.
 - Jonathan Chesebro said he would share examples of recent wins in the civil nuclear sector (which are from publicly available information).
- Jeff Harper asked if the DOC advocates in country and from within the United States.
 - Stephen Renna noted that advocacy can occur within the United States (when foreign government officials are visiting), in the country where the bid is taking place, or in another location. He gave examples of advocacy and noted that advocacy is coordinated with the USG interagency via an "in country strategy".
 - All strategies are coordinated with the company/applicant.
- Neil Numark asked if ITA Commercial Service (CS) Officers are part of the AC.
 - Stephen Renna noted that the AC is part of ITA's CS/Global Markets (GM) unit, which includes Commercial Officers serving overseas.
- David Blee asked who U.S. civil nuclear companies should call in the AC to initiate conversation w AC.
 - Stephen Renna noted that Cameron Dorsey is the POC in the AC and that AC Regional Managers are also involved.
- Bob Kalantari asked if there is a minimum dollar value for applying/being approved for advocacy.
 - Stephen Renna said there is no minimum dollar threshold.

Gary Wolski Reviewed Potential Committee Actions

- U.S. industry input to USG re China
 - Gary Wolski asked if CINTAC should be part of NEI's China impact survey.
 - Bob Kalantari noted that it was unclear where 810 applications are being held back.
 - Michelle Scott noted that DOE manages the 810 process with assurances from State. Due to the USG China policy review, 810 packages are at DOE pending review. She noted that USG wants input from U.S. industry re the impact of 810s being held.
 - Vijay Sazawal asked about the U.S. Department of Justice (DOJ) case and the fact that China has not reacted to the DOJ indictment. He asked if there is a way to bifurcate CGN issues from non-CGN issues.
 - Michelle Scott replied that she cannot speak for DOJ and noted that new information has come out given ODNI review and CGN's indictment, which led to the USG assessment.
 - Gary Wolski asked where is the proper forum for industry to push this issue forward.
 - Michelle Scott replied that NEI is pushing this issue forward and that the USG wants more information re how the USG review is impacting U.S. industry.
 - Dan Lipman asked companies to email him if the USG 810 policy review is impacting them and to note the dollar value, opportunity cost, and material impact. This would be separate from the NEI member survey). NEI noted that they plan to send this information to the White House/DOC/DOE directly.
 - Michelle Scott and Al Burkart highlighted that the USG needs information as soon as possible (don't wait to send this information via a CINTAC letter to Secretary Ross).
 - Stephen Burdick noted that a CINTAC letter is helpful in terms of putting on public record that China 810 is an issue and to note that CINTAC appreciates any help DOC can provide to help shorten/resolve the USG 810 Assessment. Stephen agreed to draft a letter to Secretary Ross re China 810 for proposal to the full committee.
- Gary Wolski noted Aaron Weston's question re what the USG should be doing differently to support U.S. civil nuclear companies.
 - David Blee noted that the final CINTAC meeting (July 19, 2018) should include these recommendations.
 - Michelle Scott encouraged companies to think outside the box re what the USG can do on financing.
- Gary Wolski noted that several Executive Orders (EOs) exist that could impact the U.S. civil nuclear industry.
 - Donald Hoffman volunteered to collect information on EOs that impact industry so that this information can be conveyed to DOC and the USG (Donald offered to compile a list of EOs within the next few weeks).
 - Ralph Hunter asked Michelle Scott to clarify what "creative USG financing" means. Michelle Scott replied that industry should consider all options.

- Hash Hashemian noted that it is difficult for U.S. industry to determine what is "public domain" versus what is covered by 810. He asked if DOE has a form for U.S. companies to self-assess if 810 needed.
 - Michelle Scott noted that she would check with DOE/NNSA and get back to CINTAC. She also noted DOE/NNSA's online e810 system where companies can apply for 810 export licenses and get other information.
 - Bob Kalantari commented that the e810 process is quick.

12:00 – 12:30 Discussion: China Civil Nuclear Licensing

• Was discussed earlier so no separate discussion on this topic occurred.

12:30 – 1:15 Working Lunch: Subcommittee Breakout Sessions

• CINTAC Subcommittees had breakout sessions.

