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THE RISKS OF ŠKODA¹

Unsettling facts on the Temelín Nuclear Power Plant

concerning faulty welding work and documentation in Temelín block 1

Fact sheet, version 5.0²

Jiří Tutter Jan Haverkamp 29 May 2006

Introduction

Central European nuclear industrialists and lobbyists at present paint a picture that there is a nuclear renaissance in Central Europe. Several arguments play against this claim, not in the least that the amount of nuclear reactors to be closed in the coming 15 years will be larger than the amount of new build reactors. Plans for new build reactors are uncertain. One of the factors playing a role in this is the track-record of reactor building in the region. This is marred by time- and budget-overdraws. Many of these relate to poor working practices during the building phase of reactors. Such a situation leads to a larger risk for investors in possible new projects.

New investors in the region are not always aware of this track record. The involved building companies, utilities and nuclear regulators will not inform them about it proactively, as they are often themselves implied in the continuing poor safety culture.

This paper highlights a story during the building of the Temelín NPP in the Czech Republic that illustrates what we mean with poor safety culture. It is not a single story – we know of many similar examples from the Central European nuclear industry. But this story is well documented and followed over a longer time. It also implies bad practices from building companies, bad supervision by main contractors, bad practice by a state nuclear regulator and compliance by the utility and judicial and political sectors of the state authority.

In detail, this story illustrates why Greenpeace Czech Republic has come to the conclusion that parts of the present day Škoda Alliance were involved in faulty welding work that has strong consequences for the safety level of the Temelín NPP; it shows how members of the Škoda Alliance plotted with the Czech nuclear regulator – the State Office for Nuclear Safety (SUJB) – and with Temelín operator CEZ to wipe this issue under the carpet; it shows how members of the Škoda Alliance did not mind to undermine the

^{1 &}quot;Škoda" in the Czech language means "damage"

² This paper is based on the fact sheet "Unsettling facts on Temelín", version 3.2, of 2 November 2003 and the publication "Aktuální situace ve věci neoprávněné opravy na primárním okruhu 1.bloku JETE (3.9.2004)" with updates from the authors. This sheet is produced under responsibility of Greenpeace Czech Republic and the authors. The sheet represents the facts as they are known to Greenpeace Czech Republic and the authors.

fundamentals of the safety system and safety culture in order to avoid blame and possible bankruptcy.

The only conclusion can be that the Škoda Alliance delivered a dangerous nuclear power plant in the South of the Czech Republic.

Temelín is an unacceptable risk to society – there is no reason to believe that the work ethics, safety culture and nuclear regulatory mechanisms have improved so much in Central Europe that new nuclear projects would not be subject to similar risk.

Short History of the Scandal

In 1994, during the welding of one of the 8 central cooling pipes to the reactor vessel of block 1 of the Temelín NPP, a Russian supervisor discovered the pipe was welded 180 degrees wrong. In order to prevent repercussions and further time loss, the management of the welding firm Modranská potrubní a.s. (part of the present Škoda Alliance), most probably with agreement of the main contractor Škoda Praha a.s. (also part of the Škoda Alliance), ordered the welding teams to cut the weld on the seam, turn the pipe and re-weld it. This operation went against all valid rules and regulations, without a project preparation, approval, external expert input or external supervision. This operation caused a crucial weak spot in the nuclear part of the power station. Documentation was falsified and partly disappeared.

In July 2000, a witness directly involved in the case contacted Greenpeace Czech Republic. His credibility was scrutinised in confrontation with several international experts in welding and VVER 1000 reactors. The conclusion was that the witness was credible and the story needed intensive follow-up.

In September 2000, Greenpeace informed the Czech nuclear regulator SUJB of the case. After anonymous confrontation of the key-witness with an inspector of SUJB, a team of SUJB inspectors decides to start an investigation into the matter. The witness identifies the welding seam in question as welding seam number 1-4-5. The investigation leads to the **report 15/2001** in spring 2001, which shows severe problems with the welding quality, including of welding seam 1-4-5. Report and recommendations are not accepted by SUJB management.

