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 & Stefanija Klaric

Time & Date: 21/07/2020 @ 11am

1 Progress since last meeting

- Completed interim report
- Reduced the amount of training done per episode, reducing the training time for each episode Undertook more preliminary testing of model architecture and DDPG parameters
- Re-wrote preliminary experiments chapter to provide a more structured and scientific approach. Presented findings in a clearer and more concise manner

2 Discussion Points

- CY advised to proceed with completion of thesis
- SR advised that results of DDPG are approaching the performance of PID; however, do not seem to be able to match or exceed PID performance. SR advised that there are still some avenues to explore that might yield better results
- CY advised that research needs to move away from simulation and match real world scenario

3 Plan until the next meeting

- Approach PWC or TGEN to determine real world parameters and real world load data
- Determine a clear experimental methodology for main research experiments
- Continue writing thesis

Supervisor

July 24, 2020