



INTRODUCTION

This Memorandum of Understanding (MoU) is entered on January 17, 2018, by and between:

1. Centre of Excellence for Geothermal Energy (CEGE),

AND

2. M/s. Arya Drillers

Whereas,

Arya Drillers

Dr Ritesh Arya started his carrier as a hydrogeologist in Himachal Government in 1993 @Rs 82.80 paisa. At that time the entire water supply schemes for providing drinking water facility to the people were based on tapping surface water resources only. Groundwater data on mountain areas was negligible and Himalayas were considered to be devoid of substantial groundwater potential. Prior to his work the entire exercise to develop groundwater resources in the mountain state of Himachal was based on hit and trial method. Arya studied samples of more then 6000 borewells and classified the Himalayas into various Hydrostratigraphic zones (International Geological Congress, China, 1996). Later he prepared a model to explain occurrence and movement of groundwater resources in entire Himalayas (International Conference on Groundwater Solutions, Australia, 1997).

Pandit Deendayal Petroleum University (PDU)

Pandit Deendayal Petroleum University promoted by Gujarat State Petroleum Corporation aims at creating a world class University in energy education and research with special focus on the oil and gas sector. PDU addresses the need for trained and specialized human resource for Oil & Gas Industry worldwide. It intends to expand the opportunities for students and professionals to develop an intellectual knowledge base with leadership skills to compete in the global arena. This objective is being addressed through a number of specialized and well-planned undergraduate and post-graduate energy education programmes and intensive research initiative. Pandit Deendayal Petroleum University (PDU), having established School of Petroleum Technology, School of Petroleum Management, School of Technology, is interested in conducting Industrial research problem pertinent to Indian Industry and taking lead to establish research facility on the campus.

The university has established Centre of Excellence for Geothermal Energy (CEGE) to carry out research and development studies in exploration and exploitation of geothermal energy.



Now therefore the MOU witnesses that the parties hereto agree as follow:

1. Objectives

The Memorandum of Understanding expresses mutual interest among the parties to promote research in geothermal energy and to explore in good faith the following:

1. To carry out research in geothermal energy to advance the mutual objective of CEGE, PDU and ARYA DRILLERS and to take advantage of their complementary strengths.
2. Exchange of data and development of models for the benefit of geothermal research in India.
3. Conduct joint studies on exploration, exploitation, interpretation and subsurface modeling in Geothermal.
4. Planning and design for Implementation of pilot geothermal projects.
5. Consider other innovative programs that provide opportunities for collaboration among the institutions with research.
6. Work together and explore the possibilities to develop a viable and sustainable model for funding of the research, which may include support of the Centre and of research projects in areas of interest to the parties related to geothermal energy.

2. UNDERSTANDING OF PARTIES

1. Parties understand and acknowledge that they are making a significant commitment to this collaborative effort. Accordingly, Parties agree to deploy their best efforts on its design and implementation.
2. This MoU shall remain effective for the period of two (5) years from the date of signing of this agreement i.e. up to and thereafter it will terminate. However, it may be renewed as deemed necessary and with mutual consent of both Parties.
3. The Parties understand and acknowledge that this Memorandum of Understanding will provide the foundation for more comprehensive Agreements.
4. Each party would bear its own expenses in regard to implementation of this MOU. Further, actual implementation would be undertaken by respective Parties at its own risk and cost.
5. Each party represents that with respect to the matters which are subject to this Memorandum it will not make or offer any payment, gift, whether directly or through intermediaries, to or for the use of any public official where such payment, gift, promise or advantage would violate the Corrupt Practices Act.
6. **Confidentiality:** The Parties shall during the tenure of the Agreement and at any time thereafter maintain in the strictest confidence, all information acquired in pursuance of the Agreement and shall not, unless authorized in writing by the other party, divulge or grant access to any information acquired in pursuance of the Agreement or the results thereof and shall prevent anyone becoming acquainted



with any such information. CEGE, PDPU shall also not destroy any report, note and technical data relating to the operation/work and not required by the ARYA DRILLERS. ARYA DRILLERS shall be bound by similar obligations w.r.t. confidentiality of information the obligation is a continuing one for the Parties and shall survive after the completion/termination of this Agreement.

