# Webinar Series on **Stakeholder Involvement**related to **Nuclear Power**







Anticipating and Navigating Challenging Circumstances







Lisa Berthelot Stakeholder Involvement Officer IAEA Division of Nuclear Power





# **Learning Objectives**

The objectives of this webinar are to:

- Recognize the difference between a crisis, risk and emergency in the area of nuclear power
- Recognize the importance of long-term engagement with stakeholders to effectively prepare for crises and emergencies
- Develop mechanisms to prepare to communicate in challenging circumstances
- Identify approaches to build and rebuild trust





# **Today's Speakers**



Peter Kaiser



Jaana Isotalo



JoAnne Ford



Lauren Matakas









## 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**

# Peter Kaiser

- Crisis Communications Adviser, IAEA Incident and Emergency Centre
- Developing safety standards, strategies for communication with the public in nuclear and radiological emergencies.
- Led IAEA web, social media, telephone hotline team during the Fukushima accident
- Over 19 years' experience leading public information teams at international organisations
- 10+ years' experience as network TV news and radio documentary producer



# **Communication Standards**



- 1. Protect the public
- 2. Inform public of hazards and protective actions
- 3. Place radiological health hazards in perspective in plain language
- 4. Enable interested parties to make informed decisions
- 5. Refute rumours; counteract misinformation

All-of-the-above builds and maintains public trust



# **Engaging people = Preparedness**



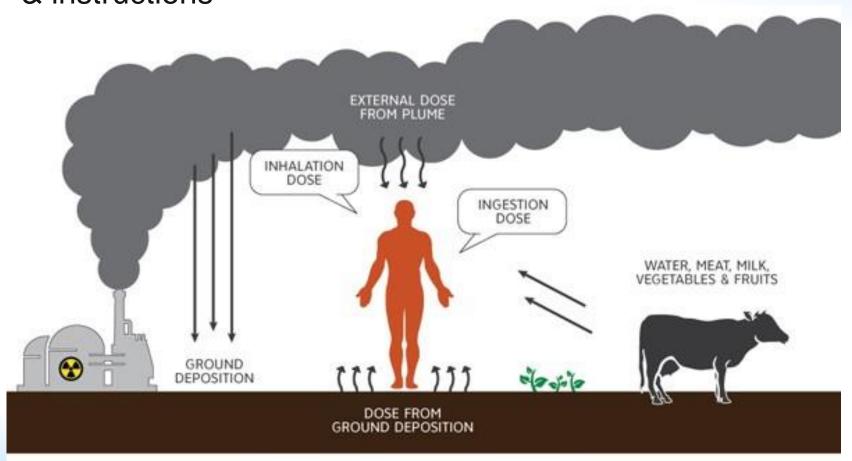




# Responding to Affected People



Provide affected people information on health hazards & instructions









# **Demand surge**







# Response messaging





Adapted from Yves Stevens, @Stevensyves1
Belgian government crisis centre spokesperson

WE KNOW Factual, easy to understand Confirm knowledge of event

WE DO Describe initial steps and mandate Provide any preliminary confirmed information

WE CARE Stay tuned! Announce the timing for next update

# FAQ Nr. 1











**CHALLENGE:** Answer question **AM I SAFE?** 



Quickly



Without technical language



Understandable without explaining doses and units



Place radiological health hazards in context



Publishable in any digital channel

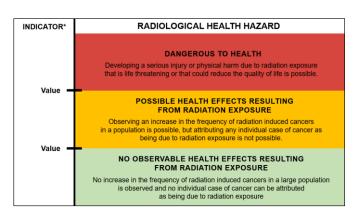
## RECOMMENDATION



Plain language communication can reduce anxiety and place hazards in an understandable context

