Being a good neighbour

How to use experience from communication with stakeholders near existing facilities

Martina Bílá

Head of the Communications Department

Situation in the Czech Republic

Over 60 years of radioactive waste management

3 currently operational repositories – Richard, Bratrství, Dukovany

Preparation of the Czech deep geological repository

Our facilities and sites

Why we are interested in social aspects at our currently operational repositories

We are part of the community

We fully appreciate the huge responsibility that the given community accepts for the whole of Czech society

A part of knowledge management

Public involvement - existing repositories

Stakeholders: municipalities, the public, the regions, schools, regional scientific institutions, The State Office for Nuclear Safety, the church etc.

- We are good neighbour
- Information: Civic control commissions, information centres, events for the public - open days, presentations for schools and seniors, site visits
- Employment
- Consideration for the environment and comunity: monitoring, history, covid...

What can we use in the process of finding a suitable site for DGR?

Stakeholders: municipalities, the public, The State Office for Nuclear Safety regions, schools and universities, scientific institutions,

- Local working groups
- Expert advisory panel
- Events at the sites, getting to know our colleagues
- Information, site visits
- Respect for the community and its specificities and history

Memory of place - respect for history

- Very important topic for the Czech society
- Two of our repositories have direct links to the turbulent history of the Czech Republic in the 20th century
- Bratrství (near Jáchymov)
- Richard (near Litoměřice)

Bratrství


Důl Bratrství
Poznejte s námi dlouhé dějiny důlní činnosti v tomto údolí a otevřete kapitolu o práci válečných zajatců a vězňů ze zdejších pracovních táborů.

Bratrství

- Former uranium mine
- Forced labour/POW camp, camp for political prisoners (1946-1954)
- Radioactive waste repository since 1974
- The commitment of the state to honouring the past: memorial to prisoners, information boards - freely accessible
- Connected with the Jáchymov Hell educational trail

Richard

Richard

- 60 years of operation
- Former limestone mine, Nazi underground factory
- 4,500 people from all over Europe died during the construction of the factory
- Huge public interest in the history of the site
- We are preparing a memorial and a brochure about history focused on the history of the repository

DGR development project

How can we inspirate?

Memory of place is very important

We are interested in the history of the site

We adopt a sensitive and respectful approach to addressing archaeological sites, historical monuments, war graves, memorials, special flora and fauna, etc.

At all times, we strive to treat the candidate sites with the maximum possible consideration and respect.

