Timestep = 0.5 seconds MiniWECC 30 Minutes of 0.03% noise.

## AGC Settings:

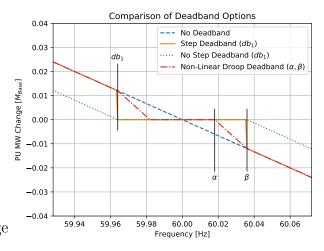
• B = 1% initial area load

• Action Time: 15 seconds

• ACE Gain: 1.75

• Filtering: PI kp=0.025 a=0.0001

• IACE Included, 15 second window average



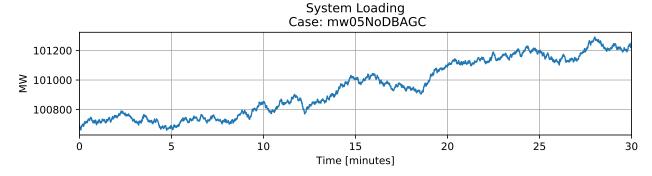
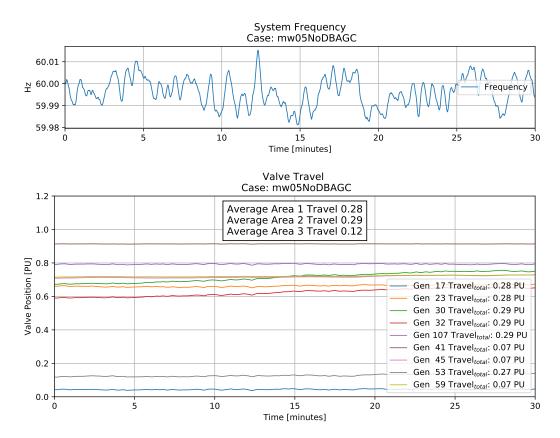


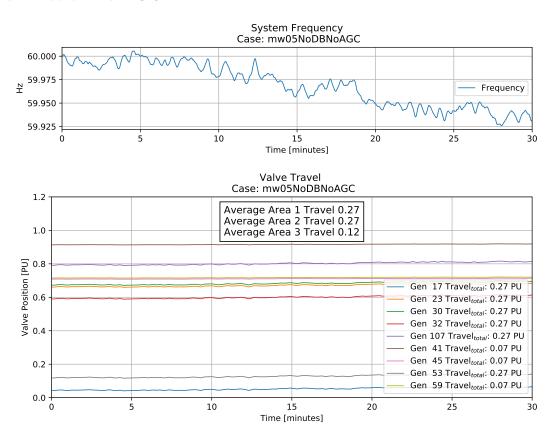
Table 1: MiniWECC noise results.

|           | Valve Travel [PU] |        |       |        |         |         |           |           |
|-----------|-------------------|--------|-------|--------|---------|---------|-----------|-----------|
|           |                   | No DB  |       | Step   | -       | No-Step |           | N-L Droop |
| Generator | No DB             | No AGC | Step  | No AGC | No-Step | No AGC  | N-L Droop | No AGC    |
| 17        | 0.28              | 0.27   | 2.66  | 5.93   | 0.26    | 0.26    | 0.28      | 0.32      |
| 23        | 0.28              | 0.27   | 2.74  | 5.93   | 0.30    | 0.26    | 0.30      | 0.32      |
| 30        | 0.29              | 0.27   | 2.76  | 5.93   | 0.32    | 0.26    | 0.32      | 0.32      |
| 32        | 0.29              | 0.27   | 2.87  | 6.28   | 0.30    | 0.26    | 0.31      | 0.32      |
| 107       | 0.29              | 0.27   | 2.77  | 6.28   | 0.25    | 0.26    | 0.27      | 0.32      |
| 41        | 0.07              | 0.07   | 0.53  | 1.12   | 0.06    | 0.06    | 0.07      | 0.08      |
| 45        | 0.07              | 0.07   | 0.65  | 1.12   | 0.20    | 0.06    | 0.12      | 0.08      |
| 53        | 0.27              | 0.27   | 2.91  | 6.28   | 0.32    | 0.26    | 0.31      | 0.32      |
| 59        | 0.07              | 0.07   | 0.61  | 1.12   | 0.14    | 0.06    | 0.10      | 0.08      |
| Total:    | 1.91              | 1.83   | 18.50 | 39.99  | 2.15    | 1.74    | 2.08      | 2.16      |