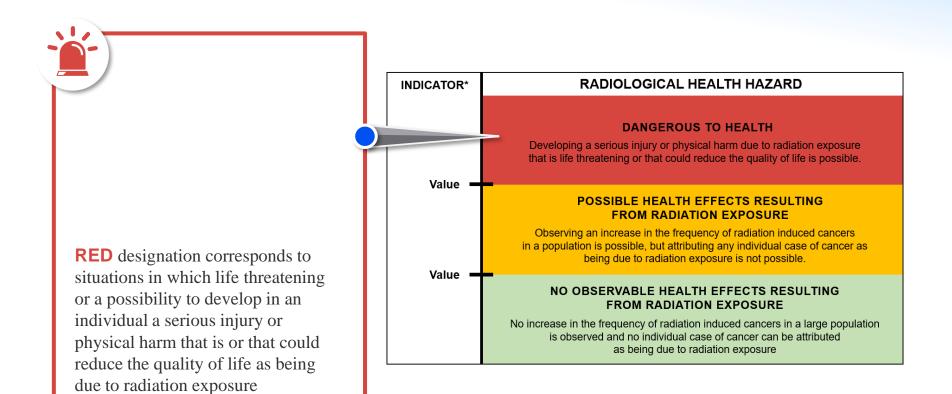


A simple graphical reference provides context quickly and does not require technical knowledge



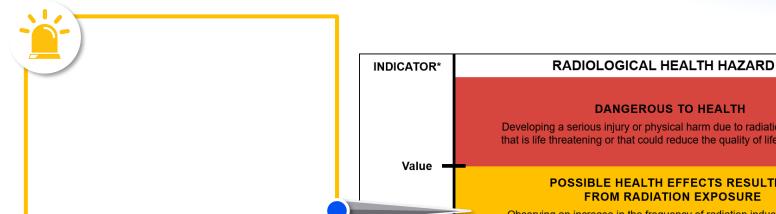
Example system for putting radiological health hazards in perspective in a nuclear or radiological emergency





Value





YELLOW designation: is applied if the doses exceed criteria at which an increase in the frequency of occurrence of specific cancers in a population could be scientifically attributed to radiation exposure by means of epidemiological analysis.

## **DANGEROUS TO HEALTH**

Developing a serious injury or physical harm due to radiation exposure that is life threatening or that could reduce the quality of life is possible.

#### POSSIBLE HEALTH EFFECTS RESULTING FROM RADIATION EXPOSURE

Observing an increase in the frequency of radiation induced cancers in a population is possible, but attributing any individual case of cancer as being due to radiation exposure is not possible.

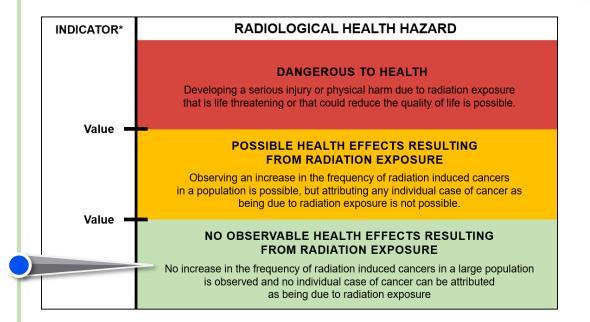
#### NO OBSERVABLE HEALTH EFFECTS RESULTING FROM RADIATION EXPOSURE

No increase in the frequency of radiation induced cancers in a large population is observed and no individual case of cancer can be attributed as being due to radiation exposure





GREEN designation = "safe": applies to dose levels that are so low the national radiation protection authorities and/or emergency response authorities do not establish protective actions for the affected



**Support to Member States** 







**Publications** 

Scientific Visits



**Training** Courses



E-learning

IAEA Capacity Building Support in Stakeholder Engagement and Public Communication

**Technical** Meetings



Nuclear Toolbox

Communicator's

Webinar Series

on Stakeholder **Involvement** related to Nuclear Power

Rising to the Social Media Challenge

Webinar Series

on Stakeholder **Involvement** related to Nuclear Power



Crisis, Risk & **Emergency Communication** Anticipating and Navigating Challenging Circumstances

Webinars

Expert Missions





# Thank you!

Peter Kaiser Crisis Communication Adviser IAEA p.kaiser@iaea.org









# Let's interact

Do you have communication responsibilities in your job?

- Yes
- No





# **Today's Speakers**

# Jaana Isotalo

- Senior Vice President, HR & Communication, Teollisuuden Voima Oyj (TVO), Finland
- 20 years of experience in Nuclear industry (incl. final disposal organization)
- Dozens of international missions (IAEA, WANO etc.)
- Former IAEA staff member (NPES)
- Member of several nuclear related national and international working groups, boards and general assemblies
- Member of several (non-nuclear) companies executive boards
- Active citizen (Women in Nuclear, JCI, etc.)



