

**Threats for the future of nuclear.
Meeting the challenge.**

by Serge Prêtre

Abstract

Many possible causes for a phase-out of nuclear energy are listed first. Then the question is raised if all these possible causes might have a common denominator. In other words: Is there a root cause behind all the visible causes? The author proposes as direct or indirect root cause "Fear and mistrust" and the inability of all institutions to cope with that problem. He explains that this originates from the collective unconscious which is still loaded with archaic contents. As the collective unconscious will slowly integrate the facts of the modern world, indifference will come and the fear and mistrust will fade away. But this process will need another 2 or 3 generations. In order to accelerate this process the author proposes the following 5 actions:

1. **Listen to people.** By being listened to, people can express their fears and mistrust and by doing so unload their frustration. After this venting the rationalisation can start.
2. **Citizen panels.** Have totally lay persons inform themselves on a critical topic like "What solution for nuclear waste?" and come to conclusions which are then presented to the media.
3. **Stakeholder involvement.** Invite interested or concerned persons of very diverse background to build a standing committee and consider its recommendations prior to making your decisions.
4. **New risk governance.** Replace progressively the top-down approach "Decide -- Announce -- Defend" by the bottom-up paradigm "Announce -- Discuss -- Decide".
5. **Cultivate confidence.** As the confidence in your organisation might get lost overnight be prepared to manage the credibility crisis, and minimize in advance depth and extent of the loss of confidence.

The author believes that such actions and attitudes contribute to reduce the probability of a phase-out of nuclear energy.

Threats for the future of nuclear. Meeting the challenge.

by Serge Prêtre

- I. Possible causes for a phase-out of nuclear energy.
- II. Common denominator to all causes.
- III. Meeting the challenge. (5 ideas!)

I. Possible causes for a phase-out of nuclear energy

- Major accident consequences are too heavy
- Radwaste / long term / future generations
- Economy / big business / globalization
- Financial aspects / insurability
- Terrorism / war / proliferation
- Climate change is not man-made
- Electricity production must be decentralized
- Human being is not mature enough
- Degradation of safety / decadence

II.

Common denominator to all possible causes for a phase-out of nuclear energy

Directly or indirectly it could be:

Ⓐ

The fear of radiations, still perceived as mysterious and extremely dangerous.

Ⓑ

Mistrust toward the operators of NPP and the safety authorities.

and

Ⓒ

The inability of all institutions to cope with these problems.

Why so much fear? Why so much mistrust?

Nuclear Energy is a revolutionary novelty perturbing the collective unconscious that is also a repository for archaic contents. The contents of the collective unconscious influence the dominant ideas over the course of the centuries.

(Archetypes = mythological motifs:

The Hero, the Dragon, Hell, Purity, Sin, Divine punishment, the Sorcerer, Magic forces, etc.)

Possible contents of the collective unconscious

- Transforming matter is a sin.
- Nuclear energy is too powerful and therefore reserved for the domain of God.
- Radioactive waste is an irreversible stain on our planet Earth.
- Nuclear energy is a pact with the devil.
- Nuclear energy has associations with Hiroshima and Nagasaki.
- Man shall not play the sorcerer's apprentice.
- Nuclear energy is simply immoral.

Influence of the collective unconscious

We are living in democracies. In the end, it is the people who vote or elect and decide on the future of nuclear energy.

In casting their vote, they are influenced by the contents of their unconscious which can have more weight than rational arguments.

Remember: Humanity has just emerged from the Middle Age!

III.

Meeting the challenge

What could or should be done?

- a) Nothing
- b) Listen to people
- c) Citizen panels
- d) Stakeholder involvement
- e) New risk governance
- f) Cultivate confidence

III.

Meet the challenge!

What should be done?

a) **Nothing** If you are patient!

Time will do the job. The collective unconscious will slowly integrate the facts associated with nuclear energy. Indifference will come. And nuclear energy will become understandable and even trivial. But this will need time.

III. **Meet the challenge!** What can be done?

b) **Listen to people**

Help them to express their fears and their mistrust. This emotional process will accelerate the possibility of rationalisation and will help to put fears and mistrust in perspective.

The listening process rather than the answers given to questions is what really counts first!!

„ I have not been listened to „

- That is a very heavy reproach associated with feelings of disappointment, anger or rage.
- Such people would vote against nuclear to vent their frustration.
- What they want is not impossible to realise. They want to be listened to with due attention and respect.

to listen to people is **not**

- to inform them.
- to try to convince them.
- to bombard them with arguments.

to listen to people is rather

- to acknowledge their fears, disappointments, anger and rage.
- to give them the possibility to open their “overpressure relief valve” and to let the steam out.
- to be alert to catch their deeper messages.

