

CENTRE DE COMPÉTENCE SUISSE EN
GÉOTHERMIE PROFONDE POUR LA PRODUCTION
D'ÉLECTRICITÉ ET DE CHALEUR



Challenges for the industry

SCCER-SoE Annual Conference

Dr. Peter Meier, CEO

Neuchâtel, le 11 septembre 2015



Geo-Energie Suisse AG

Swiss competence centre for deep geothermal energy

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- ❑ Company founded 2010 by 7 Swiss energy providers to evaluate and develop the vast potential of deep geothermal energy.
- ❑ Currently planning or developing projects in the cantons of JU, TG, VD and LU



Challenges for a first pilot project

- Permitting
- Insurance for environmental liability
- Acceptance
- Financing
- Technical, scientific (?)
- Organizational, procedures
- Risk management

Haute-Sorne: construction permit from the République and Canton du Jura (15.6.15)

Signature of the collaboration contract Canton Jura, Community of Haute-Sorne And Geo-Energie Jura SA



P. Meier, CEO Geo-Energie Suisse

Ph. Receveur, Minister Canton Jura

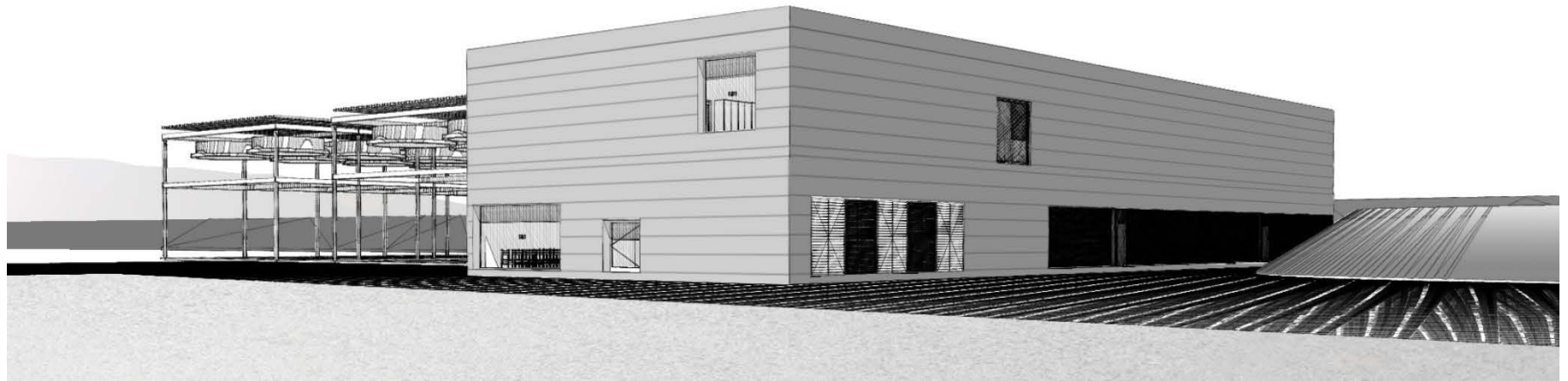
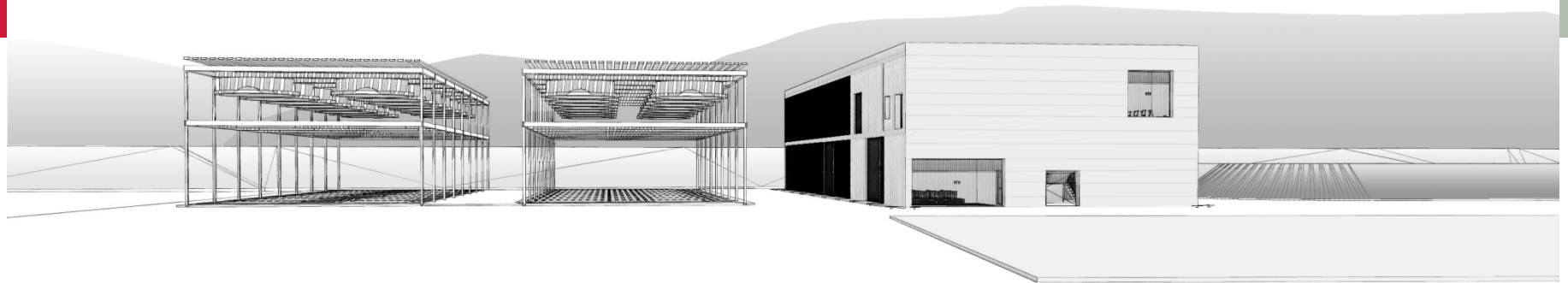
B. Vallat, Mayor Haute-Sorne

