

PrA TPDs checklist (updated)

Reporting period: Year 26_2 (Autumn-Winter 2022/23)

Period of Operational Use: Autumn-Winter 2022/23 (06/09/2022 – 31/03/2023)

| Check | Results | Comments | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---|--------|----------|---------|--------|--------|-----|------|------|-----|-----|-----|-----|------|------|-----|--------|--------|-----|-------|-------|-----|---|---|-----|---|---|--|--------|----------|-----|---|---|-----|---|---|-----|--------|--------|-----|---|---|-------|--------|--------|-----------|
| Date of receipt | Wednesday 22 June 2022 | Within timeframes according to TPDs timetable | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Data completeness (FF) | Expected files: <ul style="list-style-type: none"> • x6 .csv Regression data (PC 1, 2b, 2s, 3, 4b, 4s) • x6 .csv GAACs • x8 .csv Profile coefficients (PC 1 to 4s) • x48 .csv Algorithmic stretched coefficients | We received all expected files | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Data format (FF) | All files in correct format. | No issues | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Data completeness (NFF) | We received all expected files as shown below. Regressions <table border="1"> <thead> <tr> <th></th> <th>Actual</th> <th>Expected</th> </tr> </thead> <tbody> <tr> <td>Records</td> <td>597552</td> <td>597552</td> </tr> <tr> <td>GSP</td> <td>1400</td> <td>1400</td> </tr> <tr> <td>PFL</td> <td>100</td> <td>100</td> </tr> <tr> <td>RES</td> <td>2500</td> <td>2500</td> </tr> <tr> <td>COF</td> <td>527600</td> <td>527600</td> </tr> <tr> <td>PER</td> <td>65950</td> <td>65950</td> </tr> <tr> <td>ZHD</td> <td>1</td> <td>1</td> </tr> <tr> <td>ZPT</td> <td>1</td> <td>1</td> </tr> </tbody> </table> Profile Coefficients <table border="1"> <thead> <tr> <th></th> <th>Actual</th> <th>Expected</th> </tr> </thead> <tbody> <tr> <td>ZHD</td> <td>1</td> <td>1</td> </tr> <tr> <td>PFC</td> <td>8</td> <td>8</td> </tr> <tr> <td>DPP</td> <td>140160</td> <td>140160</td> </tr> <tr> <td>ZPT</td> <td>1</td> <td>1</td> </tr> <tr> <td>Total</td> <td>140170</td> <td>140170</td> </tr> </tbody> </table> | | Actual | Expected | Records | 597552 | 597552 | GSP | 1400 | 1400 | PFL | 100 | 100 | RES | 2500 | 2500 | COF | 527600 | 527600 | PER | 65950 | 65950 | ZHD | 1 | 1 | ZPT | 1 | 1 | | Actual | Expected | ZHD | 1 | 1 | PFC | 8 | 8 | DPP | 140160 | 140160 | ZPT | 1 | 1 | Total | 140170 | 140170 | No issues |
| | Actual | Expected | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Records | 597552 | 597552 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| GSP | 1400 | 1400 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PFL | 100 | 100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RES | 2500 | 2500 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| COF | 527600 | 527600 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PER | 65950 | 65950 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZHD | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZPT | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Actual | Expected | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZHD | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PFC | 8 | 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DPP | 140160 | 140160 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZPT | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | 140170 | 140170 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Data format (NFF) | All files in correct format. | No issues | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SVAA Test Loading | SVAA test loading results showed no issue for all GSP Groups. | No issues | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Check | Results | Comments | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|---|-------------------|-----------------|-------------------|---|----------|--------|-------|----|----------|---------|-------|----|--|--|--|---|----------|----------|-------|----|----------|--------|-------|----|--|--|--|---|
| | There were 'warnings' for the GSP Groups _N and _P. However this was expected since the Scottish GSP Groups were not originally included, as they had their own profiles before BETTA. | SVAA Test load results received on 05/07/2022 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Friendly (FF) vs Non-friendly (NFF) data comparisons | Basic Regression Coefficients are the same in both files. 14 Settlement Period stretch for Switched Load Profile Classes 2 and 4 also match. | No issues | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Eval (new reg.) vs. GAD | Y26_2 regression data evaluated for 2021/22 Autumn to Winter (September 2021 to March 2022) and the outturn NET. This evaluated demand is compared with GAD. Comparisons indicate regressions look okay. | No issues | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Y26_2 vs. Y25_2 evaluated regressions at 10-year average NETs for 2021/22 | Y26_2 regression data compared to Y25_2 regression; comparisons indicate regressions look okay. | No issues | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Data Analyst analysis for Y26_2 GADs | <table border="1"> <thead> <tr> <th>PC</th> <th>Avg. Demand</th> <th>Avg. Std. Error</th> <th>Precision 2022/23</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>0.454772</td> <td>0.0313</td> <td>6.87%</td> </tr> <tr> <td>2b</td> <td>0.601503</td> <td>0.05534</td> <td>9.20%</td> </tr> <tr> <td>2s</td> <td></td> <td></td> <td></td> </tr> <tr> <td>3</td> <td>1.565742</td> <td>0.083824</td> <td>5.35%</td> </tr> <tr> <td>4b</td> <td>2.740415</td> <td>0.1974</td> <td>7.20%</td> </tr> <tr> <td>4s</td> <td></td> <td></td> <td></td> </tr> </tbody> </table> | PC | Avg. Demand | Avg. Std. Error | Precision 2022/23 | 1 | 0.454772 | 0.0313 | 6.87% | 2b | 0.601503 | 0.05534 | 9.20% | 2s | | | | 3 | 1.565742 | 0.083824 | 5.35% | 4b | 2.740415 | 0.1974 | 7.20% | 4s | | | | Table presented by Data Analyst at the last PEG meeting |
| PC | Avg. Demand | Avg. Std. Error | Precision 2022/23 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 0.454772 | 0.0313 | 6.87% | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2b | 0.601503 | 0.05534 | 9.20% | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2s | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 1.565742 | 0.083824 | 5.35% | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4b | 2.740415 | 0.1974 | 7.20% | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4s | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Evaluated algorithmic stretched coefficients all sum to same value per stretch | Differences in all Profile Class 2 stretches are inside tolerable limits. Differences in all Profile Class 4 stretches are inside tolerable limits. | No issues | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Group Average Annual Consumptions (GAACs) | The percentage ratios between the average GAACs and the average annual consumption per PC are 100% | Small differences (up to 0.3%) seen for some ratios | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Check | Results | | | Comments |
|--|----------------------|------------------------|------------------------|---|
| Negative evaluation counts at long run average NETs +/- 10°F for an evaluated matrix of 365 x 48 values. (17,520 half-hourly evaluations) | Profile Class | HH Count + 10°F | HH Count - 10°F | Small number of negative values on PC2s (Switch load) |
| | PC1 | 0 | 0 | |
| | PC2b | 0 | 0 | |
| | PC2s | 14 | 2 | |
| | PC3 | 0 | 0 | |
| | PC4b | 0 | 0 | |
| | PC4s | 0 | 0 | |