



Barr River hydro scheme

Monthly report – June 2025

1 Summary

An exceptional month with the return of decent rainfall levels.

2 Monthly generation & revenue

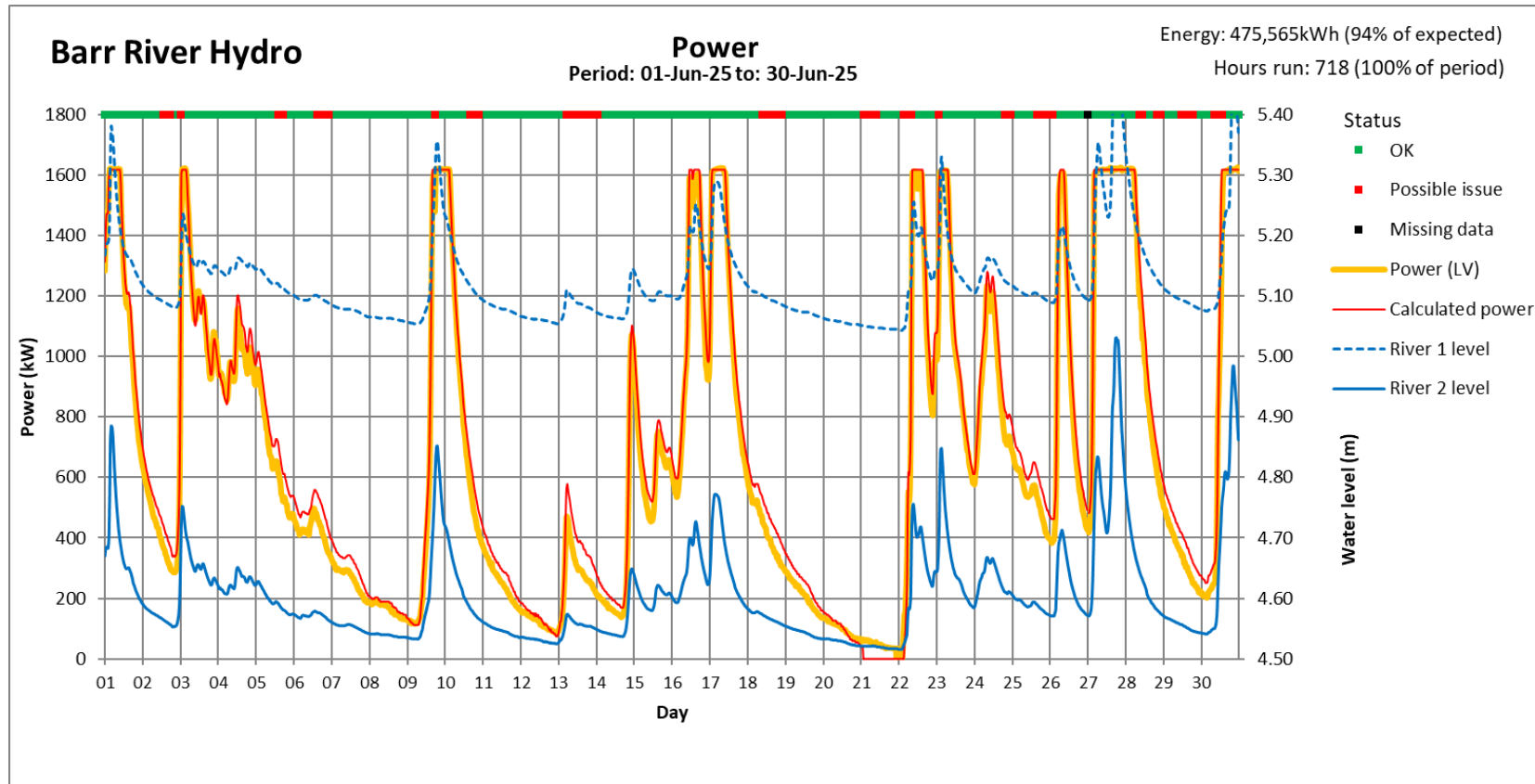
| Parameter | Value |
|---|---------|
| Actual generation (FIT meter), kWh | 475,565 |
| Average generation in month, kWh | 211,278 |
| Forecast generation in month (P50), kWh | 188,561 |
| Actual relative to forecast | 252.2% |
| Rainfall relative to 1991-2020 average by month | 134% |
| Calculated generation ¹ kWh | 503,781 |
| Actual relative to calculated generation, kWh | -28,216 |
| Actual relative to calculated generation, % | -5.6% |
| Approximate revenue in month ² | £84,263 |

