

Energiforsk

- Non profit distributing R&D coordinator
- Electricity, heat and gas
- Funding activity by activity, strong involvement from the financiers



Nuclear portfolio programs 2017



Concrete

Strål
säkerhets
myndigheten
Swedish Radiation Safety Authority



Vibrations



Strategic Monit.



GINO

Strål
säkerhets
myndigheten
Swedish Radiation Safety Authority



ENSRIC

Strål
säkerhets
myndigheten
Swedish Radiation Safety Authority



COMRADE

Strål
säkerhets
myndigheten
Swedish Radiation Safety Authority

Stakeholders Energiforsk nuclear:

VATTENFALL



**uni
per**

TVO

fortum



**Strål
säkerhets
myndigheten**

Swedish Radiation Safety Authority



SAFO

Swedish Atomic Forum



Vibrations in nuclear applications

- Vision:
 - Reduce production losses caused by vibration related problems
- R&D and practical information exchange
- Time frame 2016-2018
- Program volume 1 MSEK/year
- Results
 - Reports that can be downloaded from www.energiforsk.se
 - Seminars
 - Tools/guidelines



Vibration related problems

- Pipe vibrations (flow, acoustic, resonance)
- EDG's vibrations
- Turbine vibrations

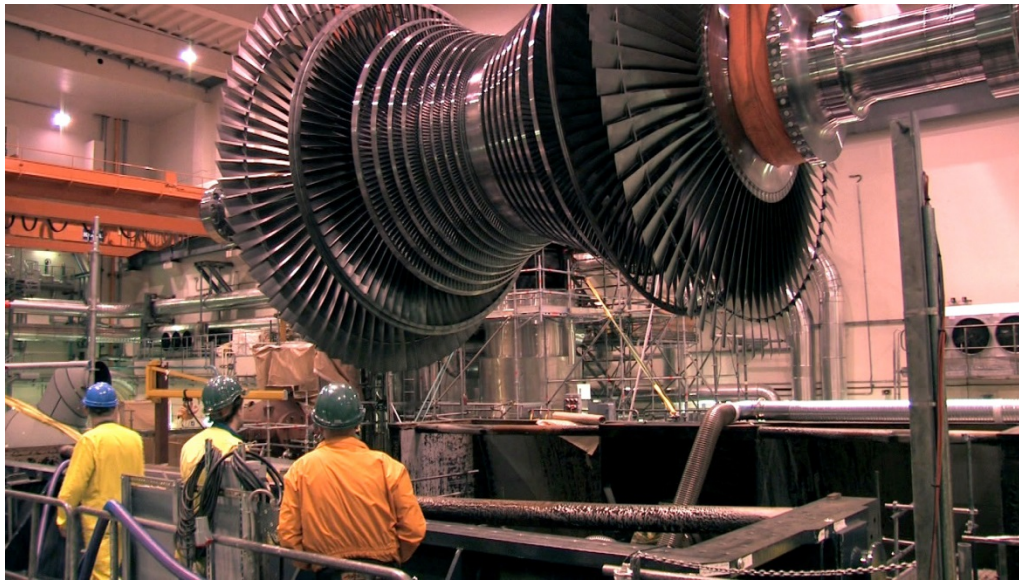
Other areas

- Load follow
- Torsional vibrations
- FIV experiment + CFD
- Pipe vibration measurements



WHY vibration problems?

- Knowledge among partners
- Lack of requirements/standards
- Power uprate
- Exchange of components



WHY a program on Vibrations in Nuclear?

- Knowledge increase
- Knowledge transfer
- Collaboration

