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SDU-115 - Qualification of old references SR-PSU

1 Background and objective

A requirement on all documents that are produced for the license application is that they shall undergo a factual and quality review. However, many of these new documents need to refer to older or SKB external documents that lack a documented factual and quality review. For example, process descriptions in the SR-PSU process reports contain many references to old or external documents of this type. Therefore, a qualification of these old or external documents is needed in order to fulfill the requirements on quality assurance of documents supporting the license application.

According to the quality assurance document SDU-106, peer reviewed articles and papers fulfil the quality assurance requirement. Furthermore, old documents or parts of old documents can be made quality approved by conducting a documented factual review of the document or the parts of the document that are referenced. This line of action is judged as not possible to follow for qualification of references in the SR-PSU process reports, considering the substantial amount of time and resources it would require. Therefore, an alternative procedure for qualification of references has been developed and tested for some descriptions of fuel processes in the Fuel and Canister process report.

The objective with this document is to provide a procedure for qualification of documents that are used as references in SR-PSU reports. This procedure implies that qualification of references is made in the report where the references are used, e.g. in the process descriptions in the process reports. The qualification is then reviewed by the experts selected for factual review of the report in question, e.g. the process report.

2 Scope

This instruction is valid for the SR-PSU process reports and the Climate report (as well as for other SR-PSU reports which contain supporting references for which no factual review is documented in SKBdoc).

A distinction is made between supporting references and general references. Supporting references are documents that are used to support or justify a decision, selection or treatment of an issue, whereas general references are those used in a broader sense to exemplify or describe an issue. This instruction is restricted to references that, according to the definition above, are regarded as supporting references.

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3 Application

The SR-PSU process reports and the Climate report as well as other SR-PSU reports will be factual reviewed according to existing quality assurance procedures. By providing thorough arguments and justifications in these reports for the treatment of an issue and for the adequacy of the references supporting this treatment, the reliability of this supporting information and reference can be judged in the factual review of these reports.

The procedure for qualification of supporting references in the SR-PSU process reports and the Climate report is given below.

3.1 Justification of selected handling of a process

According to the instructions for developing process descriptions in SR-PSU (SDU-502), the handling of a process in SR-PSU is described and arguments for the selected handling are documented under the heading "Handling in the safety assessment SR-PSU". The expert responsible for the content in this section of a process description shall ensure that all arguments supporting the selected handling are given in such detail that it is possible for the external experts conducting the factual review to assess the reliability in the argumentation without having to consult supporting references, at least not those that lack a documented factual and quality review. This means that any results or arguments adopted from supporting references, at least from those that lack a documented factual and quality review, must be written out; it is not enough to just refer to a result/argument in such a supporting reference.

3.2 Demonstrate adequacy of supporting references

A sections is added to the process descriptions with the heading "Adequacy of references supporting the handling in SR-PSU". This section is added at the end of a process description on the same level as the heading "Handling in the safety assessment SR-PSU".

Under the new heading "Adequacy of references supporting the handling in SR-PSU", the expert responsible for the content in the section "Handling in the safety assessment SR-PSU" documents the reasons why he or she as an expert judge the supporting reference as being adequate from a quality assurance perspective. This shall be done for every reference supporting the suggested handling of the process. Some examples of arguments that can be used are given below.

- The supporting reference is an SKB report that has undergone a documented factual- and quality review.
- The supporting reference is a peer reviewed article or conference paper that is available in the open literature.
- The supporting reference is not an SKB report, but is developed within the framework of a
 quality assurance system that requires a documented factual- and quality review before
 approval and printing.
- The supporting reference is not peer- or factual reviewed, but it is scientifically consistent with other references that are peer reviewed articles or papers.

4 References

SDU-106 Krav på ansökningshandlingar.

SDU-502 Instruction for developing process descriptions in SR-PSU

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