1:15 – 2:00 Discussion on Saudi Arabia and USG Support for New Nuclear (USAID, OPIC, EBRD, Multilateral Development Banks)

• Speakers:

- Steven Burns, Chief, Energy and Infrastructure, Bureau for Europe and Eurasia, USAID
- o Nadia Rhazi Khawar, Program Manager, Global Energy Group, OPIC
- <u>Topics</u>: update on Saudi Arabia and discussion on USAID, OPIC, EBRD, and MDBs support for energy projects and new nuclear

USAID Update

- Steven Burns provided an overview of USAID's work and how it relates to the civil nuclear energy sector.
- Steven Burns noted USAID work to support Armenia's nuclear regulator, and also noted it had done work in the Ukraine.
- Steven Burns noted that USAID's work is focused on sector reform, is less investment focused, and works to support countries in their move to a free market economy.
- Noted USAID's technical work (e.g. establish energy law, energy market law) and support for utilities.
- Questions/Discussion:
 - Neil Numark asked if there are nuclear projects coming up that USAID is interested in supporting.
 - Steven Burns noted that Armenia, Turkey, and several other countries are interested. He said USAID works in small countries where a nuclear project may be too big a project for that country to undertake. Noted that USAID needs to show that any project would benefit the region.
 - Neil Numark asked if USAID supports capacity building in Africa, the Middle East, and Southeast Asia.
 - Steven Burns replied that USAID has done work in these regions (regional authority work and work with utilities), and would consider future work in

these regions. Noted that he did not know exactly what other USAID regional bureaus are doing in this area.

- o Graham Cable asked how USAID projects typically get started.
 - Steven Burns noted that USAID responds to assistance requests that it receives and also identifies projects that fit its mission. Any number of sources can propose projects (e.g. U.S. industry can make requests, host governments often propose projects).
- Bob Kalantari asked how USAID's budget is distributed.
 - Steven Burns noted that it varies by operating unit. USAID has an assistance budget mandated by Congress. The State Department works with other USG agencies that are providing assistance to allocate funding according to U.S. priorities. Most money goes to USAID, and some to programs re democracy, civil society, health, and infrastructure.

OPIC Overview:

- Nadia Rhazi Khawar provided an overview of OPIC's mission and the types of projects it supports.
 - Noted that OPIC provides political risk insurance and that OPIC finances nuclear but with caveats.
 - Since 2009 OPIC has had a categorical prohibition on financing most nuclear projects. This policy aligns OPIC with MDBs and other IFIs. OPIC cannot finance new construction or updates to existing NPPs, but can support other types of nuclear projects.
 - OPIC brings in \$300 million per year to the U.S. Treasury (at no cost to U.S. tax payers). OPIC supports private sector projects (must be majority owned by the private sector).
 - OPIC is technology agnostic: long-term U.S. participation in a project needed and one quarter of equity investment in a project must be from U.S. sources. OPIC only works in emerging markets (Gross National Income (GNI) less than \$15K).
- Nadia Rhazi Khawar gave an overview of OPIC's project in the Ukraine for Energoatom's central spent nuclear fuel storage facility [see handout for project details].
 - OPIC \$250 million commitment to provide political risk insurance.
 - Bank of America and Merrill Lynch to underwrite the loan to finance construction of a long-term fuel storage facility in the Chernobyl exclusion zone.
 - Government of Ukraine (GoU) paying political risk insurance comes into play if GoU defaults. U.S. company Holtec International providing \$225 million worth equipment.
 - Total project cost is \$410 million (\$250 million from OPIC).
 - Project helps Ukraine increase its energy security (spent fuel would otherwise have been shipped to Russia). Is the first time Ukraine has accessed U.S. capital markets.
- o Questions/Discussion
 - Russel Neely asked who approached OPIC re the Ukraine deal.

- Nadia Rhazi Khawar said she would check into this. Noted that in other deals OPIC usually receives project information from outside sources (companies, host government).
- Stephen Burdick asked for more information on OPIC's policy prohibition on supporting nuclear projects.
 - Nadia Rhazi Khawar noted that the OPIC policy document that prohibits support for nuclear projects discusses why nuclear projects are difficult for OPIC.
 - Difficulties include: OPIC's maximum dollar value for project support (\$250/\$400 million), which is not enough to support a \$10 billion NPP; OPIC's lack of internal resources to monitor a multidecade nuclear project; scrutiny by U.S. civil society; and the need for OPIC to have a larger budget and more resources to finance and monitor nuclear projects. In addition, strong congressional and interagency support would be needed for OPIC to support nuclear projects. OPIC President would need to change the policy.
 - Noted that projects over \$50 million go to the OPIC Board for review. DOC Secretary Ross sits on the OPIC Board.
- David Blee asked for more information on OPIC's Board and Congressional oversight committees.
 - Nadia Rhazi Khawar noted that OPIC's Board is complete and includes approximately 15 public and private sector members. The Board meets quarterly.
 - Senate Foreign Relations Committee provides congressional oversight of OPIC.
 - Noted that Senator Kuhn and others have proposed the BUILD Act (S2463), which would create a new international development finance institution and give OPIC more capabilities. OPIC currently can only do debt financing (S2463 would change that to allow equity financing).
 - OPIC can support projects up to \$250 (up to \$400M at discretion of management) and can take on debt up to 75 percent of project costs.

