

Active Power Load Balancing

- The purpose of Active Power Load Balancing is to regulate output frequency in islanded mode by ensuring that:

$$|P_{PV} - P_{load}| \leq P_{batt}$$

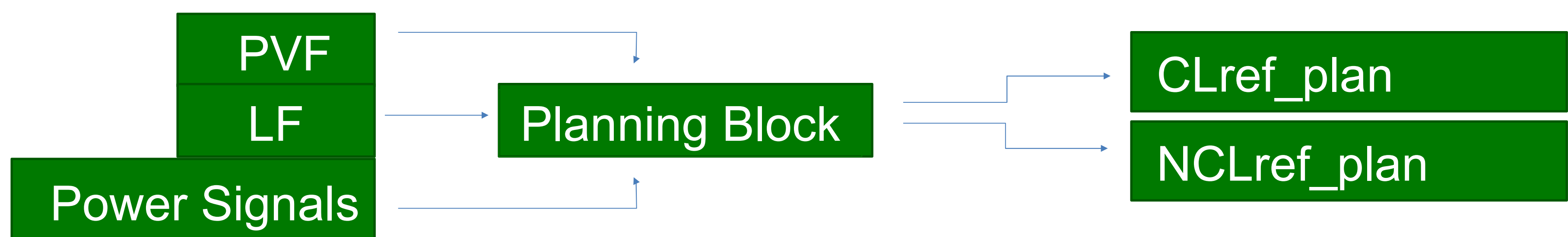
- Battery performs the droop control by determining the speed at which the synchronous generators operate

Project Goals

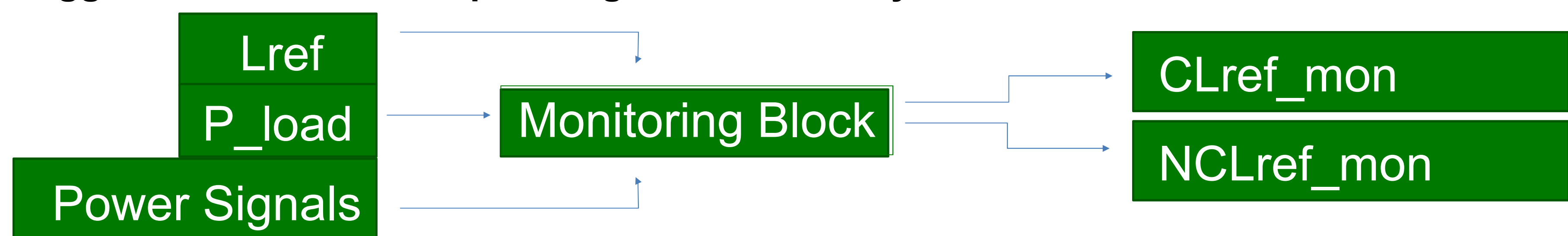
- LABVIEW has an interface with the desired hardware
- The power system has already been implemented in Simulink
- The goal is to implement the power system in LABVIEW

Power System – Central Controller

- Central Controller - plans and monitors the load to determine whether the stated condition in the islanding mode is met
- Planning Block triggered as soon as islanding takes place and every minute thereafter



- Monitoring Block triggered 4 seconds after planning block and every 2 seconds thereafter



Results