Thank you for your attention

bila@surao.cz

PUBLIC ENGAGEMENT STRATEGIES AND STAKEHOLDER INVOLVEMENT

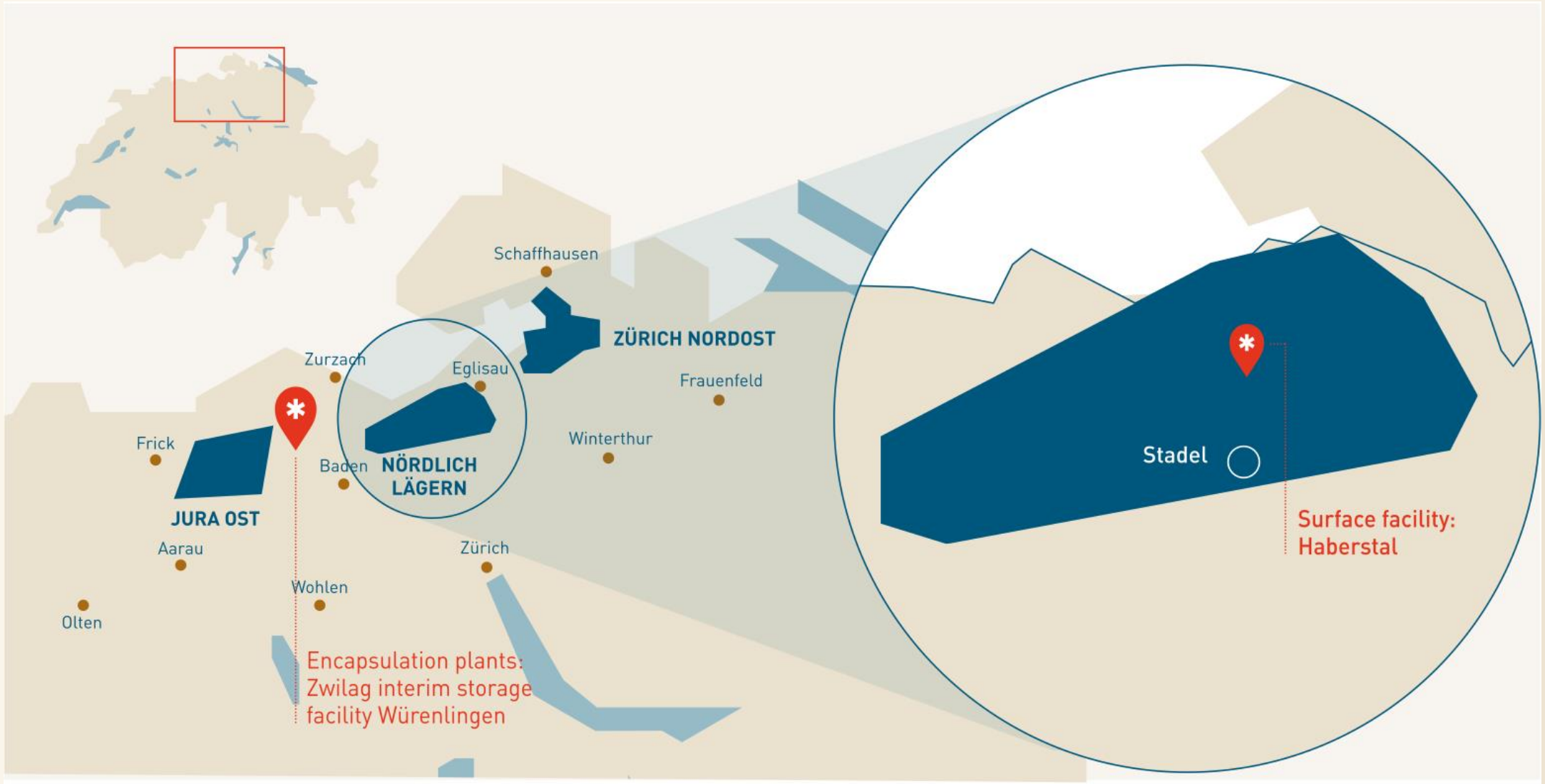
A SWISS PERSPECTIVE

ICGR / Busan, 29th May 2024

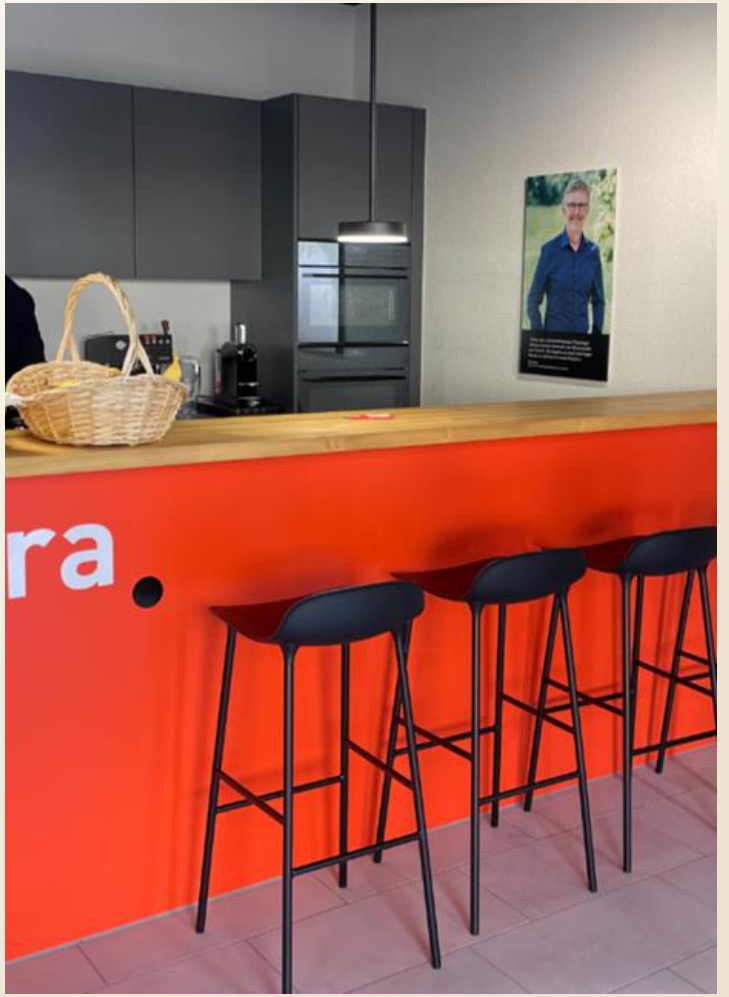
Philipp Senn

nagra.

SWISS SITE SELECTION PROCESS IN A NUTSHELL



STADEL MEETING POINT



«STAMMTISCH»

CONCLUSION

- Support transition from research to project organisation, upholding reputation earned to date (Communication & Public Affairs plays an important role here)
- Within the framework of the officially stipulated Sectoral Plan process (site selection): find creative solutions to strengthen the willingness of the local population to advance the project by assuming societal responsibility for all of Switzerland
- Consistently continue to follow proven fundamental principles: transparency, openness and dialogue at eye-level, specifically:
  - Be approachable, foster mutual personal relationships
  - Keep an open mindset, stay tolerant and respectful
  - Listen – truly listen – to each other patiently, try to see things from all perspectives