What would be the challenge?

- To recruit, teach and train many good **listeners.**
- To engage them in thousands **small group meetings** (not more than 15 persons) organised in villages, towns, schools, companies, hospitals, political parties, clubs, etc.
- To continue this job over many years.

Meet the challenge!

What can be done?

c) Citizen panels

Give to an independent company the mandate to organize **citizen panels** on topics like:

- What to do with radioactive waste?
- Sources of sustainable electricity production?
- How much emergency preparedness?

The citizen panels must have a large autonomy and present themselves the results of their deliberations to the media.

Citizen panels

Participants:

- lay persons (~ 15) without any connexion to electricity production or nuclear energy (they are not stakeholders!!)
- a good mix of profession, social class, sex, skin colour, geographic origin, political tendency,.....
- all being motivated persons, ready to involve themselves and to accept democratic procedures

Citizen panels

Working Procedures:

- The members organize themselves and elect a chairman, a secretary and a treasurer.
- They decide on meeting dates, agenda and meeting places.
- They invite speakers of their choice and organize audits.
- They manage a budget.
- They can use a secretariat offered by the organizing independent company.
- They produce a final report and present the results to the media.

III.

Meet the challenge!

What can be done?

d) Stakeholder involvement

Invite interested or concerned persons (stakeholders) to build and participate in a standing stakeholder advisory committee or a consensus seeking committee. This committee should meet periodically, discuss actual topics and make recommendations. Consider these recommendations with respect and use them by making your decisions.

Stakeholder involvement

Is useful for:

- Defining better what the real public interest is
- Leading to more robust decisions
- Helping resolve long-standing conflicts
- Helping restore trust
- Building capacity for solving problems of the future
- Educating and informing the public

Stakeholder involvement

Possible criteria for the choice of participants:

- Representative of interest groups
- Strong motivation (constructive!)
- Fairness
- Sincerity
- Share a basic set of values
(not fundamentalist; not sectarian; not fanatic)
- No hidden scenario
- Capable of accepting a consensus

Depth of stakeholder involvement

The stakeholder participation process:

1. Must be done.
2. Must be seen to be done.
3. Its results will be considered.
4. Its results will be integrated in the decision making process.

Stakeholders involve themselves according to the importance they receive

Sincerity of the lead organisation

- The officials of the organisation leading the stakeholder participation process must sincerely believe in the benefits of this process.
- If the stakeholders get the impression that this process is a masquerade or an alibi or just a pretence of public participation, then the process has already failed. It is not possible to simulate sincerity!

Values similarity

1. Identify, clarify the values of each stakeholder (beliefs, intentions)
2. Discuss these values and understand them
3. Build a minimum set of common values (common denominator)
4. Make sure that there is a broad consensus on this shared set of values
5. **Only then:** The stakeholder participation process can be successful

III. **Meet the challenge!**

What can be done?

e) **New risk governance**

- Toward participative democracy
- Dialogues, respect, acknowledgement, consensus
- Transparency, sincerity, fairness, trust
- Decentralized and pluralistic expertises

A very slow and time consuming process with acceptance emerging at the other end.

From the old to the new risk governance

- Consider the public and all stakeholders as mature and responsible.
- Avoid the „Don't worry, we'll think for you“ stance.
- Encourage the public (or discussion groups) to think about the problems and to discover that reality is neither black nor white.
- Explain the **uncertainties** and confess your **doubts**.