2:00 – 2:50 Subcommittee Implementation Plan Updates

• Subcommittee leadership identified goals for 2018 meetings and events.

Advocacy Subcommittee (David Blee)

- Provided an overview of the Advocacy subcommittees work and noted that the Subcommittee's plan had not changed significantly since the last CINTAC meeting.
- Noted subcommittee plans to recommend organization of a workshop on the commercial importance of 123 Agreements in either May or July.

Regulatory Subcommittee (Stephen Burdick)

- Proposed sending a letter to Secretary Ross re the current USG China policy review and requesting DOC support to expedite/resolve the review
- Members discussed the draft letter and noted that DOE's inimicality assessment was the crux of issue; noted the need for the USG to assess nonproliferation concerns; need to assess which U.S. civil nuclear exports don't present a threat; suggested that if a license has previously been issued, that these items should not be held up as part of the policy assessment.
- CINTAC voted to send China Policy Assessment letter to Secretary Ross.

Competitiveness Subcommittee (John Bendo)

- Provided overview of proposed Congressional Briefing on the importance of commercial nuclear exports to the U.S. economy. Noted that the purpose of the briefing is to inform congressional members and their staff on the economic benefits that the industry provides and to highlight the importance of concluding 123 agreements in key markets.
- Committee members were supportive of a briefing being organized and agreed to discuss further.

Messaging Subcommittee (Donald Hoffman and Jarret Adams)

- Donald Hoffman provided an update on subcommittees activities. Noted the importance of urgent USG action to help U.S. industry in specific markets otherwise Russia and China will win the deals. Once this happens, U.S. industry has little chance of having significant content on foreign technology reactors.
- Jarret Adams recommended that CINTAC send a letter to support U.S.-KSA 123 Agreement.

Summary of Subcommittee Updates

• Gary Wolski summarized subcommittee updates, noting that the Advocacy Subcommittee recommended DOC organize a workshop on the importance of 123 agreements in May or July; the Competitiveness subcommittee recommended that a congressional briefing be organized on the commercial benefits that U.S. civil nuclear exports provide to the U.S. economy; the Messaging Subcommittee recommended a future letter recommending that the U.S.-KSA 123 Agreement be concluded soon; and the Regulatory Subcommittee recommended a letter on the China Policy Review.

2:50 – 3:00 Conclusion & Next Steps

• Gary Wolski and Chris Colbert thanked members for a productive meeting and reviewed the meeting action items. They also noted that the next meeting is a May 17 1-3pm phone call.

3:00 – 4:00 Public comment period

• No public comments.

Meeting adjourned at 3:30pm

ATTENDEES

CINTAC Members		
Name	Title	Organization
Larry Sanders	President	Accelerant Technologies
H.M Hashemian	President and CEO	Analysis and Measurement Services Corporation
Craig Piercy	ANS Washington Representative	American Nuclear Society
John Bendo	Nuclear Energy Business Manager	American Society of Mechanical Engineers
Colleen Deegan	Vice President	Bechtel Corporation
Ken Camplin	Vice President and Chief Business Development Officer	BWX Technologies
Michael Whitehurst	Director, Business Development	Centrus Energy Corporation
Omer Brown, II	Attorney-at-Law and Legal Counsel	Contractors International Group on Nuclear Liability, Contractors International Group on Nuclear Liability
Gary Wolski	Vice President, Nuclear Division	Curtiss-Wright

Russell Neely	Chief Operating Officer	Edlow International Company
Colin Austin	Vice President of International Business	EnergySolutions
Robert Kalantari	President and CEO	Engineering, Planning and Management
Donald Hoffman	President & CEO	Excel Services Corporation
Woody Lawman	Director of Sales, Navy and Nuclear Products	Flowserve Limitorque
David Jonas	Partner	Fluet, Huber + Hoang
Brad Porlier	Vice President, Sales and Nuclear Power	Fluor Enterprises
Jarret Adams	CEO	Full On Communications
David Sledzik	Senior Vice President, Sales & Commercial Operations, Nuclear Plant Projects	GE Hitachi Nuclear Energy
Myron Kaczmarsky	Senior Director of Sales	Holtec International
Vijay Sazawal	Global Civil Nuclear Trade Consultant	International Atomic Energy Consulting
Seth Grae	President & CEO	Lightbridge Corporation

Stephen Burdick	Partner	Morgan, Lewis & Bockius
Dan Lipman	Vice President, Suppliers and International Programs	Nuclear Energy Institute
Lee Peddicord	Director, Nuclear Power Institute	Texas A&M University
Neil Numark	President	NUMARK Associates
Christopher Colbert	Chief Strategy Officer	NuScale Power
Scott Singer	Vice President, Chief Security and Information Officer	PAR Systems
Mimi Limbach	Managing Partner and President	Potomac Communications Group
Eddie Guerra	Senior Structural Engineer	Rizzo Associates
Eric Rasmussen	Director of Engineering and Asia Sales	RSCC Wire and Cable
Kevan Weaver	Director, Technology Integration	TerraPower, LLC
David Blee	Executive Director	United States Nuclear Infrastructure Council
Thomas Dolan	Adjunct Professor	University of Illinois at Urbana- Champaign