The provisions of this clause shall not apply to information that:

- (a) is acquired/developed by the Parties independent of this Agreement or is rightfully received free of restriction from another source having the right to so furnish such information; or
- (b) is in Public domain; or
- (c) at the time of disclosure the information was known to either Parties or its affiliated companies, free of restrictions, as evidenced by documentation in its position; or
- (d) is disclosed with prior consent of the Other Party; or
- (e) is required to be furnished or reported under any Law/Order of a Court or is required by Govt. Ministries/agencies/regulatory agencies, Court of Law or the law of land or like Authorities having jurisdiction as regards such information, or in accordance with the rules, by laws, policies, disclosure standards or courts of professional conduct or ethics that may be applicable to such information. Provided, however, that as soon as the Disclosing Party learns that it is or may be required to disclose any Confidential Information under the above mentioned circumstances, it shall (i) as promptly as possible take reasonable steps to notify the Other Party of the disclosure requirement so that the Other Party, if it deems fit may seek a protective order or other appropriate relief. (ii) Provide such cooperation and assistance as the other party may reasonably request in any effort by the Other Party to obtain such relief.

7. The provisions of this Memorandum reflect the current plans and intentions of the ARYA DRILLERS and CEGE, PDPU but are not binding on the ARYA DRILLERS and CEGE, PDPU. Specific terms and conditions are to be set forth in future Agreements of all Parties.
8. All the parties shall designate a liaison office for this Memorandum of Understanding and for any subordinate Agreements under this Memorandum of Understanding.
9. This Memorandum of Understanding may be renewed or extended by mutual consent of the participating Parties. Such amendments, once signed by authorized signatories will become part of this Memorandum of Understanding.
10. This Memorandum of Understanding is a non-exclusive arrangement among the Parties. The MoU can be terminated by either party after giving 30 days notice in writing.
11. **Resolution of Disputes:** All disputes regarding the interpretation of contents of this MoU or its implementation shall be resolved bilaterally by the Head of the CEGE, PDPU and DG OEC. Any other disputes remaining shall be resolved through the relevant Ministries and guidelines of the Government.



12. **Assignment of the MoU to a third party:** Either Party shall not assign this Agreement to a third party without prior written consent of other Party.
13. **Publications & presentations in Journals & Conferences:** Publications shall have prior approval of ARYA DRILLERS to restrict disclosure of any proprietary data of ARYA DRILLERS. Further, publications and presentations in Journals & Conferences respectively shall be under joint authorship of ARYA DRILLERS & CEGE, PDU.
14. **Intellectual property:** The Parties shall execute separate Agreement for undertaking any project work in collaboration with each other prior to undertaking an activity relating to research in a particular field. The modalities relating to development, ownership and usage of Intellectual Property arising out of or in relation to any work undertaken by the Parties pursuant to this MoU shall be decided mutually by parties on case to case basis, at the time of execution of such agreement.
15. **Comprehensive Agreement for individual projects:** A detailed Agreement including execution Terms and Conditions, payment terms, milestones, deliverables, confidentiality etc. will be entered into for each individual project between CEDE, PDU and respective ARYA DRILLERS under the broad umbrella of this MoU.
16. **Correspondence:** Both Parties agree to correspond regarding this MoU to the attention of designated representative at the following addresses.
17. **Signatories:** The MoU shall be signed by the Head OEC and the Coordinating head of CEGE, PDU, and the originals, made in duplicate, will be retained by ARYA DRILLERS and CEGE, PDU.



IN WITNESS WHEREOF, the Parties to this MOU have caused this agreement to be executed by their fully authorized representatives on their behalf on the ___ day of

**Centre of Excellence for
Geothermal Energy, PDPU**

Signature: _____

Date: _____

Dr. Anirbid Sircar

Head-CEGE

Pandit Deendayal Petroleum Uni.

Raisan, Gandhinagar

Gujarat- 382007

India

Aritesh

ARYA DRILLERS

Signature: _____

Date: _____

Authority