

**Implementing Stakeholders' Access to Expertise:
Experimenting on Nuclear Installations' Safety Cases - 12160**

Ludivine Gilli*, Sylvie Charron*

*Institut de Radioprotection et de Sûreté Nucléaire (IRSN), Fontenay-aux-Roses, France

ABSTRACT

In 2009 and 2010, the Institute for Nuclear Safety and Radiation Protection (IRSN) led two pilot actions dealing with nuclear installations' safety cases. One concerned the periodical review of the French 900 MWe nuclear reactors, the other concerned the decommissioning of a workshop located on the site of Areva's La Hague fuel-reprocessing plant site in Northwestern France. The purpose of both these programs was to test ways for IRSN and a small number of stakeholders (Non-Governmental Organizations (NGOs) members, local elected officials, etc.) to engage in technical discussions. The discussions were intended to enable the stakeholders to review future applications and provide valuable input. The test cases confirmed there is a definite challenge in successfully opening a meaningful dialogue to discuss technical issues, in particular the fact that most expertise reports were not public and the conflict that exists between the contrary demands of transparency and confidentiality of information. The test case also confirmed there are ways to further improvement of stakeholders' involvement.

INTRODUCTION

Over the past 10 to 15 years, the French risk governance field has witnessed a twofold evolution regarding stakeholders' involvement. First, the citizens have been demanding with increasing strength a seat at the decision-making table. Second, the legal framework has evolved to take some of these demands into account.

A key player in this field, the Institute for Nuclear Safety and Radiation Protection (IRSN) is the French institutional expert in nuclear safety and risk assessment. As such, IRSN has been taking at heart its mission to engage citizens on technical issues over the years, initiating several actions designed to better involve local stakeholders and NGOs in the technical nuclear matters.

Many challenges are to be faced in this endeavour. For IRSN, two major challenges were in the way of a better involvement of stakeholders. First, the fact that the reports and positions IRSN prepares for the French nuclear safety authority (ASN) were not public documents and therefore were difficult to share with the public. Second, the conflict that exists between the demands of transparency and the confidentiality requirements regarding the information IRSN deals with.

Progress had been made in the recent past, in the wake of the 2005 Public debate on the new EPR reactor. For instance, ASN and IRSN worked together to allow some expertise reports to be made public. Another example is the Convention which was signed between the nuclear plant operator EDF and the relevant Local Information Committee (*Commission Locale d'Information*, or CLI, in French) to give the latter access to Flamanville EPR's whole safety case, a file to which the CLI wouldn't have had access to under normal circumstances, for confidentiality reasons.

Despite definite progress, however, the two issues mentioned above remained a serious hindrance in the quest for proper and efficient stakeholders' involvement. This fact prompted IRSN to launch two "pilot actions" designed to explore ways for civil society members to gain access to nuclear safety cases. The ultimate goal was to test how, insuring this access, IRSN's

experts could hold with civil society members a technical dialog and ultimately empower them enough to allow them to use their new competence in the analysis of future safety cases.

The general aim was the same for both actions, but most of the other parameters were different: the installations, the stakeholders involved... and in the end the fate of the action.

METHOD

Two different “cold cases”

Due to the French regulation, IRSN cannot discuss publicly any case during an ongoing review process. While this is understandable¹, it remains a problem. Indeed, the stakeholders mainly need IRSN's input precisely when the case is being reviewed, since it is at that time they can provide input, not once the process is over. Therefore, a way must be found to allow discussing ongoing cases without disclosing the specifics of IRSN's position, in accordance with French legislation. However, as mentioned above, this problem was not the main target of the pilot action. So it was circumvented, by focusing the actions on two “cold cases”: cases which had already been dealt with. By tackling a closed topic, IRSN's experts eluded the major challenge of holding a dialogue with “outsiders” during an ongoing review process. This allowed concentrating another major challenge: how to deal with the conflict between transparency and confidentiality requirements, which are inherent with technical topics. Still, the rationale may seem odd: even if the fact that the cases are closed allows discussing them, why focus on cases with nothing at stake? Why would stakeholders find any interest there? Because the two chosen cases weren't merely cold cases, they also were cases with a perspective.

