Appendix II
PUBLIC ACCEPTANCE OF SMALL REACTORS

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INTRODUCTION

The success of any nuclear program requires acceptance by the local public and all levels of government involved in the decision to initiate a reactor program. Public acceptance of a nuclear energy source is a major challenge in successful initiation of a small reactor program. In AECL's experience, public acceptance will not be obtained until the public is convinced that the specific nuclear program is needed, safe and of economic and environmental benefit to the community.

The title of public acceptance is misleading. The objective of the program is a fully informed public. The program proponent cannot force public acceptance, which is beyond his control. He can, however, ensure that the public is informed.

Once information has begun to flow to the public by various means as will be explained later, the proponent is responsible to ensure that the information that is provided by him and by others is accurate.

Most importantly, and perhaps most difficult to accomplish, the proponent must develop a consultative process that allows the proponent and the public to agree on actions that are acceptable to the proponent and the community

AECL's EXPERIENCE

AECL has decades of experience with power reactors and waste management issues in Canada. Until the 1970s public acceptance of nuclear energy was not an issue and the information generally available to the public was largely of a technical nature. After TMI, as a sector of the public became concerned about the use of nuclear energy, organizations on both the for and against side of the issue sprang up and commenced surveys on public opinion, and also initiated programs to influence public opinion. In the 80s and 90s, pro-nuclear agencies began advertising the positives of nuclear energy to counter the concern raised by the Chernobyl accident, movies such as the China Syndrome, novels and anti-nuclear groups which had succeeded in turning the majority of the population very cautious about use of the nuclear option. In the U.S., increasing regulation and frequent court mandated construction reviews resulted in a number of U.S. utilities losing large sums of money on their nuclear programs. As a consequence, nuclear proponents, including AECL, in a number of countries with established successful programs were forced to defend these programs and gained a great deal of experience in dealing with the public on nuclear issues.

AECL also gained specific experience in dealing with the public on small reactor programs. The heating reactor program built around the 10 MW_t SLOWPOKE Energy System provided direct public experience with small communities (Sherbrooke, Quebec and the University of Saskatoon, in Saskatoon, Saskatchewan). At these sites AECL gained experience appropriate for the subject of this week's session, and experience that is relatively recent, 1989, compared to the siting experience for the large power reactors which took place a number of years ago.

From these contacts, a number of people's concerns have been identified. They are

1) Lack of Control

People fear that they have no control over the nuclear industry. It is seen as large, reporting to government authority beyond the reach of the average individual, and therefore able to act according to its own wishes.
Compounding this existing feeling of non-control, nuclear programs are usually seen as and in fact usually are megaprojects. Megaprojects have a history of perceived megarisks - cost overruns, and often expensive to operate.

2) Safety

Safety is a concern both with regard to the plant itself, and to disposal of nuclear waste. The public fear what they cannot see, smell or touch, and the risks from plant and waste effluent fall into this category.

3) Disaster

A further complication for the nuclear proponent is that human nature is fascinated with disaster. The nuclear bomb, while unrelated to a power plant, has left a legacy of potential disaster - amply reinforced by Chernobyl

DEALING WITH PUBLIC CONCERNS

How do we deal with these concerns? What is our message?

The proponent must ensure that the community understands that it retains control over the siting process. In Canada and the United States and in most of Europe, the public does indeed control the siting process. Therefore, even though the public may not understand the science of nuclear fission, they are able to demand answers to public concerns before the project can proceed.

The proponent must be able to satisfactorily explain the community need and benefit, and the ability of the nuclear option to meet that need. This discussion will include data of an economic nature, security of energy supply, etc.

The message should include a discussion on the specific project advantages such as jobs and technology transfer. In fact nuclear has a very positive message - how should it be delivered?

MESSAGE DELIVERY

Nuclear 's positive message has not been delivered adequately. However a number of lessons have been learned.