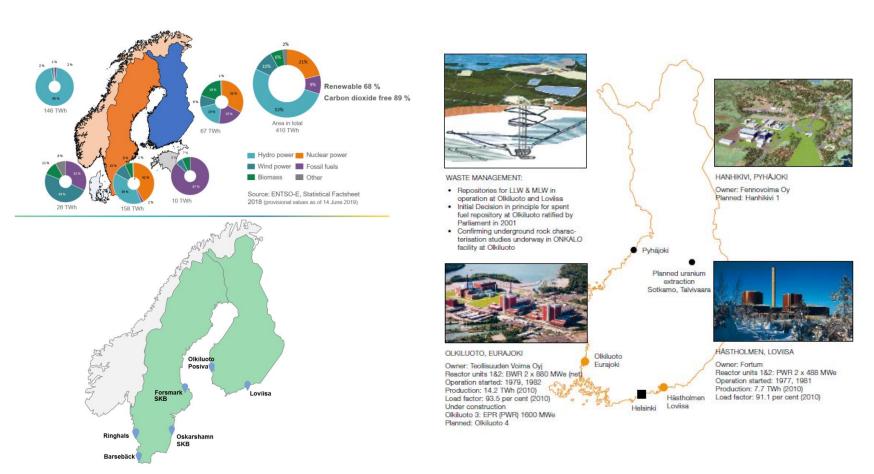


# Cornerstones of Good Nuclear Crisis Communication

IAEA Webinar 2020-12-01

© Teollisuuden Voima Oyj 2020-11-17 Isotalo Jaana PUBLIC

# Electricity generation in Nordic market area







## **MISSION**

## - what we are

We generate safely and competitively with nuclear power environmentally-friendly electricity for the shareholders of the company and thereby to create wellbeing for Finland.

## Mission for influencing:

We promote the status of Olkiluoto's nuclear power as desirable electricity production form and keep our business profitable.

## **VISION**

## what we want to improve

Recognised pioneer in the nuclear industry.

About 30% of the electricity produced in Finland.

## **Vision for influencing:**

Communicating and influencing in professional way

Making the safety brand stronger

Coaching the management and personnel

















## **Stakeholders**

- Owners
- Policymakers
- Authorities
- Associations

- Financiers
- Learning and research institutes
- Local communities
- General public
- Media

Central and direct impact on TVO's activities e.g. owners, politicians, financiers, and relevant authorities)

Decision makers

Opinion leaders

Indirect impact on TVO's prerequisites for operation and acceptability of nuclear power (e.g. associations, media, learning institutes)

General public

Strong influence on decision-makers regarding acceptability and reputation (Olkiluoto visitors, fair visitors, etc.)



# RESPECT & TRUST TIMELY WICE (be 1st) FACT BASED AND CLEAR



# Key Indicators of Stakeholders Survey 01/2020

71/100
Attitude towards nuclear power



77/100
TVO's reputation



78/100
Posiva's reputation

63%

Think that energy policy should mainly focus on promoting low-carbon solutions

40%

Think that Olkiluoto's communications have succeeded in raising nuclear power to the same level with renewables

53%

Think that there has been frequent dialogue with TVO and Posiva



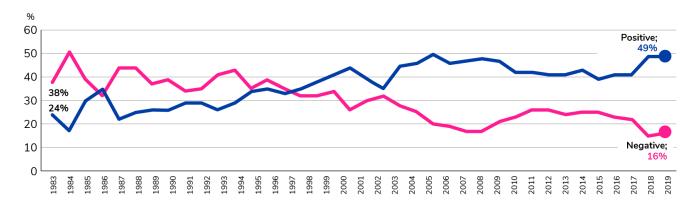
Comparison with 2017

Survey conducted by: Prior Konsultointi Oy, Jouni Kivikoski



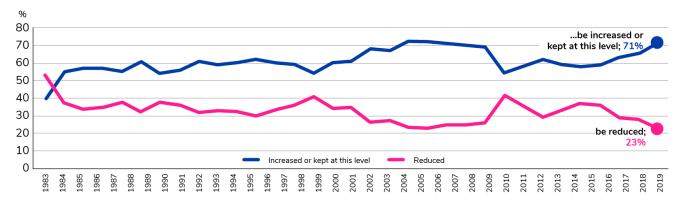
## SUPPORT FOR NUCLEAR POWER IN FINLAND

What is your general attitude to nuclear power as an energy source in Finland?



