

U.S. Department of Commerce
Civil Nuclear Trade Advisory Committee (CINTAC) Meeting
Sixth Charter, 2018-2020
Tuesday, March 26, 9:45am - 4:00pm
Herbert. C. Hoover Building, Room 1412
1401 Constitution Ave., NW
Washington, DC 20230

MINUTES

9:45 – 10:15

CINTAC V Deep Dive: Discussion

- Discuss outcomes and best practices from CINTAC V charter
 - Speakers: Jonathan Chesebro & Devin Horne, Designated Federal Officers of the CINTAC, U.S. Department of Commerce; Gary Wolski, CINTAC V Chair; Chris Colbert, CINTAC V Vice Chair
-
- DFOs gave a presentation on the background of CINTAC, Committee structure, and Committee outputs (see attached PowerPoint presentation).

10:15 – 10:45

TeamUSA Overview: U.S. Government Support for the U.S. Civil Nuclear Industry

- Representatives from the Departments of Commerce, Energy, State, EXIM Bank, and the U.S. Nuclear Regulatory Commission (NRC) discussed their agency's role in engaging with the U.S. nuclear industry internationally.

- DOE Office of Nuclear Energy Update
 - DOE's Versatile Test Reactor project will enhance the ability of the United States to test nuclear fuel and help the United States meet its goal for advanced nuclear reactor technology development.
 - DOE will soon announce new Funding Opportunity Awards (FOAs) focused on advanced reactors and regulatory assistance.
 - Gateway for Accelerated Innovation in Nuclear (GAIN) - provides industry with access to the technical, regulatory, and financial support necessary to move new or advanced nuclear reactor technologies toward commercialization, as well as ensuring the continued safe, reliable, and economic operation of the existing nuclear reactor fleet.

- DOE/NNSA Update
 - Provided update on Part 810 process improvement program and NNSA's work to streamline export license reviews.
 - U.S.-China Civil Nuclear Framework:
 - U.S. Government (USG) working to implement the framework and is reviewing license applications on a case by case basis.

- Encouraged industry to adopt increased intellectual property (IP) protections and review company policies regarding IP protection.
- State Department Update
 - Performing outreach to other countries to educate them on the new U.S.-China Framework.
 - International Framework for Nuclear Energy Cooperation (IFNEC) – gave overview of IFNEC mission, members, and noted that an Executive Committee meeting will be held soon, as well as a small modular reactor (SMR) conference. The SMR conference will have a government and industry component.
- Office of Science & Technology Policy (OSTP) Update
 - 2017 National Security Strategy notes importance of nuclear energy for U.S. national security. Administration supportive of nuclear and wants to help U.S. industry export its products and services globally.
 - The recently enacted Nuclear Energy Innovation Capabilities Act (NEICA) will speed up the development of advanced reactors in the United States and eliminates financial and technological barriers standing in the way of nuclear innovation.
 - As part of NEICA, DOE plans to establish a Nuclear Reactor Innovation Center to help more quickly deploy advanced nuclear technologies.
- U.S. Nuclear Regulatory Commission (NRC) Update
 - NRC continues to review Part 110 export license applications. Timeframe for issuing licenses depends on the specific license. NRC has a new policy whereby fees are not required for export license reviews.
 - NRC working with the United Kingdom to prevent a disruption of nuclear commerce given Brexit uncertainty.
- EXIM Bank Update
 - No operating board currently means that EXIM cannot authorize transactions over \$10 million. EXIM can still receive requests to support nuclear transactions and can review them.
 - The President nominated four board members and Senate votes on those proposed members are pending.
 - EXIM charter expires September 30, 2019. Legislation to reauthorize EXIM beyond this date is anticipated.
- DOE Office of General Counsel Update
 - DOE and other USG agencies working to encourage countries to ratify the Convention on Supplementary Compensation for Nuclear Damage (CSC), an important multilateral treaty relating to liability and compensation for damage caused by a nuclear incident.
 - DOE rulemaking regarding CSC and nuclear suppliers is ongoing and industry input was received.

- DOC/ITA Update
 - ITA will soon begin recruitment for the IAEA U.S. Industry Program Trade Mission (September 2019).
 - U.S.-Japan Economic Dialogue held recently. ITA seeking industry input regarding how U.S. and Japan can cooperate in the areas of decommissioning and SMRs/advanced reactors.

10:45 – 11:00 Break

11:00 – 11:30 Nuclear Cooperation MOUs Overview

- Jim Warden, Acting Director, Office of Nuclear Energy, Safety and Security, Bureau of International Security and Nonproliferation, U.S. State Department
- Gave overview of NCMOUs and noted February 26 speech at the Hudson Institute by Dr. Christopher Ford, Assistant Secretary of State for International Security and Nonproliferation, where he announced the State Department’s intention to begin negotiating these agreements and outlined the NCMOU concept.
 - NCMOUs will be smaller more flexible instruments that will help develop government-to-government relationships in the civil nuclear sector, as well as promoting industry-to-industry relationships.
 - NCMOUs will take less time to negotiate than 123 Agreements and are not bound by Section 123 of the Atomic Energy Act. NCMOUs are complementary to and in no way replace the need for 123 agreements.
- Members noted their intention to provide input regarding countries where it would be valuable for the United States to negotiate NCMOUs. Stated that these agreements could greatly benefit U.S. industry and demonstrate the USG’s commitment to revitalizing and expanding the U.S. civil nuclear industry.

11:30 – 12:00 Election of CINTAC Leadership: Chair and Vice Chair

- Members elected Chris Colbert (NuScale Power) as CINTAC Chair and Jeff Harper (X Energy) as CINTAC Vice Chair.

12:00-12:30 CINTAC Structure & Priorities: Discussion

- Members had a brainstorming session on priorities for CINTAC VI charter and CINTAC subcommittee structure.
- Members noted that the previous CINTAC charter achieved a number of successes, including helping to guide the U.S.-China framework, meeting with the Secretary and sending timely letters to the Secretary.
- Members noted the importance of subcommittees doing work between meetings to ensure that the Committee is productive at in-person meetings and is developing well-considered recommendations.

12:30 – 2:00 Working Lunch: Establish CINTAC Subcommittee Structure

- Members discussed potential subcommittee structures, including focusing on topics such as financing, market prioritization, trade promotion and advocacy, innovation and technology, and workforce/education. Further discussion needed to determine if a separate Communications Subcommittee should be established or if a communications liaison should be embedded in each subcommittee.
- DFOs, CINTAC Chair, and CINTAC Vice Chair noted that they would review the proposed subcommittee structure and then contact the full committee regarding the final subcommittee structure and membership.

2:00 – 2:30 Conversation with Department of Commerce Leadership

- Jim Sullivan, Deputy Assistant Secretary for Services performing the non-exclusive functions and duties of the Assistant Secretary for Industry and Analysis, U.S. Department of Commerce, International Trade Administration (ITA)
- Mr. Sullivan highlighted ITA’s work to support the U.S. civil nuclear industry, including ITA’s Civil Nuclear Trade Initiative (CNTI), the IAEA U.S. Industry Program, ITA support for the President’s Civil Nuclear Review, bilateral and regional initiatives, the Civil Nuclear Toolkit, and the Advocacy Center. Mr. Sullivan requested data-driven, specific, and actionable recommendations that DOC can act upon.
- Members noted that: a whole-of-government approach by the USG is needed to support U.S. industry; non-binding MOUs with other countries are beneficial to supporting U.S. industry; a strong domestic industry is needed to support the international competitiveness of U.S. industry; USDFC support for nuclear energy is needed; SMRs are a growing export market; more ITA staff are needed to support the IAEA U.S. Industry Program; and that the United States needs to export its regulatory system and standard globally.

2:30 – 3:00 Conclusion & Next Steps: Confirm 2019 meeting dates, identify action items

- Members agreed to future CINTAC meetings on the following dates: April 29 2-4pm (phone call); May 22 9am-4pm (in-person); June 24 2-4pm (via phone); August 14 9am-4pm (in-person); October 22 9am-4pm (in-person); and December 2 2-4pm (via phone).

3:00 – 4:00 Public Comment & Adjourn

- Two members of the public attended (Peter Jeydel, Associate, Steptoe and Stephen Carr, Self-representative) but did not provide comments.

