Barr River hydro scheme

Monthly report – January 2026

1 Summary

A poor month due to limited rainfall.

2 Monthly generation & revenue

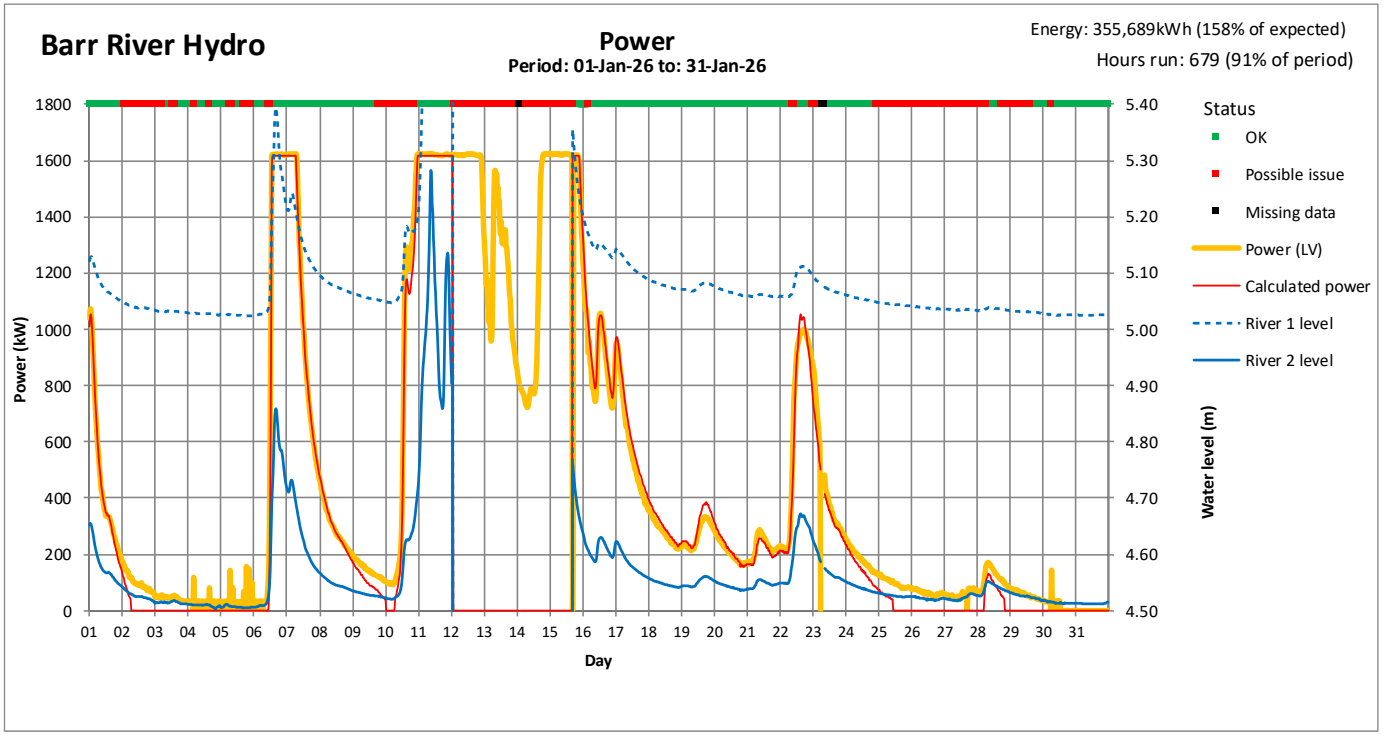
Parameter	Value
Actual generation (FIT meter), kWh	355,689
Average generation in month, kWh	506,699
Forecast generation in month (P50), kWh	695,941
Actual relative to forecast	51.1%
Rainfall relative to 1991-2020 average by month	80%
Calculated generation[1] kWh	n/a -see below
Actual relative to calculated generation, kWh	n/a
Actual relative to calculated generation, %	n/a
Approximate revenue in month[2]	£60,214