Graham Cable	Vice President, Global Market Development, New Plants & Major Projects	Westinghouse Electric Company
Tyson Smith	Partner	Winston & Strawn LLP
Jeffrey Harper	Vice President, Strategy and Business Development	X Energy

U.S. Government		
Name	Title	Organization
Wilbur Ross	Secretary	U.S. Department of Commerce
Ian Steff	Deputy Assistant Secretary for Manufacturing	U.S. Department of Commerce
Jonathan Chesebro	Senior Nuclear Trade Specialist	U.S. Department of Commerce
Devin Horne	Civil Nuclear Trade Specialist	U.S. Department of Commerce
Adam O'Malley	Director, Office of Energy & Environmental Industries	U.S. Department of Commerce
Stephen Renna	Director, Advocacy Center	U.S. Department of Commerce
Cameron Dorsey	Regional Manager,	U.S. Department of Commerce

	Advocacy Center	
Leland Sidle	Intern, Office of Energy & Environmental Industries	U.S. Department of Commerce
Michelle Scott	Senior Advisor, Office of Nuclear Energy	U.S. Department of Energy
Aaron Weston	Director, Nuclear Energy Policy	National Security Council
Kirsten Cutler, Ph.D	Foreign Affairs Officer, Office of Nuclear Energy, Safety and Security	U.S. Department of State
Alex Burkart, Ph.D	Senior Level Advisor for Nuclear Energy, Bureau of International Security and Nonproliferation	U.S. Department of State
Kyler Turner, Ph.D	Nuclear Engineer, Office of Nuclear Energy, Safety and Security, Bureau of International Security and Nonproliferation	U.S. Department of State
Tim Froelich	Intern, Office of Nuclear Energy,	U.S. Department of State

	Safety and Security, Bureau of International Security and Nonproliferation	
Art Kron	Negotiations and Liaison Policy	Defense Technology Security Administration, Office of the Under Secretary of Defense for Policy
Craig O'Connor	Director of Business Development, Project & Structured Finance Division	Export-Import Bank of the United States
Nadia Rhazi Khawar	Program Manager, Global Energy Group	Overseas Private Investment Corporation
Steven S. Burns, PE	Chief, Energy and Infrastructure, Bureau for Europe and Eurasia	U.S. Agency for International Development

NOTE: not all USG participants attended the entire meeting

Members of the Public		
Name	Title	Organization
James E. Bartlett III	Principal	Law Office of James E. Bartlett III, PLLC
Peter Jeydel	Associate	Steptoe & Johnson LLP

ATTACHMENTS

Congressional Briefing The Importance of Commercial Nuclear Exports to the U.S. Economy Date: TBD Location: TBD

Draft Agenda:

- 12:00 12:05 Welcome: Gary Wolski Vice President, Nuclear, Curtiss-Wright; Chairman, CINTAC
- 12:05 12:20 Keynote: Wilbur Ross U.S. Secretary of Commerce
- 12:20 12:30 Understanding the Global Nuclear Export Market: Graham Cable Vice President, Global Growth and Strategy, Westinghouse Electric Company
 - The global competitive landscape and the U.S. position
 - New plant opportunities in the next 10 years
 - Number of plants expected to undergo decommissioning
 - Competing with state owned entities and lessons learned
 - The number of new builds awarded to international competitors such as the Russians, Chinese, and Koreans, etc.
 - Lessons learned from recent commercial nuclear tenders
- 12:30 12:35 The Export Potential for Small Modular Reactors (SMRs): David Blee Executive Director, U.S. Nuclear Infrastructure Council
- 12:35 12:45 The Value of Commercial Nuclear Exports to the U.S. Economy: Daniel Lipman Vice President, Suppliers and International Programs, Nuclear Energy Institute
 - How the health of the domestic industry impacts to US export competitiveness
 - U.S. nuclear supply chain infrastructure
 - Economic impact to the U.S. economy
 - Jobs supported/created
- 12:45 12:55 Commercial Nuclear Exports as a Foreign Policy Tool: Jack Edlow President, Edlow Enterprises
 - Nuclear as a policy imperative rather than merely an energy option
 - How U.S. nuclear exports influence global nonproliferation
 - How successful nuclear tenders create long term relationships
- 12:55 13:05 Financing of Large Nuclear Projects: Paul Murphy Managing Director, Gowling WLG
 How access to financing impacts American companies ability to compete
- 13:05 13:20 How Industry and Government Can Collaborate for Success: Jeffrey Merrifield Partner, Pillsbury Winthrop Shaw Pittman
 - The role of government in international nuclear tenders
 - Regaining and maintaining U.S. Leadership
 - Policies to support exports
- 13:20 13:30 Q&A and Closing Remarks: Gary Wolski Vice President, Nuclear, Curtis-Wright; Chairman, CINTAC

Presented to CINTAC Fifth Charter March 15, 2018 U.S. Department of Commerce Puerto Rico Initiative Update

How we got here?