Source: Kantar TNS 2020, Energiateollisuus ry

According to Finns, nuclear power should...





# 

#nuclearheroes #beyoungnotfossil #newclearpower



# Thank you!



### JAANA ISOTALO

SENIOR VICE PRESIDENT (HR, COMMUNICATION AND TRAINING)

jaana.isotalo@tvo.fi | www.tvo.fi Tel. | +358 50 327 6609

Teollisuuden Voima Oyj | Olkiluoto, 27160 EURAJOKI

in





P9

© Teollisuuden Voima Oyj 2.12.2020



# **Today's Speakers**

# JoAnne Ford

- 25+ years of experience as a communicator with the Canadian government and NGOs
- Private consultant, specializing in science related communications with an emphasis on emergency planning and response to nuclear and biological emergencies.
- Former staff member with the International Atomic Energy Agency, consultant to the Agency since 2005 for various publications and projects related to risk and emergency communications.
- Facilitator and trainer in public and media communications.

# Risk Communication

- A two-way information exchange between experts and public
- To help the public better understand risks, make informed decisions about them, and promote compliance with mitigation measures
- To help experts better understand the public's concerns and perceptions of the risk to improve their communication
- A process: both experts and public exchange information regarding the nature of and concerns about the hazard involved.
- Multiple methods may be used for this exchange:
  - face-to-face, such as: public opinion research, community engagement
  - Social media engagement, such as Facebook, Instagram, YouTube, etc.
- Effective risk communication requires planning; it does not take place in a vacuum

# Communication Context

- What is the context for communicating about risk?
  - Nuclear Power Plants: siting, construction, refurbishment, licensing, environmental monitoring, waste management, fuel transportation, emergencies and transboundary accidents
  - Radiation Sources: transportation, mobile or fixed use in industry or medicine, emergencies, loss of control or theft
- Any aspect likely to be controversial, based on past public reaction or public concerns about similar risks?
- Public opinion research (focus groups, surveys, questionnaires, etc.)?
- What potential background and technical information will be needed to put risk into perspective?
- Plan how to simplify scientific and technical concepts into plain language

## **Audiences**

- Who are the target audiences for the risk communication?
- What do they already know about the subject?
- Any past experience with the risk?
- What is the level of scientific literacy (will they have some level of technical knowledge or none, at all)?
- Who are the influencers for these audiences (prominent media, other experts or environmental activist groups)? And what are their views?

# Risk Perception

- Perception is the driver behind the public's reaction to a risk
- Relates to how instinctively humans assess something new: freeze, flee, or fight
- Some key risk perception factors to consider in the nuclear context are:
  - Control
  - Voluntariness
  - Familiarity
  - Awareness
  - History
  - Certainty
  - Trust
- Trust is the probably the most important; if an organization has the public's trust, they are more likely to accept risk information
- Communications should strive to build trust by being honest and transparent about the risk and empathizing with the public's concerns

#### Challenges

- Information on audiences, their risk perception and attitudes can be gathered through public opinion research
- Too often, resources to conduct this research is lacking
- Can extrapolate from past research or public reaction, experiences from similar situations in other countries, or from similar risks, but not ideal
- Social media has totally changed the game; anyone can influence public perception from anywhere
- Potential for misinformation (inadvertent sharing of incorrect information) and disinformation (intentional sharing of incorrect information) to manipulate the public's reaction to a risk
- Long-term impact of other risks (for example COVID 19) on the public psyche

# Going Forward: Tackling the seeds of distrust

- One mitigation measure for an emergency at a nuclear power plant is for nearby residents to "shelter-in-place"
- New public experiences to consider in this communications context:
  - The HBO miniseries Chernobyl, dramatized the aftermath of the accident
  - Lockdowns due to the COVID 19 pandemic: have they changed the public's perception of what it means to "shelter-in-place"
  - Erosion of public trust in health officials due to COVID 19 pandemic response
  - And in the province of Ontario, Canada, the impact of a false alarm accidentally issued during a January 2020 simulation exercise to mobile phones across the province, directing residents nearby Pickering Nuclear Generating Station to shelter-in-place
- What would the public response to such an order be today?
- Going forward, effective risk communications will depend on acknowledging shortcomings and rebuilding trust





#### **Today's Speakers**

#### Lauren Matakas

- Public affairs specialist at the US Environmental Protection Agency (EPA).
- Led the creation, review, and publication of the United States' nuclear detonation social media messages.
- Led the revision efforts for the communications section of national planning guidance and led a media monitoring team in support of the national COVID-19 response.
- Lived and worked in Kosovo with the US Peace Corps from 2014-2016.



