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How to Attract New Sources of Nuclear Finance? Avoid Nuclear Industry Jargon and Learn to Speak the Banks' Language

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The nuclear industry is at a turning point. In a post-Fukushima environment and with a changing industry structure, new technologies and new sources of competition, one of the key challenges for the future of the industry is its ability to develop and access new sources of finance. While the focus today is on export credit agency finance, new sources of finance and project models need consideration.

In this context, how well positioned is the nuclear industry to attract such new sources of finance? Is the development of the industry stifled through misperceptions which inhibit its ability to articulate an attractive case for nuclear finance?

At the 2014 World Nuclear Association Annual Symposium, George Borovas, the head of Shearman & Sterling's Global Nuclear Group, took up these thematic questions in his address and asked "are industry participants and bankers talking different languages?" Let us translate.

A Changing Nuclear Industry

The nuclear industry is in a state of transition and transformation.

Public versus private owners/sponsors. The majority of nuclear power plant projects were traditionally state-owned/sponsored. Today and into the future, new nuclear build projects will be privately owned/sponsored (though still require strong government support).

Pre- versus post-Fukushima. Today the risk profile of new plants is very different from the pre-Fukushima environment, and concerted efforts are needed to restore the reputation of the global nuclear industry.

Proven versus new technologies. Today's nuclear projects involve many first-of-a-kind technologies that, while safer and more efficient, are yet to be proven. This will change in the future as successful new-build projects are completed and new plants are operational.

In-country versus global human resources. Whereas in the past most human resources were employed in-country, including operational support, today the industry faces global human resources shortages in key disciplines such as engineering and project management, particularly accented in emerging nuclear countries.

Government versus new sources of finance. Government planning and financing was once central to nuclear projects. While the focus is currently on export credit agencies, they may not have capacity to carry the full debt load of new nuclear power plant projects. Both governments and the private sector are seeking new sources and models of finance.

All of the above points have implications for how the nuclear industry goes about the task of effectively presenting itself to its multiple stakeholders, including potential investors and financiers.

Trends in Nuclear Finance

In this changing context, a modern challenge of nuclear finance is that there is no precedent or standard commercial financing model.

Vendor finance model. There are many current examples of vendor-based financing, but developing and owning nuclear power plants are not a vendor's core business and provision of significant vendor equity may not be a sustainable model over multiple projects.

Focus on ECA finance. Today, the focus of the nuclear industry is on export credit agency finance. Multilateral agencies, such as the World Bank, the International Finance Corporation, the African Development Bank, the Asian Development Bank and the European Bank for Reconstruction and Development, have both official and unofficial policies of not lending to new nuclear projects. The European Investment Bank, which is able to finance nuclear projects, may only do so with the affirmative decision of the European Commission under the EURATOM Treaty.

In this restricted financing environment, other private investors (both debt and equity) are sought, as are new finance models.

How to Attract New Sources of Finance

Here are three approaches that the nuclear industry should take in order to enhance its ability to attract commercial banks to financing nuclear power plant projects: engage with commercial banks early, speak *their* language and proactively identify solutions to de-risk projects.

Talk early, talk often. Nuclear projects are complex and costly. For this reason, it is important for those in the project development area to engage with financial institutions early in the development stage of a nuclear project. Too often an owner/sponsor will start to develop a project, consider technology options, open discussions around project contracts and only then, several years into such planning process, turn its attention to seeking finance. This kind of post-fact scenario does not necessarily create comfort and confidence in the fundamental bankability of the project. An alternative approach is to engage banks far earlier in the planning process and to develop solutions together.

Speak the banks' language (not yours). Another potential inhibitor of the nuclear industry's ability to attract new sources of finance is one of language, terminology and perception. Project developers should be aware that there is a potential disconnect between their own language and interpretation of issues related to nuclear projects, and how such matters are typically understood by banks. In short – the industry should learn to speak the banks' language in order to avoid being misinterpreted as well as missing out on opportunities for new sources of finance. (See Appendix 1: a guide to some commonly used—and potentially misinterpreted—terms.)

Demystify nuclear. This is not an easy task. But, in order to de-risk a project, and hence attract new sources of finance, project developers need to be particularly attuned to two important categories of risk as seen from the banks' point of view: financial risk and reputational risk.

Financial risk is primarily driven by:

- historical and current experience of project delays and overruns
- the significant amount of finance required for projects, and the long development/construction timeframes
- long-term regulatory environment and power market uncertainty
- the need for experienced project managers and engineers
- nuclear liability and insurance

Reputational risk is primarily driven by:

- the social stigma associated with the nuclear industry
- political risk and public acceptance issues
- post-Fukushima environment and nuclear safety concerns
- nuclear non-proliferation
- radioactive waste management and disposal
- historical and current experience of project delays and overruns

Engagement with banks must occur at the early stage of a project's development, in order to adequately address the risks of a project, to demystify any potential issues and to ensure that project developers and banks develop common understandings and workable risk-mitigation solutions.

Conclusion

Globally the nuclear industry is at a turning point. The future growth prospects of the industry are dependent on project developers' ability to access new sources and models of finance. It is in the interests of all stakeholders—developers and financiers—to develop innovative, bespoke and workable project structures and financing solutions. In tandem with such efforts, the industry must continue to address the challenges of negative perceptions and barriers caused by a lack of effective communication. Successfully meeting these challenges and unlocking new sources and amounts of finance requires: early engagement with banks and financial institutions, speaking in the banks' language and de-risking projects.

Appendix 1: a guide to some of the commonly used—and potentially misinterpreted—terms

Industry …	***Bank …***
says "latest technology"	*hears* FOAK risk
says "proven safety record"	*remembers* Chernobyl, Three Mile Island, Fukushima
says "consortium"	*thinks* interface risk
says "construction schedule"	*worries about* delays and cost overruns
says "channeling of liability"	*worries about* gaps, inconsistencies, neighboring countries
says "peaceful use"	*considers* nuclear proliferation
says "localization"	*hears* supply chain risk
says "well-regulated industry"	*queries* host country regulator
says "with Government support"	*worries about* long-term political risk
says "CfD or long-term PPA"	*acknowledges* State aid investigations
says "long-term economics"	*hears* electricity market risk
says "new nuclear program"	*queries* host country commitment and resources

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