- During the December 2017 CINTAC meeting, the idea was proposed to the full CINTAC committee for developing a recommendation to the Secretary to promote the option of Advanced Nuclear Reactors to Puerto Rico from an economic perspective.
- A CINTAC Tiger Team was assembled to strategize and develop the best way to approach the Secretary for promoting Advanced Nuclear Reactors to Puerto Rico.

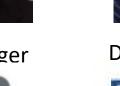
Tiger Team





Eddie M. Guerra















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With support from:























Our work

Position Paper

POSITION PAPER:

PUERTO RICO AND THE CASE FOR SMALL MODULAR REACTORS

An Economics and Exports Perspective

Civil Nuclear Trade Advisory Committee US Department of Commerce February 23, 2018

Recommendation Letter to Sec. Ross

CINTAC

Civil Nuclear Trade Advisory Committee

March 15, 2018

The Honorable Wilbur L. Ross Secretary U.S. Department of Commerce 1401 Constitution Ave., NW Washington, DC 20230

Small Modular Reactors for Puerto Rico: An Economics and Exports Perspective

Dear Mr. Secretary:

The Civil Nuclear Trade Advisory Committee (CINTAC), as an advisor to you on the competitiveness of our nuclear industry, will submit a Position Paper titled "Puerto Rico and the Case for Small Modular Reactors: An Economics and Exports Perspective" to you, to advise how the U.S. Department of Commerce (DOC) could best serve Puerto Rico's economic recovery. In this Position Paper, CINTAC describes the potential of an SMR project to transform Puerto Rico's economy and revitalize its energy infrastructure. This Position Paper concludes with a recommendation to pursue a Pre-Feasibility study to assess the viability of an SMR project for the island. Given the importance and the potential outcome of this Pre-Feasibility study for our U.S. nuclear industry, we respectfully advise you to forward this Position Paper to Puerto Rico's stakeholders, to include the Financial Oversight and Management Board (H.S. 5278-14th U.S. Congress) (Herein "The Board"). If needed, CINTAC can provide recommendations to your staff in case The Board requests a follow-up meeting to discuss pursuing this Pre-Feasibility study for SMRs for Puerto Rico.

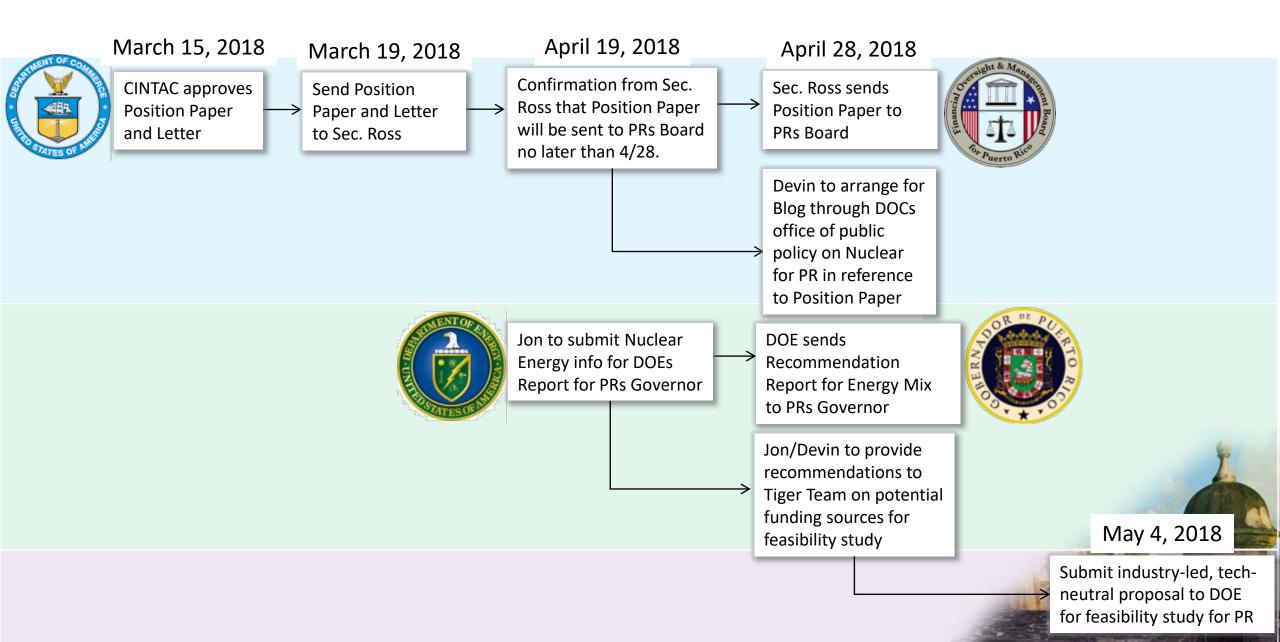
The situation in Puerto Rico, although unfortunate, presents a timely opportunity for the U.S. nuclear industry. The aftermath of Hurricane's Irma and Maria has launched a movement to transform the island's energy infrastructure into a more reliable, environmentally friendly and sustainable one. Today's SMR designs present the technological advances specially tailored for energy challenges of island-type territories like Puerto Rico. For instance, some SMR designs are built underground which could also potentially increase the island's energy security in future hurricane situations. For decades Puerto Rico's stakeholders have looked for options to reduce the island's high cost of electricity. SMRs could provide an initial Levelized Cost of Electricity (LCOE) which could compete with the island's high cost of electricity generated by imported diesel fuels. Moreover, last month, Puerto Rican Governor Ricardo Rosspiló announced the plan to privatize Puerto Rico's sole utility, which has controlled most of the electricity generation and distribution in the island for the last 40 years. A Pre-Feasibility study will assess in detail these unprecedented changes in Puerto Rico, the island's market conditions and infrastructure needs and ultimately provide U.S. utilities and SMR technology vendors the necessary insights for SMR deployment for Puerto Rico.

