

International Framework for Nuclear Energy Cooperation – Finance Workshop

Stakeholder Perspectives: Commercial, Investment Bank
Considerations Used in Making Financing Decisions

Challenges/Risks of New Nuclear Plant Investment

- High capital cost
- Lengthy planning, licensing, and construction period
- Required licenses/regulatory approvals
- Technology and operating risk
- Fuel supply and spent fuel management
- Environmental issues
- Security and safeguards

Role of Commercial and Investment Banks

- Advisory role in establishing government/industry framework for new nuclear power plant development
 - ▶ Plant ownership
 - ▶ Government support
- Revenue sources (PPAs; feed-in tariffs, etc.)
 - ▶ Regulatory structure
- Project finance structuring advisor
- Direct lender
- Underwriter for issuance of debt and equity securities to public investors
- Agent for private placement of debt and equity

Considerations in Making Financing Decisions

- Scale, competence, and creditworthiness of project owners
- Established technology with a foundation of proven operating performance
- Qualified, experienced, creditworthy supplier/construction group
- Appropriate mitigation of construction risk through Equipment Procurement Contract (EPC)
- Defined, long-term revenue stream sufficient to service and repay project debt and provide an appropriate equity return
- Balanced capital structure
- Appropriate debt financing structure
- Established and proven licensing and regulatory framework
- Strong public policy support

The Two New U.S. Nuclear Power Plant Projects

- Vogtle Units 3 and 4
 - ▶ Two 1,100 MW PWRs using Westinghouse-amended AP 1000 design
 - ▶ AP 1000 Design Certification Document issued by NRC in December 2011
 - ▶ Received Combined License (COL) from NRC in February 2012
 - ▶ Consortium ownership including Southern Co. and municipal utilities

- Summer Units 2 and 3
 - ▶ Two 1,100 MW PWRs using Westinghouse-amended AP 1000 design
 - ▶ Received Combined License (COL) from NRC in March 2012
 - ▶ Consortium ownership including SCANA and state-owned utility

- Ten additional COL applications for up to 16 additional units under active NRC review, together with several other Design Certification applications

Financing Strategies

- New Vogtle and Summer units are both being financed with direct corporate borrowings by fully regulated utilities
- Vogtle owners actively pursuing direct loan from U.S. Dept. of Energy
 - ▶ Government loan covers debt financing for the plant
 - ▶ Government lien on new plant and recourse to other existing utility assets
 - ▶ Benefits: Low-cost financing and diversified funding sources
 - ▶ Allows utility to finance other capital needs in public capital markets
- Owners of new Summer units have also applied for DOE loan guarantee
 - ▶ Summer owners may finance plant with normal utility debt and equity financings in the public capital markets

Comparison with regard to Financing Considerations

- Both are creditworthy, regulated utilities with reasonable scale and extensive experience in nuclear plant construction and operation.
- AP 1000 design builds on extensive PWR experience and adds attractive safety enhancements
- Experienced and creditworthy design, manufacturing, and construction teams
- Appropriate risk-sharing mechanisms in EPC
- Defined long-term revenue stream from statutory rate regulation mechanisms
- Balanced utility capital structure consistent with solid investment grade credit quality
- New NRC licensing process is being tested for the first time; government protections for initial plants to mitigate risk
- Consistent support for new nuclear plant development by Administration and Congress; strong support by state leaders and public

Conclusions

- In our view, both lead U.S. nuclear projects are well structured, with conservative financing strategies and appropriate risk mitigation
- They will provide valuable experience of the new NRC licensing process, new plant designs, and renewed U.S. nuclear plant construction
- Financing strategies will rely on public capital market debt and equity financing
- If successful, these initial two projects will provide a foundation for additional plant construction commitments, including more challenging competitive generation projects using a nonrecourse project finance structure
- The focus on these two projects should enhance the prospects for success

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