Overview of Presentation

- Government – to – Government Approaches
- Loan Guarantees
Government – to – Government Approaches
Government-to-Government Model

- The nuclear procurement is done at a government-to-government level
- Financing can be through an intergovernmental loan
- Currently being used by Russia in a number of locations (India, Vietnam, Bangladesh, Belarus, Nigeria, etc.) and by China in Pakistan
- Pros: Makes financing easier
- Cons: Limits technology choice
- Cons: Lack of competitive pressure
- Key Consideration: Strength of bilateral relationship
- Realization: Government is a key factor in a nuclear development program
- Remember: sovereign responsibility still remains for host government
Threshold Questions

• Is the G-to-G structure also a BOO(T)?
  • If it is not a BOO(T), does the host country have the “knowledgeable customer” capability to own and operate the NPP?

• Is the host country comfortable with the technology being offered by the foreign country?
  • Recognize that this is a “tied aid” structure

• How will the host country ensure that it is getting a good price for the Project?
  • Recognize that this is a “sole source” scenario and not a competitive procurement
Motivations

• For the Host Country:
  • Foreign experience ... a partnership of sorts
  • Foreign source of funding
  • Deals in other sectors

• For the Exporting Country
  • A market for its nuclear power plant
  • Bilateral relationships
  • Long term linkages
  • Deals in other sectors
  • More focused aid with tangible results
Challenges

- Sovereign responsibility still remains
  - Regulatory Authority; Licensing
  - Site Selection
  - National Law
  - International Commitments
  - Security & Safeguards
  - “Knowledgeable Customer” Capability
  - Spent Fuel / Nuclear Waste & Decommissioning
Questions

- What does the foreign government want in return?
- What else accompanies the guarantee?
- How strong is the bilateral relationship?
Loan Guarantees
Loan Guarantees - Approaches

• Background:
  • The Government guarantees the debt portion of a financing structure

• Examples:
  • US Loan Guarantee Program
  • UK Loan Guarantee Program

• Distinguish this from:
  • Guarantee of an offtaker under a PPA
  • Guarantee of a price for electricity
Loan Guarantees – Advantages & Considerations

• For the Guarantor, it is only a contingent obligation
  • There is no actual money being committed by the Guarantor

• For the Borrower, it can provide cheaper interest rates
  • A guaranteed loan has lower risk, therefore lower cost

• For the bank market, it can create liquidity where it might not otherwise be present

• Traditionally, a Guarantor charges a fee for the guarantee
  • The fee can be based on the credit rating of the Borrower
  • The fee can be based on the quality of the Project

• A government guarantee might place limits on how much of the debt and / or project cost it will guarantee
Sovereign Loan Guarantees

- Sovereign loan guarantees can be policy tools
- Policy tools can then have policy goals
- Policy goals can then have policy requirements
- Policy requirements can then limit the freedom action for the Borrower
- Policy tools can also have major public scrutiny

- Note, too, that for the guaranteed lenders, it is a major step to call on the guarantee
Loan Guarantees – Limitations & Considerations

• Credit of Guarantor
  - If Guarantor is not above investment grade, the government guarantee does not provide the necessary support

• Perhaps local law and local courts for enforceability
  - Viewed negatively by international participants
  - Enforceability is a key aspect of the guarantee; therefore, if the guarantee is viewed to be difficult to enforce, such aspect reduces the value of the guarantee

• Perhaps legal limits on guarantee capacity
  - Query: How are guarantees “scored” under budgetary rules?

• State Aid rules (European Union)
  - Hinkley Point currently under review by the EU re. “contract for difference” and loan guarantee structures
Export Credit Agencies – the Key Source for Financing International Nuclear Power Plant Development

- Overview of Export Credit Agencies (“ECAs”)
  - Sovereign entities
  - Designed to promote exports of a country
  - ECA financing is tied to amount of national content
  - Depending on the ECA, ECAs can provide:
    - Actual loans
    - Guarantees for lenders
    - Insurance for lenders
    - Equity loans
  - ECA financing is viewed as cheaper than pure commercial debt
  - ECA financing is governed by OECD lending guidelines (for most ECAs)
  - ECA financing is viewed as a “good thing” for a project
  - ECA financing is political (both positive and negative)
  - 18 year repayment period following commercial operation
Export Credit Agencies – The OECD Rules

