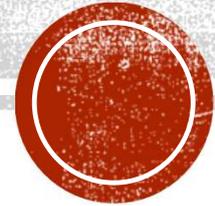




**AVS ENERGY**

**DIVISION : CONSULTANCY**  
**SUBJECT : OWNER'S ENGINEERING**

**GEOHERMAL POWER PLANTS**



❖ Performing below services on behalf of the customer in Projects and existing Power Plants

- ❖ Engineering
- ❖ Project Management
- ❖ Supervision



- ❖ An owner's engineer serves as an independent representative or advocate of the project owner.
- ❖ It is a critical supporting role that provides project management and quality assurance support during all stages of the asset lifecycle.
- ❖ This is a unique consultancy opportunity for the first time investing in Geothermal Energy



- ❖ High quality in the planning and construction of a Geothermal Power Plant is important for its safety and long term reliability.
- ❖ Collaborating with an independent owner's engineer can ensure that your project complies with international standards.
- ❖ Thereby reducing the risk of liabilities and address potential quality issues.
- ❖ In addition, it can also help to reduce your project costs through greater control over the project scope, schedule, orders and various aspects.



- ❖ Investors of Geothermal Power Plants
- ❖ Teams who is operating Geothermal Power Plants
- ❖ Teams who is working on energy efficiency projects in their GPP
- ❖ Geothermal Power Plant ORC suppliers
- ❖ Geothermal Power Plant Turboexpander suppliers.



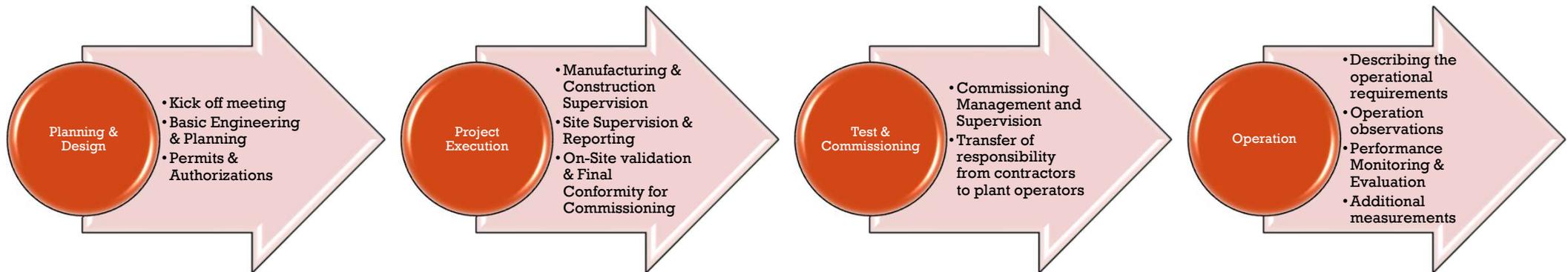
❖ We are performing this job according to customer demand from below phases.  
Customer can hire us for 1 phase or complete project lifecycle

❖ Phases

- ❖ Planning & Design
- ❖ Project Execution
- ❖ Test & Commissioning
- ❖ Operation



# FLOWCHART



❖ AVS can join your project for 1 of these phases or all phases . AVS is aiming to add value in your projects with its unique expertise.



## Kick of Meeting

- Approving of project organisation chart
- Describing of project success criterias

## Basic Engineering & Planning

- Starting of project planning
- Describing of engineering roadmap
- Clarifying of process flow diagram

## Permits & Authorizations

- Describing a roadmap for permits and authorizations which can effect the project lifecycle



# PLANNING & DESIGN

## Manufacturing & Construction Supervision

- Quality assurance of project's outsourced jobs
- Quality assurance of project's construction site jobs

## Site Audit & Reporting

- Implementing of project plan with respect of scope, time and cost
- Subcontractor audit
- Periodic site reporting

## Conformity check for commissioning

- On-Site validation
- Final conformity assesment after all construction jobs done



# PROJECT EXECUTION

## **Commissioning Management Supervision**

- Planning & Reporting
- Execution of commissioning with all related stakeholders

## **Transfer of responsibility from manufacturer to customer operators**

- Organizing of system trainings
- Training of the customer operators



## **TEST & COMMISSIONING**

## Describing the operational requirements

- Describing and Reporting of optimal operation requirements

## Operational Observation

- Operational support and implementing plant development projects
- Hunting of energy efficiency points and producing new projects

## Performance Check and Development

- Evaluation of plant thermal performance
- System observation according to changing conditions

## Additional Measurements

- Organizing and implementing the additional measurements



# PLANT OPERATION



- ❖ AVS has an experience in building more than 100MW GPP and more than 50 production and reinjection wellpad projects.
- ❖ With our unique project experience and local presence , we are able to build strong relationships with local EPCs and componen manufacturers.
- ❖ This enables us to provide reliable support in planning, management, supplier evaluation and personel training for Geothermal Power Plant construction and operation.

# PROJECT PHOTOS

