Spain

EPR Fact Sheet

Decision making

Decision making in case of emergency rests in local authorities. The main position for decision making is the Plan Director, filled by the State Government Delegate at the province. This position is aided by an Executive Committee composed of five to seven posts responsible for radiation protection (filled by CSN), public health, security, logistics and local civil protection, as well as a representative of the local municipalities.

Upon request, help can be provided by the State Government through the Central Response and Help Plan, which is coordinated by State Civil Protection and encompasses the rest of the State resources.

Advice

The Nuclear Safety Council (CSN – Consejo de Seguridad Nuclear) is the only authority responsible for providing advice and recommendations regarding radiological protection and nuclear safety in case of emergency. CSN advice to decision makers encompasses emergency assessment, prognosis, protection measurements to the public and environment, etc.

CSN operates information systems for the monitoring of environmental radiation as well significant plant parameters and status.

Licensee

Additionally to the notifying requirements in case of an emergency event, licensees must make the necessary information available (including external dose predictions) to the CSN in order to assess plant status and possible consequences. Licensees are also required to update the information as soon as it is known to have changed.

Alarming

Licensees are obliged to notify the CSN and the Plan Director (see Decision making paragraph) Emergency Centre any event that fulfills predefined criteria that requires activation of EP&R Plans.

Organizational structure

Country info

Capital Madrid
Official language Spanish
Population 46 M
Area 504 000 km²
Currency Euro (€)
Time zone UTC+1
Calling code +34
Internet TLD .es
NPPs /ele. share 6/20%

NWP*
CSN - Nuclear Safety Council
(Salem-Emergency Centre)

NCA*
CSN - Nuclear Safety Council
(Salem-Emergency Centre)
Emergencies and Civil Protection Office
(DGPCE)

Emergency website
www.csn.es

Online measurements
www.csn.es

Bilateral agreements
Portugal, France

RANET capabilities
- Radiological assessment and advice
- Dose assessment
- NI assessment and advice

* National Warning Point and Competent Authority under the Emergency Conventions
Nuclear facilities and population

<table>
<thead>
<tr>
<th>NPP</th>
<th>Type</th>
<th>MWₜ</th>
<th>GPS coordinates</th>
<th>5 km pop.</th>
<th>20 km pop.</th>
<th>50 km pop.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Almaraz</td>
<td>AL 1</td>
<td>1035</td>
<td>39.807008° N 5.698364° E</td>
<td>1 500</td>
<td>27 100</td>
<td>162 500</td>
</tr>
<tr>
<td></td>
<td>AL 2</td>
<td>1044</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ascó</td>
<td>AS1</td>
<td>1032</td>
<td>41.201058° N 5.567850° E</td>
<td>6 700</td>
<td>33 800</td>
<td>448 100</td>
</tr>
<tr>
<td></td>
<td>AS2</td>
<td>1027</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cofrentes</td>
<td>COF</td>
<td>1092</td>
<td>39.213227° N 1.050972° W</td>
<td>2 000</td>
<td>11 000</td>
<td>366 700</td>
</tr>
<tr>
<td>Garoña</td>
<td>GAR</td>
<td>466</td>
<td>42.775442° N 3.207159° W</td>
<td>270</td>
<td>8 200</td>
<td>403 300</td>
</tr>
<tr>
<td>Trillo</td>
<td>TRI</td>
<td>1066</td>
<td>40.701573° N 2.622687° W</td>
<td>1 300</td>
<td>6 300</td>
<td>120 700</td>
</tr>
<tr>
<td>Vandellós</td>
<td>VA2</td>
<td>1087</td>
<td>40.950718° N 0.865283° E</td>
<td>630</td>
<td>57 000</td>
<td>461 000</td>
</tr>
</tbody>
</table>

*The IAEA emergency preparedness category 1 and other relevant facilities

Planning zones

On-site emergency classification

Category I.- Pre-Alert
A situation with a potential degradation of plant safety

Category II.- Emergency Alert
An event that can cause an important degradation of plant safety

Category III.- Site Area Emergency
An event that can induce important failures in plant safety functions

Category IV.- General Emergency
An event that can cause important damage to plant core

Off-site emergency classification

Off-site emergency can be classified in four different groups (Situation 0, 1, 2 and 3) according to the protection measures required by the on-site emergency and its off-site consequences.

Protection strategy

<table>
<thead>
<tr>
<th>Protective Action</th>
<th>On-site classification</th>
<th>Off-site classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>I</td>
<td>Situation 0</td>
</tr>
<tr>
<td>Access Control</td>
<td>II, III</td>
<td>Situation 1</td>
</tr>
<tr>
<td>Situation 1</td>
<td>IV</td>
<td>Situation 2</td>
</tr>
<tr>
<td>Situation 2</td>
<td>IV</td>
<td>Situation 3</td>
</tr>
</tbody>
</table>

Criteria

<table>
<thead>
<tr>
<th>Protective Action</th>
<th>OILs /EALs</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sheltering</td>
<td>10 mSv</td>
<td>Avertable dose in 48 h (up to 10 km)</td>
</tr>
<tr>
<td>Thyroid Blocking</td>
<td>100 mGy</td>
<td>Equivalent avertable dose</td>
</tr>
<tr>
<td>Evacuation</td>
<td>50 mSv</td>
<td>Avertable dose in 1 week. Greater or minor levels can be justified (weather conditions, easy evacuation, large population, up to 5 km)</td>
</tr>
</tbody>
</table>

Long term protection measures

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<table>
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<tr>
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<tbody>
<tr>
<td>Temporal Relocation</td>
<td>30 mSv</td>
<td>the first month and 10 mSv the following months</td>
</tr>
<tr>
<td>Permanent Relocation</td>
<td>Projected dose for one month &gt; 10 mSv after 1 or 2 years of temporal relocation, or life projected dose &gt; 1 Sv</td>
<td></td>
</tr>
</tbody>
</table>

Comments
Planning zones are divided in 16 sectors of 22° 30’ named after the compass rose.