Meeting adjourned at 3:30pm

Meeting Attendees

CINTAC Members

- Margaret Harding – Principal, 4 Factor Consulting
- Larry Sanders – Chief Executive Officer, Accelerant Technologies
- Jay Brister – Vice President, Business Development, AECOM
- Robert Coward, Immediate Past President, American Nuclear Society
- John Bendo – Business Development Manager, Power & Energy, ASME
- H.M Hashemian – President, Analysis and Measurement Services Corporation
- Colleen Deegan – Vice President, Bechtel Corporation
- Glenn Neises – Nuclear Director, Burns & McDonnell
- Joseph Miller – Director, Advanced Technology Programs, BWX Technologies, Inc.
- Bryan Wilkes - Vice President for Strategic Engagement and External Relations, CB&I Project Services Group
- Michael Whitehurst – Director, Business Development, Centrus Energy Corp.
- Gary Wolski – Vice President, Nuclear Division, Curtiss-Wright
- Russell Neely – Chief Operating Officer, Edlow International Company
- Colin Austin – Senior Vice President of International Business, EnergySolutions
- Robert Kalantari – President and CEO, Engineering, Planning and Management
- Donald Hoffman – President & CEO, EXCEL Services Corporation
- Ralph Hunter - Vice President, Exelon Corporation
- Woody Lawman – Director of Sales, Navy and Nuclear Products, Flowserve Limatorque
- Jarret Adams – CEO, Full On Communications
- David Sledzik – Senior Vice President, Sales & Commercial Operations, Nuclear Plant Projects, GE Hitachi Nuclear Energy
- Brandon Brooks – Strategic Development Manager, General Atomics
- Charles Goodnight – President, Goodnight Consulting
- Myron Kaczmarek – Senior Director, Holtec International
- Robert Sweeney, President & CEO, IBEX Engineering Services, Inc.
- Paul Amico - Director, International Operations, Power Services Group, Jensen
- Seth Grae – President & CEO, Lightbridge Corporation
- Juan Subiry – Vice President, Market and Product Strategy, NAC International
- Edward Kee – CEO, Nuclear Economics Consulting Group
- Beverly Marshall – Vice President, Governmental Affairs, Nuclear Energy Institute
- Kenneth L. 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
- Art Wharton – Vice President, Market Development, Studsvik Scandpower Inc.
- Pete Gaillard – Licensing Manager, Terrapower, LLC
- David Blee – President & CEO, United States Nuclear Industry Council
- Graham Cable – Vice President, Global Growth & Strategy, Westinghouse Electric Company

- Jeffrey Harper – Vice President, Strategy and Business Development, X Energy, LLC

Members of the Public

- Peter Jeydel, Associate, Steptoe
- Stephen Carr, Self-representative

U.S. Government

U.S. Department of Commerce (DOC)

- Jim Sullivan, Deputy Assistant Secretary for Services performing the non-exclusive functions and duties of the Assistant Secretary for Industry and Analysis, U.S. Department of Commerce, International Trade Administration (ITA)
- Jonathan Chesebro, Senior Nuclear Trade Specialist & CINTAC Co-Designated Federal Officer, International Trade Administration
- Devin Horne, Civil Nuclear Trade Specialist & CINTAC Co-Designated Federal Officer, International Trade Administration
- Jennifer Chung, Senior Counsel, Information Law Division, Office of the General Counsel
- Valeria Dueñas, Attorney-Advisor, Ethics Law and Programs Division, Office of the General Counsel

U.S. Nuclear Regulatory Commission (NRC)

- Lauren Mayros, International Policy Analyst, Export Controls and Nonproliferation Branch, Office of International Programs

U.S. Department of Energy (DOE)

- Michelle Scott, Senior Advisor for Commercial Activities, Office of Nuclear Energy
- Katie Strangis, Senior Policy Advisor, Office of Nonproliferation and Arms Control (NPAC), National Nuclear Security Administration (NNSA)

U.S. Department of State

- Kirsten Cutler, Senior Science Advisor, Office of Nuclear Energy, Safety and Security, Bureau of International Security and Nonproliferation

Office of Science & Technology Policy (OSTP)

- Mike Goff, Director

Export-Import Bank of the United States (EXIM)

- Ashok Pasricha, Structured Finance Division

Handouts

CINTAC VI Charter

1. Committee's Official Designation. Civil Nuclear Trade Advisory Committee

2. Authority. The Secretary of Commerce (the Secretary), having determined that it is in the public interest in connection with the performance of duties imposed by law upon the Department of Commerce (the Department), established the Civil Nuclear Trade Advisory Committee (the Committee) under the authority granted in 15 U.S.C. 1512, and in accordance with the Federal Advisory Committee Act (FACA), as amended, 5 U.S.C. App., and with the concurrence of the General Services Administration.

3. Objectives and Scope of Activities. The committee shall advise the Secretary on the development and administration of programs to expand U.S. exports of civil nuclear goods and services in accordance with applicable U.S. laws and regulations, for use by the Department in its role as a member of the Civil Nuclear Trade Working Group of the Trade Promotion Coordinating Committee and the Department's active participation in the Atoms for Prosperity interagency group to promote U.S. civil nuclear trade.

4. Description of Duties. The committee functions solely as an advisory committee in accordance with the provisions of FACA, as amended, 5 U.S.C. App. In particular, the committee shall advise on:

- a. matters concerning trade policy development and negotiations relating to U.S. civil nuclear exports;
- b. the effect of U.S. Government policies, regulations, programs, and foreign government policies and practices on the export of U.S. civil nuclear goods and services;
- c. the competitiveness of U.S. industry and its ability to compete for civil nuclear products and services opportunities in international markets, including specific problems in exporting, and provide specific recommendations regarding U.S. Government and public/private actions to assist civil nuclear companies in expanding their exports;
- d. the identification of priority civil nuclear products and services markets with the potential for high immediate returns for U.S. exports, as well as emerging markets with a longer-term potential for U.S. exports;
- e. strategies to increase private sector awareness and effective use of U.S. Government export promotion programs, and recommendations on how U.S. Government programs may be more efficiently designed and coordinated;
- f. the development of complementary industry and trade association export promotion programs, including ways for greater and more effective coordination of U.S. Government efforts with private sector organizations' civil nuclear industry export promotion efforts; and
- g. the development of U.S. Government programs to encourage producers of civil nuclear products and services to enter new foreign markets, in connection with which the committee may

advise on how to gather, disseminate, and promote awareness of information on civil nuclear exports and related trade issues.

5. Agency or Official to Whom the Committee Reports. The committee shall report to the Secretary on its activities and recommendations.

6. Support. The International Trade Administration, Industry & Analysis, Office of Energy and Environmental Industries, shall provide staff support for the committee.

7. Estimated Annual Operating Costs and Staff Years. The estimated annual operating cost of the committee is approximately \$68,000, which includes one person/year of staff support. Members of the committee will not be compensated for their services or reimbursed for their travel expenses.

8. Designated Federal Officer. The Assistant Secretary for Industry & Analysis shall designate a Designated Federal Officer (DFO) from among the employees of the Office of Energy and Environmental Industries. The DFO will approve or call all of the advisory committee and subcommittee meetings, prepare and approve all meeting agendas, attend all committee and subcommittee meetings, adjourn any meeting when the DFO determines adjournment to be in the public interest, and chair meetings when directed to do so by the Secretary.

9. Estimated Number and Frequency of Meetings. The committee shall, to the extent practicable, meet approximately three times a year. Additional meetings may be called at the discretion of the Secretary or his/her designee.

10. Members and Designations. The committee shall consist of approximately 40 members appointed by the Secretary, in accordance with applicable Department of Commerce guidance and based on their ability to carry out the objectives of the committee. Members shall represent U.S. entities involved in the export of civil nuclear products and services and reflect the diversity of this sector, including in terms of entities' size and geographic location. The committee shall also represent the diversity of company or organizational roles in the development of civil nuclear energy projects, including, for example, U.S. civil nuclear manufacturing and services companies, U.S. utilities, U.S. trade associations, and other U.S. organizations in the U.S. civil nuclear sector. The Secretary shall appoint to the committee at least one individual representing each of the following:

- a. civil nuclear manufacturing and services companies;
- b. small businesses;
- c. utilities;
- d. trade associations in the civil nuclear sector;
- e. research institutions and universities; and
- f. private sector organizations involved in strengthening the export competitiveness of U.S. civil nuclear products and services.

Members shall serve in a representative capacity, expressing the views and interests of a U.S. entity or organization, as well as its particular subsector; they are, therefore, not Special Government Employees. Each member of the committee must be a U.S.

citizen and must not be registered as a foreign agent under the Foreign Agents Registration Act. No member may represent a company that is majority owned or controlled by a foreign government entity (or foreign government entities). Members shall not reference or otherwise utilize their membership in TFAC in connection with public statements made in their personal capacities without a disclaimer that the views expressed are their own and do not represent the views of TFAC, ITA, or the Department.

