

## **Industrial Visit Report: Sawara Kuddu Hydroelectric Project, Hatkoti, Shimla, H.P. 4<sup>th</sup> May 2024**



**Date of Visit:** May 4th, 2024

**Location:** Sawara Kuddu Hydroelectric Project, Hatkoti, Shimla district, Himachal Pradesh

**Organizing Institution:** Department of Civil Engineering, Jaypee University of Information Technology, Wagnaghat

**Batch:** B-Tech CE 4th, 6<sup>th</sup> and 8<sup>th</sup> Semester

**Faculty Coordinator:** Mr. Kaushal Kumar and Mr. Akash Bhardwaj (CED)

**Purpose of Visit:** The industrial visit to the Sawara Kuddu Hydroelectric Project was organized as part of the academic curriculum for students of [Department/Program Name] at Jaypee University of Information Technology. The primary objective of the visit was to provide students with practical exposure to the functioning and operations of a hydroelectric dam and powerhouse. Additionally, the visit aimed to enhance students' understanding of renewable energy sources and their role in sustainable development.

**Overview:** The Sawara Kuddu Hydroelectric Project is located in the picturesque region of Hatkoti, Shimla district, Himachal Pradesh. It harnesses the water resources of the Pabbar River to generate electricity through hydropower. The project comprises a dam, a



powerhouse, and associated infrastructure designed to efficiently convert the potential energy of water into electrical energy.

### Activities and Observations:

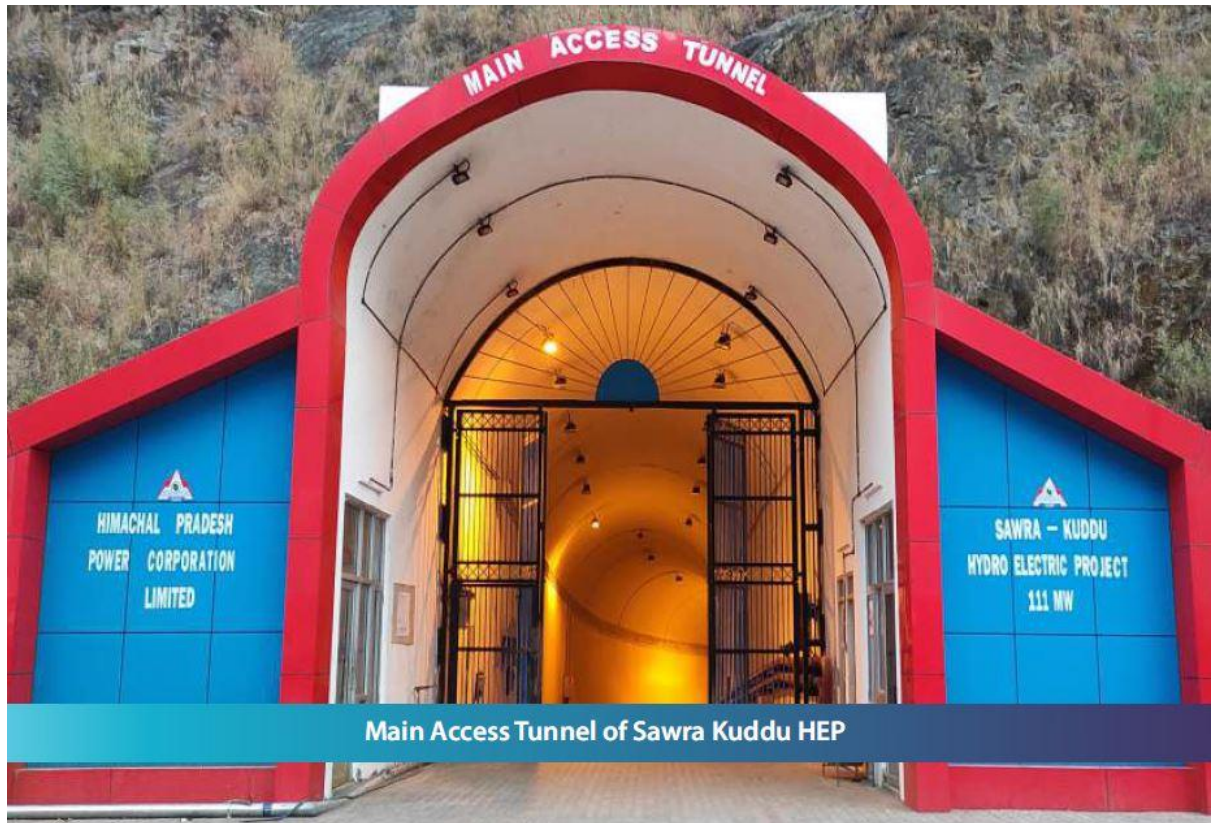
1. **Guided Tour:** The visit commenced with a guided tour of the dam site, led by experienced personnel from the hydroelectric project. Students were provided with insights into the construction, design, and functioning of the dam, including its role in regulating water flow and ensuring efficient energy generation.