[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	350,416
Variance to generation, kWh	-5,273
Variance to generation, %	-1.5%

3 System reporting



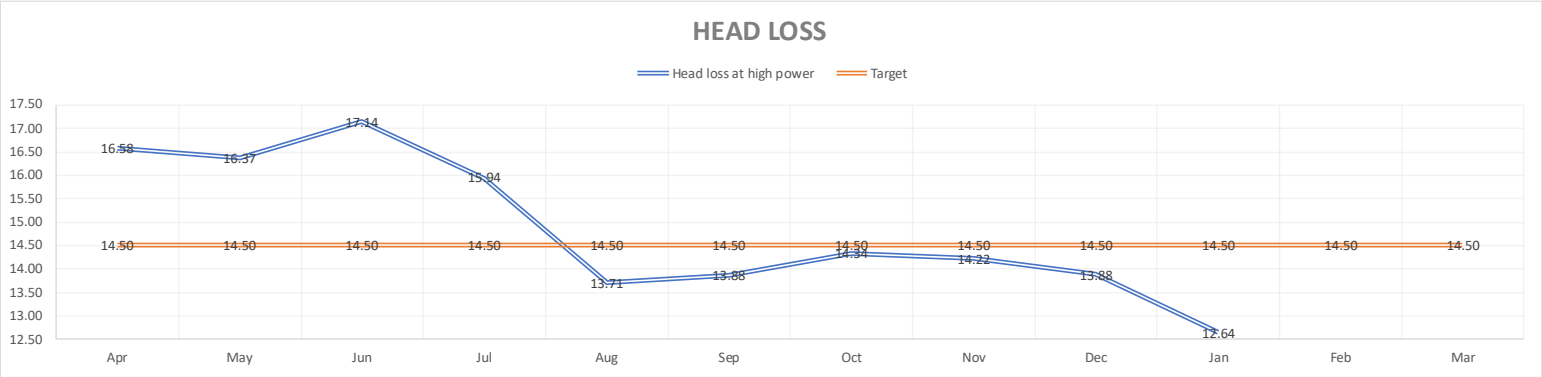
3.1 Scheme anomalies to calculated generation

Date/time	Details	Action required
12/1/2026	Grid trip c. 01:30. Turbine auto re-started. Since the trip, only chamber 1 and tailrace levels have a sensible reading. Hence there is no expected power shown for these days.	Message to request Douglas checks the fuses on River 1, River 2, Chamber 2, and River 3 sensors.
15/1/2026	Brief stoppage on 15th due to electrician carrying out EICR. Electrician also replaced blown fuses on level sensors	
23/1/21026	Power cut c. 5am-8am.	None