Project site Glovelier

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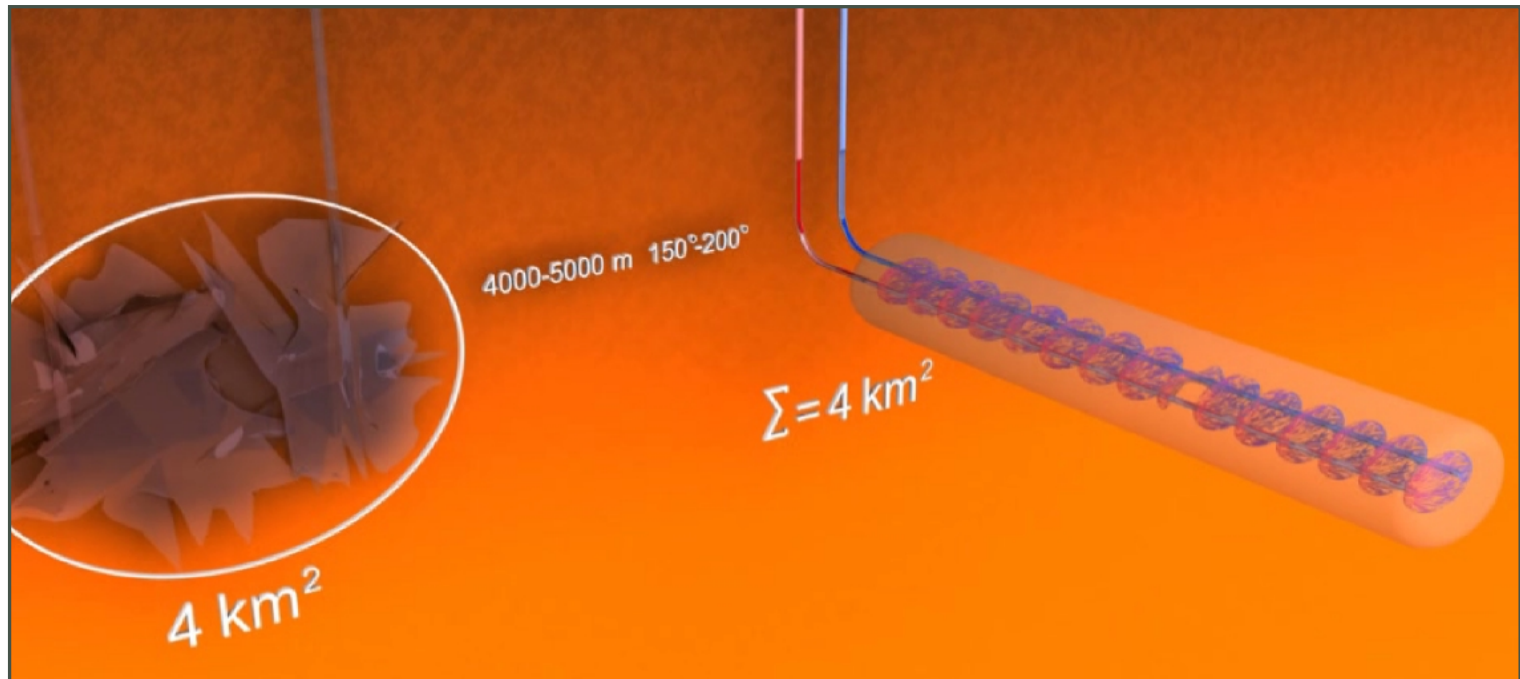
Power plant Haute-Sorne




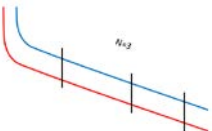
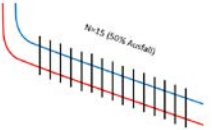
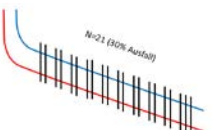
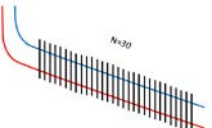
plans: Kury&Stahelin

