Webinar Series on Stakeholder Involvement related to Nuclear Power









Webinar Series on Stakeholder Involvement related to Nuclear Power

8.12.2021







This will be an interactive webinar.

We'll have a live audience Q&A session at the end of the presentation.

BUT you can **type your questions at any time** into the CHAT panel.

You can also use the CHAT panel to let us know if you're having any technical problems.





#1 Basics of Stakeholder Involvement
#2 Public Surveys
#3 Public Information Centres
#4 Social Media
#5 Messaging, Storytelling, Plain Language
#6 Media Relations
#7 Crisis, Risk & Emergency Communication
#8 Design & Tools for Engagement
#9 Stakeholder Involvement in New Nuclear Power

www.iaea.org/si-webinars





Today's Speakers









Pam Gorman Prochaska, Xcel Energy, USA

Rob Whittleston, National Nuclear Laboratory, UK

Gaston Meskens, SCK•CEN, Belgium Franc Bogovič, European Parliament, Slovenia





Where do you work?

- Government
- Regulator
- Operator
- NEPIO: Nuclear Energy Programme Implementing Organization
- Technical Support Organization
- NGO
- Academia

- Research Institution
- International Organization
- Media
- Private Sector-non-nuclear
- Nuclear Advocate/Independent Advocate
- Other
- I prefer not to say







Today's Speakers

Pamela Gorman Prochaska

Director of Nuclear Policy and Strategy for Xcel Energy. Pam began her career with Xcel Energy over 32 years ago in the operations department of the Prairie Island nuclear plant. After 10 years in operations she spent time in various plant positions including project management, regulatory, communications and training.

She then moved to the operations side of the company and was the Community and Government Relations Manager for Southeast Minnesota. About five years ago Pam came back to nuclear in her current role where she interfaces with governmental and industry organizations at all levels that enact, implement or influence policies that impact Xcel Energy's nuclear power plants and used nuclear fuel storage.

Pam is a graduate of the University of Minnesota- Duluth where she earned a Bachelor of Science in Mathematics and Secondary Math Education.





Stakeholder Outreach

Pamela **Gorman** Prochaska Director, Nuclear Policy & Strategy

Xcel Energy

Serving eight states

- 3.6 million electricity customers
- 2 million natural gas customers

Nationally recognized leader:

- Wind energy leader
- Carbon emission reductions
 and reporting
- Innovative technology
- Excellent nuclear operations







Monticello Nuclear Generating Plant

Location:	Monticello, Minn.
Jobs:	Over 400
Capacity:	671 MWe
Generation:	5.6 GWh
Built:	1971
License:	2030



Prairie Island Nuclear Generating Plant

Location:	Near Red Wing, Minn.
Jobs:	Over 500
Capacity:	1,150 MWe
Generation:	9 GWh
Built:	1973 (Unit 1); 1974 (Unit 2)
License:	2033 (Unit 1); 2034 (Unit 2)



1994 – Public Policy Debate





What did we learn?

- Define the decision makers Who they are and best ways to engage. Could be different for different audiences.
- Communicate. Communicate. Communicate.

Seek feedback and adjust accordingly.

• Nothing can replace seeing for yourself

Plant tours and models help demystify nuclear. Virtual tours. Tabletop exercises.

Build trust and relationships

Do what you say you will. Be respectful even when you disagree. Regular contact.

• Don't give up!



Build Positive Relationships



Safe and Reliable operation, Carbon-free, Competitive, Grid Stability, Fuel Diversity, Community Health, Vitality, Jobs and Taxes



Public Support for Nuclear Power

Favorability to Nuclear Energy 1983–2021



America Nuclear Society poll conducted by Bisconti Research



DO *Highlight benefits rather than dismiss risks*

- Celebrate the decades of low-cost, reliable, clean electricity nuclear has provided.
- Nuclear is one of the largest sources of clean energy, providing 20% of US electricity, 80% in France, and over 50% in many other countries.
- The United Nations and the Intergovernmental Panel on Climate Change (IPCC) have concluded that nuclear energy will be a key technology that we will need for the fight against climate change.
- Emphasize we need a diverse portfolio of technologies, including solar, wind, and nuclear to ensure a reliable and safe clean-energy future.



DON'T

- Attack renewable energy to promote nuclear energy.
- Argue about death counts from past accidents.
- Argue that radiation is beneficial or omnipresent.
- Argue about whether there should be thresholds for low-level radiation exposure.
- Compare nuclear's risk with those of familiar activities.



Questions to consider

Do your decision makers know and understand your issues?

Are you fostering good relationships with them?

What are you doing to get your messages out?







Rob Whittleston

As Director for International Engagement, Security and Non-Proliferation at the UK's National Nuclear Laboratory, he is responsible for maintaining NNL's place as a world leading national institution, and for ensuring NNL can play its vital role enabling the peaceful use of nuclear materials and technology.