Members shall serve at the pleasure of the Secretary from the date of appointment to the committee to the date on which the committee's charter terminates. The Secretary shall designate the committee Chair and Vice Chair. The Chair and Vice Chair shall serve in those positions at the pleasure of the Secretary. Members must attend a minimum of fifty percent of committee meetings and a majority of subcommittee and working group activities to remain members. Failure to meet this minimum participation requirement could result in membership termination.

11.Subcommittees. The Department, through the DFO, may establish subcommittees or working groups from among the committee's members as may be necessary, and consistent with FACA, the FACA implementing regulations, and applicable Department of Commerce policies. Such subcommittees or working groups may not function independently of the chartered committee and must report their recommendations and advice to the committee for full deliberation and discussion. Subcommittees or working groups have no authority to make decisions on behalf of the committee nor can they report directly to the Secretary or her designee.

12.Recordkeeping. The records of the committee, formally and informally established subcommittees, or other subgroups of the committee, shall be handled in accordance with General Records Schedule 6.2 or other approved agency records disposition schedules. These records shall be available for public inspection and copying, subject to the Freedom of Information Act, 5 U.S.C. 552. The Office of Energy and Environmental Industries shall maintain all files mandated by FACA and the Department's policies on advisory committee management.

13.Duration/Termination. This charter will terminate two years from the date of its filing with the appropriate United States Senate and U.S. House of Representatives Oversight Committees, unless it is earlier terminated or renewed by proper authority.

CINTAC VI Roster

- Margaret Harding – Principal, 4 Factor Consulting
- Larry Sanders – Chief Executive Officer, Accelerant Technologies
- Jay Brister – Vice President, Business Development, AECOM
- Robert Coward, Immediate Past President, American Nuclear Society
- John Bendo – Business Development Manager, Power & Energy, ASME
- H.M Hashemian – President, Analysis and Measurement Services Corporation
- Colleen Deegan – Vice President, Bechtel Corporation
- Glenn Neises – Nuclear Director, Burns & McDonnell
- Joseph Miller – Director, Advanced Technology Programs, BWX Technologies, Inc.
- Bryan Wilkes - Vice President for Strategic Engagement and External Relations, CB&I Project Services Group
- Michael Whitehurst – Director, Business Development, Centrus Energy Corp.
- Gary Wolski – Vice President, Nuclear Division, Curtiss-Wright
- Russell Neely – Chief Operating Officer, Edlow International Company
- Colin Austin – Senior Vice President of International Business, EnergySolutions
- Robert Kalantari – President and CEO, Engineering, Planning and Management
- Donald Hoffman – President & CEO, EXCEL Services Corporation
- Ralph Hunter - Vice President, Exelon Corporation
- Woody Lawman – Director of Sales, Navy and Nuclear Products, Flowserve Limatorque
- Jarret Adams – CEO, Full On Communications
- David Sledzik – Senior Vice President, Sales & Commercial Operations, Nuclear Plant Projects, GE Hitachi Nuclear Energy
- Brandon Brooks – Strategic Development Manager, General Atomics
- Charles Goodnight – President, Goodnight Consulting
- Myron Kaczmarek – Senior Director, Holtec International
- Robert Sweeney, President & CEO, IBEX Engineering Services, Inc.
- Paul Amico - Director, International Operations, Power Services Group, Jensen
- Seth Grae – President & CEO, Lightbridge Corporation
- Juan Subiry – Vice President, Market and Product Strategy, NAC International
- Edward Kee – CEO, Nuclear Economics Consulting Group
- Beverly Marshall – Vice President, Governmental Affairs, Nuclear Energy Institute
- Kenneth L. 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
- Art Wharton – Vice President, Market Development, Studsvik Scandpower Inc.
- Pete Gaillard – Licensing Manager, Terrapower, LLC
- David Blee – President & CEO, United States Nuclear Industry Council
- Graham Cable – Vice President, Global Growth & Strategy, Westinghouse Electric Company
- Jeffrey Harper – Vice President, Strategy and Business Development, X Energy, LLC

Examples of Previous CINTAC Letters

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 the U.S. civil nuclear industry, is submitting 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. civil 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.R.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. civil nuclear industry. The aftermath of Hurricanes 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 Rosselló announced the plan to privatize Puerto Rico’s sole utility, which has controlled most of the electricity generation and distribution on 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 in Puerto Rico.

A positive outcome from this Pre-Feasibility study will have a significant impact on the U.S. civil 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 in Puerto Rico to pursue a Pre-Feasibility study is essential for the U.S. civil nuclear industry to capitalize on this opportunity. Today, Puerto Rico's finances and infrastructure revitalization program are coordinated by the members of the Financial Oversight and Management Board. Although historically the U.S. Government (USG) has collaborated with the private sector for nuclear infrastructure projects, the role of the Financial Oversight and Management Board in Puerto Rico places the USG in a good position to determine the course for the island's critical energy infrastructure projects.

As an attachment to this letter, CINTAC has included a Position Paper recommending the Pre-Feasibility study. We encourage you to forward this Position Paper to Puerto Rico's Financial Oversight and Management Board and for your staff to take a lead role in subsequent follow-up meetings.

Thank you for supporting CINTAC. We look forward to working with you and your team on this initiative to provide Puerto Rico with clean, reliable, and sustainable energy.

Sincerely, on behalf of the members of CINTAC,

Gary Wolski, Chairman
Chris Colbert, Vice Chairman

Cc: U.S. Secretary of State
U.S. Secretary of Energy
National Security Advisor
Chairman, U.S. Nuclear Regulatory Commission
Director, National Economic Council
Chairman, Export-Import Bank of the United States

Attachment: Position Paper "*Puerto Rico and the Case for Small Modular Reactors: An Economics and Exports Perspective*"

October 12, 2017

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

Dear Mr. Secretary:

The Civil Nuclear Trade Advisory Committee (CINTAC), as an advisor to you on the promotion of nuclear energy exports, wants to make you aware of the importance and scope of nuclear trade between the United States, Canada, and Mexico as President Trump and members of his Cabinet embark on a process to renegotiate the North American Free Trade Agreement (NAFTA). We hope that the U.S. Government (USG) will work carefully to ensure that any changes to NAFTA do not have the unintended consequence of disturbing the current balance in a way that could increase risk to U.S. nuclear providers.

As you may know, Mexico operates two General Electric nuclear power reactors at the Laguna Verde Nuclear Station near Veracruz. These units were first put into production in 1990, and the construction at this site was overseen by two U.S. companies, Burns and Roe and Ebasco. These units supply 4.5 percent of Mexico's total power and are considered strategic energy assets. Due to Mexico's limited domestic nuclear capability, the Comision Federal de Electricidad (CFE), the national electric company owned by the Mexican government and the plant's owner, utilizes external sources – principally from the United States – for assistance in maintaining the safe operation of these units.

Additionally, CFE and the Government of Mexico have indicated that it is their desire and expectation to construct two additional units at the Laguna Verde site in the coming years, and we understand that they have looked closely at U.S.-based technologies to fulfill this need. Given that the cost of adding two additional nuclear reactors in Mexico could exceed \$10 billion, maintaining a productive relationship with Mexico in our trading efforts is of paramount importance. If the United States were successful in collaborating with Mexico to construct the potential units, it would significantly enhance the level of energy exports from the United States to Mexico.

In a similar vein, nuclear trade between the United States and Canada is meaningful, with both U.S. and Canadian companies having significant operations on each side of the border. While Canada's nuclear program was based on pressurized heavy-water nuclear reactors of an indigenous Canadian design (called "CANDU" reactors), the United States serves as a critical source of technology and resources to maintain these units.

Today, nuclear power provides over 60 percent of the total generation in the Province of Ontario, and within the last year, the province has announced that it will spend over \$20 billion during the next 10 years to extend the life of 10 nuclear units at the Darlington and Bruce Stations in the province. U.S. companies will be highly involved in these efforts supplying both personnel and

equipment. A program of this magnitude has the potential to provide billions of dollars in commerce for U.S.-based nuclear companies.

Finally, we want to make you aware that there are a variety of advanced, non-light water, nuclear reactors, as well as fusion-based reactors that are being developed in the United States and Canada with significant collaboration between the two countries, including between the two regulators – the U.S. Nuclear Regulatory Commission (NRC) and the Canadian Nuclear Safety Commission (CNSC). The development of these technologies has the potential to benefit both countries and provide a platform where a new generation of nuclear reactors could result in exports from both countries to Asia, Europe, South America, and Africa.

