

Thesis Progress Form

CHARLES DARWIN UNIVERSITY

College of Engineering, IT, and Environment

Name: Shane Reynolds

Unit: ENG720

Title: Automatic generation control of a two area power system using deep reinforcement learning

Supervisors: Charles Yeo & Stefaniya Klaric

Time & Date: 11am @ 19/03/2020

1 Progress since last meeting

- Final iteration on Research proposal
- Completed and submitted Research Proposal document
- Readings on AGC and Load Frequency Control (LFC) for Literature Review
- Working on Draft Literature Review

2 Discussion Points

- Any feedback on Research Proposal

3 Plan until the next meeting

- Complete and submit draft literature review
- Develop data management plan



- Contact Mark Howard from PWC to discuss obtaining data sets
- Look for a contact at PWC to obtain timeseries data sets
- Investigate ways to simulate load demand data
- investigate programming languages to implement DRL agent and how these integrate with the selected simulation environment
- Reach out to DIgSilent again to try and get demonstration software
- Create basic classical control models using Matlab

Supervisor

March 19, 2020