Originally trained as earth system scientist, Rob is passionate about the role nuclear technology has to play in protecting both our society and planet.

He has held a variety of internationally facing R&D management roles spanning the nuclear fuel cycle, including at Hitachi, and the UK Nuclear Decommissioning Authority's Radioactive Waste Management Directorate. He has previously worked in central government, leading policy development in the rail sector.





'Fission Chips' and the role of trusted professions

Engaging with policy and decision makers







NUCLEAR SCIENCE TO BENEFIT SOCIETY

AUTUMN 2021



UK context

- In the UK, nuclear is a sector with considerable heritage, embedded across the country
- It is often high on the public agenda, touching many aspects of UK Government policy
- It will continue to play a key role, but challenges remain



Trusted professions play a vital role

- In an era of fake news, peer reviewed, scientific evidence and advice is more vital than ever to inform policy and decision making
- Scientists are a highly trusted profession
- This has potentially life saving consequences
- But information must be delivered in an accessible way

26. Drinking alcohol reduces the risk of infection

The WHO have released a response to the series of myths surrounding alcohol and COVID-19. They explain that while alcohol can disinfect the skin, it does not have this effect inside the body.



Methanol, ethanol, and bleach are poisons. Drinking them can lead to disability and death Methanol, ethanol and bleach are sometimes used in cleaning products to kill the virus on surfaces - however you should never drink them. They will not kill the virus in your body and they will harm your internal organs.

To protect yourself against COVID-19, disinfect objects and surfaces, especially the ones you touch regularly. You can use diluted bleach or alcohol for that. Make sure you clean your ently and thoroughly and avoid

FACT: Drinking methanol, ethanol or bleach **DOES NOT prevent** or cure COVID-19 and can be

extremely dangerous



). NOW I WILL READ YOU A LIST OF DIFFERENT TYPES OF PEOPLE. FOR EACH WOULD YOU TELL ME IF YOU GENERALLY TRUST THEM TO TELL THE TRUTH. OR NOT LOCAL PHARMACISTS NURSES DOCTORS TEACHERS SCIENTISTS NPHFT WEATHER FORECASTERS HIDGES TELEVISION NEWS READERS CIVIL SERVANTS FCONOMISTS ORDINARY PERSON IN THE STREET POLLSTERS **CLERGY/PRIESTS** EU LEADERS TRADE UNION OFFICIALS JOURNALISTS LOCAL COUNCILLORS BUSINESS LEADERS 43% CHARITY CHIEF EXECUTIVES BANKERS GOVERNMENT MINISTERS ESTATE AGENTS POLITICIANS

INDEX 2021 - WHO DO WE TRUST THE MOST?



Fission Chips – a nuclear knowledge bite series

- A long term approach to improving engagement
- A growing network of officials and decision makers, across a wide range of UK Government departments
- Providing a 'safe environment' for these officials to ask internationally renowned experts questions relating to any aspects of nuclear
- No prior knowledge assumed
- Most importantly, the topics of discussion are set by the participants themselves





Delivered to date

- Three briefings have been held, covering a range of topics:
 - What is the UK nuclear industry?
 - Is nuclear safe?
 - The Retention of the UK's Independent Nuclear Deterrent – Lessons in Communicating & Influencing
 - The UK Defense Nuclear Enterprise
 - The role of nuclear and net zero: challenges and opportunities
 - Nuclear innovation for climate
 - The perception of risk
- Reaching over 200 officials across 18 UK
 government departments and agencies
- Created links between departments e.g.
 energy policy and international development





Key takeaways

- Scientific and technical advice is essential to inform policy and decision making – but it must be accessible
- Assume no prior knowledge, and do not wait to be told they welcome your support
- Clear, consistent messaging is key the sector speaking with a single voice
- Work with all policy and decision makers with an interest in nuclear think outside the box
- Interests and understanding of policy and decision makers reflect those in broader society – they are members of the public too!



Nuclear will play an important role for a long time...

... so do not forget the policy and decision makers of the future!



About us Customer Solutions Innov



NNL scientists inspire next generation across Cumbria

Representatives from the UK's national laboratory for nuclear fission share importance of the sector's work to combat climate change, following Glasgow climate conference COP26





NATIONAL NUCLEAR





Gaston Meskens

Works with the Science and Technology Studies group of the Belgian Nuclear Research Centre SCK•CEN and with the Centre for Ethics and Value Inquiry of the Faculty of Arts and Philosophy of the University of Ghent. He has over 20 years of experience in participative and transdisciplinary research related to the ethics of governance of issues such as sustainable development, energy, climate change and radioactive waste management. He is member of the steering committee of the Constituency of Researchoriented Independent Non-Governmental Organisations towards the UNFCCC (the constituency that represents the global scientific world in the United Nations Climate Change negotiation process) and was chair of the constituency from 2016 to 2018.