A positive outcome from this Pre-Feasibility study will have a significant impact on the U.S. nuclear industry, paving the way for SMR deployment and thus contributing to our industry's growth and global energy dominance. Moreover, the possibility for U.S. SMR technology to provide clean, reliable and sustainable energy to an island like Puerto Rico will achieve an international milestone in the nuclear industry and will present an example for other countries in the world facing similar challenges. Support from DOC staff to encourage state and federal officials of Puerto Rico to pursue a Pre-Feasibility study is

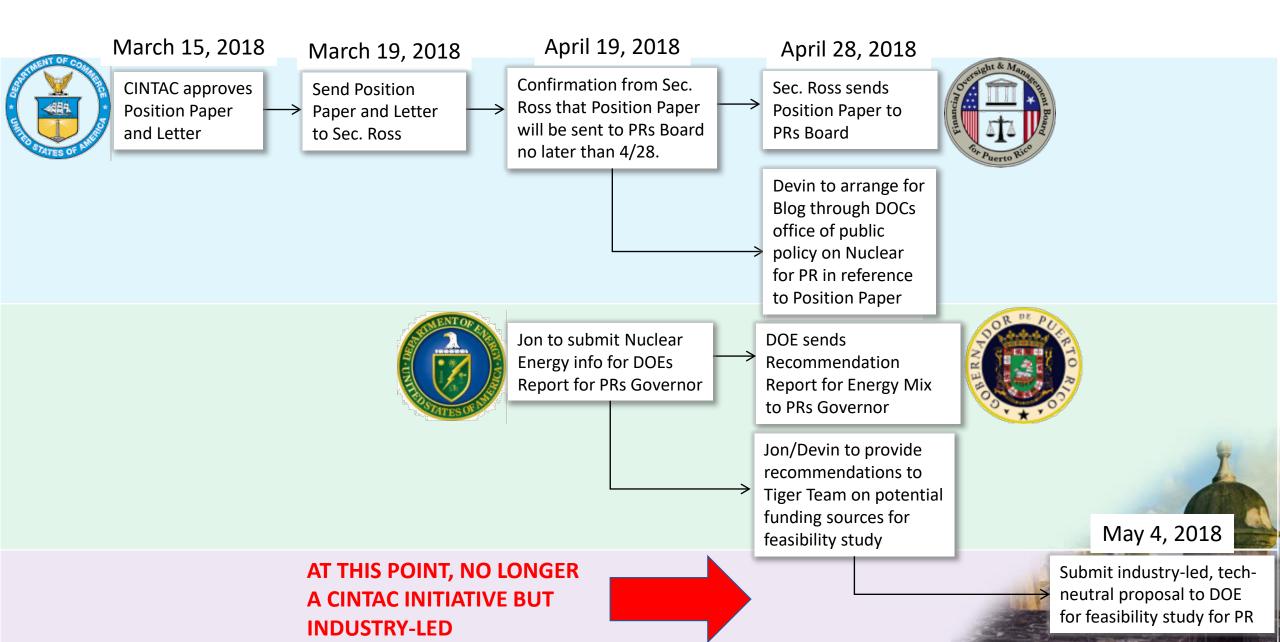
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Where we go from here?