Concept DHM Basel vs. „new“ horizontal multi-stage system

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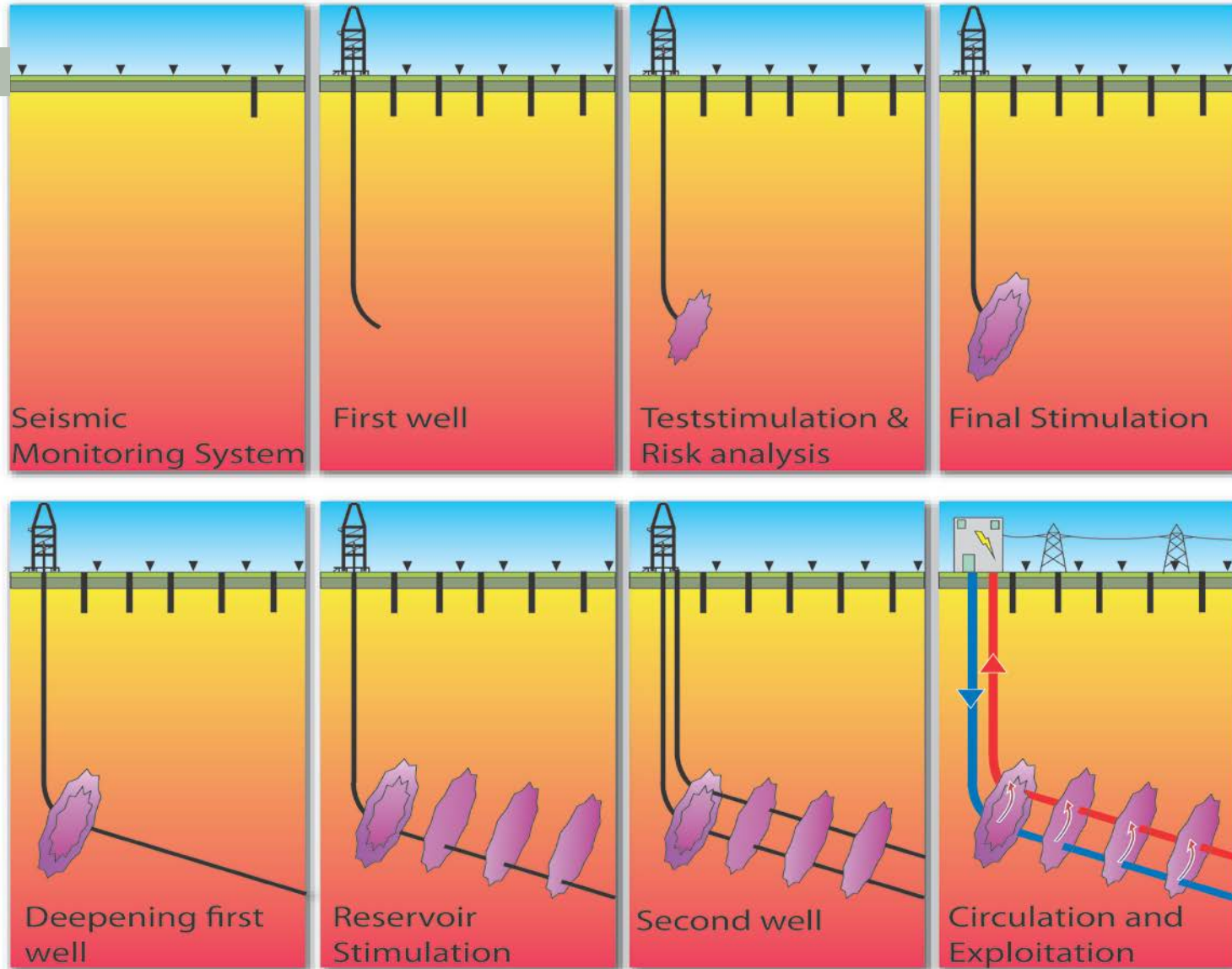