Previously, he participated as invited expert in Belgian parliamentary and public hearings on the ethics of risk-inherent technology governance, in several Technical Committees of the IAEA and of the OECD and in UN missions in the frame of sustainable development. At SCK•CEN Gaston is now working as researcher, writer, lecturer and mediator of dialogue on ethics in relation to science, technology and democratic decision making. He holds master degrees in theoretical physics and nuclear engineering from the University of Ghent in Belgium.





Nuclear energy governance

&

The ethical motivation for participative forms of knowledge generation and decision making

IAEA Webinar #10 Engaging with policy and decision makers, 8 December 2021



Science & Technology Studies Unit, SCK•CEN Centre for Ethics and Value Inquiry, University of Ghent gaston.meskens@sckcen.be

Gaston Meskens

Academy

The ethical motivation for participative forms of knowledge generation and decision making

IAEA Webinar #10 topic

"... the ways in which the professional and technical community **can** engage with policy and decision makers. How **can** energy and nuclear experts, economists, utilities, industry, academics and potential technology suppliers support well-informed decision making regarding nuclear power? What works? What doesn't work so well? ..."

IAEA 19th INPRO Dialogue Forum

"... The importance of Public Acceptance ..."



The bigger (critical) picture Forms



The bigger (critical) picture Forms

- Our current forms of political decision making, inherited from modernity, are not designed for engagement with the public or civil society
- democracy via party politics and elections
- international negotiations based on diplomacy and state sovereignty
- \rightarrow public participation seen as 'additional' or 'corrective' to these forms
- soft law the Aarhus Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters
 - EC "... Member States shall ensure that the public is given early and effective opportunities to participate ... " (original 2003/35/EC Directive)







http://www.eesc.europa.eu/?i=portal.en.events-and-activities-symposium-on-nuclear-fission-papers



2012 Interdisciplinary Study

Synthesis Report **Topical socio-economic reports / expert viewpoints**

"Risk governance:

What is an acceptable level of (nuclear) risk for the public at large?"

my answer:

[...]

There exists no objective (scientific, economic, social, political or philosophical) rationale for the determination of the acceptable level of nuclear risk for the public at large.

An acceptable nuclear risk is simply a risk that an informed democratic society justifies as acceptable.

Benefits and

Limitations of Nuclear Fission for a Low-Carbon Economy



http://www.eesc.europa.eu/?i=portal.en.events-and-activities-symposium-on-nuclear-fission-papers



risk justification



Technocracy is still among us

it may have good intentions, it doesn't rule as such, but it functions at the service of politics.



Nuclear energy governance is a 'complex social problem' troubled by knowledge related uncertainty and moral pluralism





Nuclear energy governance is a 'complex social problem' troubled by knowledge related uncertainty and moral pluralism





Nuclear energy governance is a 'complex social problem' troubled by knowledge related uncertainty and moral pluralism





Societal trust in the assessment of what is an acceptable risk for society should be generated 'by method instead of proof'

- No scientific or political authority can determine alone what would be an acceptable risk for society.
- Good science and engineering, open and transparent communication and the 'promises' of a responsible safety and security culture are necessary conditions but can never generate societal trust in themselves.
- S The reason is that there will always be **essential factors beyond full control** (nature, time, human error, misuse of technology), which implies that one always has to deal with incomplete and speculative knowledge and value pluralism (also in post-accident conditions).
 - This simply means that one can never 'prove' with scientific, technical or economic arguments that nuclear is an acceptable energy technology (but neither that it is not)
- → There is a need for governance methods that could generate trust by their very method, instead of by 'proofs' or 'a competition of promises'.



A special challenge for science in the 'risk society'

Confronted with the need to deal with incomplete and speculative knowledge and value pluralism in providing policy advice on issues of social well-being, the challenge of science is not the production of credible proofs, it is the construction of credible hypotheses.





Inspiration from philosophy & science studies

John Dewey

"... democracy is unlocking the social intelligence of the people..."

Noam Chomsky

> the importance of **moral justification of authority**

- The idea of post-normal science, relying on an 'extended peer community' consisting of all those with a stake in the dialogue on the issue
- The idea of transdisciplinary knowledge as a synergy of knowledges from natural and social sciences, the humanities and the arts and lay and indigenous knowledge



The ethical motivation for participative forms of knowledge generation and decision making put in practice



The ethical motivation for participative forms of knowledge generation and decision making put in practice

There is a need for new governance methods that would allow		
the recognition of uncertainty and moral pluralism	transdisciplinarity and focus on ethics in education & training transdisciplinarity and participation in scientific research	
informed consent		
precaution and confrontation of rationales	and deliberation in political decision making	
accountability to next generations		

In its role of governance advisor and facilitator, the IAEA could promote these governance methods and care for transdisciplinarity and a focus on ethics in its own education and training programmes.