Also in September 2000, the regional police of České Budějovice opens an investigation. It lets an independent team of welding experts from Prague investigate welding seam 1-1-5. It is up to today not known to Greenpeace how the police got a wrong identification number of the welding seam, as it did not receive it from Greenpeace. The police shelves the case. In spite of the police having investigated the wrong seam, SUJB management knowingly uses the police findings to argue that the witness does not have a case.

After not having accepted the report 15/2001, SUJB management orders a new investigation by a new team of inspectors, which **does not include investigation of welding seam 1-4-5**. This inspection yields report 43/2001.

SUJB also orders an independent investigation in summer 2001 by the welding expert prof. Jaroslav Němec, **who also does not investigate welding seam 1-4-5**.

Twice, an appeal at the Czech Supreme Court ruled that SUJB did not have sufficient justification to refuse Greenpeace access to inspection report 15/2001 and other materials and assigns Greenpeace damages. SUJB reacts in each case with a new refusal on the same grounds. Greenpeace is at present in appeal against the last (third) refusal.

From 2003, SUJB publishes in response to Greenpeace's accusations information on welding work on its website, but fails to address any issue around welding seam 1-4-5.

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The Temelín NPP block 1 was loaded with fuel in summer 2000 and went critical in October of that year. At this time, nuclear regulator SUJB already was informed about the faulty weld. It went online after report 15/2001 was finished. The reactor continues to operate in test mode until today, as Czech authorities were not able to issue the final building approval pending court cases concerning access to documents, amongst which inspection report 15/2001. This means that the reactor is not in official commercial operation 19 years after start of building, although it delivers electricity already from the year 2001.

Conclusion: CEZ operates at present an unsafe NPP at Temelín because of fault of Škoda Alliance member companies.

Important Conclusions

The facts listed here are based upon documentation as made available to Greenpeace by the Czech nuclear regulator the State Office for Nuclear Safety (SUJB), and Temelín operator CEZ, cross-examined information from different witnesses whose identity unfortunately needs to be safeguarded in fear of repercussions, interviews with SUJB management on this issue, information revealed to Greenpeace by the police during their investigations, as well as media information.

The issue started receiving attention in July 2000 on the basis of a witness statement of one of the people directly involved in welding work in Temelín. This witness still wants full protection of his/her identity. Greenpeace received further witness information from circles around the subcontractor responsible for welding, Modranská potrubní a.s.

This fact sheet gives rise to some devastating conclusions:

- 1. Temelín cannot be considered safe. Because of the found facts, the assembly procedures and subsequently Temelín itself do not meet basic technological and nuclear safety requirements operated in Western Europe, including in the Czech Atomic Law.
- The witness statement that an illegal repair was carried out on one of the primary cooling circuit pipes in Temelín block 1 directly on the reactor has to be judged as credible.
 SUJB cannot exclude the event as alleged by Greenpeace.
 SUJB cannot exclude that the quality of welding seams on the reactor vessel has been compromised.
- 3. The police was misled in its first investigation of the welding seam and investigated another seam than the one indicated by the witness. Both SUJB and CEZ at that time were informed about which welding seam was indicated by the witness.
- 4. SUJB did not carry out other investigations to the alleged welding seam than a check on documentation. This documentation is not complete, a compulsory part (including the welding logs) is not available at all, and the available part shows actions that went against prescribed procedures. There is a possibility that documentation from another welding seem was used for covering up problems in the alleged welding seam. SUJB claims it destroyed an internal protocol of the investigation that it refused to publish. If it did so, this destruction would be against

the Czech Law on the State Control. Greenpeace has, however, information available that indicates that the report is still existing. A follow-up report does not address the alleged welding seam at all, nor does a following external expert report, nor do consecutive reports on welding quality made during fuel-change outages in 2004 and 2005