Efficiency of the multi-stage vs. single open-hole systems

Utilisation System	Increase Factor of:	
	El. Power	Costs
 <p>Vertical Single-Open-Hole-System, 1 fracture</p>	1	1
 <p>Single-Open-Hole-System, 3 fractures</p>	1.8	1.2
 <p>Multi-Stage-System; 50% failure rate of stages.</p>	2.9	1.6
 <p>Multi-Stage-System; 30% failure rate of stages.</p>	4.2	1.6
 <p>Multi-Stage-System; 0% failure rate of stages.</p>	6.2	1.6

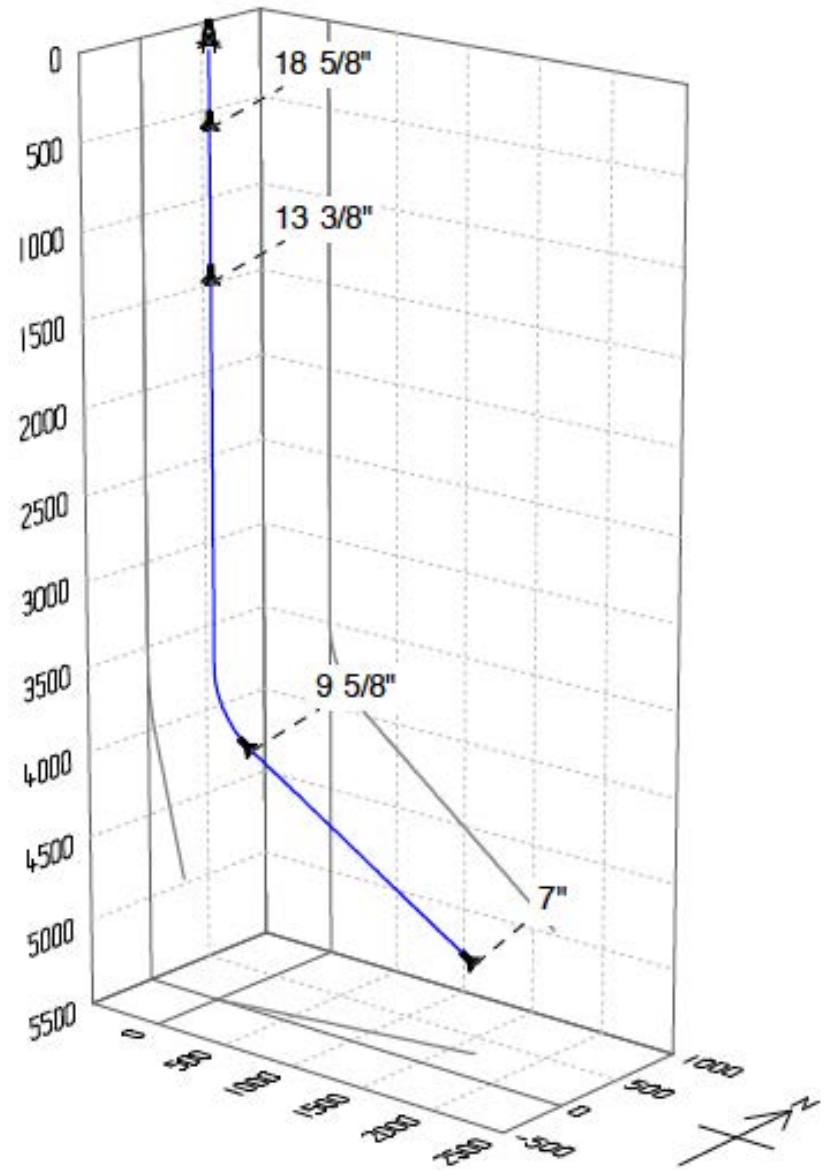
Conceptual design

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Completion and Stimulation

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Scientific collaboration

- GEOSIM (SED/ETH&GES)
- RAMSIS-RI (SED/ETH&GES), CTI financed
- DG-WOW (UniNE, GES), CTI financed
- Thermodrill, EU-Horizon 2020, Start September 2015, SBFI financed
- DESTRESS, EU-Horizon 2020, decision open
- SCCER-SoE: yet to be defined in detail

Time plan Haute-Sorne

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2012



Preliminary impact and risk studies

2013



- Accompanying groups
- Application for construction permit and main environmental impact and risk studies

2014
2015



Examination by authorities
Risk guarantee BFE/Swissgrid

2017



Drilling (if financing successful)

2020+



Power plant working

Geothermal - Out of good ground(s)

