

# Barriers to public outreach and education For the nuclear industry

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# What I'll talk about

- The nuclear renaissance: why it might not come.
- Why what's being done isn't working.
- What we could do instead.
- Recommendations for the CNS and the nuclear industry.

Keep doing what you're doing, you'll keep getting what you've been getting.

- Until the nuclear industry changes how it handles public perception, public perception will never change.
- Without changing how the general public perceives nuclear power, nuclear power won't grow.

**F. E. A. R.**

# F. E. A. R.

- F: False
- E: Evidence
- A: Appearing
- R: Real

# False Evidence Appearing Real?

- People (wrongly) believe:
  - Nuclear power plants are always on the verge of blowing up like a bomb, or they blow up in a barely controlled way.
  - Lots of people died in Three Mile Island.
  - Thousands of people died in Chernobyl.
  - Huge areas of farmland were permanently ruined.
  - There are dozens of other disasters that no one talks about that killed even more people.
  - There's no safe way to handle nuclear waste.
  - There's no good plan for dealing with nuclear waste.
  - The nuclear industry will say anything to make a buck.
  - And many more!

# F.E.A.R.

- People are uncomfortable with what they don't understand.
- The technology
  - Is complicated.
  - Involves scary things like radiation.
  - Has few vocal advocates outside of the industry.

# Their response?

- F: Forget
- E: Everything
- A: And
- R: Run!

# The way to beat this?

- F: Face
- E: Everyone
- A: And
- R: Respond!

# Burden of proof

- The responsibility belongs to the nuclear industry.
- Many people in the nuclear industry want people to take the initiative, and this isn't fair.

# What's going on now isn't enough

- Websites are insufficient, even good ones.
- Commercials on TV are insufficient.
  
- Comfort comes when they talk about the subject matter and build up relationships with people that they trust.

# The current state

- People don't trust the nuclear industry.
- The nuclear industry is unwilling to value public perception sufficiently.
- The anti-nuclear movement is more committed, presenting information better and is winning.

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If the nuclear industry doesn't change  
what it's doing

The anti-nuclear movement will  
continue to gain more trust  
And a stronger following.

# But wait, we explain things clearly!

- We have websites and people going around and talking about nuclear power.
- But, what does it look like to an outsider?

# The Montillation of Traxoline

It is very important that you learn about traxoline. Ceristannians process large amounts of fevon and then bracter it to quasel traxoline. Traxoline may become one of our most important senaus in the future because of our depletion of geological repositories of zionter leeles.

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## 2. Why is traxoline important?

# Frightening

- The most frightening thing is that you probably could answer those questions.

# So...

- Do you have any idea what Traxoline is?
- Do you care?
- Why am I wasting your time with this?

# Is this clear to you?

It is very important that you learn about Uranium. Centrifuges process large amounts of Uranium Hexafluoride and then isotopically separate it to enrich Uranium. Uranium may become one of our most significant power sources in the future because of our depletion of geological repositories of fossil fuels.

# Public perception

- Reality isn't nearly as important for determining people's reality as their perception of reality.
- Giving them information that they don't think actively about will not change their mind, even if they can recite it back to you.

# Long term plans

- Short term solutions like commercials will only provide short term results.
- Long term results require relationships built over time.
- This takes money, effort, energy, people and most of all more time!

# People believe what they talk with their friends about

- There's a strange story about podiatry in Northern Ontario.
- A librarian learned that people seem to retain and believe information that they talk about with people that they like.

# Preconceived notions

- People don't change their preconceived notions simply by being told that the notions are wrong.

# Politically unfeasible

- When people lose their focus on nuclear, especially trash talking about a particular political party or the stupidity of global warming, it hurts the cause.
- Many people don't want to support nuclear because it's supported by a particular political party. It needs to be made accessible.

# Admit to mistakes and ignorance

- More intimacy will be formed when people cop to being wrong, and are clear and honest about it.
- Give a list of reasons why nuclear might not work and ask people what they would suggest. Admitting ignorance is a great way to show respect for your audience.

# Stop having debates, have conversations!

- People want to be listened to.
- The pro and anti nuclear debate doesn't leave room for people with genuine fears and concerns.
- Skeptics get classified with deniers. Give them the space and respect to be cautious and curious.

# Old model

- A person knowledgeable about Traxoline gets up and talks about how it's montilated.

# Possible Model

- Someone in the nuclear industry says: “You know, I'm curious what you think about nuclear power. What are your concerns?”
- Then the knowledgeable person has to *listen* and respond appropriately!
- Ask them how to start conversations, it might encourage them to talk with other people.

# The success of the nuclear renaissance

- This will only go forward if people outside the industry are having conversations.
- The industry will always be looked at by outsiders as biased.

# When at the ATA

- Spontaneously, without anyone knowing of my affiliation someone said: “That's as stupid as trusting the nuclear industry about nuclear power.”

# The audience isn't stupid, but knows less than you think they do

- Talking down to an audience alienates them.
- BUT! Most people don't understand:
  - The difference between energy and power
  - The difference between energy and electricity
  - What radiation is
  - Who to trust about nuclear

# Recommendations

- Get ~ a dozen people on a CNS education committee
- Have them meet 2x a year, in person, once at NEO, once elsewhere (smaller group)
- Give them a budget of ~\$20,000/year to work on projects.
- Include largely non-technical people
- Experts are often inflexible, frustrated and intimidating.

# Recommendation

- Hire communications people to look at what the anti-nuclear lobby is doing right.
- Do a survey to find out what people believe about nuclear power.
- Find out where most people get their information about nuclear power.
- Target other engineering and scientific societies first.

# Young people

- Get student chapters of CNS going.
- Have them do outreach
- Students are more believable than engineers or scientists.

# Target

- UNENE needs to start offering two courses for undergraduate levels:
  - Introduction to energy
  - Introduction to nuclear power
- This course should be made available online and on several campuses across Canada
- Aim at teachers, journalists, business students

# Communication

- Communication is like safety.
- It has to happen at every stage not just
  - When we feel like it
  - When we have extra money
  - When we're trying to build a new plant

How will you respond to  
F. E. A. R.?