- 5. In spite of two court rulings in 2004 and 2005, SUJB refuses to publish crucial information on the case.
- 6. Documentation on welding work in the primary cooling circuit of Temelín block 1 is still incomplete and what is there still indicates violation of technology procedures.
- 7. SUJB management plays an active role in covering up this information by failing to publish incriminating information, diverting attention from the subject, and giving willingly false information. With that the SUJB position of independent nuclear regulatory office is violated.
- 8. On the basis of information available and its seriousness, as far as we can judge even according to the Atomic Law in the Czech Republic SUJB should have refused to give permission for fuel loading as well as test operation and commercial operation of Temelín block 1, regardless of the extra delays and costs it would bring. This would mean that all the processes started from the loading of the fuel in year 2000, subsequent tests as well as current mode of operation are illegal.
- 9. The disclosed facts prove that the quality and nuclear safety control mechanism failed on all levels up to and including the "independent" state nuclear authority. It casts doubt on the quality of other control operations carried out by SUJB. It also casts doubt on the internal quality control of Škoda.
- 10. Temelín's operation of both blocks should stop without delay in order to prevent further breaks of law. As SUJB's independence has to be put into doubt, also other responsible authorities (i.e. the Czech Government, Temelín operator CEZ) should be active in this process.
- 11. Škoda a.s. as main contractor and Modranská potrubní a.s. as subcontractor for welding work cannot be trusted. They are both responsible for the alleged illegal repair as well as in the ongoing attempts to cover up the illegal repair. Also Temelín operator CEZ participated in the cover-up.
- 12. Investments in nuclear projects in Central Europe carry the risk of similar mess-ups as happened in Temelín. Such a risk can have severe consequences for the financial management of the power plant.

Summary of Facts

- 1. In July 2000, an anonymous witness¹ informed the Czech office of Greenpeace that while working on the Temelín construction site, he participated in a repair of one of the welding seams directly between the primary cooling circuit and the reactor of block 1 of the Temelín nuclear power plant. He claims that the main pipe was connected 180° wrong. This was discovered only after the welding work on the pipe was virtually finished. Modranská potrubní a.s. ordered the welding teams to cut directly on the seam on the reactor vessel, turn the pipe and re-weld it. He claims that documentation must have been adapted to hide this case. He also claimed that this procedure was against technical regulations and that the responsible companies - the subcontractor Modranská potrubní a.s. and main contractor Škoda Praha a.s. – agreed on keeping this incident secret. On request of the police, CEZ and SUJB, the witness identified to Greenpeace the welding seam on a map provided by CEZ. This information was passed on to SUJB on 22.9.2000 during a meeting between Jan Haverkamp and Jiří Tutter of Greenpeace and SUJB president Ing. Dana Drabova and SUJB inspector Ing. Jana Kroupova. The indicated welding seam was later identified by SUJB as the seam number 1-4-5.23
- 2. After receiving a criminal complaint from Greenpeace on 28.8.2000 on endangering the public and possible fraud with documentation concerning welding work, the police in České Budějovice started investigations. Part of the investigations was an independent analysis of the incriminated welding seam, carried out by an external expert team from Prague. Greenpeace did not give the police the information about which welding seam was indicated by the witness. If the police did receive indications, they must have come from SUJB, or indirectly from SUJB via Modranská potrubní a.s., Škoda Praha a.s. or CEZ. The independent investigators investigated welding seam number 1-1-5.⁴ Welding seam 1-4-5 was not considered nor analysed. Halfway January 2002, the police in České Budějovice re-opened investigations into the case on the basis of this information. For unknown reasons these investigations were again shelved halfway 2003. Consecutive attempts to have the case re-opened by different state prosecutors were blocked in an early stage.
- 3. On the first meeting between SUJB and Greenpeace on 29.08.2000, SUJB implied that the witness mixed up a similar incident that occurred on pipe number 1-1, welding seam number 1-1-6, not in the reactor area but already in the assembly hall. This repair was well documented and carried out according to prescribed procedures. Greenpeace checked this theory with the witness, who strictly denied that that was the case he was describing. Greenpeace informed SUJB of this.

¹ Name and address known to Greenpeace CZ. For reasons why the witness does not want to reveal his/her identity, see Appendix 1. A duly signed affidavit is available to Greenpeace.

² See copy of the drawing in the hands of SUJB, Appendix 2.

