Status Petrothermal Projects

SCCER-SoE Jahreskonferenz
Friday 15th of September 2017, WSL Birmensdorf (ZH)

Dr. Peter Meier, CEO Geo-Energie Suisse
The Heat

99% of its volume is above 1000°C

The geothermal gradient

20°C/Km  30°C/Km  40°C/Km  50°C/Km
The Water Flow

Message

- Sufficient temperature will always be found. It is only a matter of depth (and costs)

- Large water flows at depth are rare. **Technology is therefore required to extract the heat in most cases**
130 potential sites for pilot projects were evaluated within different plays within crystalline basement and sediments.
Haute-Sorne, Canton Jura
Status Haute-Sorne

- 2012: Start planning
- January 2014: Request for construction permit submitted
- June 2015: Construction permit received
- June 2015: Liability insurance CHF 100 Mio. contracted
- December 2016: Cantonal court rejects appeal against construction permit
- December 2016: Risk guarantee from Swissgrid/BFE CHF 47.5 Mio.
- January 2017: Appeal against construction permit
- April 2017: Popular initiative to ban middle and deep geothermal energy in the Canton of Jura submitted
- September 2017: Message of Cantonal government to Cantonal parliament
- October 2017: Cantonal parliament will decide on legal validity of initiative
- October 2017-March 2018: decision of federal court expected
Next steps

- Haute-Sorne: good advice is costly!
- After the clear approval of the new energy law:
  - Continue developments at other sites
  - Study alpine regions for possible sites
- R&D-projects
- Heat storage projects
- Hope for patience of the shareholders
- Go abroad

04.05.2016
Partners
Project DESTRESS / EU-Horizon 2020
Multi-stage and cyclic stimulation

Objectives
Demonstration of soft stimulation treatments of geothermal reservoirs.

Project description
16 Partners from research and industry from 6 European countries and South Korea will demonstrate soft stimulation in existing or planned boreholes at up to 7 sites in sedimentary and crystalline rocks.

Significance
Geo-Energie Suisse focuses on the development and testing of zonal isolation techniques and multi-stage shear stimulation treatments at the Haute-Sorne site.

Budget
Total budget Euro 25 Mio., Geo-Energie Suisse CHF 5.6 Mio.

Project duration
March 2016 – February 2020

Swellable packers
DESTRESS Pohang, South Korea, December 2016
Thank you for your attention!