The first one focused on the third periodical safety review (VD3²) of the 34 French 900 MWe nuclear reactors. These safety reviews are mandatory and take place every 10 years. Their aim is to make sure that the installations meet the initial safety requirements (conformity studies), but also to re-evaluate these requirements in order to make the plants even safer (re-evaluation studies). The VD are carried out in two phases: first a “generic studies” phase – focusing on the conception of the 900 MWe reactors as a whole – which took place from 2002 to 2008, then a specific study of each reactor's safety, which analyses the actual status of every single reactor – and will last from 2009 to 2020. When the pilot action was launched, the first phase was closed, which allowed discussing all the conclusions regarding the state of the 900 MWe reactors as a whole. At the same time, it left perspectives open, since the VD of each of the thirty-four 900 MWe reactors remained to be done, starting with Tricastin and Fessenheim. Not to mention that the next VD of the 1300 MWe reactors, which are different from the 900 MWe but share many attributes, are to take place in a few years as well.

The second case dealt with the decommissioning of the High Activity Oxide (HAO) workshop³, located on the La Hague fuel reprocessing plant site, and for which the decommissioning application had been approved in 2008. As the first step in a years-long decommissioning process to take place at La Hague, the HAO case shared many issues with a case to be submitted to public inquiry a few months later – the decommissioning of the remainder of the UP2-400 plant (the HAO workshop is a part of UP2-400, the first to be decommissioned).

¹ Here should be pointed out the fact that while IRSN is reviewing a case, the Institute's position is being built through expertise work. As a consequence, IRSN actually doesn't have an official position at that point.

² VD3 stands in French for “*Visite Decennale 3*”

³ Also known under the name « INB 80 » (*Installation Nucléaire de Base N°80* – Nuclear Installation N°80)

In both cases, we surmised that even though the case was closed, we would be able to draw much valuable technical and methodological information from the experiment, which would be useful to the stakeholders in preparing to study the future cases to come. Therefore, it responded to the ultimate goal of helping stakeholders build a competence to analyse technical safety case and use it in the future. This was especially true for the VD3 case, because the test case didn't come at the end of a process but half-way between the national generic part of the VD3 and its local specific part, enabling the stakeholders to use the lessons learned on the generic aspects on the study of the reactor close to their home. In the HAO case, the continuity between one dismantling process and a future one seemed clear to IRSN's members, but we shall see it was so obvious for the CLI members.

Different partners

The choice of the topics also depended on the existence of relevant stakeholders to participate in the pilot action. Given the high complexity of the nuclear safety case, it has always been a challenge in itself to locate citizens who are interested and qualified enough to interact on such topics. Of course, the aim is not to locate retired nuclear specialists acting as citizens. In that case, not only would the merits of that exercise be very limited, but there wouldn't be many persons available. That being said, some level of knowledge is necessary when one wishes to grasp and discuss nuclear safety cases and raise pertinent issues. Acquiring this knowledge takes time, which many people don't have, or are not willing to invest in such activities. Therefore, IRSN is always looking for new stakeholders to engage. In recent years, this search has been eased by the existence in France of the CLI network, which constitutes a good starting point when it comes to finding partners within civil society.

The CLIs are mandatory pluralistic bodies attached to each French nuclear installation. Their role is to monitor the installation and to inform the local population on nuclear safety and radiological protection matters. All CLI members are volunteers. They come for 50 % at least from the ranks of elected officials (city, county, and region) and for at least 10 % from each of the three following categories: representatives of environmental protection NGOs, representatives from nuclear operators' labor-unions and "qualified persons". Some CLIs have existed in France since the late 1970s. At that time, however, the CLIs were neither official nor mandatory bodies, they were non-profit organizations. As a result, they only sprouted when some energetic people decided to take matters in their own hands and establish them.

In 1981, the CLIs gained an official existence, when the Government decided to make their creation easier and provided some guidelines regarding the tasks and the composition of the commissions, to be adapted to the local context. This move prompted the creation of several new CLIs. A renewed push came with the 2006 "TSN" Act on Nuclear Transparency and Security. This Act required that a CLI be established next to each nuclear installation, hence providing more potential partners for IRSN. Moreover, the CLIs are now federated in a national organization called ANCCLI (National Association of Local Information Commissions and Committees), which eases the exchange of information between CLIs and provides a pool of expertise for all CLIs at the national level.

The HAO action was a local one, and as such required finding local stakeholders to interact with. One of the reasons why this installation was chosen as the subject to a "test case" is the fact that HAO is located in La Hague, where a CLI has been active – and interacting with IRSN – for many years. The La Hague CLI was established in 1981 and has existed in its current form since 2008. Its members have been very active over the years, in particular (but not only) on radio-

ecological topics. Moreover, the CLI had created a working group to study the HAO decommissioning application during the public inquiry process the previous year. The product of their taskforce had been a series of 15 questions and eight remarks that were sent to the operator. Given their implication on the HAO decommissioning process, this CLI was definitely a relevant stakeholder to engage.

