Overview

The nuclear power industry is moving ahead with new reactor designs and new business models. As traditional government and regulated utility models are replaced with a restructured electricity industry and electricity markets, complexity and risk increase for nuclear power plant projects. Nuclear projects in non-traditional electricity industry structures, with new business models and innovative financing approaches, require detailed and insightful analysis of electricity markets and nuclear project economics.

The nuclear power industry is also confronting legal and regulatory challenges related to national phase-outs of nuclear power, project delays, and other issues. Nuclear power litigation and arbitration cases have large stakes and cover complex issues, including analyses of electricity markets and the use of electricity market models. Nuclear fuel cycle issues, including long-term disposition of nuclear fuel, used fuel reprocessing, uranium mining, and uranium enrichment, also need economic analyses.

The role of government in nuclear programs and projects is significant. Decisions made by governments should be supported by sound cost/benefit analyses if government decisions are to be robust—an important consideration where governments may change multiple times between the start of nuclear power plant construction and the end of decommissioning more than 100 years later.

Capabilities

NERA’s nuclear industry experts have the skills and experience to help companies and governments evaluate options and make thoughtful decisions related to the nuclear power industry. Our experts have worked with sellers, buyers, regulators, and other nuclear project stakeholders on a range of issues.

Our experts have worked on nuclear projects around the world at all stages. NERA’s extensive work in the electricity industry (and its restructuring) gives us insight into how nuclear power projects fit into various electricity industry structures, markets, and approaches. We have unparalleled expertise in applying rigorous economics and the analytical tools and techniques needed to help structure successful nuclear industry projects. NERA has built a reputation for unmatched reliability and objectivity.

Structuring nuclear projects

NERA experts bring many decades of work on regulated utility issues and more than two decades of electricity industry restructuring and reform experience. Our work with electricity markets, economic regulators, governments, IPPs, and merchant power projects provides us with deep insight into structuring a new nuclear power project.
Analyzing electricity markets
NERA experts often use electricity market models to understand current and future revenues in these markets. Often, nuclear project revenues are based (in whole or in part) on electricity sales into an electricity market. We also offer analysis and expert testimony on market power and competition issues. Economic damages in nuclear power industry legal disputes often include past and future replacement power procured in an electricity market.

Assessing and planning nuclear power projects
NERA experts assess proposed nuclear projects, providing strategic advice to owners, investors, vendors, and others on whether and what kind of nuclear investment makes economic sense. We conduct due diligence; help prepare for key milestones; plan for allocation of resources; and advise on appropriate financial and contractual structures. A new nuclear investment brings a range of risks and uncertainties and identifying, measuring, and managing these uncertainties is a vital part of nuclear plant development. NERA has extensive experience in evaluating risks and formulating appropriate risk management and mitigation strategies.

Assessing due diligence for nuclear investments
NERA has provided independent assessments of nuclear projects for owners, investors, lenders, and others. Our project experience includes advising the US Department of Energy on regulatory and market risk related to US government nuclear loan guarantees, and advising corporate and governmental bodies investing in nuclear power projects.

We apply rigorous economic analysis and deep industry insight to provide independent views of project issues and risks. We can help clients assess how a nuclear plant project fits with the client’s strategic, economic, and resource positions. A new nuclear plant represents a multi-decade commitment and getting a clear view early in the project is essential to long-term success.

Providing expert testimony to support regulatory approvals and rate cases
NERA’s experts help clients with the nuclear industry’s unique regulatory processes. We have extensive experience developing expert testimony presented before regulatory bodies around the world. NERA helps clients ensure that nuclear investments are recovered through rates by analysis of prudence and economic soundness of investments in nuclear projects and current and expected future market conditions.

Consulting and testifying expertise in litigation and arbitration
NERA experts have been deeply involved in many nuclear regulatory disputes, litigation cases, and international arbitrations. We work closely with clients to prepare analyses and develop effective testimony. We have advised on the development and implementation of case strategies, assisted with responses to data and other requests, provided expert testimony, and reviewed analyses produced by clients and other experts.

About NERA
NERA Economic Consulting (www.nera.com) is a global firm of experts dedicated to applying economic, finance, and quantitative principles to complex business and legal challenges. For over half a century, NERA’s economists have been creating strategies, studies, reports, expert testimony, and policy recommendations for government authorities and the world’s leading law firms and corporations. We bring academic rigor, objectivity, and real world industry experience to bear on issues arising from competition, regulation, public policy, strategy, finance, and litigation.

NERA’s clients value our ability to apply and communicate state-of-the-art approaches clearly and convincingly, our commitment to deliver unbiased findings, and our reputation for quality and independence. Our clients rely on the integrity and skills of our unparalleled team of economists and other experts backed by the resources and reliability of one of the world’s largest economic consultancies. With its main office in New York City, NERA serves clients from more than 25 offices across North America, Europe, and Asia Pacific.

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