Where we go from here?



Engaging the Public from an Early Stage: Results from First Social Media Outreach





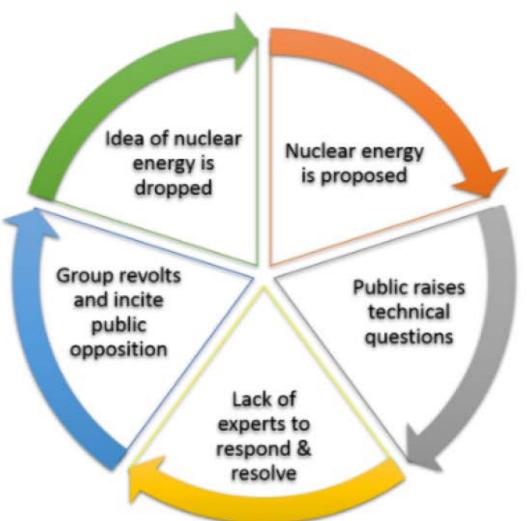


ATTEMPTS OF NUCLEAR ENERGY IN PUERTO RICO

Nuclear energy has been proposed for Puerto Rico multiple times. However, efforts have never materialized.

- 60's | Boiling Nuclear Superheater Power Station
- 70's | Site Selected for a Nuclear Plant
- 90's Nuclear Energy Considered as an Alternative to Fossil Fuel Dependency
- 2011 | State Senate Pursues Feasibility Study for Nuclear Energy
- 2017 | SMRs are Discussed as Energy Option after Hurricane Maria

Why nuclear energy proposals have failed in Puerto Rico?





ENGAGING PUBLIC WITH #NUCLEAR4PUERTORICO

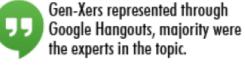
- #Nuclear4PuertoRico is an educational campaign aimed to educate Puertoricans in the island about the benefits of the modern nuclear technologies.
- On March 8th 2018, a live chat kicked off the campaign, by having one conversation over three social media platforms; Facebook, Twitter and Google Hangouts, under #Nuclear4PuertoRico.
- The live chat was able to dissect reasoning behind the negative perception, collect match demographic insights with age groups and identify important cultural aspects for the educational campaign.

#NUCLEAR4PUERTORICO INSIGHTS



100 + Total Participants

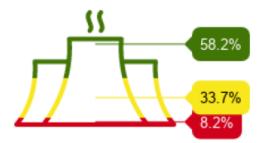
100,000 + Reach





Organizations and vendors were represented through Twitter. Overall the sentiment was positive.

Most Puertoricans (24-60 yrs) were represented through Facebook. Sentiment was mostly neutral Sentiment Towards #Nuclear4PuertoRico



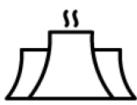
Negative (8.19%) Neutral (33.67%)



Siloed presence of key groups demonstrated the need to connect them in order to facilitate nuclear energy awareness.

#NUCLEAR4PUERTORICO COMMON THEMES

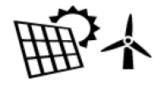
Three common themes when people voiced their negative opinion about #Nuclear4PuertoRico:



"It is not safe for Puerto Rico" (radioactive contamination, waste management, current natural disasters, emergency preparedness and response)



"Can't trust PREPA or government to manage this complex technology"



"Why the need of nuclear when we can have solar and wind energy"

#NUCLEAR4PUERTORICO RECOMMENDATIONS

Studies show that public perception towards nuclear energy is easily influenced. It also shows that familiarity and awareness increases support. Influence in Puerto Rico will greatly depend on:

CULTURAL COMPETENCE

Nuclear Energy proposal for Puerto Rico needs to take into account that local media is overly sensational with great influence on public opinion. There is also a need to understand and collaborate with current energy initiatives.



INITIATIVE BEING LED BY PUERTORICANS FOR PUERTO RICANS

Puertoricans are sensitive towards having an outsider solve their problems. One of the opportunities when proposing nuclear for Puerto Rico for the 5th time is to engage the Puertoricans working in the US nuclear industry.



MAKING THE MAJORITY LAUDER

Historically, there is always a small but active group of Puertoricans who will organize and create opposition. Success in educating the public and changing perception will come from mobilizing the majority and making them lauder by providing diverse platforms for broadcasting their support.

STRATEGIC APPROACH

Governmental committees and commissions as well as union groups are a major challenge for this nuclear energy proposal. A well thought and funded advocacy strategy incorporating these challenges will help this proposal to succeed.