The VD3 action was part national part local, which prompted a search of different stakeholders. Indeed, as it was explained above, the first part of the VD3 is a generic exercise on the 900 MWe reactors as a whole while the second part addresses the status of each reactor. ANCCLI role as a pool of expertise, and the fact that it has a “permanent group” working on nuclear safety, made it an interesting stakeholder to discuss this topic. Not only was the association qualified to discuss the issues, but it would also be able to relay whatever came out of the discussions to all the affiliated CLIs. However, since there was a definite local component in the VD3 exercise, it was felt important to include local stakeholders as well, with a preference for those who would be concerned by a VD in the near future. Those considerations led to form a group with representatives of ANCCLI, and representatives from the CLIs of Gravelines, Fessenheim⁴, Dampierre and Le Blayais⁵. Let us note that the CLIS of Fessenheim had ordered a third-party expertise for the VD1 and the VD2, that the CLIN of Le Blayais had ordered one for the VD2, and that both ordered one for the VD3. Therefore, it was felt important to include them among the participants.

Finally, for each action, contact was initiated with the operator and ASN. In the HAO case, Areva agreed to give the CLI members access to the complete decommissioning file. In the VD3 case, EDF already had given access to its documents to the CLI’s experts, and participated in the final meeting. In both cases, ASN was kept informed of the discussions, and took an active part in the public meeting that closed the VD3 case.

RESULTS

The inaugural working meeting for the two pilot actions was held in common, in April 2009. On this occasion, IRSN presented the proposed scheme, which was the same for both actions, and discussed it with the stakeholders. The proposal comprised two steps. First, IRSN and the stakeholders were to hold discussions about the safety case and the way they could interact on such cases, trying at the same time to build capacity and find solutions to the challenges mentioned above. Second, they would hold a public meeting (local for the HAO case, national for the VD3 case) on the safety case, allowing IRSN, the operator and the stakeholders to express their position on the case, before opening the floor to discussion. Once the terms were agreed upon, each case then started its own journey.

The VD3 Case

The question of access to documents was a major part of the interactions on the VD3 case. To begin with, IRSN’s relevant expertise report was transmitted to the independent expert mandated by Fessenheim’s CLIS (namely the Group of Scientists for Information on Nuclear Energy - GSIEN⁶) to follow the plant’s VD3. As mentioned above, this report was not public.

⁴ The Fessenheim CLI calls itself CLIS (the “s” stands for “suivi”, which means monitoring), which was its name before the 2006 TSN Act that made the CLIs mandatory. It obtained to keep its name.

⁵ The CLI of Le Blayais calls itself CLIN (the “n” stands for “nuclear”), which was its name before the 2006 TSN Act that made the CLIs mandatory. It obtained to keep its name.

⁶ *Groupe de scientifiques pour l’information sur l’énergie nucléaire*

Therefore, its transmission was not a mere formality. Nevertheless, discussions between IRSN and ASN, led to both to agree to communicate the full report to GSIEN, after GSIEN agreed to a confidentiality clause. The report was transmitted in May 2009. Then, in March 2010, IRSN published and presented in detail to the VD3 working group (made of CLI members and IRSN experts) a 30-page long report prepared for the public, designed to explain the VD3 process and give a summary of IRSN's position.

Meanwhile, from December 2009 to September 2010, the working group met several times to discuss the VD3 issues and determine which among those issues were the most important for the stakeholders. The selected issues were internal and external hazards, severe accidents, ageing, human and organizational factors. Once the issues were selected, the working group decided, as it had initially been planned, to hold a public meeting in Paris to present the VD3 process along with the issues which had been singled out. The meeting took place in November 2010. It gathered about 35 persons coming from 10 different CLIs. ASN presented the context of the VD3, EDF presented the stakes as seen by an operator, IRSN made presentations on all the selected topics, and the four CLI which had been part of the working group presented their own works or questions regarding these issues. All this put together produced a lively and successful meeting. Several CLI members who participated in this meeting left with ideas to develop actions on this topic in their region. Some implemented these ideas, launching actions to monitor the VD3 on their site, such as public meetings and independent expertise.

