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## Lessons Learned? Selected Public Acceptance Case Studies Since Three Mile Island

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This paper will present an overview of the present situation, some recent polling survey information, and then look at lessons learned in terms of selected case studies and some global issues over the 22 years since the Three Mile Island (TMI) accident. That is quite an ambitious topic but there are some important lessons we can learn from the post-TMI era.

With respect to where we are today, clearly the post-TMI era has been a roller-coaster one for the nuclear industry, certainly in the USA. It has been more down than up. As we look ahead to the coming century, things are turning in the right direction, or at least stabilising. We are not hearing about plant shutdowns, but we are not hearing about plants being built either. In Europe perhaps the roller-coaster is continuing to some extent, although France of course has a very stable programme, while Japan is still building plants.

It has been said that the resurgence of nuclear energy is inevitable. I am not sure I totally agree, but I think the prospects are improving. The lynch pins of that are safe operation and economics. All the efforts in public affairs, communications and public acceptance cannot gloss over shortcomings in safe operation of nuclear facilities and in economics. If the value is not there, you are not going to create that value.

However, the industry has made a persistent public acceptance and communications effort. It has not been spectacular but it has made steady incremental gains. Certainly some areas have borne fruit, although in other areas it has been up and down.

The strength of these public acceptance gains over the few years, which have also seen increased optimism about nuclear power, remains to be seen. The question is really, if there was another accident like TMI in the United States how would we follow that, are we resilient enough to take that kind of hit? I think the verdict is still out on that.

In terms of public opinion polls, generally in the USA support for nuclear has not been a majority, but it depends on how you ask the question. If you ask, "Do you favour nuclear energy?", you get a higher proportion of people saying they are supportive. If you ask, "Do you support nuclear energy?", you get a lower percentage in favour. In terms of opposing, I do not think it really matters whether you use the term "oppose" or "do not favour", the result is more or less the same. As an example, a March 1999 Associated Press poll in the USA which asked "Do you support or oppose using nuclear power to generate electricity?" found 45% supporting, 31% opposing, and 23% not knowing.

In the UK, the division of public opinion is about a 28%/25% split with supposedly about 45% undecided. Poll support for nuclear has been strong in

France, to the extent that data is available. In Japan, nuclear energy seems to be holding its own in public support despite some recent incidents which have shaken the confidence of the general public.

The perception gap which has been identified through Nuclear Energy Institute polling is still with us. For example, in a June 1998 survey of US college graduates, which is a favourable group for the US nuclear industry, they supported nuclear energy almost two to one, with 61% supporting nuclear and 34% opposing. But when this group was asked what they thought their friends and neighbours felt, they thought that 62% opposed nuclear energy and only 20% supported it, which was diametrically opposed to their own thinking.

What are the reasons for the perception gap? What focus groups tell us is that their perception is that others only see the dangers of nuclear power. They think that negative media coverage means negative public opinion, and since they see a lot of negative media coverage they assume that all their friends and neighbours are opposed to nuclear energy.

There are various aspects to this perception gap. It is probably a given that excellent performance will never be front page news. We are not seeing the economics of nuclear, safe operating performance, or nuclear power's part in electricity supply written up in the media. Making current nuclear power plants more visible would go a long way to ease the perception gap. We really do need to take our case to the public, and more communications about the benefits would be helpful to solidify support. This is fairly pragmatic stuff, but you cannot run a public campaign by stealth.

Let's consider nuclear transport as a case study. Transportation of nuclear materials has occurred with great frequency, things have gone well. You have safe operations and economic value, but with a low profile. What you really have is a stealth campaign. The public is not hearing about what is happening in nuclear transport. They are not seeing these shipments go through their neighbourhoods, or learning that these are being done safely. That is all part of the strategy. But when there is an incident there will not be much resilience there in terms of public education. Ultimately, if there was an accident with transport, it is going to be brought to the public's attention, and they have not been learning about this incrementally.

I have deliberately not talked about the French programme here because that is in itself a whole case study. Certainly France has an outstanding programme, and they have done the five things that you really need to do to have a successful programme. These five elements in my view are:

- safe operations,
- favourable economics,
- visibility,
- an active outreach programme,
- passion.

In France, a whole generation was educated starting in the third grade of high school about how France needed to have other energy supplies, that fossil energy was an offshore resource. It is continuing with the current generation, but probably not with the same forceful approach. The other thing you have also got in the French programme is passion. You have a desire for energy

independence, and nuclear energy certainly is the key to independence. So the French programme has the key elements to overcome a perception gap.

In August 2000 we obtained some new focus group results among US nuclear professionals, including a high proportion of engineers. We sought to find their perception of nuclear industry public acceptance and communication programmes, and how important they think these are.

With respect to both maintaining existing plants and building new plants, it was interesting that even among this technical group the feeling of over 80% was that communications are extremely important or very important. So there was recognition that effective communications are a key element, in addition to safe operations and good economics.