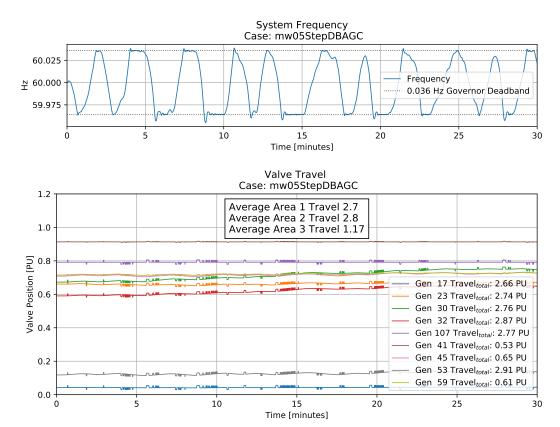
#### mw05NoDB With AGC



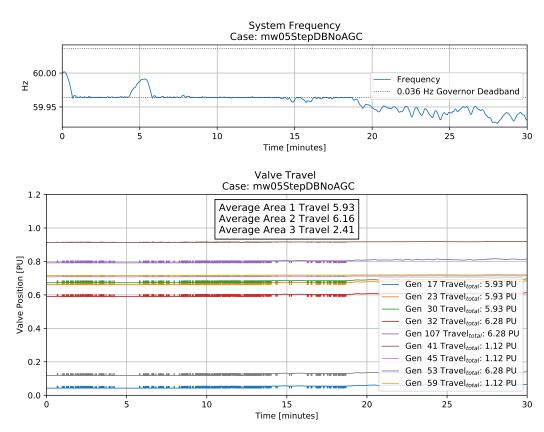
#### mw05NoDB With No AGC



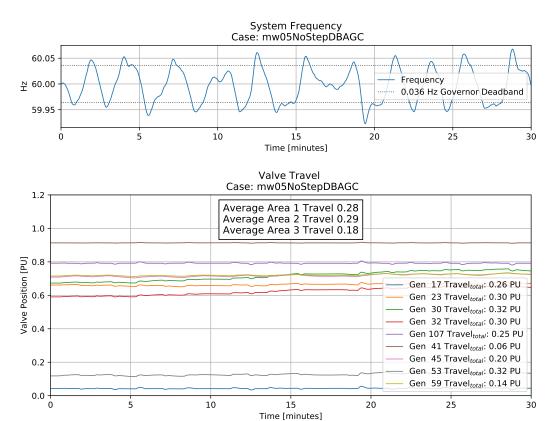
# mw05StepDB With AGC



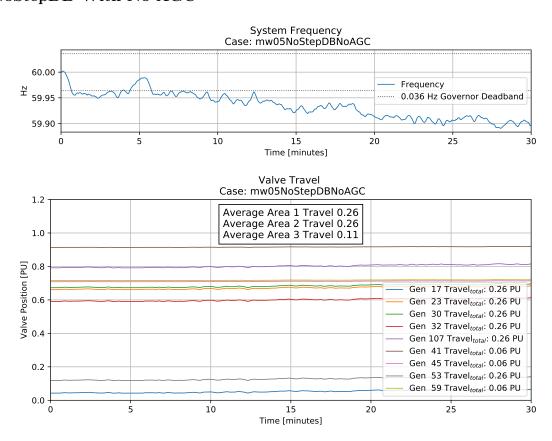
# mw05StepDB With No AGC



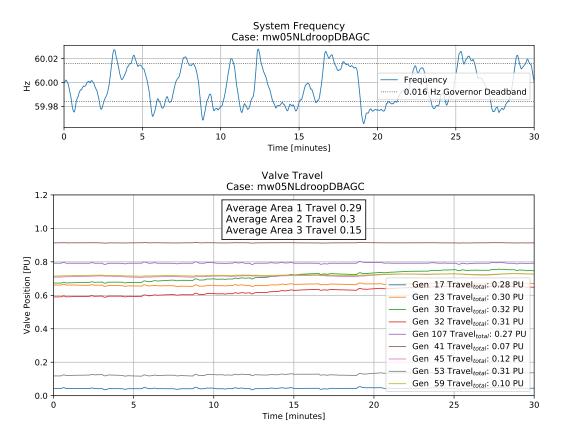
## mw05NoStepDB With AGC



### mw05NoStepDB With No AGC



#### mw05NLdroopDB With AGC



### mw05NLdroopDB With No AGC