References

- Meskens, Gaston, 2013. The trouble with justification getting straight on the science and politics of nuclear energy, Elsevier Energy Strategy Reviews
- Meskens, Gaston, 2015, Global governance as ethical commitment A new vision on solidarity for sustainable development, book chapter in the book 'Sustainability - Global Issues, Global Perspectives', Cognella Academic Publishing
- Meskens, Gaston, 2015, Beyond Paternalism and Strategy: Understanding Radiological Risks as a Mutual Learning Experience, Fukushima Global Communication Programme Working Paper Series, United Nations University Institute for the Advanced Study of Sustainability
- Meskens, Gaston, 2016, Ethics of radiological risk governance: justice of justification as a central concern, Annals of the ICRP, SAGE Publishing
- Meskens, Gaston, 2016, Overcoming the framing problem—a critical-ethical perspective on the need to integrate social sciences and humanities and stakeholder contributions in EURATOM radiation protection research, Journal of Radiological Protection, IOP Publishing



References



- Meskens, Gaston, 2017, *Better living (in a complex world) An ethics of care for our modern co-existence*, book chapter in 'Ethics of Environmental Health', Routledge
- Meskens, Gaston, 2018, *The Politics of Hypothesis An inquiry into the ethics of scientific assessment*, book chapter in 'Ethics of Environmental Health Risks', Routledge
- Meskens, Gaston, 2018, *Reflections on Uncertainty, Risk and Fairness*, book chapter in 'Ethics for Radiation Protection in Medicine', Taylor & Francis
- Meskens, Gaston, 2021, *Cosmopolitanism and Environmental Health*, book chapter in 'Research Ethics for Environmental Health', Routledge



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Today's Speakers

Franc Bogovič

Held posts such as agricultural expert, agricultural trade entrepreneur, Mayor of Krško Municipality, member of Slovenian National Assembly and Minister of Agriculture and Environment in the Government of the Republic of Slovenia.

During his thirteen-year term of office as a mayor of Krško Municipality, he played a significant role in improving the relationships between the municipality and the state with the Krško Nuclear Plant, and establishing a permanent nuclear waste repository. From 2004 he was also the vice president of the Association of European municipalities with nuclear facilities, Group of European Municipalities with Nuclear Facilities).

Bogovič is currently serving his second term as a Member of the European Parliament, and is mostly engaged in topics related to agriculture, rural and regional development, cohesion policy, as well as energy. Bogovič also leads the Smart Villages initiative in the European Parliament and in Slovenia.



Energy site - Krško

Region generates more than 40% of all Slovenian energy production

> Nuclear power plant Krško, since 1981

eppgroup

GEN energija

Nuclear power plant Krško Hydro power plant on the Sava river

GEN-I

Thermal power plant Brestanica

Small solar power plant



Energy

Franc BOGOVIČ

Poslanec Evropskega parlamenta Member of the European Parliament

> Hydro power plants on the Sava River

Social acceptability of the Krško NPP in the local environment











Confidence in the **competence and professionalism** of the leading management in the Krško NPP

NEK employees are the best ambassadors Safe operation of the Krško NPP – regular investments and modernizations Investing in local community development

Long-term solution for RAW management; spent nuclear fuel is not a waste, recycling

Franc BOGOVIČ

Poslanec Evropskega parlamenta Member of the European Parliament



What was important for me when I became the mayor of Krško

- Create my own opinion, build trust with people who manage Nuclear Power Plant
- Get to know the nuclear facility
- GMF Vice President
- Recognize nuclear energy as a development opportunity
- Active role in energy development

The role of nuclear energy in the transition to a low-carbon society



Climate change requires the decarbonisation of our society



Increasing of electricity consumption



Increasing the share of electricity from renewables and electricity from nuclear power plants



Franc BOGOVIČ Poslanec Evropskega parlamenta Member of the European Parliament



How to achieve social acceptability for new nuclear facilities



Proactive, transparent communication between politics and the profession



Debates based on **facts, figures, not ideology** or political belief



Nuclear power plants as a solution to the transition to a low carbon society



Renewal of the European nuclear industry



Find permanent solutions in the field of RAW management

Franc BOGOVIČ Poslanec Evropskega parlamenta Member of the European Parliament















Pam Gorman Prochaska, Xcel Energy, USA

Rob Whittleston, National Nuclear Laboratory, UK

Gaston Meskens, SCK•CEN, Belgium

Franc Bogovič, European Parliament, Slovenia





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8.12.2021







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