To deliver the message the proponent must:

1) Establish a presence within the community. Outsiders are not believed to have the community's interests as a top priority. AECL has found that employees must be moved into the community in order to gain credibility. These employees are seen as truly making a commitment to their new community, and it is appreciated. By moving to the community, the individual also gains a much better appreciation for the true concerns of the citizens of that community.

2) Establish credibility with the local leaders, both the obvious and those 'behind the scenes'. In most communities, a few people are very influential, hard-working and community minded. These are the people who will take the time to understand the issues, and in turn be able to explain the issues to other citizens. Local leaders have more credibility than the proponent's employees.

To help these interested people to understand the issues, it is the proponent's responsibility to:

provide easy to understand literature

give honest answers to the difficult questions - explain the pros and cons and ensure that risk is understood

be available to help potential supporters

bring guest lecturers as required.

3) Establish a relationship with the media that is frank but friendly. The proponent must insist on correcting errors (errors in fact, not opinion) as they occur. The proponent must also learn to understand the role of individuals working in media, gain an appreciation of their deadlines, space constraints and tailor his message accordingly. In other words, treat the media with respect.

4) The proponent must ensure that local staff have sufficient autonomy to deal with issues as they arise. Avoid having to 'check with Head Office". In this way, local staff will be able to deal with last minutes speaking engagements, radio talk show phone-ins, letters to the editor in a prompt manner so as to keep the public aware of accurate information as opposed to rumour. It is AECL's experience that a quick response is preferable to the well-crafted, but delayed response.

5) Nuclear projects represent opportunities and politicians will be interested in exploring the option. In order to gain and maintain political support, the proponent must work with the public to ensure that the politicians receive vocal support from their citizens. It is not sufficient to gain political support and then expect the politician to carry the arguments to completion. The proponent must stay involved throughout the public information program to ensure that the community remains accurately informed.

Most importantly, and underlying all of the above, the public will believe the message, if they trust the messenger.

THE MAIN DIFFICULTIES IN A PUBLIC INFORMATION PROGRAM

The main difficulties in a public information program are:

1. Public apathy. The proponent is interested, the opponents are interested, but experience indicates that the vast majority of the public has too many other issues on their minds to get deeply involved with a nuclear siting issue. Consequently, it is difficult to get a good understanding of the communities' concerns, and therefore difficult to issue information that will meet the needs of the silent majority. As a result it is often difficult to achieve a sufficient level of understanding with the public at large.

Given the reality that only a small minority will ever be truly interested, the approach is to identify those groups whose support is essential and work with them - community leaders, political leaders and businesses/employers who will benefit.

2. Potential for Irrational Debate. Opponents will strive to introduce factors that have nothing to do with the project at hand, e.g.s Chernobyl, nuclear weapons.

A public that is frightened of horrific consequence will be unwilling to take even a small risk if they perceive that the nuclear option will put the community at risk. Again the approach is to identify those groups whose support is essential and ensure they understand the merits and demerits of the nuclear program, and the true intent of the opposition. The proponent must strive to educate the media, schools, and community organizations to explain the issues and the objectives of the proponents and opponents.

Which methods are most successful to explain a nuclear program to the public and key groups?

1. Simple, easy to understand literature - pictures, short sentences, facts

2. The proponent must be accessible - set up information centres in town markets (i.e. go to the people)

3. Avoid townhall meetings - they are ineffective for the important question and answer format which allows the proponent to truly understand the issues within the heart of the community.

SUMMARY

Key factors for success must include an understanding on the part of the public that they do have control over the fate of the project. Too often opposition arises

because of frustration and anger due to the mistaken belief that the project will go ahead regardless of local input.

In Canada, the Environmental Review Process includes public hearings and no approval will be granted without public hearings. Furthermore no license will be granted until the nuclear regulator is satisfied that the plant is safe, and that the public has had the opportunity to comment on the plant.

A second key factor is the willingness of the proponent to become a member of the community, recruit local champions and support them with visiting scientists, professors, and a public information program that listens and responds.

Thirdly, the proponent must listen and make changes to the program in response to community needs wherever possible.

Finally - be credible: learn the concerns of the community, agree on actions with the community and carry out your commitments.