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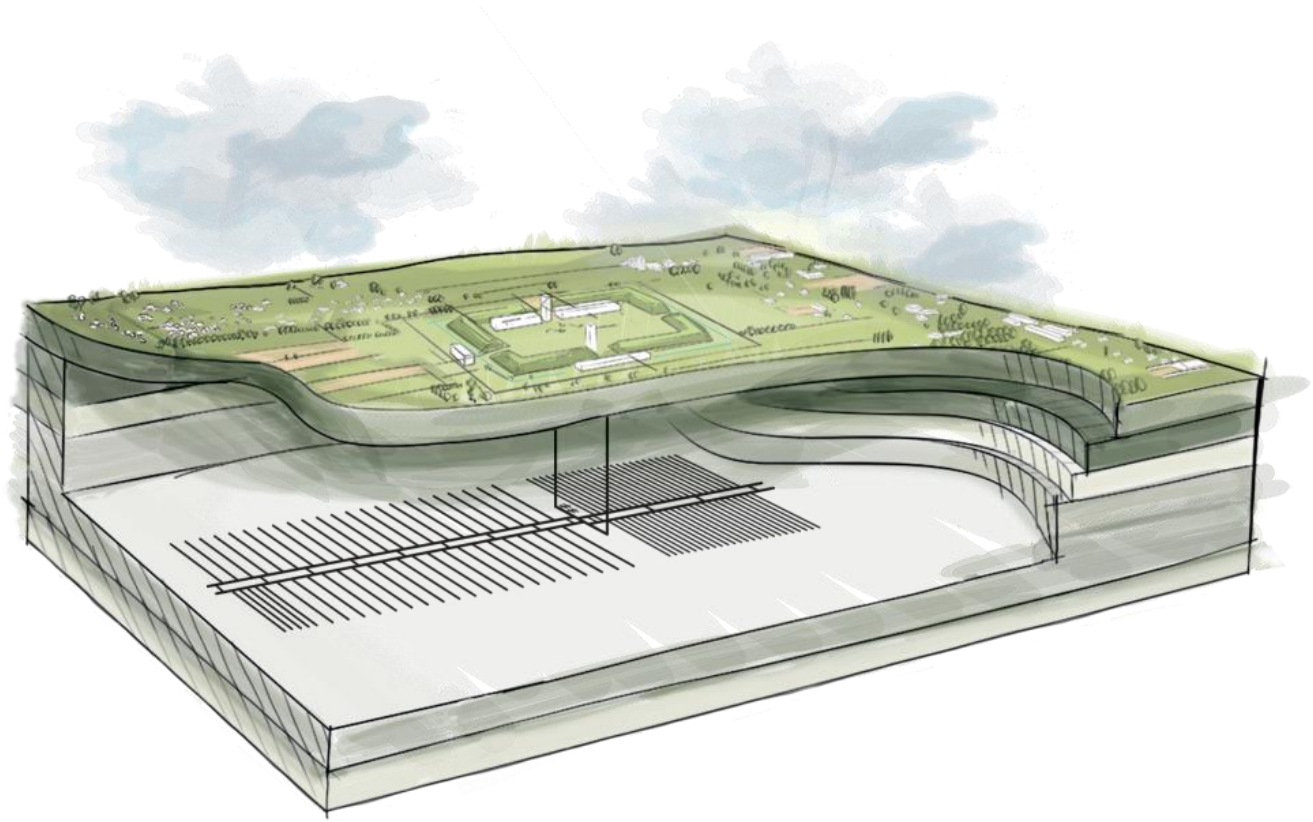
The societal debate on the future of high-level and/or long-lived waste in Belgium

Dr. Sigrid Eeckhout
Philippe Lalieux
Jan Rypens

ICGR-07, 29 May 2024

Step-by-step national policy on the long-term management of high-level and/or long-lived radioactive waste



Step 1:

Decision in principle

(Royal Decree 28 Oct 2022)

Step 2:

Decision-making process

. .

Last step:

Site selection(s)

Objectives of the societal debate 2023-2024

To prepare the second part of the national policy for the long-term management of high-level and/or long-lived waste.

- To make a recommendation to confirm or change the choice for deep disposal in the framework of the reversibility of the decision.
- To get input for the decision-making process.
  - What decision?
  - With whom should this decision be prepared?
  - Who will decide?
  - On what basis?
  - In what order?

Setting up the societal debate

ONDRAF/NIRAS

- Assigns the King Baudouin Foundation the task of organising the societal debate;
- Provides its expertise and participates in various workshops as an expert and/or observer, at the Foundation's request.

King Baudouin Foundation

- Is responsible for the design, implementation and reporting of the societal debate;
- Carries out its mission in an independent, neutral, plural and transparent manner;
- Orchestrates the implementation of the independent academic study.

NU VOOR MORGEN

Dialoog over de toekomst van radioactief afval.

PRÉSENTS POUR LE FUTUR

Dialogue sur l'avenir des déchets radioactifs.

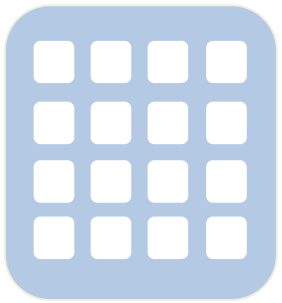
Web-site

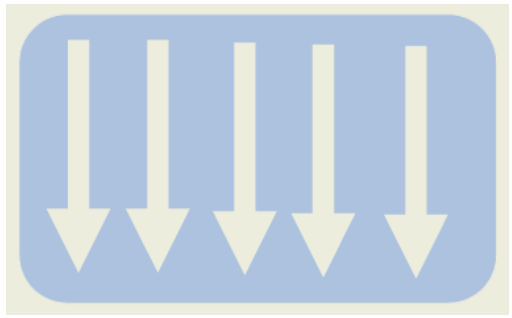
Tour of Belgium

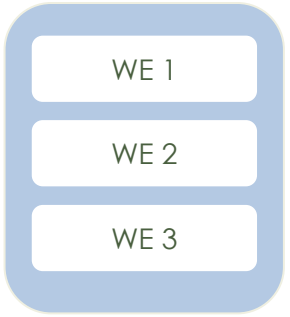
Dialogue with experts around 5 central themes