## One Message, Many Voices:

Communicating (and Coordinating) in a Nuclear Emergency

Lauren Matakas, US Environmental Protection Agency
December 1<sup>st</sup>, 2020

Crisis, Risk and Emergency Communication: Anticipating and Navigating
Challenging Circumstances



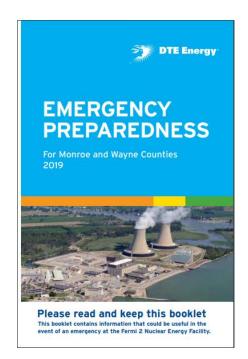
# "radiological"



### Radiation Questions





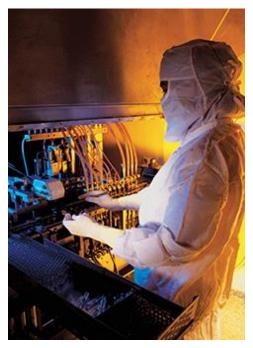




#### You are a Communicator!











#### Public Perception

"Situations involving radioactive materials have a remarkable capacity to produce widespread fear, a profound sense of vulnerability, and a continuing sense of alarm and dread."

-Dr. Steven Becker



## Risk Perception Factors

Lower Perceived Risk	Higher Perceived Risk
Voluntary	Imposed
Under an individual's control	Uncontrollable
Has clear benefits	No clear benefit
Distributed fairly	Distributed unequally
Natural	Man-made
Familiar	Unfamiliar
Chronic	Catastrophic
Affects adults	Affects children
Risks known to science	Risks unknown to science

Adapted from Covello, Sandman, Slovic, 2001



Nuclear Emergency Communications Techniques

- Use simple language
- Express empathy
- Show how we reached our conclusions
- Explain radiation units
- Explain potential health effects
- Explain why actions are protective
- Help the public understand results

## Who are we talking to?

























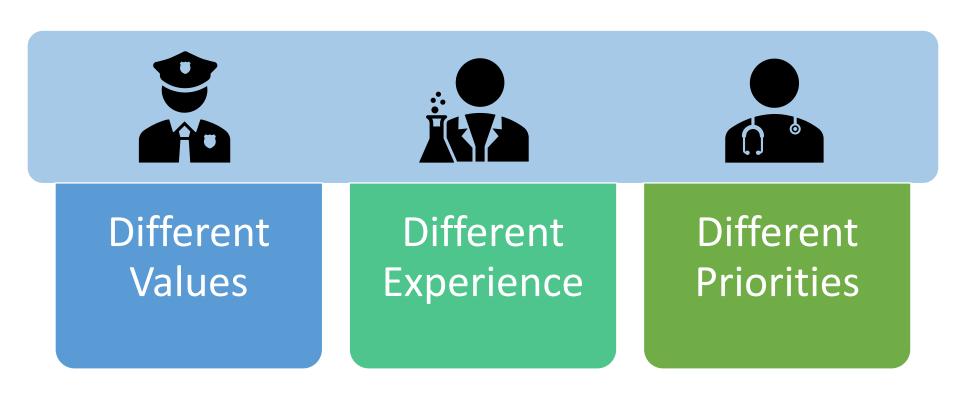








#### Coordinating Messages



#### Coordinating Messages







Call the hotline if you see anything suspicious

Don't eat food from your garden until we have more information Take a shower if you can; if not, wash; if not, wipe with a towelette

Public asks: what do I do first?

What's for lunch?