³ Code-numbering as follows: first number indicates the reactor block, second number the pipe, third number the welding seam. In this case it is Temelin block 1, pipe 4, welding seam number 5.

SUJB, Stanovisko Státniho úřadu pro jadernou bezpečnost k problematice svarů primárního potrubí DN 850 na Jaderné elektrárě Temelín. (24 July 2001, http://www.sujb.cz/docs/potrub_stanovisko.pdf), page 2 third paragraph: "Welding seam 1-1-5, criticized originally was sufficiently analysed in the framework of the police investigation...".
 ; Oral confirmation during meeting SUJB – Greenpeace, 4.10.2001

4. Greenpeace organised several meetings between the witness and international experts. Partly on request, partly on own initiative, Greenpeace also organised two telephone talks and one personal meeting (in which the identity of the witness was kept obscured) with the responsible SUJB inspector, Ing. Jana Kroupova. Mrs. Kroupova stressed at these occasions that she kept SUJB management informed in detail about these contacts.

All involved experts, including Mrs. Kroupova, concluded that the witness was not a querulant, but completely credible. Furthermore, his statements appeared to be consistent.

- 5. During a meeting between Greenpeace and SUJB on 04.10.2001, SUJB president Drabova and SUJB director of the nuclear installations control division Ing. Petr Brandejs stated that SUJB by May 2001 had received full documentation from Modranská potrubní a.s. concerning all welding work in the primary circuit. They restated this after being asked whether anything had changed since a statement received by Greenpeace on 09.01.2001 from SUJB management¹, in which Ing. Pavel Böhm, deputy chair of SUJB for nuclear safety declares that the documentation "shows formal and factual faults, and was not handed over in complete form." In this letter, Ing. Böhm continues, "the working order for assembling the pipes to the reactor had not followed the prescribed technical regulations." This statement was confirmed in the first quarterly report for 2001 by SUJB to the Czech government².
- 6. During the meeting on 04.10.2001, however, Mr. Brandejs and Mrs. Drabova claimed that all documentation was there and in order. There, where there had been discrepancies, SUJB had requested from CEZ additional checks that were reported by an independent consultant, Prof. Jaroslav Němec³. These checks involved analysis of documentation and physical tests of the welding seams around the alleged repair on tube 1-1 (seams 1-1-6 and 1-1-6a), as well as two seams near the circulation pump in the pipes 3 and 4 (seams 1-4-11 and 1-3-8). Although not stated clearly in the report, Mr. Brandejs and Mrs. Drabova claimed it also included a complete analysis of documentation by prof. Němec. Welding seam 1-4-5 had not been considered for extra attention nor tested physically. Mrs. Drabova and Mr. Brandejs refused to tell who carried out the tests, as they claimed because they did not know. Nevertheless they assured that the tests had been carried out well.
- 7. A source from the circles around Modranská potrubní a.s.⁴, however, clearly and unmistakably claims that up to 05.10.2001, documentation received by SUJB from Modranská potrubní a.s. in this case was not complete and showed still discrepancies with technology regulations. He furthermore stated: "What you know now is only a fraction of what went really wrong".
- 8. The same source revealed that staff from Modranská potrubní a.s. and CEZ in fact had carried out the tests for prof. Němec's report. He stresses that this is known to SUJB.

4 Name and address known to Greenpeace. The source holds a major position in which he has access to all information concerning Modransa portubni a.s. in this case. This source is prepared to witness in court.

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¹ Ing. Karel Böhm, letter to Greenpeace on 09.01.2001- (SUJB reference number ČJ707/to/01)

² SUJB, Situační zpráva o hodnocení jaderné bezpečnosti stavby jaderné elektrárny Temelín, 1. ctvrtletí 2001, http://www.sujb.cz/?c_id=268, point 3.1, 13th paragraph.

