Principles for the safety culture of the regulatory body

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IAEA Safety Culture characteristics

IAEA SF 1: Principle 3: ‘Leadership and management for safety’ includes following statements:

- The management system has to ensure the promotion of a safety culture
- A safety culture that governs the attitudes and behavior in relation to safety of all organizations and individuals concerned must be integrated in the management system. Safety culture includes:
  - Individual and collective commitment to safety on the part of the leadership, the management and personnel at all levels;
  - Accountability of organizations and of individuals at all levels for safety;
  - Measures to encourage a questioning and learning attitude and to discourage complacency with regards to safety.

INSAG-4 safety culture and regulators

- Regulators have considerable discretionary authority in matters of nuclear safety
  - The management style – relations with operating organizations that are open and cooperative
  - An open approach is adopted to setting safety objectives
  - A consistent and realistic approach to safety is achieved, recognizing the residual risk
  - Regulators recognize that the primary responsibility for safety rests with the operating organization
  - Improvements in safety result from a well judged combination of innovation and reliance on proven techniques

Safety Culture Principles for RB – CNRA Green Booklet (April 2015 draft)

1. Leadership in safety matters has to be demonstrated at all levels in the regulatory body
2. Individual members in the regulatory body have responsibility and accountability for exhibiting behavior that set the standard for safety
3. A culture that facilitates cooperation, open communication and promotes safety
4. Utilizing a systematic approach to implementing a strong, holistic approach to safety
5. Continuous improvement, learning and self-assessment at all levels in the organization

Work on Safety Culture at STUK

- Identified the need to address safety culture more explicitly in the MS
- Latest safety culture self assessments in 2013 at all levels of the organization
  - Finnish application on the IAEA model (DISC-model*) were used
  - Discussions on the status of our safety culture and on how to enforce it in our activities
- Resulted in
  - Management panel on STUK's safety culture
  - Updated Safety and Quality Policy
  - Modifications to inspectors' training programme,
  - Safety Culture in management reviews

*VTT /Reiman, Oedewald, Macchi

DISC-Model used as a basis in STUK's safety culture self-assessment in 2013

STUK's Safety and Quality Policy statements

- The purpose of STUK is to protect people, society, the environment and future generations from the detrimental effects of radiation. Our aim is to keep the radiation exposure of Finns as low and safety as high as is practically possible and to prevent radiation and nuclear accidents.
- Our core values are **expertise, openness, courage and co-operation**. We observe the principles inherent in good governance and in good regulatory operations. We commit ourselves to good professional quality in our operations and high quality in our services.
- We understand **how our work affects safety** and that nuclear and radiation safety is the synergetic sum of several factors. We underline safety as the **first priority** in our operations and decision-making and allocate our resources based on a **graded approach** to safety. With our **behavior we promote** a good safety culture.

STUK's Safety and Quality Policy statements

- We emphasise the **operator's responsibility** for safety. We oversee the safety of radiation operations and of the use of nuclear energy in Finland. In detecting shortcomings, we firmly intervene, where necessary.
- We are prepared against **unusual situations**. Our personnel are organized, instructed and trained to operate under various radiation and nuclear accident situations.
- We continuously **develop and improve** our operations for better safety, quality and successfulness. In our work we utilise the results of research and analyses. We also contribute to the development of Finnish know-how. We identify and take into account any uncertainties and risks relating to our operations. We are vigilant and open to detect any deviations and opportunities for development in our work, courageously highlighting them. In order to find best practices, we regularly ask a third party to evaluate our operations.

STUK's Safety and Quality Policy statements

- We treat one another **equally and fairly**. Our duties and responsibilities are unambiguous and each person is responsible for the quality of their work. Everyone is given the opportunity to develop their professional skills and work duties as well as our organisation; we support this by flexibility of organisational structures as well as **open**, discussing and mutually appreciative **interaction**.
- We openly and in a timely manner **disseminate information** about radiation and nuclear safety related matters and also take an active role and the initiative in **communicating** them. We foster **active relations** with our interest groups.
- **Together** we promote high-quality radiation and nuclear safety.

Conclusions

- Principles/characteristics/factors for good safety culture are to great extent similar between licensees and regulatory bodies and can be applied for developing RB's safety culture
  - Some nuance differences exists between IAEA, CNRA GB principles and national features
- Regulator set an example for promoting safety and good safety culture and to do that we need to
  - Understand the roles and responsibilities between the regulatory body and the licensee
  - Understand the impact regulator has on the licensee by its activities and behaviour
  - Have a holistic approach to safety