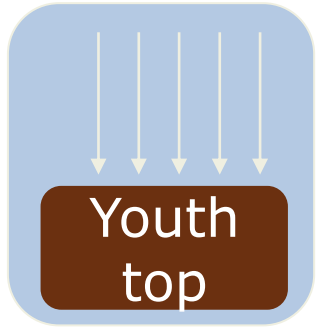
Public forum

School track









Broad stakeholder forum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Governance structure of societal debate

- **Scientific Advisory Committee**: to monitor and advise the Steering Committee on all relevant perspectives
  - technical-scientific, ethical, social, financial
- **Steering committee:** to ensure that all important decisions are made during the process
- **Independent scientific study:** to guarantee the quality of the process
  - criteria of inclusiveness, quality of facilitation and deliberation, objectivity, transparency, neutrality

Results

3 preliminary conditions

Act within an ethical framework

Create conditions for broad and sustainable participation

Adequate actors, distincs roles, transparant responsibilities

1 overarching principle

Do not allow the decision-making process to stall

3 missions

Invest in multiple scenarios and evaluate periodically

Initiate site identification

Secure financing for future generations

Fondation Roi Baudouin

Agir ensemble pour une société meilleure

Lessons learnt

- Decision in principle on **deep geological disposal confirmed**

- **Main national policy principles confirmed**:

  - step-by-step decision-making process,
  - transparency,
  - public participation,
  - reversibility and retrievability,
  - …

- **Multiple scenarios**, with emphasis on international or shared DGR

- **Safety first** - geology is the decisive factor **BUT** cannot be the only criterium

Lessons learnt

- **Ongoing decision-making process: start now**
- Need for **political commitment**: greater role for Parliament
- Greater support given to **citizens and civil society** to enable them to make their contribution
- **Independent organization** to oversee the decision-making process
- Diversified and shared **knowledge landscape**

Lessons learnt: a unique process

- **Multiple participative approaches involving citizen's, youth, experts, institutions… carried out by an independent actor**

- **Successful** societal debate:

  - Website: 100,000 unique visitors, 600 participated in online discussion platform
  - Tour of Belgium: 10 events, +/- 440 participants
  - Experts: 34 Belgian and international experts
  - Public Forum: 27 citizens
  - **Young people: 1,090 participants, 118 volunteers for Youth Summit**
  - Broad stakeholder forum: 32 participants

Way forward

- **Preparation of second Royal Decree on decision-making process** with input from
  - societal debate
  - national and international Return on Experience
  - ARTEMIS-mission December 2023
  - R&D
- **Legal SEA procedure**
  - public consultation
  - advice from SEA Committee, Official bodies (Regions, CFDD/FRDO, AFCN/FANC)

ULB

UNIVERSITÉ LIBRE DE BRUXELLES

ECOLE POLYTECHNIQUE DE BRUXELLES

Integrating ethics in the societal debate in Belgium (2023-24)

Dr. Ir. Céline Kermisch
Université Libre de Bruxelles (ULB)
Celine.Kermisch@ulb.be