³ Prof.Ing.Dr. Jaroslav Němec DrSc. Dr hc, *Posudek kvality, životnosti a provozní spolehlivost svarů hlavního cirkulačního potrubí DN 850 JE Temelín*, (Praha, 29.6.2001; http://www.sujb.cz/docs/potrub_posudek.pdf)

- 9. During the meeting between Greenpeace and SUJB on 04.10.2001, SUJB president Drabova and SUJB inspector Ing. Brandejs claimed that there were no discrepancies in the documentation concerning welding seam 1-4-5 and that they only heard now for the first time about the fact that the witness had indicated this seam via Greenpeace to Ing. Kroupova, notwithstanding the fact that Mrs. Drabova was present in the meeting where that happened. They furthermore denied that they knew that Ing. Kroupova had had two telephone contacts and one personal contact with the witness, and declared they only knew about one telephone contact. (For the opinion of Ing. Kroupova, see point 4). During the same meeting on 04.10.2001, Ing. Kroupova confirmed that she had been informed about the identity of this welding seam and that she had informed SUJB management of this.
- 10. Greenpeace asked insight in the SUJB investigation results on welding seams in an official request, dated 28.06.2001. This request was several times refused. In the final refusal on 12.10.2001, following a Greenpeace appeal, SUJB president Dana Drabova writes: "An inspection directed on a repair of a welding seam in the 850 DN pipes of the primary cooling circuit of the 1st block by Modranké a.s. **was not carried out** and therefore this material [inspection protocol, JT] also cannot be provided. Controls on the process of welding of the 850 DN pipes in the primary cooling circuit of the first block of the Power Station Temelín, including inspection protocols, were only carried out in Temelín. ."¹

This is **not true** and herewith **SUJB tries to hide a report that was made by its own inspectors**. Proof for this comes from the following documentation:

 9.1.2001 – letter from SUJB management to Greenpeace, SUJB ref. number 707/TO/01

"On 12.12.2000 SUJB launched control procedures of the system quality at Modranská portubni a.s."

 19.1.2001 – letter from SUJB management to Greenpeace, SUJB ref. number 1135/TO/01

"As far as the criminal complaint [submitted by Greenpeace,; JH] is concerned, SUJB started a direct investigation. It did not find an immediate risk emerging from unsafety and an in-depth investigation continues at the subcontractor (Modranská potrubní a.s.) [...]"

 9.3.2001 – letter from SUJB management to Greenpeace, SUJB ref. number 3632/TO/2001

"4. Modranská potrubní a.s.

At the moment it has to be observed, that [there are] in the framework of the mentioned inspection positive results [...]"

- 9.3.2001 fax SUJB management to Greenpeace, (no ref. Number SUJB) "We cannot give you the concrete name of the inspector [that carries out] the safety investigation in Modranske portubni a.s.. The investigation is carried out by a group of qualified inspectors of SUJB, directly resorting under the deputy chair for nuclear safety."²
- 11.4.2001 Letter from SUJB management to Greenpeace, SUJB ref. Number 5180/TO/2001

"On the basis of the collected information and performed interviews with all

¹ All mentioned correspondence is in the hands of Greenpeace and can be made available upon request.

² SUJB Drabova already indicated in a letter dd. #### that one of these inspectors would be Ing. Jana Kroupova. From the earlier mentioned source from circles around Modranske potrubní, we know that amongst these inspectors were at least the late CSc. Ing. Tendera and Ing. Kroupova.

concerned, and after basic investigation of all available documentation on the 12.12.2000 an investigation was carried out at one of the involved parties, that until date has not been concluded [...] written reporting of the inspections carried out since its opening on 12.12.2000 of course exists. As long as the investigations carried out at the company Modranka potrubní a.s. continue, the requested information can for the time being not be given to you following § 11, first subparagraph of law number 106/1999 Sb. [The law on public access of information, JH]. Only after conclusion of the investigations it will be possible to consider the amount of information that can be provided."