¹ Calculated generation is based on river level data and seeks to establish the expected generation with no performance issues.

² Export revenue based on reported export and estimated GDUoS charges.

| Export meter | Value |
|-----------------------------|---------|
| Export, kWh | 469,249 |
| Variance to generation, kWh | -6,316 |
| Variance to generation, % | -1.3% |

3 System reporting



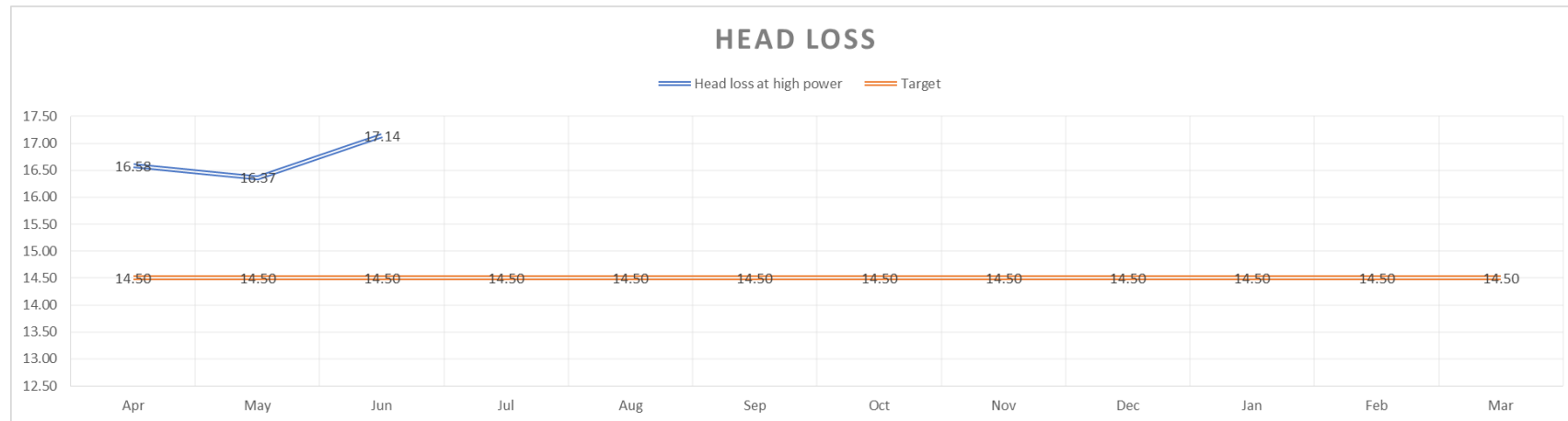
3.1 Scheme anomalies to calculated generation

| Date/time | Details | Action required |
|-----------|--|---|
| General | Slightly under generating during times when river level is dropping. This is possibly a result of varying water flow from secondary intakes but could be connected to the head loss in the pipeline. | GHC will review data after pigging and investigate further. |

3.2 Other system events

| Date/time | Details | Action required |
|----------------|---|-----------------|
| 9/6/2025 17:30 | Turbine shutdown due to high reactive energy. Auto restarted shortly after. | N/A |
| 22/6/2025 | 13.40 - Turbine shutdown due to F003 & auto restarted 18:00 - F156 alarm, no impact on operation | N/A |

