# Global nuclear energy

## Who we are

HKA is the world's leading consultancy for risk mitigation and dispute resolution, using our multi-disciplinary expertise to provide a comprehensive set of specialist services within the power, utilities and industrial sectors. With more than 1,000 experts, consultants and advisors based in 18 countries, the firm has world-class expertise to help our clients manage uncertainty on the most complex contracts and challenging projects. Clients have access to industry leaders who decode complexity through collaborative working and innovative thinking, making the best possible outcomes a reality for our clients, every time.

We understand that nuclear energy plays a key role in a time of energy security, within a society transitioning to a carbon-neutral future, however, we recognize the nuclear sector presents a tremendous number of opportunities and challenges for contractors. HKA has more than five decades of extensive experience within the nuclear power sector employing world-renowned industry experts, supporting clients on nuclear power plants and facilities domestically and internationally. Our global team of experts has supported clients involving almost 100 nuclear power plant facilities.

Below is a map that shows some of the nuclear plant locations our global team have worked on:



HK>A



Our experts have consulted on complex disputes for some of the most prominent nuclear projects in the world and have experience with every type and phase of nuclear power construction including:

New Build

- Operation/outage
- Decommissioning
- Risk Management

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## **Case studies**

HKA has a vast abundance of experience supporting our clients with a wide variety of nuclear-focused projects. The following is a brief selection of a few of the projects our colleagues have collaborated on:

### New build

HKA was engaged by AREVA NP in 2007, in a continuing expert consulting role to support its dealings with the Employer, on the Olkiluoto 3 Nuclear Power Plant in Finland. HKA provided support and analysis in the preparation of the claims for arbitration.

The ongoing provision of technical analysis and advice directly to senior members of the AREVA NP team. The preparation and submission of several quantum, delay and technical reports. These reports included the review and analysis of a large amount of data, to furnish expert opinions and recommendations in connection with the project.

HKA built specific programming/analysis and automation systems to assist the Client and their expert teams with the automation of repetitive tasks and interrogation of multiple databases and we prepared an expert report with opinion on the original baseline program.

#### **Operation & outage**

The Virgil C. Summer nuclear expansion project began as a shared effort between VC Summer Nuclear Generating Station owners, SCANA, and Santee Cooper to add two reactors (Units 2 and 3) to the South Carolina plant. However, the decade-long, \$9B expansion was bogged down by delays and cost overruns until the effort was ultimately abandoned in July 2017.

HKA was retained by the owners of VC Summer to assist in analyzing the causes and magnitude of design, regulatory, schedule delays, and construction cost overruns, as well as pursuing alternative approaches for mitigating economic losses through available tax and equipment disposition strategies.

#### Decommissioning

HKA was originally retained to analyze damages incurred from the extended forced outage and eventual permanent retirement of San Onofre Nuclear Generating Station ("SONGS"). For this project, HKA analyzed the value of the lost electricity generation resulting from the early shutdown minus of costs Southern California Edison (SCE) avoided by not operating SONGS. This analysis culminated in a "benefit of the bargain" damages claim of more than \$6.5B. HKA also analyzed costs SCE would have avoided had SCE not entered into a replacement contract with Mitsubishi Heavy Industries, Ltd. This analysis culminated in a "rescission" damages claim of more than \$3.5B. Following the completion of the arbitration, HKA has continued to support SONGS during decommissioning in areas of state regulatory, vendor selection and disputes, Department of Energy litigation, and other strategic financial analyses to support C-suite decision-marking.

HKA personnel submitted expert reports and provided expert testimony on both direct and lost value damages during an International Chamber of Commerce (ICC) arbitration. Ultimately, the tribunal found the limitation of liability contract clause applied.





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## Contact



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### **Risk management**

HKA has been engaged to support Eskom providing a risk view regarding a steam generator replacement. Our risk review included the establishment of risk using a typical Risk Breakdown Structure (RBS) approach. The analysis then testing the risk results using a simulation program. These results allowed the contractor to have an understanding of risk, and how the risk is to be managed in the form of an Owner's risk register.

## Contact

## **Timothy Chitester, Partner**

Tim is a licensed Engineer with 44 years of experience in power facilities and is recognized by Who's Who Legal as a leading consulting and construction expert.

He has been on-site during construction and commissioning of four nuclear plants including as the Manager of Nuclear Design and the Director of Nuclear design for major utilities. He has provided retrofit, power uprate, and commissioning services to 16 operating units.

Tim has been previously retained as an expert on three new vintage plants including the Advanced Boiling Water Reactor (ABWR), the Evolutionary Pressurized Water Reactor (EPR), and the Advanced Passive Reactor (AP1000) and has consulted on modifications related to plant Station Black Out, CanDu Calandria Tube replacement and the US Department of Justice related to a fuel processing facility.

Tim has testified before the Nuclear Regulatory Commission and has been interviewed by Engineering News Record on the current US Nuclear Program status.

## Derek Nelson, Partner

Derek Nelson has been engaged to undertake independent reviews and technical due diligence on delay and disruption on several nuclear assignments. He is a Chartered Quantity Surveyor and Chartered Engineering Surveyor with over 40 years of construction and engineering experience.

He has been appointed as an independent expert witness on over 70 occasions in delay, disruption and quantum matters. Derek is both an accredited and certified expert witness, fellow and current chairman of The Academy of Experts and has acted as a delay and quantum expert witness in arbitration, conciliation, litigation and mediation and as an expert determiner.

Derek has been cross-examined on over 20 occasions and has delivered concurrent evidence in disputes from Belize to Brunei and Scotland to Singapore. Alongside his work as an expert adviser for ongoing projects, Derek undertakes the role of 'project neutral', independently reviewing international projects in preventative, on-the-job dispute resolution.





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