While we understand and appreciate the need for periodic reassessments of our trade commitments and partners, CINTAC wants you to be aware of the significant and beneficial nuclear commerce that takes place between the United States, Canada, and Mexico. While there are other sectors in which the trade may not have the balance expected or desired by President Trump, we believe the civilian nuclear sector has been thriving under the current arrangement, and urge that the current NAFTA negotiations avoid the unintended consequence of upsetting a very important level of bi-lateral nuclear trade between the United States and our counterparts in Mexico and Canada.

Thirty years ago, the United States was the unparalleled and dominant supplier of international nuclear trade. Unfortunately, this is no longer the case and our companies must work ever harder to maintain our competitive edge. As North America is one of the strongest and most favorable venues for the continuation of U.S. exports, CINTAC highly recommends a very careful consideration of changes to NAFTA.

CINTAC stands ready to assist you in the efforts of the USG toward understanding the impacts of NAFTA modifications on U.S. nuclear commerce as you and your peers are involved in the process of renegotiating the agreement.

We thank you for your support of CINTAC, and we look forward to working with you and your team on this subject and other issues of mutual concern.

Sincerely and on behalf of the members of CINTAC,

Gary Wolski, Chairman Chris Colbert, Vice Chairman

Cc: U.S. Secretary of State
U.S. Secretary of Energy
National Security Advisor
Chairman, U.S. Nuclear Regulatory Commission
Director, National Economic Council
Chairman, Export-Import Bank of the United States



INTERNATIONAL
TRADE
ADMINISTRATION

U.S. Department of Commerce's Civil Nuclear Trade Advisory Committee (CINTAC)

1. Background
2. Committee Structure
3. Outputs

BACKGROUND

Federal Advisory Committee Act (FACA)

The Federal Advisory Committee Act became law in 1972 and is the legal foundation defining how federal advisory committees operate. The law has special emphasis on open meetings, chartering, public involvement, and reporting.

More information on FACA process via the “Final Rule” document:

http://www.gsa.gov/portal/mediaId/218007/fileName/FACAFinalRule_R2E-cNZ_0Z5RDZ-i34K-pR.action

FACA Database -- A Searchable Database of All FACA Committees:

<http://www.facadatabase.gov/>

Civil Nuclear Trade Advisory Committee (CINTAC)

- Established August 27, 2008
- CINTAC was re-chartered September 2010 (CINTAC II); November 2012 (CINTAC III); August 2014 (CINTAC IV); August 2016 (CINTAC V); and August 2018 (CINTAC VI, current)
- Committee serves at the discretion of the Secretary of Commerce
- The only Federal Advisory Committee focused on export promotion for the civil nuclear sector

CINTAC Website:

http://trade.gov/mas/ian/nuclear/tg_ian_003233.asp

CINTAC VI: DOC Points of Contact

Office of Energy and Environmental Industries (OEEI)

Jonathan Chesebro
CINTAC Co- Designated Federal Officer
(DFO)
Senior Civil Nuclear Trade Specialist

Jonathan.Chesebro@trade.gov
(202) 482-1297

Devin Horne
CINTAC Co-DFO
Civil Nuclear Trade Specialist

Devin.Horne@trade.gov
(202) 482-0775

Adam O'Malley
Director, OEEI

Adam.Omalley@trade.gov
(202) 482-4850

Man Cho
Deputy Director, OEEI

Man.Cho@trade.gov
(202) 482-5159

CINTAC VI: Basic Info

- 1,054 Federal Advisory Committees exist across the US Government
 - 67 committees at Commerce, mostly within ITA
- Charter VI signed August 11, 2018
 - Expires August 11, 2020
- 39 members representing 6 sub-sectors

Subsectors Represented

	Sector Role
U.S. Civil Nuclear Sector	Manufacturing and Services Companies (20)
	Small Businesses (13)
	Utilities (1)
	Trade Associations in the Civil Nuclear Sector (2)
	Research Institutions and Universities (1)
	Private sector organizations involved in strengthening the export competitiveness of U.S. civil nuclear products and services (2)

CINTAC Accomplishments

- CINTAC recommendations create real impacts:
 - Re-establishment of Nuclear Energy Policy position at the White House National Security Council
 - Creation of “TeamUSA” interagency civil nuclear working group
 - Support U.S. industry involvement in Saudi Arabia’s civil nuclear power program
 - Resolution of USG policy assessment on U.S. civil nuclear exports to China
 - Encourage Puerto Rico to pursue a pre-feasibility study to assess the viability of a SMR for Puerto Rico
 - Support for CSC entry into force
 - Reauthorization of ExIm Bank

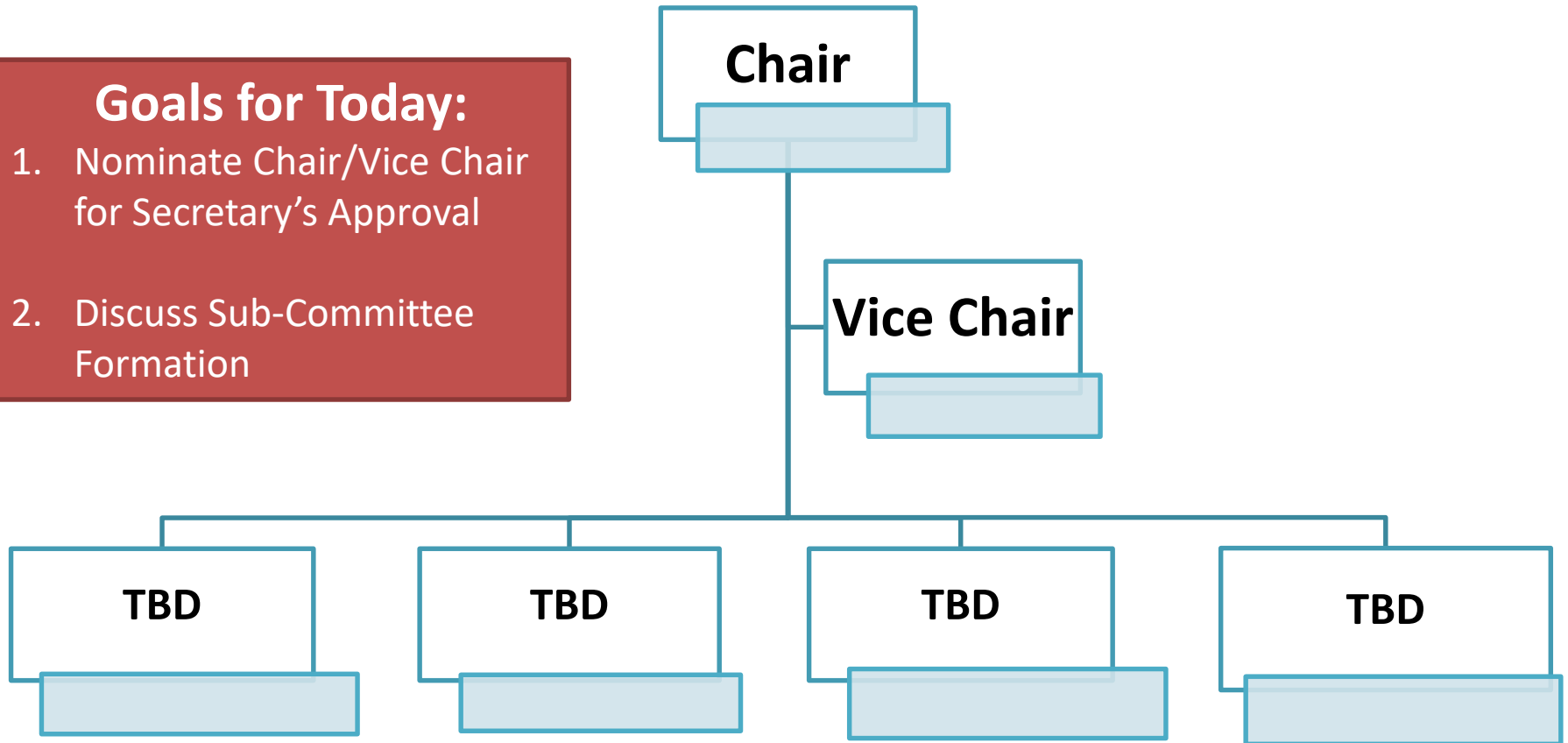
COMMITTEE STRUCTURE

CINTAC VI, 2018-2020

Committee Structure

Goals for Today:

1. Nominate Chair/Vice Chair for Secretary's Approval
2. Discuss Sub-Committee Formation



Benchmarking Against Similar DOC Advisory Committees:

Environmental Technologies Trade Advisory Committee (ETTAC)

- Chair, Vice Chair
- Sub-Committees:
 - Trade Liberalization
 - Trade Promotion
 - Standards, Regulations, and Certification
 - Innovation

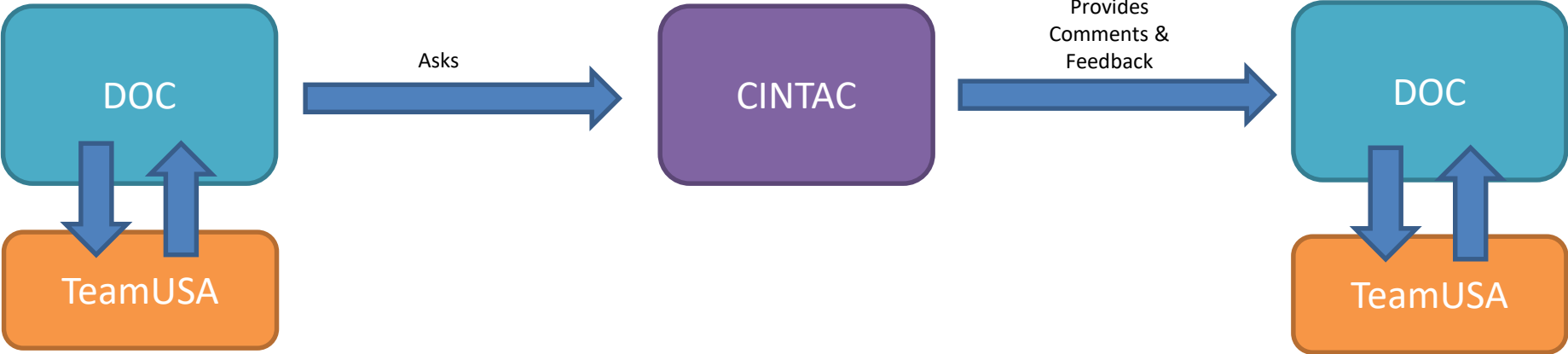
Renewable Energy & Energy Efficiency Advisory Committee (REEEAC)

- Chair, Vice Chair
- Sub-Committees:
 - Global Energy Infrastructure
 - Resiliency & Infrastructure
 - Smart Communities
 - Smart Transportation

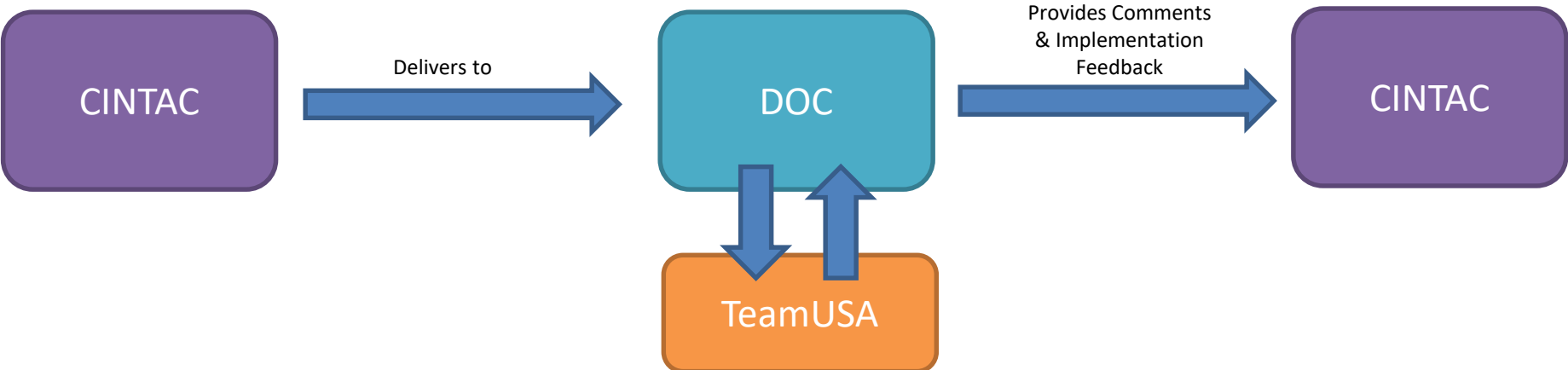
OUTPUTS

CINTAC WORKFLOWS

1. DOC Seeks Specific Policy and Programmatic Guidance



2. Committee Brings Issues to DOC Attention



CINTAC Recommendation: Sample Process

Sub- or Full Committee identifies issues, prioritizes issues, and does basic background research

Subcommittee drafts recommendation, seeks feedback, makes revisions, and presents recommendation to full committee

Full Committee reviews recommendations, redrafts as necessary, and records vote





Full Committee provides supporting data and collects feedback on implementation

Full Committee delivers recommendations to Secretary, if approved

Recommendations: Approval/Voting Process

Chair moderates discussion, calls for vote on recommendations

Possible outcomes of a vote include:

- Approve:**  Subcommittee chair works with Chair, DFOs, and other members as appropriate to prepare recommendations for the Secretary.
- Rejected:**  Recommendation is dropped and subcommittee continues work on next issue.
- Returned:**  Committee votes to return recommendation to Subcommittee for further development.
- Amended:**  If a committee member offers an amendment to a recommendation, the Chair will call a vote to determine if the amendment is accepted. If accepted, the amendment will be incorporated into the original recommendation at the time of the vote on the recommendation's approval.

CINTAC Recommendations: General Guidelines

Recommendations should be:

- **Complete**: Should be supported with sufficient information and data to provide the Secretary with a clear understanding of the issue, the potential results, and the steps needed for the Department of Commerce to implement.
- **Actionable**: Next steps for implementation should be clear to the Secretary and within the Commerce Department's purview.
- **Clear**: All subcommittee members should agree that the recommendation is ready to be proposed to the full committee. Dissenting views should be clearly articulated within the recommendation.

CINTAC Recommendations: History

- **The primary Committee output is a series of discrete recommendations delivered to the Secretary of Commerce**
- **The CINTAC has made 41 recommendations over five charters:**
 - CINTAC I, 2008-2010: 8 Recommendations
 - CINTAC II, 2010-2012: 9 Recommendations
 - CINTAC III, 2012-2014: 6 Recommendations
 - CINTAC IV, 2014-2016: 6 Recommendations
 - CINTAC V, 2016-2018: 12 Recommendations
- **Recommendations were drafted by Subcommittees, then presented on and approved by full Committee**
- **Recommendations were conveyed to the Secretary through letters (which are posted on the CINTAC website)**

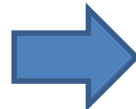
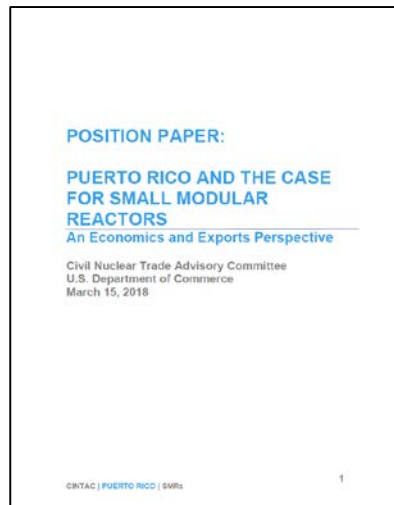
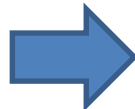
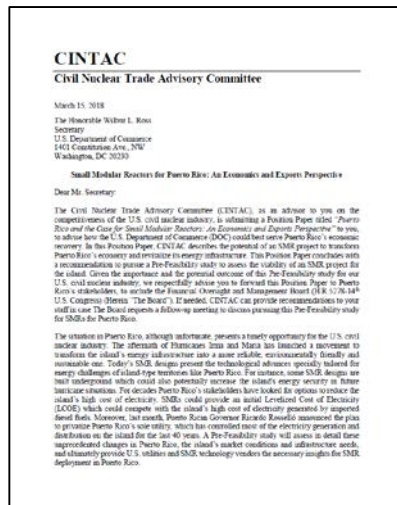
Issues for CINTAC member consideration

- Matters concerning trade policy development and negotiations relating to civil nuclear exports;
- The effect of U.S. Government policies, regulations, programs, foreign government policies and practices on the export of U.S. civil nuclear goods and services;
- The competitiveness of U.S. industry and its ability compete for civil nuclear products and services opportunities in international markets;
- The identification of priority and emerging markets for exports of U.S. civil nuclear goods;
- Strategies for helping private sector companies leverage U.S. Government export promotion programs, and how those programs might be improved;
- The development of complementary industry and trade association export promotion programs, including ways to improve coordination of U.S. Government efforts with private sector organizations' civil nuclear export promotion efforts;
- How best to support U.S. firms' entry into foreign markets, and what CINTAC can do to advise Commerce on how to build awareness of information on civil nuclear exports.