obsolete risk governance

DAD = Decide → Announce → Defend

new risk governance

based on stakeholder involvement

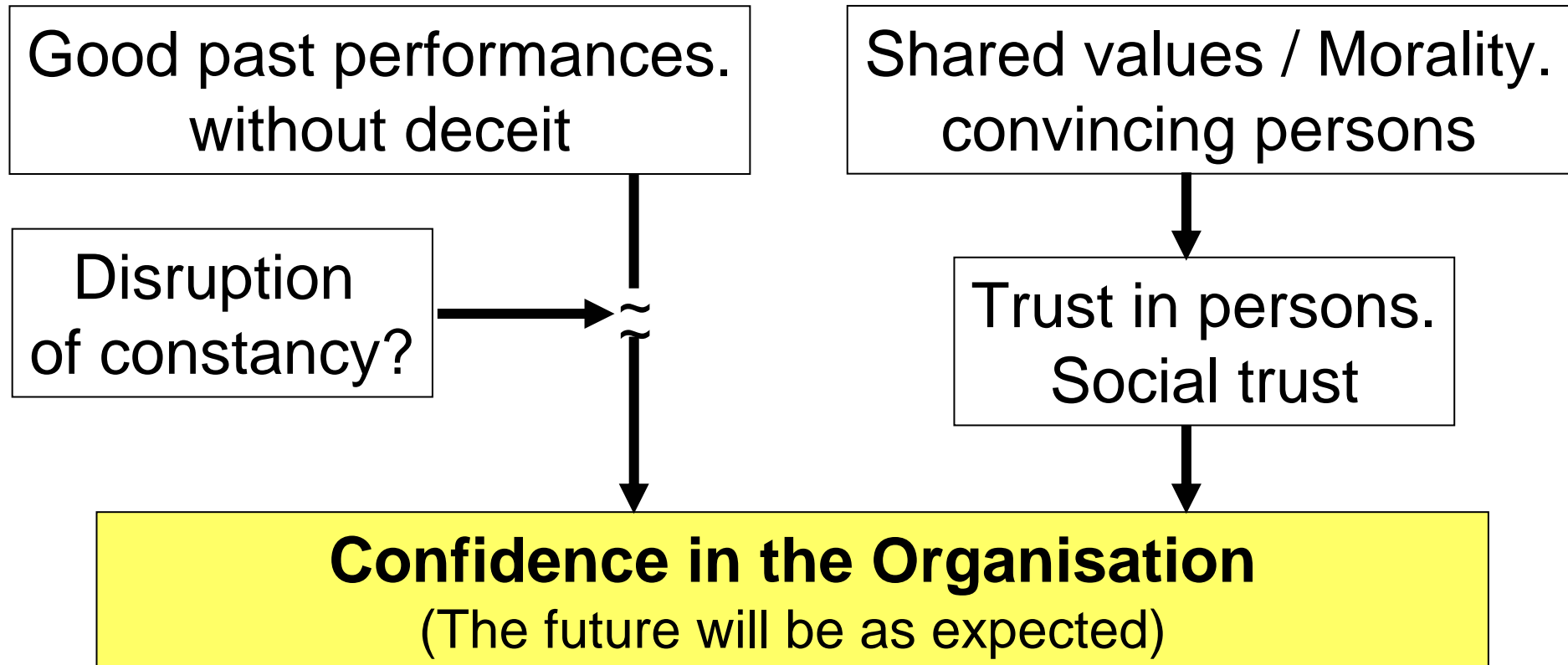
ADD = Announce → Discuss → Decide

Bottom-Up instead of Top- Down approach

III. Meet the challenge!

What can be done?

f) Cultivate confidence



The probability to lose the confidence is very high



Credibility crisis

- **Minimize in advance depth and extent of the credibility loss.** (→ Keep the expectations of the public concerning your performances at a reasonable level)
- **Prepare, already now, your image repair discourse.** (→ Establish trust in persons in order to restore confidence in the organisation)

Minimize in advance depth and extent of the credibility loss

- Inform with humility. Avoid being overbearing or arrogant.
- Acknowledge the scientific uncertainties and confess your doubts.
- Explain that the persons of your staff are competent and highly motivated for safety but not perfect.
- Admit that your surveillance and controls cannot cover 100 %.
- Admit that incidents and accidents are still possible even if their probability is very low.

→ Keep the expectations at a reasonable level

Prepare now your image repair discourse

- Take the initiative to communicate.
- Admit, apologize and accept responsibility.
- Don't blame anybody.
- Stay by the truth. Give a complete message.
- Don't be defensive - Don't trivialize.
- Tailor the discourse to the perceived offence rather than to the objective gravity of the event.
- Demonstrate seriousness and a firm commitment for safety.
- Repair damages, prevent recurrence and explain your actions.

Little by little collect trust in order to restore confidence in the organisation

- Invite known stakeholders to a seminar. Use the good contacts you had already establish earlier. Carry out a risk-dialogue with them. (Stakeholder involvement)
- Be patient, credible, honest, transparent, understanding without being hypocritical nor naive. (listen)
- Launch an independent investigation and invite several experts with diverse background. (pluralistic expertise)
- Do not push too early the return to normality. Let first a mourning process take place. (Trust needs time!)

Contribute to reduce the probability of a phase-out of nuclear energy in your country

- Have good listeners engaged in listening the concerns of people.
- Arrange the organisation of citizen panels on critical topics.
- Promote stakeholder involvement and take stakeholders seriously.
- Introduce and support the new risk governance in your field of influence.
- Cultivate confidence and prepare your image repair discourse.