- 25.7. 2001 Letter of SUJB management to Greenpeace, rejection of the request of Greenpeace for the above mentioned report
 "Again you request us to provide you with a copy of the final protocol of the inspection carried out by SUJB at Modranská potrubní a.s. concerning a repair in a tube in the primary circuit of the NPP Temelín. To my regret I am forced to answer again, that SUJB cannot provide you with this material. Your request needs the permission of a person that does not relate to the conditions of Iaw 106/1999 Sb. and from the present conditions under Iaw 552/91 follows our confidentiality in relation to personal data of investigated persons [...] At present I am in the position to let you know, that in relation to the inspection in Modranská potrubní a.s. further inspection will be carried out, and this directly at the Nuclear Power Station Temelín."
- In one of the documents attached to the rejection of the request of Greenpeace, "Position of SUJB concerning the problem of welding at the primary pipes DN 850 at the NPP Temelín"¹:

"On the basis of this assessment in-depth investigation activities were carried out not only at the operator, *in casu* CEZ a.s. Nuclear Power Station Temelín, but also at the subcontractor for welding work, that in this case was Modranská potrubní a.s. In this organisation, SUJB concentrated completely on the investigation to assure the quality of work in its entire course (preparation, realisation and following controls)."

SUJB furthermore informed the Government of the Czech Republic regularly about the progress of the investigation:

- Situation report on the assessment of nuclear safety during building of the nuclear power station Temelín 4th quarter 2000²
 "In the framework of the control of the system quality of the contractor for the NPP Temelín SUJB started an investigation into the system quality at Modranská potrubní a.s. Praha."
- Situation report on the assessment of nuclear safety during building of the nuclear power station Temelín 1st quarter 2001³
 "SUJB in this period carried out an in depth investigation into the documentation of the quality system at the subcontractor Modranská potrubní a.s. Praha, [...] especially for the area of production and installation of the main circulation pipes in the 1st block of the NPP Temelín."

¹ SUJB, Stanovisko Státniho úřadu pro jadernou bezpečnost k problematice svarů primárního potrubí DN 850 na Jaderné elektrárě Temelín. (24 July 2001, http://www.sujb.cz/docs/potrub_stanovisko.pdf)

² SÚJB, Situační zpráva o hodnocení jaderné bezpečnosti stavby jaderné elektrárny Temelín, 4. čtvrtletí 2000, Praha (2000); point 3.1, 18th paragraph (http://www.sujb.cz/?c_id=265)

³ SÚJB, *Situační zpráva o hodnocení jaderné bezpečnosti stavby jaderné elektrárny Temelín, 1. čtvrtletí 2001*, Praha (2001); point 3.1, 13th paragraph (http://www.sujb.cz/?c_id=268)

Situation report on the assessment of nuclear safety during building of the nuclear power station Temelín – 2nd quarter 2001¹
 "In the concerned period the investigation was closed directed to the verification of the quality of welding seams of the main circulation pipes in the 1st block initiated by Greenpeace. This investigation linked into the investigation carried out in the subcontractor Modranská potrubní a.s. Praha."

Also the earlier mentioned source around Modranská potrubní a.s. testifies that specifically SUJB inspectors carried out an in-depth investigation that amongst others resulted in the discovery that documentation on the welding work was incomplete and showed irregularities in working procedures.

Greenpeace appealed two times against a negative decision from SUJB to have insight in report 15/2001 and other relevant documents. Twice the Czech Supreme Court ruled that SUJB had no justification to deny Greenpeace access to these reports: the first time in December 2004 and the second time in November 2005. Still, SUJB denied access once more in February 2006 on the basis that the reports do not exist – the same reason that was not accepted by the courts already twice. Greenpeace has again appealed.

11. During 2002 and 2003 SUJB admitted that an inspection report on investigations in welding work at Temelin block 1 did exist. After a request from Greenpeace, in April 2003 it handed over parts of inspection report 43/2001². In this report several welding seems are investigated, but welding seem 1-4-5 is not addressed at all. On the other hand, the report unveils several severe mistakes in welding documentation in other instances. It appears that these have been handed over to prof. Němec for independent investigation. The conclusions of report 43/2001 and the report by prof. Němec cover one another.

