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Dispatch Tuesday PM: Arapuni Dam Visit And The journey to Taupo

To start this dispatch I feel very privileged because I consider myself to be very lucky to be a part of this class and moreover have the great opportunity to travel to New Zealand a wonderful country rich in culture, heritage and more over a nation that exemplifies the use of sustainable forms of energy for a better well being for its community. On Tuesday for the second half our professor had planned a great travel itinerary where we would visit the Arapuni Hydro Power Station that is built on river Waikato. This hydro power station is controlled and maintained by Mercury NZ Limited, a company that comes under the A listers in the Renewable energy sector of New Zealand.



Figure 1: A photograph Captured By Me During Site Visit Of The Arapuni Dam

After a quick lunch in our favourite lunch stop “Countdown” we started our journey to Taupo, a beautiful city by the lake. We were informed that the lake was formed after a volcanic eruption in the region. After a good 2 hour 30 min drive from the wind farms we reached the Arapuni dam, a majestic structure that has been serving the country since 1929. At the site we were warmly welcomed by Kiel, the site manager from Mercury who spoke about his enduring family connection with the dam, where his father, brother and also his sister were brought up near the dam due to their fathers profession and how his whole family is dedicated workers for Mercury. So Arapuni Dam in terms of structure is about 64 metres high from the foundation level, the power house is about 136 metres long and 22 metres wide. There are about eight steel-lined penstocks which are around 3.6 in diameter. The type of turbine is Francis in this Hydro Power station and they are eight in number and placed vertically and they have a total capacity of 164 MW. We were told the hydro power plant contributes to around 10-15% for New Zealand’s Power Generation. After looking at all the equipment in the control rooms as well as the transformers, turbines and everything we started our wonderful and scenic drive to Taupo to enjoy the beautiful city view and life in the evening.



Figure 2: Captured By Me The Turbines Inside The Power Generation Room