Thank You





Breach of Contract for Capital Markets

CATALYZE PRIVATE CAPTIAL WITH POLITICAL RISK INSURANCE

MARCH 2018

INNOVATIVE POLITICAL RISK INSURANCE FACILITATES ACCESS TO U.S. CAPITAL MARKETS

OPIC is taking a novel approach to political risk insurance by offering Breach of Contract for Capital Markets (BOC) insurance coverage to qualified issuers in the U.S. capital markets. This coverage is utilized in connection with U.S. capital markets bond offerings and allows issuers to use political risk insurance to de-risk investment structures. Thus, BOC provides a credit enhancement that allows/enables the insured to issue investment grade notes. The proceeds of the loan made by the issuer are lent to a sovereign or state-owned enterprise to support developmentally important projects.

Frequently Asked Questions

What Type of Insurance Coverage is BOC?

BOC is a combination of expropriation coverages called non-payment of an arbitral award and denial of justice. This coverage insures against the risk that a sovereign or state-owned entity does not pay a valid arbitral award or obstructs and/or frustrates the arbitration process.

What is the Anticipated Transaction Rating?

While every project is different, with this political risk insurance BOC uplift, it is anticipated that notes utilizing BOC coverage will receive a credit rating of single A or higher.

What Type of Projects are a Good Fit for BOC Coverage?

All BOC projects must be a strategic priority for both the sovereign and OPIC plus exhibit strong developmental impacts in the host country. The BOC product is used to support defined projects, not direct export financing. Projects that qualify must exhibit positive developmental or foreign policy impacts and cause no loss of U.S. jobs or adverse effect on the U.S. economy. Projects that result in net savings to the sovereign or implement new sovereign revenue streams are best suited for this coverage. **Do All BOC Transactions Require Expedited Arbitration?** Yes. The expedited arbitration must take place in a neutral venue.

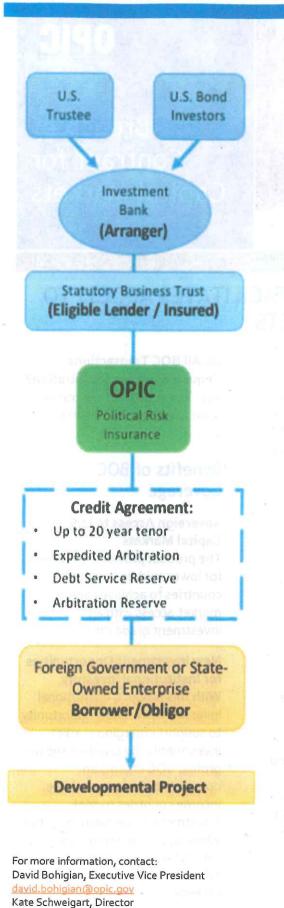
Benefits of BOC Coverage

Sovereign Access to U.S. Capital Markets

The product provides an avenue for lower-middle income countries to achieve capital market access with an investment grade rating.

New Investment Opportunities for Institutional Investors

With this product, institutional investors have a new opportunity to support emerging market investments. By lowering the risk profile, BOC creates an opportunity for lower-middle income countries to seek investment grade financing, thus allowing private sector capital to support much needed infrastructure projects in emerging markets.



kate.schweigart@opic.gov

Project Spotlight

Project: Energoatom Central Spent Nuclear Fuel Storage Facility

Description: Development and construction of the Central Spent Nuclear Fuel Storage Facility, in the Chornobyl Exclusion Zone. The project will allow Ukraine to safely store and monitor its spent nuclear fuel independently. It also achieves key objectives by reducing Ukraine's dependency on Russia, while improving its energy infrastructure and its fiscal position by accessing the U.S. bond market.

Country: Ukraine

Issuer/Insured: Central Storage Safety Project Trust

Guarantor: Government of Ukraine

Borrower: State Enterprise National Nuclear Energy Generating Company "Energoatom"

Arranger: Bank of America Merrill Lynch

Insured Loan: \$250,000,000

Moody's Sovereign Rating: Caa2

Transaction Note Rating with BOC Coverage: Aa2

Term: 20 Years

Governing Law: New York

Arbitration: International Chamber of Commerce (ICC) under the expedited arbitration procedures

Insurance: Non-Payment of an Arbitral Award and Denial of Justice

Liquidity: Adequate to cover two years of debt service on the Notes

Transactional Cost: \$3.5 million

Fast Facts About OPIC

OPIC is the US Government's development finance institution.

- \$23.23 billion- OPIC's global portfolio
- \$3.8 billion New commitments in 2017
- 111 Number of new projects committed in 2017
- \$6.5 billion Total capital mobilized in 2017
- 40 Number of consecutive years OPIC has generated money for deficit reduction
- 90 countries where OPIC has active projects
- 13,000 host country jobs new OPIC projects support in 2017

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