MODEL RECOMMENDATION

Model Recommendation from CINTAC V – the case for SMRs in Puerto Rico

- Recommendation proposed by CINTAC Subcommittee and presented to full committee
- Letter sent to Secretary of Commerce
- CINTAC Tiger Team assembled to strategize and develop the best way to approach the Secretary for promoting Advanced Nuclear Reactors to Puerto Rico
- Industry follow-up with Puerto Rican government to encourage consideration of SMRs
- Outcome: PR's House of Representatives passed a resolution to study the need for nuclear energy in PR, especially advanced reactors



APPENDIX

Implementing CINTAC Recommendations

- The following chart outlines actions taken by the U.S. Department of Commerce in response to CINTAC V recommendations
- The document is “living” and is updated on a periodic basis

CINTAC V Recommendation Matrix

Last Updated: August 13, 2018

Recommendation	Action	Responsible Party (in addition to ITA)	Status
1 In the first 6 months, develop a strategic plan to bolster U.S. nuclear industry exports.	President Trump announced a comprehensive U.S. Nuclear Policy Review	NSC/NEC	Complete
2 Advocate for a Director for Nuclear Energy in the Executive Office of the President. The director will coordinate the Administrations civil nuclear efforts, increase awareness of nuclear energy's strategic importance, and advance the civilian nuclear industry.	Aaron Weston announced as incoming Director for Nuclear Energy Policy. Currently onboarding.	NEC	Complete
3 Encourage immediate nomination of a full slate of directors to restore quorum at U.S. Ex-IM Bank. The current stalemate is an impediment to U.S. companies' efforts and hands international reactor sales and opportunities to our foreign competition.	President Trump nominated directors to restore quorum at U.S. EXIM Bank. Directors currently awaiting Senate confirmation.	WH	Complete
4 Advocate for a Director for Nuclear Energy in the Executive Office of the President. The director will coordinate the Administrations civil nuclear efforts, increase awareness of nuclear energy's strategic importance, and advance the civilian nuclear industry.	Incoming Director for Nuclear Energy is currently onboarding and will be placed on the National Economic Council.	NEC	Complete
5 Encourage greater adoption of the Convention on Supplementary Compensation for Nuclear Damage (CSC), particularly among China, Mexico, and South Korea.	Commerce included State Department and DOE CSC experts at U.S. Industry Program at IAEA to lobby key governments to adopt CSC. USG submitted CSC side event proposal at 2018 USIP at IAEA GC. DOC and interagency raise CSC when having bilateral meetings with relevant foreign government counterparts	State/DOE	Ongoing
6 Support the expedited appointment of President Trump's nominees to the Board of Ex-IM Bank.	The President nominated a full complement of Directors.	WH/U.S. Senate	Ongoing
7 Urge key U.S. and U.S.-funded financing institutions to eliminate restrictions on investment in nuclear power projects. Organizations include: the Overseas Private Investment Corporation (OPIC), World Bank, and USAID.	U.S. BUILD Act is currently under consideration on the Hill. The Administration has voiced support for the goals of this bill.	EXIM, OPIC, World Bank, USAID	Ongoing
8 In cooperation with the U.S. nuclear industry, conduct an analysis of financing techniques used by competitors and determine what measures we can take to restore the competitive balance and promote innovation in the financing sector.	The Civil Nuclear Review is ongoing. Financing is a component of this review.	EXIM, Treasury	Ongoing

CINTAC V Recommendation Matrix

Last Updated: August 13, 2018

Recommendation	Action	Responsible Party (in addition to ITA)	Status
<p>9 Enacting tax, market, and infrastructure initiatives to discourage premature nuclear baseload retirements, including FERC market pricing as advanced by Energy Secretary Rick Perry, that would “fully price generation resources necessary to maintain the reliability and resiliency of our Nation’s grid.”</p>	<p>Secretary Perry Issued a Notice of Proposed Rulemaking following DOE’s grid study. USG also reviewing national security case for maintaining coal and nuclear.</p>	<p>DOE, FERC</p>	<p>Ongoing</p>
<p>10 Accelerating U.S. Nuclear Regulatory Commission (NRC) initiatives under its “Project Aim” to right-size the agency, streamline processes, and improve timeliness while also laying a new framework for advanced reactors licensing modernization.</p>		<p>NRC</p>	<p>Ongoing</p>
<p>11 Implementing Executive Actions directing a streamlined, expedited process to approve Part 810 specific authorization requests to export certain civilian nuclear technology.</p>		<p>DOE, NNSA</p>	<p>Ongoing</p>
<p>12 Supporting the completion of next phase requirements for deployment of a next generation light-water Small Modular Reactor and development of comprehensive initiatives to expedite development of non-light-water small reactors.</p>		<p>DOE</p>	<p>Ongoing</p>
<p>13 Ensuring U.S. capability to meet used fuel disposition at Yucca Mountain and through private-sector led consolidated storage initiatives along with a review of U.S. capabilities for mining, conversion, and enrichment.</p>		<p>NEC, State, DOE</p>	<p>Ongoing</p>
<p>14 Seeking implementation of pressing civil nuclear cooperation agreements (123 agreements), including agreements with Saudi Arabia and Mexico, and creating opportunities for U.S. companies to participate in those foreign markets.</p>		<p>State, DOE</p>	<p>Ongoing</p>
<p>15 Encouraging more countries, especially China, Mexico, South Korea, and the United Kingdom, to adopt the Convention on Supplementary Compensation for Nuclear Damage, with consistent legislation.</p>	<p>See July 13 letter above re: CSC</p>	<p>State, DOE</p>	<p>Ongoing</p>
<p>16 Encouraging approval by the Senate of a full slate of directors to restore quorum at the Export-Import Bank of the United States.</p>	<p>See July 13 financing letter above</p>	<p>WH, U.S. Senate</p>	<p>Ongoing</p>

CINTAC V Recommendation Matrix

Last Updated: August 13, 2018

	Recommendation	Action	Responsible Party (in addition to ITA)	Status
17	Eliminating prohibitions against nuclear projects at the Overseas Private Investment Corporation (OPIC) and U.S.-funded multilateral banks and financial institutions.	See July 13 financing letter above	EXIM, OPIC, World Bank, USAID	Ongoing
18	Carefully review current NAFTA negotiations to prevent any unintended consequences to bilateral nuclear trade between the United States and Mexico and Canada.	ITA has reached out directly to stakeholders on multiple occasions, including CINTAC, seeking input on specific actions that Commerce can take to benefit the U.S. nuclear industry as those actions relate to NAFTA. Industry has not identified specific actions to add or be mindful of in NAFTA.	USTR	Complete
19	Advocate Secretary Wilbur Ross, Secretary Rick Perry, and Secretary Rex Tillerson lead the trade mission to Saudi Arabia in order to make the strongest possible case for U.S. involvement in the KSA's nuclear power program.	Commerce certified NEI's trade mission to Saudi Arabia and co-led a Civil Nuclear Roundtable with DOE. USG officials continue to engage at a high level.	State, DOE	Complete
20	Coordinate an analysis within the USG of the full scope of impacts from U.S. reactor suppliers being successful or failing in international reactor tenders. The analysis should propose recommendations for policy changes based on the results.	On June 29, President Trump ordered a review of U.S. civil nuclear policy. The review is currently underway.	NEC, State, DOE	Ongoing
21	To immediately direct the Commerce Department staff, with their counterparts in the Departments of State and Energy, to promptly and actively engage with relevant Congressional Committees, Members and staff to educate them on the importance of the 123 Agreement.	In December 2017, with support from the Department of Energy, the Department organized a U.S.-KSA Civil Nuclear Roundtable in Riyadh. The Roundtable resulted in plans for future engagements between U.S. industry, the U.S. Government, and the KSA. Commerce Department also supported an industry Hill briefing on the importance of nuclear energy exports. On June 11, Industry organized a Hill briefing, which the Commerce Department supported with a keynote speaker.	State, DOE	Complete/on going
22	To restart the current export license approval process.	CINTAC input feeds into Commerce's support for the internal USG review process	State, DOE, NSC	Complete
23	To expedite the conclusion of the ongoing China nuclear export policy assessment.	CINTAC input feeds into Commerce's support for the internal USG review process	State, DOE, NSC	Complete
24	To forward the Position Paper titled "Puerto Rico and the Case for Small Modular Reactors: An Economics and Exports Perspective" to Puerto Rico's stakeholders, including the Financial Oversight and Management Board.	Commerce staff has shared the CINTAC's letter and Position Paper with USG officials that work with Puerto Rico's Financial Oversight and Management Board and other relevant stakeholders.	DOE, DHS/FEMA	Complete