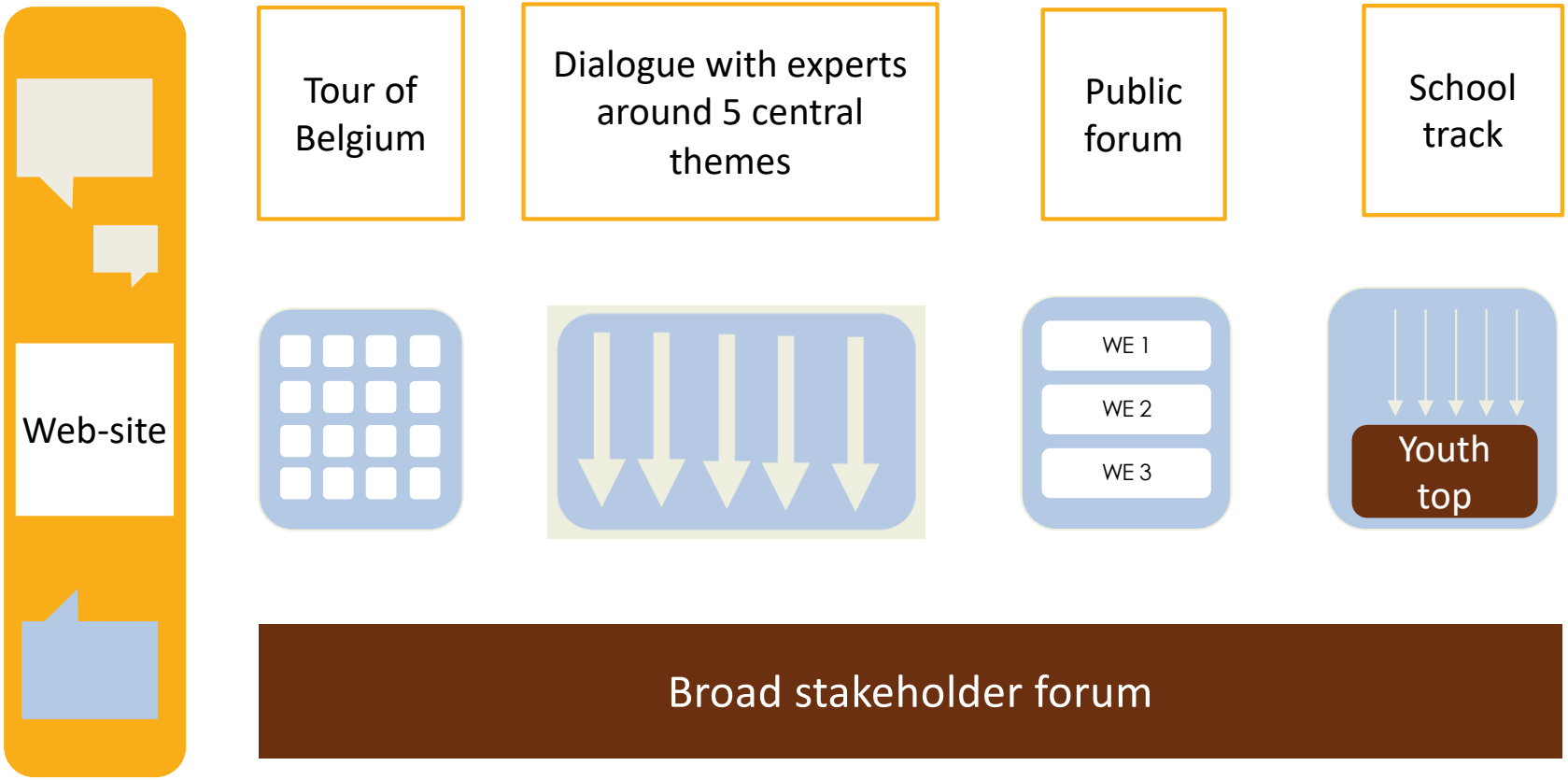
ICGR7 – Session 4A – 29/05/2025

ONDRAF/NIRAS

1 . Social acceptance and ethical acceptability

- A societal debate ? Focus on social acceptance
- Is a socially accepted project ethically acceptable?
- Far from being straightforward (van de Poel, Taebi):
  - Social acceptance refers to the fact that a technology is accepted by a community.
  - Ethical acceptability refers to a reflection on a technology that takes into account the moral issues related to it.
- 2 complementary concepts
- Good governance requires both

2 . Integrating social acceptance and ethical acceptability in Belgium



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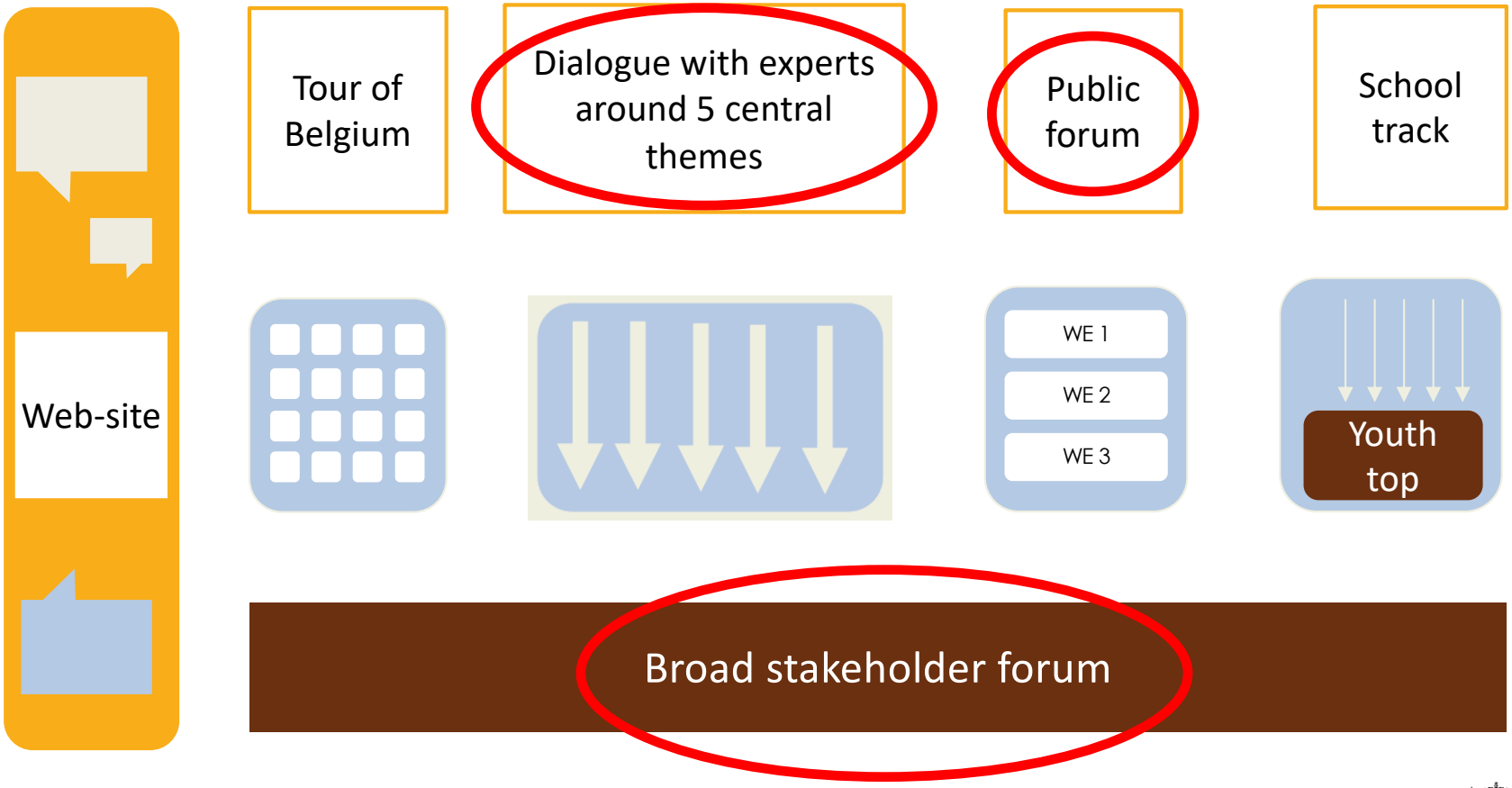
2 . Integrating social acceptance and ethical acceptability in Belgium