3.3 Head loss –Scheme pigged by Chris Henshaw 12-13/7/25.

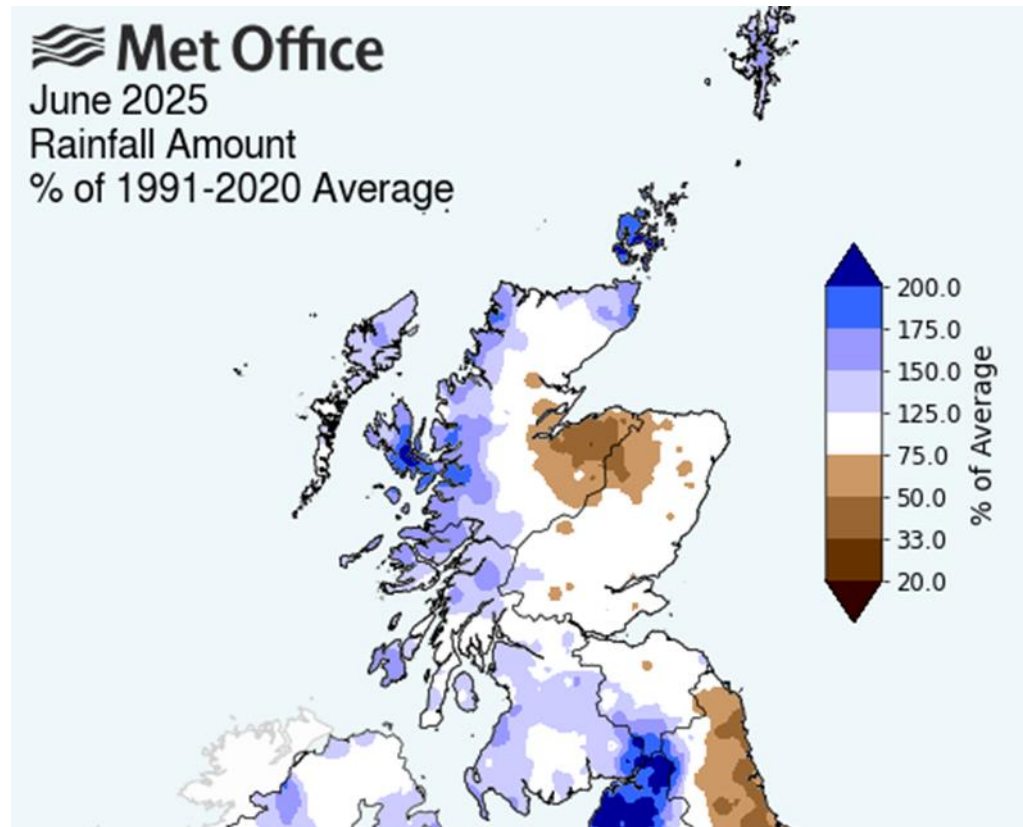


3.4 Temperatures & Vibration

| Parameter | Temperature at or near full power, °C | Alert level, °C |
|-------------------------|---------------------------------------|-----------------|
| Generator DE bearing | 46.2 | 85 |
| Generator NDE bearing 1 | 42.4 | 85 |
| Generator NDE bearing 2 | 49.1 | 85 |
| Generator windings | 69.0 | 145 |

| Parameter | Vibration at or near full power, mm/s | Alert level, mm/s |
|---------------|---------------------------------------|-------------------|
| Generator DE | 0.47 | 3.0 |
| Generator NDE | 1.26 | 3.0 |

4 Rainfall



| | |
|--|------|
| Rainfall this month (rain gauge), mm | 201 |
| Western Scotland rainfall in month with respect to 1991-2020 long term average | 134% |