3.2 Other system events

Date/time	Details	Action required
	None	

3.3 Head loss



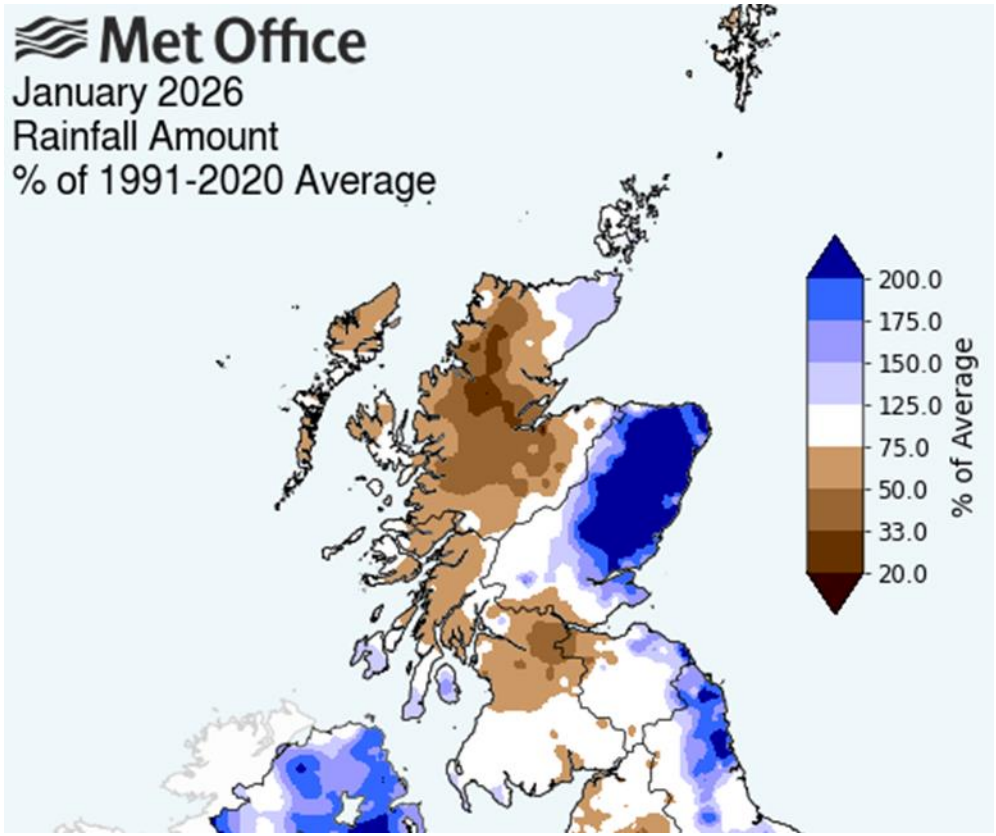
It is possible that the January head loss figure is affected by the loss of various sensors on the 12th. To be reviewed further once February data available.

3.4 Temperatures & Vibration

Parameter	Temperature at or near full power, ^{0}C	Alert level, ^{0}C
Generator NDE1 bearing	41.5	85
Generator DE bearing	38.5	85
Generator NDE bearing 2	44.0	85
Generator windings	63.1	145

Parameter	Vibration at or near full power, mm/s	Alert level, mm/s
Generator DE	0.4	3.0
Generator NDE	1.2	3.0

4 Rainfall



Rainfall this month (rain gauge), mm	164
Western Scotland rainfall in month with respect to 1991-2020 long term average	80%

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	337,159	294,561	539,798	429,308	570,111	608,906	355,689			3,816,290
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	3,873,352
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	4,164,708
Actual relative to forecast	17.9%	53.3%	252.2%	172.8%	105.0%	139.3%	73.7%	92.2%	98.2%	51.1%			91.6%
Rainfall relative to 1991-2020 average by month	54%	107%	134%	95%	88%	125%	105%	115%	96%	80%			92%
Calculated generation kWh	65,116	125,464	503,781	355,612	305,935	573,654	444,380	n/a	n/a	n/a			2,373,943
Variance to calculated generation kWh	1,147	-4,690	-28,216	-18,453	-11,374	-33,856	-15,072	n/a	n/a	n/a	-	-	-92,358
Variance to calculated generation %	+1.8%	-3.7%	-5.6%	-5.2%	-3.7%	-5.9%	-3.4%	n/a	n/a	n/a			-3.9%
Approximate revenue	£10,279	£20,713	£84,263	£59,373	£51,663	£46,508	£69,871	£96,640	£103,508	£60,214			£656,316
Capacity factor (monthly)	5.7%	10.0%	40.8%	28.0%	24.4%	46.3%	35.6%	48.9%	50.5%	29.5%			32.1%
Average RoR capacity factor[1]	7.9%	8.5%	22.2%	18.5%	14.0%	27.5%	41.3%	58.5%	59.0%	39.3%			28.6%
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	7.9%	8.5%	22.2%	18.5%	14.0%	27.5%	41.3%	59.5%	62.1%	26.3%	34.0%	17.5%	30.2%

[1] From April 2025 the average reported figure has been amended to a sample of GHC managed schemes rahter than the wider industry.