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3 . A path to integrate ethical acceptability and social acceptance: the example of reversibility and retrievability

Ethical analysis of reversibility and retrievability

→ Focus on retrievability

- Preservation of the autonomy of future generations
- But… introduction of ethical conflicts and problems
  - Retrievability and long-term safety
  - Retrievability and operational safety
  - Retrievability and nuclear security
  - Retrievability and undue burdens
  - Autonomy for whom?

In conclusion, retrievability from an ethical standpoint?

- Ambiguous role of retrievability:
  - On the one hand, it allows to account for the autonomy of close future generations
  - On the other hand, in the long-term, it could lead to safety and security deficiencies, and it could undermine the undue burdens principle
  - Hence, the necessity to frame temporally retrievability
- Ethical analysis → ethical dilemmas made explicit
- Where do we go from here?

Social acceptance studies of reversibility and retrievability

- Turning to social acceptance studies:
  input from citizens to address these ethical dilemmas
- Societal requirement to ensure reversibility and retrievability expressed in 2024
- Modalities (when? how?...) will be determined later on
- Hence, the necessity
  - To ensure a continuous citizen appropriation of the topic
  - To update its ethical analysis

Energy Communities Alliance

Local concerns. National impact.

PUBLIC ENGAGEMENT STRATEGIES AND STAKEHOLDER INVOLVEMENT: ADDRESSING SOCIAL, ETHICAL AND CULTURAL FACTORS IN DGR IMPLEMENTATION

Seventh International Conference on Geological Repositories (ICGR-7)

Empowering Progress in Developing Deep Geological Repositories

29 May 2024

Kara Colton
Director of Nuclear Policy
Energy Communities Alliance

Who is ECA?

Local and elected officials in communities hosting:

- Federal and private nuclear facilities in the United States;
- Government-sponsored nuclear research and development activities;
- Nuclear component manufacturing;
- *De facto* interim storage sites;
- Potential hosts for nuclear waste storage and disposal facilities; and
- Communities hosting or interested in hosting future public or private advanced nuclear projects.

Who is ECA?

Local governments have a responsibility to protect human health and the environment in their communities in a way that offers community-driven and risk-based economic opportunity.

CHAIR
BRENT GERRY
Mayor/CEO
West Richland, WA

VICE CHAIR
REBECCA CASPER
Mayor
Idaho Falls, ID

SECRETARY
CHUCK HOPE
Councilman
Oak Ridge, TN

TREASURER
RANDALL RYTI
Councilor
Los Alamos County, NM

MEMBER AT LARGE
JASON CHAVEZ
Councilman
Carlsbad, NM

IMMEDIATE PAST CHAIR
RON WOODY
former County Executive
Roane County, TN

Key Messages

- **Local government and stakeholder engagement should be considered an integral part of project planning, just like siting and licensing.**
  - Meaningful engagement takes times; needs to be transparent and iterative, especially given the multi-generational lifecycle of these facilities.
  - Providing notice is not engagement.
  - Partnerships are key.
- **Impacted communities should decide whether, and on what terms, they will host a nuclear waste facility.**
  - A project needs to be seen as contributing to the long-term social and economic well-being of the host community, Tribe, State and region.
  - Seeks volunteers.
- **Informed consent yields enduring consent.**
  - Local governments and states/regional governments must be given resources to provide education and outreach on potential benefits and risks of a project.

ECA Engagement on U.S. Consent-Based Siting

- **Nuclear Waste Policy Act Process of site selection** (1994 forward)
- **Nuclear Waste Administration Act of 2012** (S.3469)
- **Senate Discussion Draft of Nuclear Waste Legislation**, May 2013
- **Nuclear Waste Administration Act of 2013** (S. 1240)
- **Public Comment to Inform the Design of a Consent-Based Siting Process**, July 2016
- Comments to DOE on **Designing a Consent-Based Siting Process: Summary of Public Input**, October, 2016
- Comments to DOE on **Draft Consent-Based Siting Process for Consolidated Storage and Disposal Facilities for Spent Nuclear Fuel and High-Level Radioactive Waste**, April 2017
- **Consent-Based Siting Consortia Awardee**, June 2023

Successful Siting in the US

- Waste Isolation Pilot Plant (WIPP)
  - ECA members (local governments) engaged extensively in the process and are still engaged
  - Extended timeline for engagement (10+ years)
  - Intense, iterative and early outreach
  - Recognition of national need
  - Existence of a “clear” benefit for citizens of the state and local jurisdiction in which the facility was sited
  - Solid local support and champions
  - Competent technical oversight by the State of New Mexico
  - Rigorous quality assurance from the earliest stages of the project
  - Credibility

Unsuccessful Siting in the US

- Yucca Mountain/Private Fuel Storage, LLC
  - Local government or Tribal support but State opposition
  - Lack of trust
  - Lack of federal alignment
- Deep Borehole Field Test
  - North Dakota/South Dakota
  - DOE Press Release: *"It became clear that insufficient initial communication and outreach created a negative impression of the project that resulted in community opposition of the proposed deep borehole field test."*

Lessons Learned in the US

- Local government, Tribal and community support alone will not lead to successful siting and deployment of new nuclear projects.
- State (regional) support is necessary.
- Alignment with federal government is necessary.
- Seek a volunteer community (similar to Canada and UK).

