

Generating season is here!

Even after the blockages in the inlet and outflow caused by the February storm had been cleared, we had to wait for some time for the river level to rise sufficiently for Archie to be recommissioned. As Richard Body explained, “We can’t control the river level – the best we can do is make sure that Archie is ready to work when the conditions are right.” The summer is never a good generating time for us, and in July, August and September combined we only managed just over 1 MWh. Things picked up a bit in the autumn, and although still below what we would hope for Archie generated just under 18MWh in October and November.

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| 1 | Dec 2011 | 35.9 MWh |
| 2 | Dec 2009 | 32.7 MWh |
| 3 | Dec 2008 | 29.4 MWh |
| 4 | Nov 2009 | 29.2 MWh |
| 5 | Jan 2011 | 25.4 MWh |
| 6 | Nov 2008 | 24.8 MWh |
| 7 | Oct 2008 | 24.7 MWh |
| 8 | Jan 2010 | 23.5 MWh |
| 9 | Mar 2009 | 20.1 MWh |
| 10 | Jan 2009 | 20.0 MWh |

Note: figures are taken from the ROC report

Everything changed in December though and Archie generated over 35MWh, our best ever generating month. The Sett is a very “flashy” river, and it is interesting to note that in the just over 40 months we have been generating so far, almost 60% of our output has been in the top ten months, with a further 30% in the next batch of ten.

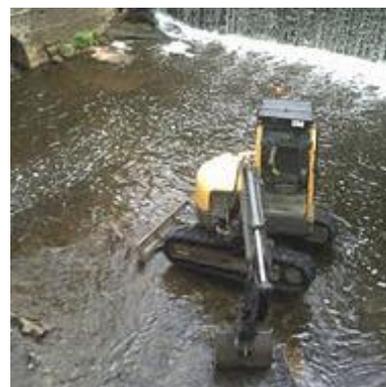
January is going well at the moment and Archie is “turning like a good ‘un”. At the time of writing this month’s output is rising steadily up our “Top Ten Hit Parade”, and may even challenge December for the top spot. Here’s hoping!

Clearing the inlet blockage

As you can imagine, clearing over 60 tons of silt, rock and sand from a sensitive river environment is not trivial. Timing is an issue, as is where to put the material removed, both of which had to be approved by relevant authorities. Simply getting the heavy machinery needed to do the job onto the site is tricky, as the bridge usually used for access cannot take the weight of these vehicles. The “beach” blocking the intake inevitably attracted most attention from passers-by, but equally problematic was the substantial buildup of silt obstructing Archie’s outflow and this area is particularly hard to get to with a digger.

Following protracted negotiations with the Environment Agency the river clearing was effected in early June when the river was low by David, a highly skilled and talented digger driver, with the backup of a maintenance mechanic.

Unperturbed by the need to practice his skills in the river, he removed as much silt and rubble as was safely possible from in front of the intake and used it to build a ramp for the



digger to enter the river at the Rock Mill bend further down the River Goyt. From here it was possible for it to build its own 'roadway' along the bank of the river to the outlet from the hydro plant below the weir. A substantial amount of silt was moved from the bottom of the fish pass and from the riverbed outside the arch to the bridge. This re-established the outflow channel from Archie into the main riverflow. Having back-tracked, the digger finished by removing the 'roadway' and ramp, with the intake silt used being reintroduced into the river at Rock Mill.

Environmental issues in the Sett Valley

Re-planting continues on Kinder Scout, which is cared for by the National Trust. The hill has acres of bare peat from years of moorland fires, overgrazing, erosion and pollution. When it rains peat erodes, which is what discolours the water: visitors often comment that the Sett is noticeably browner than the Goyt as they merge next to Archie. Erosion of peat not only releases carbon into the atmosphere, it also adds considerably to the operational costs of water companies as they must filter it out of our drinking water.

To address these problems the Trust have planted thousands of cotton grass plants, seeded the ground with heather, dammed groughs (erosion gulleys) and reduced sheep grazing to re-establish vegetation cover up on Kinder. The longer grass sward which is now growing will help slow runoff and stabilize water flows, which is good for Archie as it reduces the number of damaging flash floods such as the one last February. Peat bogs act as huge sponges. That's why the rivers still flow days after heavy rain. The Trust has relied heavily on volunteer support, helicopter transport and good understanding of moorland ecology to make this project a success and relies on EU and water company funding through the *Moors for the Future* project. Hopefully in years to come the Sett will be a clearer and tamer river!

Archie makes a Christmas tree

Well, not by himself, of course – he needed help from students at New Mills School who constructed a Christmas tree for the Festival of Trees hosted by one of our local churches. Using objects found while excavating the site during construction, along with driftwood and other items recovered from Archie's intake, local artist Amanda Whewell worked with the Year 7 students to construct what turned out to be one of the most striking and innovative trees in the Festival. The finishing touches were added by reusing some of the fabric previously used in the railing wrap project. Well done all!

Feedback wanted!

This is my first attempt at what we hope will be a regular newsletter for our shareholders. Please let us know what you think and make suggestions for future issues. Would you like to see a "Letters to the Editor" column, for example, or fewer/more photographs?

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