



Hike cum Technical Visit to Sg. Kerling Mini Hydropower Plant, Kuala Kubu Bharu, Selangor

by Dr Siow Chun Lim and Ir. Siew Yaw Jen

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The hike cum technical visit to Sungai Kerling Mini Hydropower Plant was organised by Highway & Transportation Engineering Technical Division) on 27th August 2017. The participants first gathered at the Caltex petrol station at about 9am which is several kilometres away from the trailhead. Once everyone is at the trailhead, the approximately 9km hike up to the power plant commenced. Along the way, we were guided by the power transmission poles. A river and a waterfall were observed during the hike. After about 2.5 hours hike, the participants have reached the power plant as shown in Figure 1 and 2.



Figure 1: The participants



Figure 2: The mini hydropower plant

Once there, we were briefed and given a walkthrough on the power plant by the engineer in charge. The Sg. Kerling Mini Hydropower Plant is located at Sungai Kerling, Kuala Kubu Bharu in the state of Selangor, Malaysia. It is owned by Renewable Power Sdn Bhd. This project utilizes the head differential and the river flow of Sungai Kerling to generate clean electrical energy. According to him, this is one of the earliest mini hydro plant in Peninsular Malaysia. The project was completed within 15 months and has been running for more than 8 years. Pelton turbine which extracts energy from the impulse of moving water in the Sungai Kerling was used. The 2 generators which converts mechanical energy to electrical energy are running at rated speed of 500 rpm. The 2MW power generated will then be stepped up to 11kV to be delivered to TNB via the interconnection point at PE Kg. Air Panas. Similar with other mini hydropower plants, optimum amount of rainfall is desirable. Prolonged drought will severely reduce the power generated whereas excessive rainfall may result in the need of unforeseen and additional maintenance and reparation works.

No photos were allowed within the generation plant. Once the briefing is done, the participants had lunch with the hosts. The visit officially ended at about 1pm after the session lead thanked the host, Mr. Zainul for his kind arrangement and hospitality. The participants were transported back to the trailhead by a four-wheel drive as shown in Figure 3.



Figure 3: Participants on the way back to the trailhead

A token of appreciation was later presented to Renewable Power Sdn. Bhd. as shown in Figure 4.



Figure 4: Presentation of token of appreciation to Renewable Power Sdn. Bhd.