DOE Awards $26 Million to Support Consent-Based Siting for Spent Nuclear Fuel

JUNE 9, 2023

Funding Provides Engagement and Training Resources for Communities Interested in Learning More About Interim Storage

WASHINGTON, D.C. — The U.S. Department of Energy (DOE) today announced $26 million in funding for groups of university, nonprofit, and private-sector partners that will work with communities interested in DOE's community-centered approach to storing and disposing of spent nuclear fuel, a process known as **consent-based siting**. DOE, along with these consortia, will continue working with communities to ensure transparency and local support. At the same time, DOE is also

ECA Path Forward on Consent-Based Siting

ECA will develop a framework for interaction around issues of storage and disposal of SNF and HLW with two objectives:

Build capacity in communities interested in consent-based siting to ensure they have the information – and informed representatives – to meaningfully engage on the issues a community will address as a potential host of a nuclear waste facility.

Facilitate deeper engagement and (re)create momentum through grants for qualifying communities that demonstrate readiness to begin localized education and outreach.

WORK ACROSS CONSORTIA TO IDENTIFY COMPONENTS KEY TO CONSENT

ECA Recommends Potential Hosts Consider:

As part of a consent-based siting agreement:

- Financial compensation and incentives
- Economic development assistance
- Regulatory oversight authority
- Operational limitations or requirements
- Enforceable milestones
- Deadline for removing waste from storage facility
- Legally binding contract with federal government and state

ECA Recommends Potential Hosts Consider:

As part of a consent-based siting agreement:

- Linking storage and disposal
- Need to amend existing agreements/statutory prohibitions
- Penalties for failure to meet obligations
- Triggers for termination
- Indemnification for communities, states and tribes
- Agreement on transportation routes
- Opportunities for short and long-term investment in the education, infrastructure and workforce for future nuclear missions.

ECA Soliciting Community Grant Applications

1 of 6 — Automatic Zoom

Energy Communities Alliance

Consent Based Siting
Community Grant Application

ECA Community Grant Application:
Building Capacity on Consent Based Siting and Nuclear Waste Management

The Energy Communities Alliance, Inc. (ECA) is soliciting local community applications for grants of an initial **$75,000** (with an option for a second round of an additional $75,000) to qualifying individual municipalities and other "Eligible Recipients" as defined below, that can demonstrate meaningful interest in building capacity through targeted education and outreach on nuclear waste storage and disposal issues; or evaluating community interest in hosting or supporting a specific spent nuclear fuel storage or disposal mission using consent-based siting.

ECA expects to provide **up to six (6) grants** this fiscal year. Awardees are required to report progress to ECA on a quarterly basis. With justification and approval, ECA will consider grant extensions of no more than six (6) months.

Applications are due no later than 5:00 PM EST on Friday, March 22, 2024. All applications must be submitted to bulletin@energyca.org.

COMMUNITY GRANT OBJECTIVES

Grants to **Eligible Recipients** will be awarded based on the best use of funds, as determined by ECA, in ECA's sole and absolute discretion, to meet the following goals:

- Create, organize and lead meaningful, inclusive community and stakeholder engagement opportunities that elicit public values, interests, concerns, and goals related to spent nuclear fuel and nuclear waste management

Nuclear Communities Global Partnership

Energy Communities Alliance
Local concerns. National impact.

gmf
GROUP OF EUROPEAN MUNICIPALITIES WITH NUCLEAR FACILITIES

CANHC
Canadian Association of Nuclear Host Communities

** Global Partnership is open to local governments around the world **

Global Partnership: Five Principles

1. Engage municipalities in the process.
2. Create economic opportunities in the local community.
3. Provide resources to the community to participate in the project.
4. Protect human health and the environment.
5. Educate and train workforce.

Challenges Ahead

- **Allowing flexibility –** There is no "one-size-fits-all." The conditions under which a specific community will take on a nuclear mission needs to reflect the priorities and vision of that community.
- **Building Trust**
- **Building capacity - Informed consent yields enduring "consent":** Local governments and states must be given resources to provide education and outreach on potential benefits and risks of a project.
- **Creating partnerships around/support for a project**
- **Understanding how decisions are perceived** – "Risk" (real or perceived) must be addressed, seen as based on sound science, and there must be transparency at each step.

Challenges Ahead

- **Addressing environmental justice and equity** – There should be no "one- size-fits-all approach. Stakeholders around potential new nuclear development must be engaged in defining, evaluating and determining how to mitigate environmental justice and equity issues.
- **Who Provides Consent -** Local governments are uniquely positioned to negotiate on behalf of impacted community, as is the governor of a state. Federal signatory?
- **Stakeholder vs. interested party**
- **Process to withdraw consent** should be as involved, transparent and rigorous as the process is to achieve it
- **Politics/Policy/Funding**

Questions for Discussion

- What opportunities exist to create a business case/value proposition?
  - Is reprocessing a necessary part of the discussion?
  - Is reprocessing feasible in the US?
  - How do we create incentives for communities to host a site (ex. GNEP included storage and reprocessing as a possibility – what can we learn.
- How do we address legacy trust issues and rebuild it with state/local/Tribal governments that will "consent."
- What can we do under existing legislation?
- Will inaction impact new and advanced nuclear development?
- What changes if we take a more holistic approach – use support for new nuclear technologies to force the waste discussion?