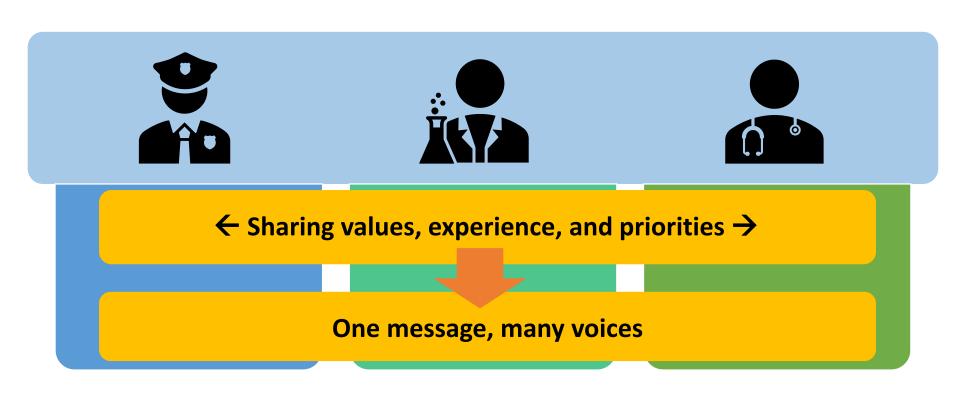
What's for lunch?



What should I do in a nuclear or radiological emergency?



### Coordinating Messages



## Federal Coordinating Committee

Federal Radiological Preparedness Coordinating Committee (FRPCC)

- Made of specific federal, nationwide partners
- Broad focus on radiological preparedness topics, not just communications
- Authority given by federal law

- Reviews final drafts of:
  - Infographics
  - Social media messages
  - Question and answer guides
  - Guidance
  - Research
  - Regulations

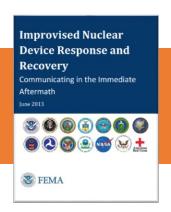


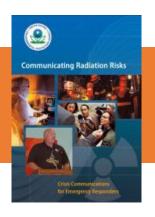
### Specific Communications Group

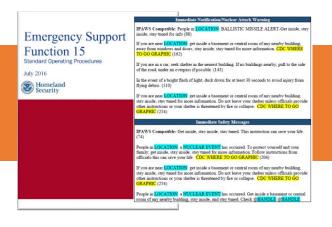
Nuclear/Radiological Communications Working Group

- Made of state, provincial, local, academic, federal and other communicators
- Specific to communications topics
- Various projects
  - Creates new materials
  - Discusses best practices
  - Learns from cross-disciplinary experts
  - Reviews rough drafts



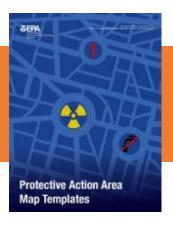


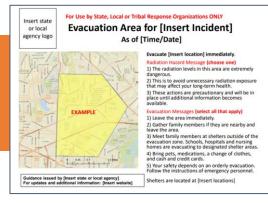












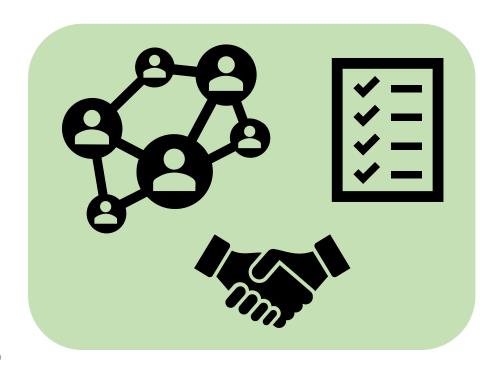


Find these and more at <a href="https://www.epa.gov/radiation/pag-public-communication-resources">https://www.epa.gov/radiation/pag-public-communication-resources</a>



## Collaboration is Necessary

- Early discussion reduces confusion during an emergency
- Knowing what other agencies and departments will say reduces complexity
- Early collaboration reduces time needed to reach concurrence







Q&A













#### **Upcoming Webinars**

#8
Design & Tools
for Engagement

Inspiring Audiences through Visuals, Games and More

Stakeholder Involvement in New Nuclear Power

Engagement in the Nuclear Newcomer Field

and Opportunities

#10

Engaging with Policy & Decision Makers

Knowledgeable and Interested Leaders



Talking about Nuclear Power & Climate Change

Together for a Clean Energy Future

#12
Communicating about Nuclear Waste
Clarifying Waste Options