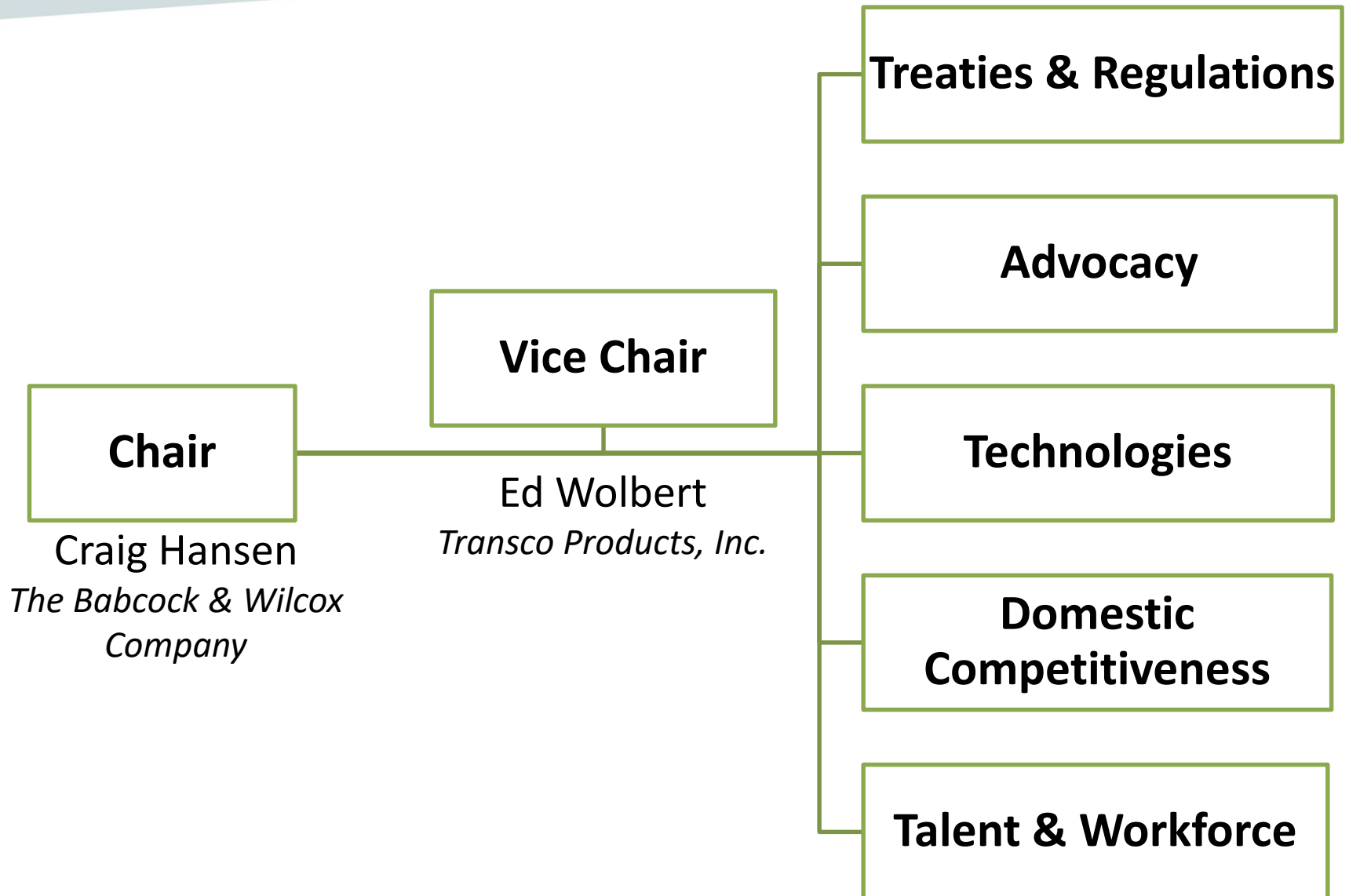
CINTAC V Recommendation Matrix

Last Updated: August 13, 2018

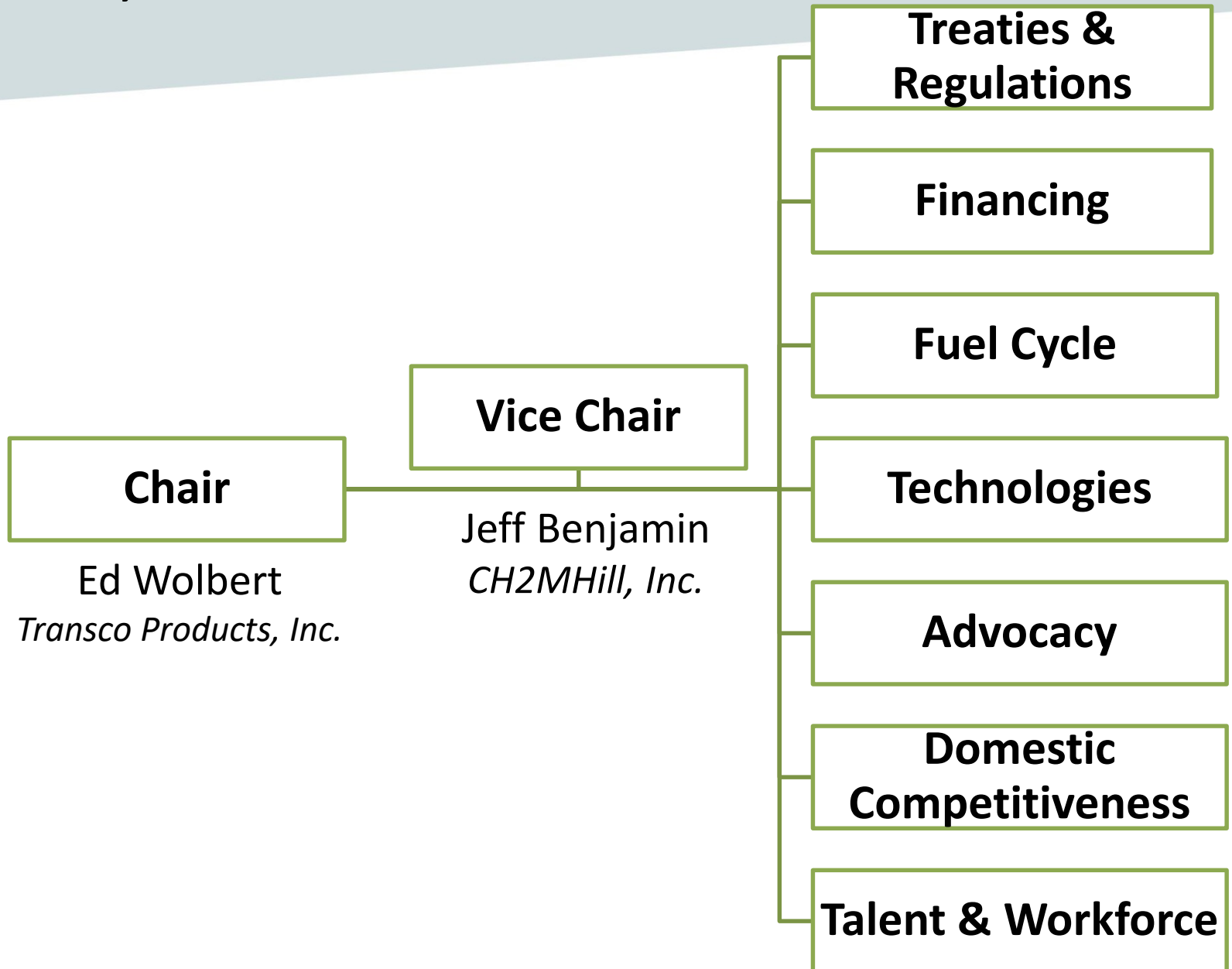
	Recommendation	Action	Responsible Party (in addition to ITA)	Status
25	To pursue a Pre-Feasibility study to assess the viability of an SMR project for the island.	See above	DOE, DHS/FEMA	
26	At the next OPIC Board of Directors meeting, to introduce a resolution amending the ESPS to eliminate the nuclear prohibition. If such action is not possible, to advocate for the reconsideration of the nuclear prohibition.	Nuclear financing review is ongoing	OPIC	Ongoing
27	If BUILD Act is enacted into law, that Sectary Ross advocate for the adoption of investment policies that support the U.S. civil nuclear industry as part of this new institution.	Nuclear financing review is ongoing	DFI	Ongoing