Energy Communities Alliance

Local concerns. National impact.

Thank you!

Kara Colton
Director of Nuclear Policy
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(703) 864-3520
kara.colton@energyca.org

Energy Communities Alliance

Local concerns. National impact.

Resource Slides

How to Approach Communication and Engagement

Company/Federal Government/Regulator must engage the community (and vice/ versa). Announcements are not engagement	Build a working relationship and provide outreach opportunities through various channels	Definitions matter – everyone needs to be on the same page
Know and understand all goals (developer, regulator, regional/state/Tribal/local government, stakeholders)	Communities need resources and experts to engage	Define opportunities, risks, timelines – be truthful and realistic
Failure to make decisions leads to failures	Be Organized	**Repeat, Repeat, Repeat**

ECA Engagement on Consent-Based Siting

Testimony to the Senate Committee on Energy and Natural Resources regarding the Nuclear Waste Administration Act of 2012 (S.3469)
September 12, 2012

ECA Recommended:

- Congress and the Administration Need to Re-Engage Communities on HLW Issues
- Support the Inclusion of Local Governments in the Decision-Making Process
- The Siting Process Must Allow Affected Communities to Decide Whether, and on What Terms, the Affected Communities Will Host a Nuclear Waste Facility
- Use a Phased, Adaptive Approach to the Sequence of Waste Disposition – Move Defense Waste First
- The Impacts of Transportation on Local Governments and Communities Need to Be Addressed
- ECA Can Support a New Organization to Manage Nuclear Waste

ECA Engagement on Consent-Based Siting

Comments on Senate Discussion Draft of Nuclear Waste Legislation
May 24, 2013

ECA Recommended:

- Local governments must be included throughout the entire decision-making process.
- A consent agreement must be legally enforceable and reflect the terms and conditions under which a community will agree to host a nuclear waste facility.
- Any new governance structure must aim to limit political influence on nuclear waste management decisions as much as possible to allow the process to move forward once agreed upon by all parties identified in legislation.
- A local government representative should serve on any newly created oversight board to ensure local perspectives and concerns are identified and represented.
- The federal government must indemnify a local government for any accidents or releases that impact their community.
- Disposition of defense waste must be considered a priority and included as part of a phased, adapted approach to the sequence of waste disposition.
- Legislation must consider and address the impacts of transportation on local governments.

ECA Engagement on Consent-Based Siting

Testimony before the Senate Energy and Natural Resources Committee on the Nuclear Waste Administration Act of 2013 (S. 1240), July 30, 2013

ECA Recommended:

- Local governments that are or may become hosts must be included throughout the entire decision-making process.
- A consent agreement between local government, state and a federal entity must be legally enforceable and reflect the terms and conditions under which a community will agree to host a nuclear waste facility.
- On governance, local communities need to better understand how a new comprehensive nuclear waste policy will be implemented and by whom.
- Disposition of defense waste must be considered a priority
- Resources must be provided for educating local communities on the technical, health and safety and other issues related to nuclear waste.
- Legislation must consider and address the impacts of transportation on local governments.

ECA Engagement on Consent-Based Siting

Public Comment to Inform the Design of a Consent-Based Siting Process, July 29, 2016

Comments to DOE on Designing a Consent-Based Siting Process: Summary of Public Input, October 30, 2016

Comments to DOE on Draft Consent-Based Siting Process for Consolidated Storage and Disposal Facilities for Spent Nuclear Fuel and High-Level Radioactive Waste, April 14, 2017

ECA Recommended:

- Finish the Yucca Mountain licensing review and pass legislation to modify the Nuclear Waste Policy Act (NWPA) and allow alternative sites – including Yucca Mountain – for interim storage or permanent disposal to also be considered.
- Continue working with local governments to identify components for consent.
- Identify the necessary process – including the order that each step should be accomplished – to move a consent-based siting process forward.
- Congress/Administration must provide resources and funding for education, outreach, feasibility studies and research and development aspects for waste management and disposal. In addition, DOE must use this funding to assist local governments and communities interested in hosting sites or involved in waste management and disposal missions to educate the local community and hire independent third-party scientists and engineers.

ECA Recommendations

- DOE should develop a list of suitable disposal mediums (salt, granite, etc.) and indicate where they exist to inform potential public interest and feasibility studies*
- A new entity focused solely on HLW/SNF nuclear waste management should be established and empowered to consent on behalf of the federal government.
- DOE should develop an initial list of the type of incentives/compensation for host communities for taking on this mission.
- DOE, the Nuclear Regulatory Commission (NRC) and the Environmental Protection Agency (EPA) should begin to develop scientifically-based health and environmental standards, model state laws and regulations to guide the siting process.
- If tangible progress cannot be made in a timely manner, the federal government should provide funding for communities that have become de facto interim storage sites for defense HLW and commercial SNF at decommissioned nuclear reactor sites. The funds will be used to help those communities offset the impacts of storing waste beyond the timeframe originally expected.

* *Only applies to siting a deep geologic repository, not an interim storage facility*