The HAO Case

For the HAO case, the question of access to documents also was a major issue. During the first HAO working group meeting, which took place in Cherbourg (next to La Hague) in November 2009, IRSN presented the HAO expertise report to a small task-force from the CLI. The members of the CLI's task-force were familiar with the safety case, since they had studied the decommissioning application during the public inquiry process the previous year. Once the report had been presented to them, they wanted for more than a mere PowerPoint file and asked for the report itself. Once again, since the report had not been written to be public, it contained confidential information and could not be easily transmitted. Therefore, IRSN initiated discussions with ASN and Areva (the operator concerned here) to inquire about the possibilities. Once again, the selected solution was to communicate the report, without its annexes and its references, after the task-force agreed on confidentiality terms. The report was communicated in March 2010.

While the question of the report was discussed, the working group met. Over a year, a series of four meetings took place, allowing tackling many issues. One of the first steps was to clarify the administrative process of a decommissioning procedure and the role of all the actors involved, from the operators to the safety authority and the public expert. When does the process start, who does what and when...? These preliminary explanations allowed the local stakeholders to get their bearings, while the experts could get a sense of what the local actors knew and didn't know. Once the background was set, the working group started trying to find the best *modus operandi*. The result was an iterative process of questions and answers which allowed determining the level of knowledge and the interests of each party. It is during this back-and-forth process that IRSN's experts presented their report and the official position the Institute took on the HAO decommissioning case. The presentation prompted questions from the CLI members, who themselves presented the 15 questions the CLI had come up with during its analysis of the safety case in 2008. These questions in turn drew comments from IRSN's experts. The outcome of this process was mutual learning: the CLI members learned details from

the plant's operation in general and the decommissioning case in particular, while IRSN's experts learned which were the preoccupations of the local stakeholders. Along the way, both parties learned to respect each other as well as each other's work.

However, unlike the VD3 case, the HAO action didn't conclude with a public meeting. The public meeting had been discussed within the working group, topics of interest had been selected, and it had been envisioned as a possible first step in the public inquiry of the remainder of UP2-400 that was to take place shortly: IRSN, the CLI and Areva would each have presented a position on the HAO file, and drawn broader conclusions regarding decommissioning files in general, as well as IRSN-CLI interactions on such cases. Nevertheless, the idea of a public meeting wasn't well received by the CLI's Board, which felt it would confuse the population more than bring answers. Therefore, the Board decided not to hold the public meeting. This was an unforeseen end to the HAO working group endeavours, but didn't erase the lessons learned in the process and actually was a lesson in itself: to not underestimate the local logics at work.

LESSONS LEARNED

The main lesson learned from both cases probably is that despite the rules and practices which have existed and still exist in France, it is possible to give the stakeholders access to safety cases. It may be achieved indirectly; by giving access to an independent expert the stakeholders have mandated to conduct a third party expertise on a specific case. It may also be achieved, in the case of sensitive information; by demanding the stakeholders preserve the confidentiality of the documents or by striking out the confidential parts and giving access to the remainder of the documents. Whatever the way, there are several possibilities to enhance stakeholders' access to safety cases, hence allowing a better involvement in the nuclear safety process.

Besides a mere access to information, giving the stakeholders' access to IRSN experts allowed a rich dialogue to take place. This contributed significantly to the stakeholders' capacity building. As it had been envisioned beforehand, the CLI members were able to use everything they had learned from the IRSN report as well as their interactions with the experts. In the HAO case, they used it in their study of the following decommissioning application, regarding the remainder of UP2-400. In the VD3 case, they used it to plan the local steps of the periodical review, which were still to come. The dialogue also contributed to a mutual gain. Through the interaction, IRSN's experts who are not used to interacting with the public learned about the stakeholders' preoccupations and saw some topics under a new light, getting a broader understanding of their field in the process. In the process, IRSN's openness culture progressed. Indeed, this implication into actions new to them changed the view IRSN's experts had of the work that could be done with the society, and the input the stakeholders could provide.

Both cases proved that access to information can be arranged and that interactions produce a mutual gain. Both cases were cold cases. The next challenge therefore is to test ways to discuss on-going cases, without treading on legitimate legal requirements. To do so, one path can be explored: while a public expertise institute cannot give an official position on a safety case before it has reached such a position, it can still provide a certain degree of support to stakeholders willing to engage in a technical debate. First, by providing context and methodological answers regarding the issue at hand. Second, by providing technical explanations answering to the stakeholders' queries. Putting these ideas into practice remains a challenge, one that needs to be actively pursued if one wishes to engage stakeholders hence enhancing nuclear safety.