• Governed by the “OECD Arrangement on Officially Supported Export Credits”

• Designed to create a level playing field, so that competition is based on the underlying goods and services, not the terms and conditions of the financing

• For financing nuclear power plants, the key tools for project-level financing include:
  – Direct Loans
  – Guarantees of Commercial Bank Loans
  – Investment Insurance

• But note, too, that all ECAs are not subject to the OECD rules
  – Russian and Chinese ECAs have more flexibility
ECAs – some things to note

• While Export Credit Agencies do provide guarantees ...
  • They charge a fee for taking on the Borrower’s risk of default
  • The fees are based on the risk of the Borrower
  • ECAs will diligence the project for technical and reputational considerations
  • They will not cover the full cost of the Project; therefore, other debt and / or equity will need to be sourced
Thank you for your time and attention

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International Presence         Experience with Nuclear Power
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Paul Murphy's practice focuses on multiple aspects of the nuclear industry – from legal and policy matters, including international regulatory and treaty frameworks and issues regarding nuclear liability, to strategies for creating viable nuclear power programs and the identification and mitigation of associated risks – representing developers/owners, investors, and contractors on nuclear projects internationally. Mr. Murphy is recognized as an expert in the development and financing of nuclear power programs by the International Atomic Energy Agency (IAEA), the OECD's Nuclear Energy Agency (NEA) and the US government. Mr. Murphy currently serves on the IAEA's Technical Cooperation Program team, which assists member states in developing civilian nuclear power programs. Mr. Murphy has served as a designated expert, chairman, and author at several special meetings and for multiple working groups of the IAEA, primarily involving the development, financing, and structuring of nuclear power projects. He continues to work with the IAEA in a number of key areas, including a current revision of the IAEA's Handbook on Nuclear Law and as lead author for a new report to be released in the next few months, entitled, "Alternative Contracting and Ownership Practices for Nuclear Power Plants".

Mr. Murphy currently serves as a two-time appointee to the US Secretary of Commerce’s Civilian Nuclear Trade Advisory Committee, and he has served as chair of its Finance subcommittee. In addition, Mr. Murphy recently served as the US Government's sole representative on an NEA working group on "Financing of Nuclear Power Plants", acting as chairman for the working group. Mr. Murphy also chaired the IAEA working group that issued, “Issues to Improve the Prospects of Financing Nuclear Power Projects.” Mr. Murphy has also worked with the Nuclear Energy Institute, the US State Department, the US Mission to the OECD, and the Export-Import Bank of the United States on revisions to the OECD's Guidelines for the financing of nuclear power projects by Export Credit Agencies.

For the last five years, Mr. Murphy served as a faculty member for the "Training Course on Nuclear Power Infrastructure Programs and Related Projects in Emerging Nuclear States", held on behalf of the US State Department and the IAEA at the Argonne National Laboratory and attended by representatives of over 20 foreign governments. Mr. Murphy was the lead instructor for the segments on financing and the bidding / evaluation process for nuclear power projects.

In addition to his work in the nuclear sector, Mr. Murphy’s representations have included extensive work in the engineering and construction industry, where he has been heavily involved in the nuclear and fossil power sectors, both domestically and internationally. His project experience, both domestic and international, includes nuclear (new build, steam generator replacement, nuclear operating plant services), coal (both new build and environmental retrofit), and gas-fired power projects, ranging from EPC contracting structures to technical support agreements and including major equipment purchase agreements and subcontracting. Recent projects have included work in solar power projects (CSP), IGCC and coal liquefaction plants, and pipelines.

Prior to joining Milbank, he served as Senior Counsel for Bechtel Power Corporation, supporting both the Nuclear and Fossil business lines as a transactional attorney involved in bid evaluations, business development, proposal submittals, contract negotiations, procurement, and project execution.

Mr. Murphy is a graduate of Princeton University’s Woodrow Wilson School for Public and International Affairs and a graduate of Harvard Law School. Mr. Murphy is also a member of the International Nuclear Law Association.
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