5 Scheme annual performance summary

| FY 2025/6 | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Total |
|---|---------|---------|---------|---------|----------|---------|---------|---------|----------|---------|---------|---------|------------|
| Actual generation kWh | 66,263 | 120,774 | 475,565 | | | | | | | | | | 662,602 |
| Average generation since commissioning | 262,333 | 217,596 | 211,278 | 335,128 | 418,095 | 302,196 | 524,441 | 539,763 | 555,825 | 506,699 | 511,675 | 283,133 | 691,207 |
| Forecast generation (P50) | 369,360 | 226,766 | 188,561 | 195,146 | 280,601 | 387,431 | 582,631 | 618,214 | 620,057 | 695,941 | 554,678 | 611,047 | 784,687 |
| Actual relative to forecast | 17.9% | 53.3% | 252.2% | | | | | | | | | | 84.4% |
| Rainfall relative to 1991-2020 average by month | 54% | 107% | 134% | | | | | | | | | | 98% |
| Calculated generation kWh | 65,116 | 125,464 | 503,781 | | | | | | | | | | 694,361 |
| Variance to calculated generation kWh | 1,147 | -4,690 | -28,216 | - | - | - | - | - | - | - | - | - | -31,759 |
| Variance to calculated generation % | +1.8% | -3.7% | -5.6% | | | | | | | | | | -4.6% |
| Approximate revenue | £10,279 | £20,713 | £84,263 | | | | | | | | | | £115,255 |
| Capacity factor (monthly) | 5.7% | 10.0% | 40.8% | | | | | | | | | | 18.8% |
| Industry wide RoR capacity factor | | | | | | | | | | | | | #DIV/0! |
| FY 2024/5 | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Total |
| Actual generation kWh | 298,851 | 170,950 | 236,233 | 302,216 | 636,431 | 181,760 | 318,014 | 366,415 | 819,629 | 334,946 | 368,598 | 294,450 | 4,328,493 |
| Average generation since commissioning | 244,074 | 240,920 | 198,801 | 351,584 | 308,927 | 342,342 | 593,249 | 597,546 | 467,890 | 563,949 | 559,368 | 279,361 | 4,748,008 |
| Forecast generation (P50) | 369,360 | 226,766 | 188,561 | 195,146 | 280,601 | 387,431 | 582,631 | 618,214 | 620,057 | 695,941 | 554,678 | 611,047 | 5,330,433 |
| Actual relative to forecast | 80.9% | 75.4% | 125.3% | 154.9% | 226.8% | 46.9% | 54.6% | 59.3% | 132.2% | 48.1% | 66.5% | 48.2% | 81.2% |
| Rainfall relative to 1991-2020 average by month | 174% | 102% | 81% | 70% | 201% | 49% | 67% | 44% | 108% | 46% | 78% | 56% | 90% |
| Calculated generation kWh | 301,701 | 175,752 | 236,233 | 302,398 | 728,169 | 189,926 | 361,864 | 367,128 | 828,135 | 360,967 | 359,919 | 288,473 | 4,500,665 |
| Variance to calculated generation kWh | -2,850 | -4,802 | Nil | -182 | -91,738 | -8,166 | -43,850 | -713 | -8,506 | -26,021 | 8,679 | 5,977 | -172,172 |
| Variance to calculated generation % | -0.9% | -2.7% | Nil | -0.1% | -12.6% | -4.3% | -12.1% | -0.2% | -1.0% | -7.2% | +2.4% | +2.1% | -3.8% |
| Approximate revenue | £73,237 | £41,323 | £57,663 | £73,743 | £157,116 | £43,866 | £81,703 | £94,692 | £212,560 | £86,231 | £94,994 | £48,500 | £1,065,335 |
| Capacity factor (monthly) | 25.6% | 14.2% | 20.3% | 25.1% | 52.8% | 15.6% | 26.4% | 31.4% | 68.0% | 27.8% | 33.9% | 24.4% | 30.5% |
| Industry wide RoR capacity factor | 43.5% | 11.4% | 20.8% | 16.5% | 47.0% | 22.0% | 27.7% | 20.8% | 62.1% | 26.3% | 34.0% | 17.5% | 30.2% |

