

# Brussels Protocol

**Conclusions of the Melk Process  
and Follow-up**

**29 November 2001**

- Chapter I – Hot Line (*put into operation in 2002*)
- Chapter II – Early Warning System (*Austrian monitoring device installed in České Budějovice*)
- Chapter III – Energy Partnership (*cooperation between Austrian Energy Agency and Czech Energy Agency, adopted common programme*)

# Chapter IV and Annex I

## Safety Issues

- 7 Items
- Responsibility for monitoring:  
State Office for Nuclear Safety

# Chapter V and Annex II

## Environmental Impact Assessment

- 21 Items
- Responsibility for monitoring:
  1. Commission for NPP Temelin  
Environmental Impact Assessment (13 items)
  2. State Office for Nuclear Safety (8 items)

# Chapter V and Annex II

## Environmental Impact Assessment

Responsibility for implementation:

1. *NPP Temelin Operator*
2. *Ministry of Environment*
3. *State Office for Nuclear Safety*
4. *Ministry of Health*
5. *Ministry of Industry*
6. *Ministry of Education*
7. *Ministry of Culture*

- Chapter VI – Commercial Operation  
*(conditions for putting into commercial operation)*
- Chapter VII – Free Movements of Goods and Publicity in Media
- Chapter VIII – Enlargement *(information to the Accession Conference about Melk Process conclusions)*

# Road Map for Implementation of Annex I and Annex II

- General rule – Regular annual meetings according to the bilateral Czech-Austrian Agreement serves to monitor the implementation of Annex I and Annex II items
- In addition – Specialists' workshops dealing with Annex I items (last meeting is planned in September 2004)

# Annex I- Safety Issues

1. High Energy Pipe Lines at the 28,8 m Level
2. Qualification of Valves
3. Reactor Pressure Vessel Integrity and Pressurised Thermal Shock
4. Integrity of Primary Loop Components - Non Destructive Testing
5. Qualification of Safety Classified Components
6. Site Seismicity
7. Severe Accidents Related Issues

1. High Energy Pipe lines at the 28,8 m
2. Level Qualification of Valves

***Issues have been solved under Comprehensive Safety Case (Report submitted to the European Commission)***

#### CONCLUSION:

1. Pipe whip restrains in combination with SUPERPIPE method represent sufficient set of technical measures, which prevent possible consequences of rupture of one pipe line at 28.8 m level
2. The qualification of respective valves was re-confirmed by development of new qualification files in accordance with international standards also widely applied in the EU

### 3. Reactor Pressure Vessel Integrity and Pressurised Thermal Shock

*Results will be discussed at the workshop in May 2004*

### 4. Integrity of Primary Loop Components- Non Destructive Testing

*Results will be discussed at the workshop in September 2004*

## 5. Qualification of Safety Classified Components *(Equipment Qualification-EQ)*

- EQ process is ongoing through the whole life of NPP
- SÚJB inspections of the EQ Program - positive results
- Any non - compliance registered in verification phase has to be addressed in compliance with formal procedures - monitored by SÚJB
- Process of EQ preservation is subject of the periodic safety assessment - SÚJB oversight

CONCLUSIONS: SÚJB accepts the plant EQ strategy

## 6. Site seismicity

- Seismic investigation of the site has been performed carefully during sitting process
- The site has been reassessed during 90th
- Local seismic monitoring network implemented around the plant
- Based on performed measurements the site is exceptionally quiet

CONCLUSION: SÚJB requirements are fulfilled

## 7. Severe accidents Related issues

### 7A – Item

- WG on comparison of calculations regarding radiological consequences of SA was established and work in 2002 and 2003
- Joint Summary Report on implementation of the issue is under preparation
- Arrangement between SUJB and Radiation Protection Division of BMLFUW was concluded in March 2004

# 7. Severe accidents Related issues

## 7B - Item

- Workshop organized in June 2003 addressed the issue, information on related documentation and training of NPP Temelin staff were given
- R&D project “Research and development of possibilities to reduce risk and consequences of severe accidents of the Czech NPP based on advanced experimental and analytical methods“ has been launched

# Annex II 21 items can be grouped as follows:

- Radiation monitoring and public information
- Monitoring of cooling towers impact
- Monitoring of surface water quality
- Monitoring of soil quality
- Seismological monitoring
- Monitoring of NPP impact on public health and social behaviour
- Elaboration of cultural monuments register within the NPP surroundings and creation of conditions for their restoration
- Conception of spent fuel disposal
- Emergency preparedness

# Further bodies monitoring the implementation of the CR obligations relating to Brussels Protocol

1. Czech Government - Annual reports submitted to it
2. Austrian Minister of Environment and Czech Minister of Foreign Affairs (responsible under Brussels Protocol) - Exchange of information
3. Public – Information about results displayed on web sites

<http://www.cez.cz/cze>

<http://kostelec.czu.cz/temelin>

[http://www.ipe.muni.cz/seismologie\\_temelin/index\\_en.htm](http://www.ipe.muni.cz/seismologie_temelin/index_en.htm)