One problem is not handed over to prof. Němec, but forwarded for the first fuel change in block 1, carried out between February and April 2003. That is the fact that the graphic analysis of welding seam 1-2-5 is completely missing. The possibility that these graphic analyses have been moved to cover destroyed graphic analyses of welding seam 1-4-5 has, as far as Greenpeace is aware of, not been investigated. Greenpeace nor the media have actively been informed about proceedings of physical testing of welding seam 1-2-5. Also the quarterly reports for the first and second quarter of 2003 do not mention such a check.

12. During a radio-interview for Czech Radio on 22 April 2003, Mrs. Drabova revealed to Greenpeace that an earlier full investigation report has existed. Information from the Ministry of Environment and information received by Greenpeace earlier leads to the conclusion that this must have been inspection report **15/2001**. Mrs. Drabova said, however, that this report and all evidence around it was destroyed after a complaint by the contractor, because the investigating inspectors had been involved in "illegal acts" of investigating irrelevant (non important) leads. She did not explain why these arguments had not been used in earlier correspondence. The fact that several witnesses claimed towards Greenpeace that this report 15/2001 did contain information on problems around welding seam 1-4-5, must lead to the conclusion that SUJB considered the problems around this welding seam as irrelevant. Considering the seriousness of the allegations, this is according to Greenpeace in direct violation of the seriousness.

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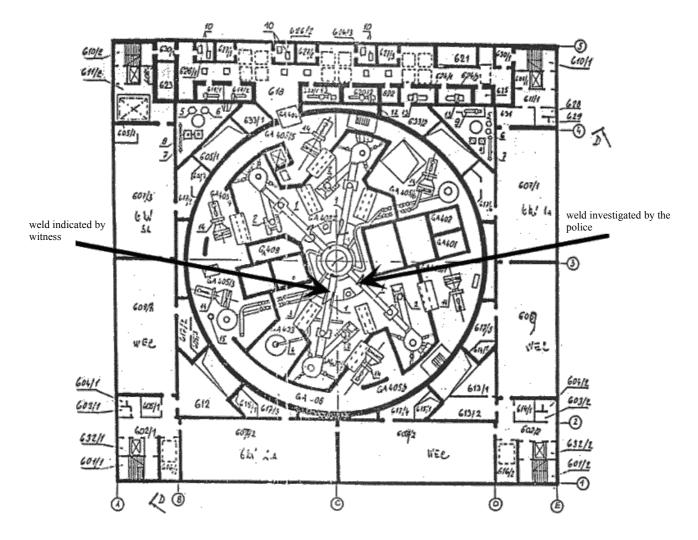
¹ SÚJB, Situační zpráva o hodnocení jaderné bezpečnosti stavby jaderné elektrárny Temelín, 2. čtvrtletí 2001, Praha (2001); point 3.1, last paragraph (http://www.sujb.cz/?c_id=269)

² See: SUJB, Hlavní body protokolu SÚJB č. 43/2001 ETE, Praha (2001) – Available upon request

the Atomic Law.

- 13. Analysis of the follow-up report 43/2001 learns that for this latter SUJB did not consult it's own welding experts. The two responsible SUJB inspectors are not welding experts themselves and the report relies on an external expert. The opinion of SUJB's own welding experts, as probably stated in 15/2001, is not taken into consideration. It has to mentioned that Greenpeace only could get its hand on the full version of report 43/2001 after a request to the Ministry of Environment. SUJB had sent Greenpeace a blacked-out version of the report summary without information on who was responsible for the report.
- 14. In 2005, during longer shut-downs of Temelín block 1 for fuel change, CEZ carried out new investigations into the quality of welds. These reportedly again did not concentrate on 1-4-5, but nevertheless found more impairments of the quality of welding work. Also in this case neither CEZ, nor Škoda, nor the SUJB took necessary steps. Also this case was kept completely out of the public.

APPENDIX 1



Photocopy of the pipe lay-out drawing in the hands of SUJB

This is a photocopy of the drawing that was handed over to SUJB during a meeting with SUJB president Dana Drabova and inspector Jana Kroupova on 22.09.2000.

APPENDIX 2

Materials from the State Office for Nuclear Safety (SUJB) on the case can be found on:

http://www.sujb.cz/?c_id=488