Dispatch for Wednesday, March 8th 2023 Ugo Mbakwe Mecury - Ngatamariki geothermal power station

On Wednesday morning, we had planned to visit the Ngatamariki Geothermal Power Station, located 17 km northeast of Taupo in Waikato. Upon reaching our destination, we were warmly welcomed by the Geothermal Maintenance Manager, Nathan Tesselar. He then led us to the conference room, where we received an informative presentation on the facility. The Ngatamariki Power Station was commissioned in 2013. The Plant consist of 7 wells, 3 of the wells being production wells and the remaining 4 injections wells, it has the largest Ormat 20MW Binary Cycle units in the world. During our tour the plant was going through a performance test, so we got to witness the steam emitted from the cooling tower.

Throughout the tour, I observed our guides constantly monitoring the air quality of the plant to ensure a safe and sustainable operation. We had the opportunity to drive down to one of the production wells, which has a remarkable depth of more than 3 km. We were also taken to see the injection well pipes, which play a crucial role in the geothermal process. These pipes are responsible for re-injecting cooled geothermal fluids back into the reservoir, maintaining the sustainability and longevity of the geothermal resource.

Overall, the visit to the Ngatamariki Geothermal

Power Station was an enlightening experience,

providing us with a deeper understanding of the

complexities and innovations involved in geothermal
energy production.