COMMITTEE STRUCTURE

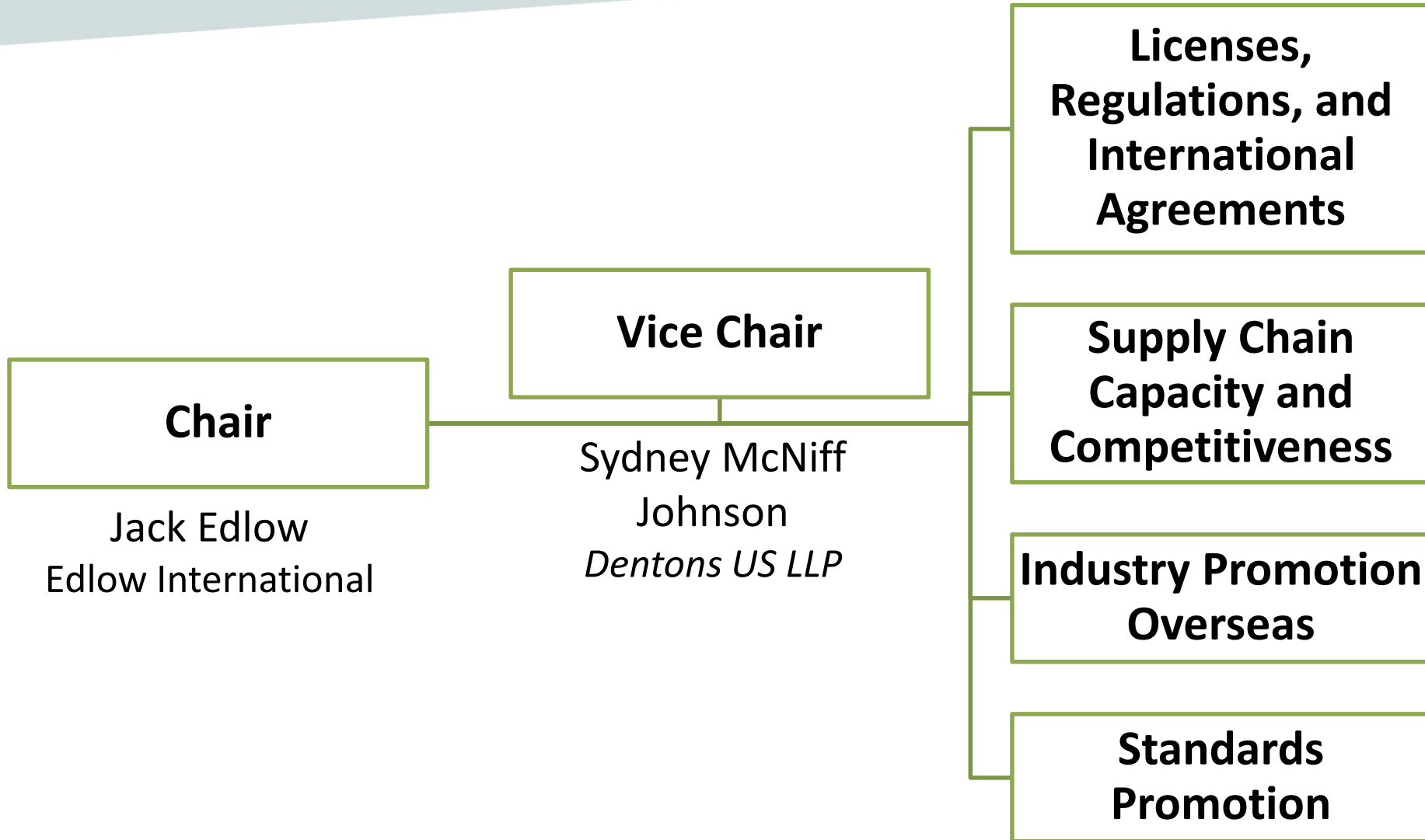
CINTAC I, 2008-2010



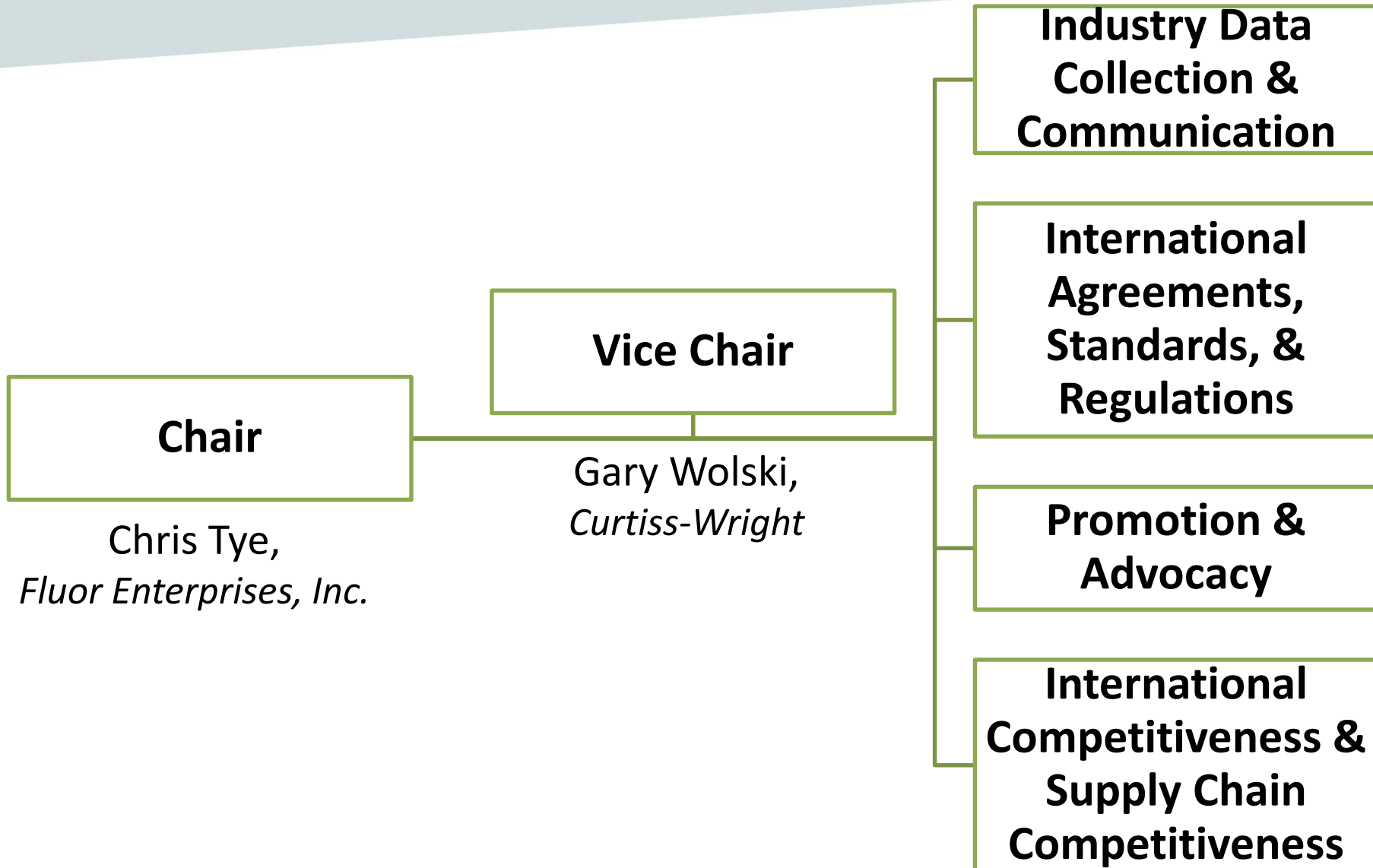
CINTAC II, 2010-2012



CINTAC III, 2012-2014



CINTAC IV, 2014-2016



CINTAC V, 2016-2018

