

Note:  
This is a translation of the ESK recommendation entitled  
“Anforderungen an Betriebsberichte laufender Stilllegungsprojekte”  
In case of discrepancies between the English translation and the German original, the original shall prevail.



## RECOMMENDATION

### Requirements for operating reports of ongoing decommissioning projects

#### 1 Request for advice

At its 46<sup>th</sup> meeting on 25.01.2017, the Committee on DECOMMISSIONING (ST) of the Nuclear Waste Management Commission (ESK) included the topic of following up ongoing decommissioning projects on the basis of operating reports of the nuclear power plants in its programme of consultations. The motivation behind this is the concretisation of the requirements for the documentation of decommissioning contained in Section 9.3 of the ESK Guidelines for the decommissioning of nuclear facilities of 16.03.2015. They relate to the reporting to the competent supervisory authority. The following contents of operating reports (Section 4) show which information the ESK considers necessary for following up decommissioning projects. It is not intended to require separate reports to be submitted to the ESK for information purposes.

The reporting by operators of nuclear power plants is also a source of information for overarching or generically significant changes, developments and trends in the plants. Particularly against the background that the decommissioning and dismantling of nuclear installations is a complex dynamic process that is associated with a change of the tasks and work to be performed as well as the respective working environment, the ESK holds the view that information in the operating reports is required that describes the respective progress of dismantling and shows any safety-relevant effects.

#### 2 Consultations

At its 47<sup>th</sup> meeting on 08.03.2017, the ST Committee informed itself about the structure and contents of operating reports of the nuclear power plants and established the ad hoc working group BETRIEBSBERICHTE (operating reports). It discussed requirements for operating reports that are relevant in terms of decommissioning and presented its results at the 48<sup>th</sup> ST meeting on 03./04.05.2017, at the 50<sup>th</sup> ST meeting on 28./29.09/2017, at the 52<sup>nd</sup> ST meeting on 17.01.2018, at the 53<sup>rd</sup> ST meeting on 21.02.2018, at the 58<sup>th</sup> meeting of the Federation/*Länder* working group on decommissioning on 27./28.02.2018 and at the

54<sup>th</sup> ST meeting on 11.04.2018. For the 55<sup>th</sup> ST meeting on 23.05.2018, the ad hoc working group submitted a draft text for adoption. The concluding discussion took place within the framework of the 56<sup>th</sup> ST meeting on 20./21.06.2018. The ESK discussed the present recommendation at its 67<sup>th</sup> meeting on 05.07.2018 and adopted it at its 68<sup>th</sup> meeting on 26.07.2018.

### **3 Preliminary remarks**

- This recommendation focusses on power reactors under decommissioning. The requirements are to be applied analogously to research reactors.
- Reports on storage (§§ 6 and 9 of the Atomic Energy Act (AtG)) are not the subject of considerations.
- The frequency of the reports must be sufficient to adequately reflect the processes in the procedure; the frequency that is appropriate in each case (e.g., annual, quarterly or monthly reports) is determined in the individual procedure by the licensing and supervisory authority

### **4 Contents of operating reports**

The information relevant for a description of the current situation in a plant under decommissioning and dismantling as well as for the description of the progress of decommissioning and dismantling can be assigned to the topic areas of

- residual operation<sup>1</sup>,
- dismantling,
- monitoring, and
- material flow in the field of waste management

which are described in more detail below.

#### ***Residual operation***

For the phase of residual operation, the current plant status with information on changes or expansions is to be presented, e.g. the new infrastructure created for dismantling, such as facilities for conditioning waste and their operation. Changes to the plant can be permanent shutdown and taking out of service in preparation for dismantling as well as changes to the operating mode through modification of structures, systems and components or the use of new structures, systems and components for residual operation.

The reporting of operating data via operating systems (as in power operation) is not required for dismantling, apart from chemical monitoring, as long as there are still fuel assemblies/fuel rods in the spent fuel pool.

---

<sup>1</sup> Residual operation: For residual operation, alternative terms such as dismantling operation are also used.

A further focus is to be placed on the presentation of the measures taken in response to reportable events and the relevant GRS information notices. With regard to the repair and maintenance work performed and in the case of in-service inspections, all anomalies occurred with a potential for safety-relevant effects are to be considered.

### ***Dismantling***

With regard to the dismantling progress in a plant, the dismantling measures carried out are to be described with information, e.g. on the procedure and implementation. These should also be presented in the context of the sequence and interfaces of the individual work sections and phases of dismantling. In addition, an outlook on the planned dismantling measures is to be presented.

### ***Monitoring***

When presenting the monitoring measures, both the personnel and the environment are to be considered.

With regard to the personnel, the radiation exposure is to be recorded during the performance of the work for residual operation, dismantling and waste management. In this context, the findings made and anomalies identified during incorporation monitoring are also to be considered.

With regard to environmental monitoring, the discharges via the air path and the discharges via the water path are to be specified.

### ***Material flow in the field of waste management***

The information on the material flow regarding waste management is used to track further processing and distribution of the dismantled (radioactive) residual material on the waste management routes, the whereabouts of the radioactive waste and the description of whether this takes place on site or at external service providers.

In particular, for the dismantled (radioactive) residual material, data must be included on

- masses forwarded to third parties (transports to storage facilities, external processing),
- cleared masses, differentiated according to specific and unrestricted clearance,
- quantities of radioactive waste, and
- occupancy of waste storage facilities (internal and external)

In addition, acquisition and delivery of other radioactive substances (e.g. sources) must also be reported. As long as there are still fuel assemblies/fuel rods in the plant, this inventory must also be recorded.

Looking to the future, a forecast must also be made for the total amount of radioactive waste generated. In this context, information on non-radioactive hazardous substances present at the site is also required.

As a general rule, information within the framework of supervisory procedures (§ 19 AtG) should be presented in the operating report under the relevant topic areas in accordance with the processes or procedural instructions approved for decommissioning and dismantling. These could be, for example, modification notifications for residual operation or dismantling measures applied for.

For all topic areas, the aspect “personnel” is also relevant and is therefore to be documented in the operating reports. It should be summarised how the operator ensures the fulfilment of his responsibility (e.g. planning, control) with the available personnel (number and technical qualification).