

INSAG Forum 2020

Covid-19, Situation in Finland and some generic concerns



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Covid-19 situation in Finland

- A state of emergency due to the COVID-19 epidemic was declared 16 March 2020.
- Restrictive measures were imposed and recommendations issued, which were effective in curbing the epidemic and protecting risk groups.
- The recommendations issued by the Government were gradually removed or relaxed during the spring and early summer.
- The number of new infections has increased again compared to the low figures in July, and some new recommendations have been issued.
- **Finnish Institute for Health and Welfare**
 - COVID-19 situation remains moderate despite several mass exposures (10 Sep 2020)
 - Number of COVID-19 cases has increased at an alarming rate in recent weeks (17 Sep 2020)
- **From an international perspective, Finland has succeeded well in combating the COVID-19 epidemic.**

Licensees' actions (1)

- The Finnish licensees have instructed their own staff and their suppliers on expectations of practices to be followed to avoid and restrict the spreading of the virus.
- The instructions of the licensees have been somewhat stricter than those given generally to the public.
- To ensure the adequacy of the staff the licensees have defined the critical positions/groups in the organization and the minimum required staffing for these positions.
- The licensees have to ensure that all the time the specified processes are implemented at the NPPs, that up-to-date instructions exist and are followed, and that the staff is competent to perform their duties in the extraordinary conditions.

Licensees' actions (2)

- For ensuring the safety of the staff it is most important to minimize the risk of spreading the virus, several measures have been implemented for this purpose at the Finnish NPPs.
- The licensees have given instructions for example concerning
 - travelling both abroad and inside Finland
 - restricting the number of people in the same room
 - ensuring adequate distances between persons working in the same room
 - minimizing access to areas important to safety and operation of the plant
 - 14 days quarantine and virus testing for workers coming from abroad
 - supporting remote work for all those that the nature of duties allows.

Management of refueling and maintenance shutdowns at the Finnish NPPs (1)

- Refueling and maintenance shutdowns of NPPs in Finland usually take place during the spring and early summer for Olkiluoto units 1 and 2 (BWRs) and late summer-autumn for the Loviisa units 1 and 2 (VVERs)
- The refueling and maintenance shutdowns of the Olkiluoto have been successfully completed.
- In Olkiluoto, practical measures to prevent the spreading of the virus during the shutdowns included for example working in three shifts, staggering the arrival times of the staff to the site and also staggering the lunch hours and coffee breaks.
- Use of protective breathing masks and cleaning of all the surfaces were intensified.

Management of refueling and maintenance shutdowns at the Finnish NPPs (2)

- About 100 foreign experts were invited to carry out specific duties during the shutdowns of the Olkiluoto units.
 - Before arrival to the site they were 14 days in quarantine, they were tested for the virus when they arrived to Finland and after the quarantine.
- In Olkiluoto, altogether 730 contractors participated in the maintenance and refueling shutdowns this year.
 - Arrangements were taken to keep them isolated
- There were some difficulties to get critical foreign experts to the site and also to get some components needed for the maintenance activities
- There are no planned changes to the schedules and scope of Loviisa 1 and 2 outages. The measures to protect the spreading of the virus are similar as in Olkiluoto.

Olkiluoto 3 (EPR)

- Work has continued on the Olkiluoto 3 (EPR) construction site. The plant already has an operating license, but STUK's permission to start fuel loading is still needed.
- Every person working on the construction site is requested to use a breathing mask. About 1500 persons are working on the site for the moment. Access to the construction site is very strictly limited.
- There was some difficulties to get critical foreign experts to the construction site and also to get some components needed for the construction.
- Latest delays of the project have been caused mainly by some technical problems.

Regulatory actions (1)

- Most of STUK's employees started to work remotely as the pandemic started (like most of the governmental officials). Continued oversight functions were possible largely via digital systems.
- Working remotely included document reviews, related decision-making, meetings with licensees and even audit type inspections.
- Audit type inspections have been performed remotely, if it has not been possible to postpone them.
- On-site inspections have been performed mostly by resident inspectors. If necessary, additional inspectors has been sent to the site.
- Inspections during manufacturing abroad have been interrupted due to travel restrictions. Instead, inspections will be conducted later at the site in Finland.

Regulatory actions (2)

STUK's table top-exercise on EPR in a pandemic situation

- The goal of the exercise was to identify the effects of a pandemic on a simultaneous radiation emergency.
- The management group of STUK went through a NPP accident scenario in five time steps.
- The recommendations of STUK and especially how they could be implemented in the pandemic situation were analysed.
- **Some findings of the exercise:**
 - Consider needs and prepare to support the Government
 - Prepare to publish the bases of the recommendations and the models behind them
 - Clarify the preparedness and ability to function of different stakeholders in a pandemic situation
 - Consider the possibilities to implement evacuation
 - Consider the difficulty of receiving international support

Generic concerns (1)

- **Ensuring adequate staffing in critical activities is the major concern of the licensee, especially the control room staff, and special measures were needed and were taken.**
- Another concern, possibly affecting many organizations, is whether there is always enough time and possibilities to multidisciplinary discussions, necessary for informed decision-making, when a great part of the staff is working remotely.
- When the management of the licensee is working largely remotely, a concern is how the management can properly make observations of the activities of the organization at the site, and how it can assure itself that everything is being done according to their expectations.
- Keeping the documentation up-to-date and known to all, and training and mentoring of new workers may be more difficult in these extraordinary conditions.

Generic concerns (2)

- Everything is not “business-as-usual” in a pandemic situation, although the normal functions of the organization are being implemented (but in very abnormal circumstances). False sense of safety should be avoided.
- One concern of high importance is the ability of different organizations to function properly in a pandemic situation and to carry out their duties even in an emergency situation.
- For this purpose, international peer reviews should be considered.
- **These concerns should be carefully considered, if this kind of situation would continue much longer or a similar situation would re-occur due to possible second wave of the virus.**

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Thank You