With respect to how well the industry is doing in conveying the safety of nuclear operations, among this group 80% felt that it was at least average/fair. In terms of conveying the overall importance of nuclear power, again the focus group felt that the industry was doing a respectable job, with 75% finding it at least average/fair. Going on to conveying the importance of nuclear to the environment, perhaps because the group had a higher expectation here, the feeling was that in many cases the industry was not excelling, with only 10% thinking a very good job was being done.

In terms of conveying the need for a new generation of nuclear plants, I do not think anyone is really espousing that message too effectively, and that showed up in the focus group. None of the group thought a very good job was being done on this. These results reflect the US perspective, but I think that there are lessons across the board here internationally.

On local outreach programmes, most of the focus group thought individual plants were doing a very good job. Naturally enough, if you have got people from the local community working at the plant, you have got jobs and other economic benefits, which are tangibles that can enhance public relations and public perception.

On how the focus group thought the industry handles the media, there was a split. About 55% thought the industry was doing a very good or average job with respect to media relations, with 40% thinking that handling of media relations was fair or poor.

Looking at the handling of public acceptance or communications in the aftermath of specific incidents, industry efforts after Three Mile Island and Chernobyl were judged to be fair or poor. With respect to some of the recent incidents in Japan (which interestingly became the subject of cocktail conversation in the United States among decision makers and opinion shapers) and to plant specific incidents, the focus group felt that the industry had done a better job in handling things.

We also asked this focus group which person do you think of when you think of nuclear energy. About 37% said no-one, and those who gave a name were fairly evenly split among President Carter (10%), Albert Einstein (14%) and Admiral Rickover (16%). Clearly there is no single human face for nuclear energy, at least not in the USA.

This was also supported by a 1992 focus group finding where they asked the group, if nuclear energy was a person, what would that person be like? The result was: serious, intelligent, dangerous, forceful, dishonest and unpredictable. Some of these characteristics are really frightening and clearly when the public thinks this is nuclear energy's persona then we have got a real problem, because four out of those six are really not good.

Going back to the August 2000 focus group, not surprisingly 90% thought the media was biased or hopelessly biased with respect to their coverage of nuclear energy. There was just a small minority who thought it fairly balanced.

Turning now to selected case studies. I will not focus on what happened in these cases, but on the conclusions one can draw. Chernobyl demonstrated that national incidents could have global impact. Clearly you cannot assume that something which happened somewhere else can be ignored. Chernobyl certainly had an impact on the US market, on the Japanese market, and it is still having an impact today. Even the word Chernobyl has entered into the nomenclature as common jargon.

Chernobyl also taught us that nuclear industry fortunes are tied to national idiosyncrasies. Clearly the way that event was handled was typical of how such events are handled in certain parts of the world. That is not to say that the way the USA manages crises is any better, certainly TMI proved that.

Triaging will occur if necessary. In the Chernobyl case the US industry moved very quickly to portray this Russian reactor as very different from US plants — which of course it was. Rather than not saying anything about it, the US industry tried to draw a line in the sand in terms of the difference between the technologies. I think this was fairly successful in mitigating the damage. I was at the US Department of Energy at the time, and we were taken aback by the commercial industry when it pointed out that the only graphite reactor in the USA was a DOE reactor at Hanford, Washington.

Obviously crisis management is extremely important. The nuclear industry has not fully learnt how to manage crises, and the question is whether it is ready to crisis manage another incident. Certainly there is no resting on our laurels with respect to this — in the business of crisis management you are only as good as your last crisis.

I will summarise what I have said in terms of the lessons learned. Although there is no substitute for safe operations and good economics, effective communication is clearly a pivotal part of the triad. Industry fortunes are inextricably global, which has pluses and minuses. Crisis management is vital. The human touch is missing from the nuclear industry, which is something that we have to address. There is simply no human face on nuclear, and the face that there is is not terribly attractive.

Any umbrella or overall campaign theme for nuclear is submerged. There is no rallying cry for the industry, there is no consistent theme message, even in the USA. Certainly there are the issues of clean air and clean power, but there is no real rallying campaign theme either globally or in the various countries as far as I can tell. Environmental linkages are still largely untapped. The industry still has a long way to go to become linked to the environment. The

interesting thing is that we are a high technology industry in a high technology era, but we are not embraced as a high technology resource.

The other key point I would like to emphasise is that the last 20 years have really taught us that vision and patience are very good attributes. If the industry had taken a longer term view of public affairs and communications it would have been far more successful. We have to take an incremental long term view rather than trying a quick fix approach every couple of years.

Of course we have to address the media-phobia in the industry, because we cannot simply say that the media is biased or hopelessly biased and let it go at that. The industry has to address this methodically and to build bridges to the media. We must also remember that public opinion polls are not bedrock. The fact of the matter is that these are straw polls, and one incident would very quickly change public opinion. We have not built the foundations in the last 22 years which would enable us to say that we can survive another TMI.

On balance, I am cautiously bullish about what the industry has done over the last 22 years. We have done some things right, we have made some gains, but there is still a lot more work to do, and some really important areas we need to address.