**Akshay Bhardwaj**, Assistant Engineer, HPPCL (JUIT Alumnus, Batch 2015-19, B.Tech, CE) explaining the working of Dam and control structures



2. **Powerhouse Visit:** Following the tour of the dam, students were escorted to the powerhouse, where electricity generation takes place. They had the opportunity to witness the various components of the powerhouse, including turbines, generators, and control systems. Interactive sessions were conducted to explain the process of electricity generation from water flow and the role of different equipment in the conversion process.



3. **Environmental Impact:** A discussion was held on the environmental impact of hydroelectric projects, focusing on both positive aspects such as clean energy generation and challenges such as habitat disruption and sedimentation. Students gained an understanding of the importance of balancing energy needs with environmental conservation.
4. **Safety Measures:** Throughout the visit, emphasis was placed on safety measures and protocols implemented at the hydroelectric project. Students were briefed on safety procedures to be followed in industrial settings, including the importance of adherence to designated pathways and safety barriers.

#### Key Learnings:

- Understanding the principles of hydroelectric power generation.
- Appreciating the significance of renewable energy sources in addressing global energy needs.

- Recognizing the environmental and socio-economic implications of hydroelectric projects.
- Gaining insights into the technical and operational aspects of a hydroelectric plant.

**Conclusion:** The industrial visit to the Sawara Kuddu Hydroelectric Project provided students with a comprehensive understanding of hydroelectric power generation and its relevance in the context of sustainable development. The firsthand exposure to the operational aspects of a hydroelectric plant enhanced students' theoretical knowledge and prepared them for future endeavors in the field of renewable energy.

**Acknowledgment:** We extend our sincere gratitude to the management and staff of the Sawara Kuddu Hydroelectric Project for their hospitality and valuable insights shared during the visit. Special thanks to [Sh. Akshay Bhardwaj] for facilitating the tour and enriching the learning experience for our students.

Glimpses of the Visit:















**JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY**  
WAKNAGHAT, P.O. – WAKNAGHAT,  
TEHSIL – KANDAGHAT, DISTRICT – SOLAN (H.P.)  
PIN – 173234 (INDIA) Phone Number- +91-1792-257999  
(Established by H.P. State Legislature vide Act No. 14 of 2002)









**List of Students of CE Department for Swara Kuddu Hydroelectric Plant visit on 04-05-2024**

Sno.	Roll No	Name	Year	Contact No.
	527	Kaushal Kumar	Faculty	
	585	Akash Bhardwaj	Faculty	
1	201629	Avishya Jaswal	4th	
2	201603	Karma Yoezer	4th	
3	201604	Phurpa Dorji	4th	
4	201605	Dechen Wangmo	4th	
5	201619	Jatin Gupta	4th	
6	201628	Ankit Ravi	4th	
7	201602	Piyush Chauhan	4th	
8	201612	Jitendra	4th	
9	201614	Shashwat Nsharma	4th	
10	201620	Saurabh Kharyal	4th	
11	201625	Arushi	4th	
12	201626	Prateek Sharma	4th	
13	201627	Pranjal Srivastava	4th	
14	201642	Mohit Thakur	4th	
15	201632	Utkarsh Singh	4th	
16	201615	Neeeyati Gupta	4th	
17	211601	Nishant Beniwal	3rd	
18	211604	Sarthak Chauhan	3rd	
19	211608	Ritik Baliyan	3rd	
20	211609	Mayank Thakur	3rd	
21	211613	Anirudh	3rd	
22	211614	Karan Negi	3rd	
23	211616	Piyush Gautam	3rd	
24	211617	Ayush Gupta	3rd	
25	211619	Ashish Kumar	3rd	
26	211620	Rajat Sheetal	3rd	
27	211621	Aryan Thakur	3rd	
28	211622	Ayush Goyal	3rd	
29	221020001	Aryaman Chander Katoch	2nd	
30	221020003	Manav Kaplan	2nd	
31	221020005	Hridyesh Sharma	2nd	
32	221020006	Harsh Kumar	2nd	
33	221021002	Shaurya Singh	2nd	
34	221031016	Akhil Sharma	2nd	

Kaushal Kumar  
 Asst. Professor, CED